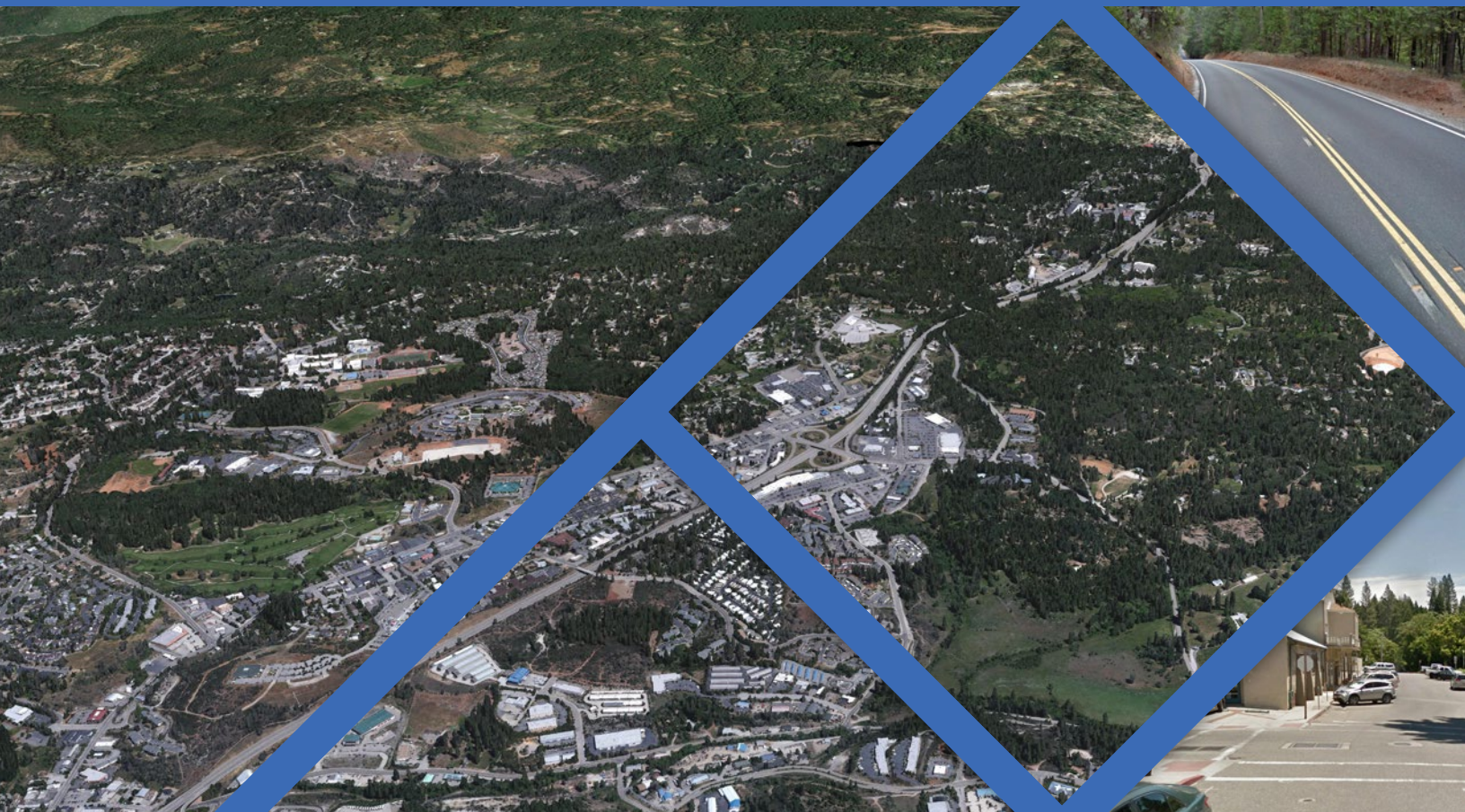


# Sphere of Influence Plan for the City of Nevada City

## Draft Environmental Impact Report

*State Clearinghouse Number: 2019029150*



Presented to

Nevada County  
Local  
Agency  
Formation  
Commission

Presented by

**Kimley»Horn**

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# SPHERE OF INFLUENCE PLAN FOR THE CITY OF NEVADA CITY

Environmental Impact Report  
State Clearinghouse Number: 2019029150

June 2020

Presented to:  
Nevada County Local Agency Formation Commission  
950 Maidu Avenue  
Nevada City, CA 95959

Prepared by:  
**Kimley»»Horn**





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# 1.0 INTRODUCTION

This Draft Environmental Impact Report (DEIR) is prepared to address the potential environmental effects of the Nevada County Local Agency Formation Commissions (LAFCo) update to the proposed Sphere of Influence (SOI) Plan for the City of Nevada City (proposed project.)<sup>1</sup>. LAFCo is required by State law to develop a SOI plan for each city and special district within the county. An SOI plan considers the probable physical boundaries and service area of a local agency and designates lands which are eligible to be annexed to the agency within the planning period. Inclusion in the City SOI would allow provision of municipal services such as public sewer and other municipal services that would facilitate development. This EIR will analyze the indirect impacts of inclusion in the Sphere. As the first discretionary decision in a chain of decisions that can lead development and impacts of development, the California Environmental Quality Act (CEQA) and State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq) and California Public Resources Code Section (PRCS) 21000, et seq. requires LAFCo to consider those indirect impacts.

CEQA requires California public agencies at all levels to consider the environmental consequences of projects for which they have discretionary authority. The public agency with the principal responsibility for carrying out or approving a project is the “lead agency.” Local Agency Formation Commissions are required under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, (CKH) Section 56425 to adopt and periodically update city SOI’s. Consequently, Local Agency Formation Commissions normally have the principal responsibility for SOI plans and normally act as the lead agency under CEQA for such projects.

The proposed SOI Plan update is discussed in detail within this Chapter in *Section 1.1 Proposed Project*. The CEQA process as it applies to unique circumstances for a SOI update is discussed in *Sections 1.2 EIR Scope, Issues, and Concerns*, and *Section 1.5 Environmental Review Process*, further below.

## 1.1 PROPOSED PROJECT

### Overview

LAFCo is responsible for determining the boundaries of cities and special districts within its area of responsibility and jurisdiction. Along with its own locally adopted guidelines, the Nevada County LAFCo operates under the Cortese-Knox-Hertzberg (CKH) Local Government Reorganization Act of 2000, located at Section 56000 and following in the Government Code. Under the provisions of the Act, LAFCo has a mandate of:

- Discouraging urban sprawl
- Preservation of prime agricultural land and open space
- Assuring provision of efficient local government services
- Encouraging orderly growth and development of local agencies

<sup>1</sup> State Clearing House (SCH#) 2019029150

LAFCo's responsibilities include review of and action on proposals for:

- Formation of new local public agencies,
- Changes in boundaries of existing local agencies,
- Changes in services provided by special districts; and
- Other changes in organization of local agencies, such as consolidations and dissolutions.

To assist LAFCo in making these decisions, the Legislature requires LAFCo's to develop informational reports on local agencies Municipal Service Review (MSR) and plans called SOI's establishing the probably physical boundaries for each agency.

MSRs are informational reports that provide information on the provision of public services by local public agencies and the capacity of the agencies to provide services. They are prepared either on an individual agency basis or regional basis. This information is then used to prepare a SOI plan for each public agency.

SOI's are operational planning documents that are intended to establish what areas are eligible for annexation to the agency and under what conditions annexation will occur. A SOI is defined as a plan for the probable physical boundary and service area of a local agency, as determined by the LAFCo. CKH defines the purpose and intent of a SOI as an important tool for "planning and shaping the logical and orderly development and coordination of local agencies so as to advantageously provide for the present and future needs of the county and its communities."

The MSR and SOI Plan guide LAFCo's determinations with respect to annexations to a city or district. Annexations cannot be approved by LAFCo unless they are consistent with the agency's SOI. Therefore, including property within a city's SOI normally implies annexation within the timeframe of the SOI plan, which Nevada County LAFCo has established by policy as a 20-year timeframe.

LAFCo is required to adopt a SOI plan for each city and district in its jurisdiction and *every five years, as necessary, review and update each SOI*. Nevada City's SOI was first adopted by LAFCo in 1983 with no environmental review. The SOI was affirmed by LAFCo in 2008 with a negative declaration. LAFCo is now in the process of updating the SOI Plan for the City again as required by CKH.

As discussed above, LAFCo has approval authority related to SOI's and associated annexations. LAFCo has the power to approve or disprove applications, or to impose reasonable conditions on approvals in limited circumstances (i.e., provision of public services and utilities). LAFCo; however, has limited authority related to land use decisions and conditions that can be placed upon proposed or approved developments. Therefore, while LAFCo is charged with considering the impacts of land uses in its decision making, LAFCo is prohibited from directing specific land use or zoning actions. Hence, LAFCo may disapprove an application for an annexation if that development could not be provided city services, but LAFCo cannot exercise direct land use authority. Therefore, imposition of mitigation and conditions of approval on projects and areas to be annexed is typically the responsibility of the associated municipality.

## Project Description

The proposed project is an update to the SOI Plan for Nevada City and comprises the proposed SOI Plan update area that encircles Nevada City. The City's jurisdictional boundaries include approximately 1,470 incorporated acres and the current SOI includes approximately 2,702 acres of unincorporated county land. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, police, fire protection, and recreational areas. It should be noted, that substantial portions of the incorporated City areas are currently served by Nevada Irrigation District (NID) for treated water.

The proposed project or any update to the SOI does not include any changes to existing land uses, land use designations, or zoning, but inclusion in the SOI is the first step towards annexation of the territory. Annexation would result in the area becoming a part of the incorporated City and thus the area(s) would have access to municipal services.

The discussion of the proposed project includes the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which is specifically identified as the Preferred Alternative in accordance with CEQA requirements. The Consensus Alternative has been developed over the last few years through a collaborative process and coordination between the City and LAFCo. Under the Consensus Alternative, the City and LAFCo staff have developed a 'consensus map' that includes four priority annexation areas and also excludes some territory represented in the current 2008 City SOI that would be removed from the SOI. The Consensus Alternative is summarized below and is discussed in greater detail in *Chapter 3.0 Project Description*. The EIR also includes three other alternatives, which are listed below and described in detail in *Chapter 3.0 Project Description* and analyzed in *Chapter 6.0 Alternatives*.

### ***LAFCo/City Preferred Consensus Sphere Alternative***

The Consensus Alternative contains four Priority Annexation Areas for which the City would initiate prompt annexation proceedings and are described below:

*Annexation Area #1* - is located just south of the City adjacent to SR 49\20. Annexation Area #1 consists of a northerly and southerly area separated by approximately 500 feet and totals approximately 16.63 acres. The northerly location is a triangular-shaped parcel approximately 5.29 acres in size and is generally bound by SR 20 to the west, Gold Flat Road to the north, and is accessed by Granholm Lane to the south

*Annexation Area #2* - is located in the northwestern part of the City adjacent California SR 49. Annexation Area #2 is approximately 86 acres in size and is generally bound by SR 49 on the north, the existing City Boundary to the east, American Hill Road to the south, and Constitution Court to the west.

*Annexation Area #3* - is located in the northeastern part of the City and is approximately 17 acres in size. Annexation Area #3 includes parcels on both sides of Willow Valley Road east of the existing City Boundary but does not include the site of the former "Health Education and Welfare Building."

*Annexation Area #4* - is located in the northeastern part of the City and is approximately 23 acres in size. Annexation Area #4 is generally bound by Red Dog Road on the north, Park Avenue on the east and south, and the City boundary to the west.

## **Alternatives**

As part of the project development process, and as required by CEQA, three alternatives have been developed to the preferred Consensus Alternative. The Alternatives were developed through consultation with City staff, consideration of the public interest, consideration of the legal requirements of CEQA and the environmental review process. The three Alternatives are briefly described below and discussed in additional detail in *Section 6.0 Alternatives*.

**Original LAFCo Staff Recommendation Alternative:** Consists of the original LAFCO recommended SOI boundary and includes approximately 1,650 acres.

**City Recommendation Alternative:** Consists of the original 1983 LAFCo-adopted SOI plan for the city, and would include the lands contained within the SOI plan affirmed by LAFCo in 2008, and

**“No Project” Alternative:** This alternative includes adoption of a coterminous SOI, meaning the City’s SOI would only include the existing territory within the City’s jurisdictional boundary.

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## **1.2 EIR SCOPE, ISSUES, AND CONCERNS**

### **EIR SCOPE**

To begin the process of preparation of an EIR and to help determine the scope of an EIR, one of the first steps is typically the preparation of a Notice of Preparation (NOP). The NOP is a document stating that an EIR will be prepared for a project and is submitted to the Office of Planning and Research (OPR) for publication. The NOP also is sent to each responsible and trustee agency, as well as every federal agency that is involved in approving or funding the project. In part, the intent of the NOP is to elicit feedback and comment from these agencies as well as members of the public and stakeholders regarding environmental issues and topics the NOP indicates will be discussed in the EIR as well as those that commenter wants to see included, or thinks should be a part of the project and discussed in the EIR. The NOP is a required part of the environmental review process intended to provide the agencies and others with sufficient information describing the project and to prompt meaningful comment for the 45-day public review period.

In accordance with State CEQA Guideline §15082 and § 15375, the NOP for the proposed project was prepared and sent to responsible and trustee agencies as well as stakeholders who had requested notification. The NOP was published with the California State Clearinghouse and issued on February 25, 2019, which began the required 30-day comment period that extended until March 27, 2019. The NOP contained a thorough description of the proposed project, location of the proposed project, maps depicting each alternative, and provided a brief description of the probable environmental effects. The NOP was circulated to local, state, and federal agencies and other interested parties, consistent with the requirements of CEQA and thus, provided adequate information for agencies and the public to make a meaningful response.

The NOP indicated the following environmental topics on the listing of resources in Appendix G of the CEQA Guidelines will be addressed:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Public Services
- Transportation and Traffic
- Utilities and Service Systems
- Significant Unavoidable Impacts
- Cumulative Impacts
- Alternatives

Of the listed environmental resource areas there are many governmental agencies that have jurisdiction over them and provide guidance on their use. Accordingly, certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from these public agencies to be implemented. Such other agencies are referred to as “Responsible Agencies” and “Trustee Agencies.” Pursuant to State CEQA Guidelines §15381 and §15386, as amended, Responsible Agencies and Trustee Agencies are respectively defined as follows:

- *“Responsible Agency” means a public agency that proposes to carry out or approve a project for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “Responsible Agency” includes all public agencies other than the Lead Agency that have discretionary approval power over the project (State CEQA Guidelines §15381).*
- *“Trustee Agency” means a State agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. Trustee Agencies include . . . (State CEQA Guidelines §15386).*

## 1.3 NOTICE OF PREPARATION RESULTS

### Comment on the NOP

The NOP sufficiently described the proposed project and informed readers such that meaningful responses were provided. The NOP solicited a total of 11 comment letters that included suggestions regarding guidance pertaining to specific contents, conformance with CEQA requirements, and the scope and content of the DEIR. Comment letters were received from the following agencies, organizations, and individuals:

#### **Regional Agencies**

- Caltrans District 3
- Central Valley Regional Water Quality Control Board (CVRWQCB)

#### **Local Agencies**

- County of Nevada Community Development Agency
- Nevada County Consolidated Fire District
- Nevada Irrigation District



***Special Interest Groups and Individuals***

- Native American Heritage Commission (NAHC)
- Shute, Mihaly & Weinburger, LLP representing the Community Environmental Advocates (CEA) Nevada Street/Willow Valley Area Neighborhood Association (which joined the comments)
- Gerald and Kathy Stapp

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## **1.4 ENVIRONMENTAL REVIEW PROCESS**

**Local Agency Formation Commission**

Under Resolution No. 12-07 effective September 20, 2012 and adopted pursuant to California Code of Regulation (CCR) §15022(d) which states, “In adopting procedures to implement CEQA, a public agency may adopt the State CEQA Guidelines through incorporation by reference. The agency may then adopt only those specific procedures or provisions described in subsection (a) which are necessary to tailor the general provisions of the guidelines to the specific operations of the agency. A public agency may also choose to adopt a complete set of procedures identifying in one document all the necessary requirements.” In accordance with this allowance, LAFCo adopted the CEQA Implementing Procedures, which have been used for the environmental review process for the preparation of this EIR.

**EIR Overview**

An EIR is an informational document that appraises decision-makers and the general public of the potential significant environmental effects of a proposed project. Hence, the purpose of this EIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to reduce potentially significant effects related to the update of the SOI Plan. In accordance with §15121 of the State CEQA Guidelines, a primary purpose of this EIR is to provide decision-makers and the public with specific information regarding the environmental effects associated with the proposed project. This EIR also identifies ways to minimize the significant effects and describes reasonable alternatives to the proposed project. When appropriate and feasible, mitigation measures are provided which may be adopted as Conditions of Approval in order to reduce the significance of impacts resulting from the proposed project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed project. To assist reviewers in understanding this EIR, the State CEQA Guideline that defines applicable terminology and sections that dictate the format and contents of the environmental analysis within the EIR are described below.

The following discussion also describes the specific CEQA Guidelines Section (§) regarding specific types of EIR’s and the methodology for evaluation of impacts. Because CEQA defines a project in broad terms and many different agency actions are considered for these projects, CEQA also provides different methodologies to inform and disclose impacts to the public and decision-makers. Although CEQA contains numerous Guidelines that are applicable to the proposed project, the following list describes those Guidelines that are the most germane to the proposed project and that were discussed in comments received on the NOP. The following pages explain how these Guidelines and CEQA §’s have been included

in the analysis of this EIR. It should be noted that in some instances the entire State CEQA § is not quoted and in some instances has been abbreviated.

### ***State CEQA Guideline § 15378 - Project***

A project is defined as the “whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

- (1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700.”

### ***State CEQA Guideline § 15360 - Environment***

To evaluate the potential impact on the environment, a CEQA document must describe the existing environmental conditions as they exist on the ground in order to enable a comparison to what will exist upon project implementation and ultimate operation. The area involved is where significant direct or indirect impacts would occur as a result of the project. The environment includes both natural and man-made (artificial) conditions. State CEQA Guidelines defines the environment as, the physical conditions that exist in the area and which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance.

### ***State CEQA Guideline § 15382 - Significant Effect on the Environment***

Based on the existing conditions and the changes that would occur, a disclosure in the EIR is required if an impact would be characterized as a Significant Effect (Impact) on the Environment. A Significant Effect on the Environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, tribal resources, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

To further refine the description and level of an impact, and EIR will typically uses a variety of terms to describe the level of significance of adverse impacts. The terms used in this EIR are defined as follows:

- **Less Than Significant.** An impact that is adverse but that does not exceed the defined thresholds of significance. Less than significant impacts do not require mitigation.
- **Significant.** An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended when feasible, to eliminate the impact or reduce it to a less than significant level.

- Significant and Unavoidable. An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less than significant level even with the implementation of mitigation measures.
- Cumulative Impacts. Two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts:
  - The individual impacts may be changes resulting from a single project or separate projects.
  - The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

***State CEQA Guideline § 15064 (d)(1), (2) and (3)***

Impacts can either be direct or indirect. A direct impact is one that will occur as an immediate result of project implementation such as from ground disturbing activities, emissions from vehicles used during construction, or visible change to the visual environment on a site that are immediately noticeable both during and after construction. An indirect impact is one that occurs at a later date or that a project would enable or induce by its presence or adoption. The explanation and specific nature of these impacts are particularly important to the proposed project as most, if not all, impacts are anticipated to be indirect. Based on State CEQA Guidelines these two types of impacts are described in detail below.

- (1) A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project. Examples of direct physical changes in the environment are the dust, noise, and traffic of heavy equipment that would result from construction of a sewage treatment plant and possible odor from operation of the plant.

In the case of the proposed project, however, there are no specific improvements or site-specific development plans that are proposed or that would be permitted by adoption of the SOI update. Therefore, as described above, while the proposed project would not directly result in any construction activities, the proposed could result in indirect impacts by facilitating future development. An indirect impact is defined by State CEQA Guideline § 15064 (d)(2) and (3) which states:

- (2) An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment. For example, the construction of a new sewage treatment plant may facilitate population growth in the service area due to the increase in sewage treatment capacity and may lead to an increase in air pollution.
- (3) An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

The proposed project is for a SOI approval and it is categorized as an action that would culminate in either direct or indirect physical changes to the environment. Hence, the proposed project is subject to CEQA in this regard. Because the SOI Plan update is an irrevocable step (barring additional revisions or amendments) it would likely result in some, although yet unknown later action(s) resulting in an associated future impact(s) from those actions what would be considered indirect or secondary. Within this EIR, the impacts are discussed based on the best information available. Accordingly, the proposed SOI Plan update would influence the future growth and development of Nevada City by promoting development because it is a major policy that will affect land use decisions. Based on CEQA requirements, the intent of this EIR is to review at an appropriate level of analysis the direct and indirect environmental impacts associated with the potential extension of agency services to areas within the recommended SOI and in *Section 6.0 Alternatives*.

#### ***15126.4 Mitigation Measures Proposed to Minimize Significant Effects***

An EIR is required to describe mitigation measures that are feasible and that could reduce adverse impacts. The requirements for and situations in which mitigation is included to an EIR is discussed as follows:

- (a) Mitigation Measures in General.
  - (1) An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.
    - (A) The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR.
    - (B) Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
    - (C) Energy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant.
    - (D) If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. (Stevens v. City of Glendale (1981) 125 Cal.App.3d 986.)

- (2) Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.
- (3) Mitigation measures are not required for effects which are not found to be significant.
- (4) Mitigation measures must be consistent with all applicable constitutional requirements, including the following:

### ***State CEQA Guideline §15370 - Mitigation***

As discussed above, mitigation consists of measures that avoid or substantially reduce a proposed project's significant environmental impacts. Mitigation measures are described in five categories and can reduce impacts in the following ways:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
- Compensating for the impact by replacing or providing substitute resources or environments.

### ***State CEQA Guideline §15146 – Degree of Specificity***

The EIR analyzes the environmental effects of the proposed project to the degree of specificity appropriate to the current proposed action as required by §15146 of the State CEQA Guidelines. The analysis considers the actions associated with the proposed project to determine the short-term and long-term effects associated with adoption of the proposed project. The proposed project does not include any component that, if the SOI is adopted, would directly result in construction or operation of any physical element that would directly affect the environment. Therefore, the proposed project focuses on indirect impacts that could result or be facilitated after project approval. Where appropriate and where within the authority of LAFCo, the EIR proposed measures to mitigate potentially significant impacts. Those impacts that cannot be mitigated to less than significant levels are also identified.

To provide clarity on the difference between direct and indirect impacts and description of specificity, State CEQA Guideline §15146 is cited below [the reader is directed to (b), which is descriptive of the types of impacts that would occur from adoption of the proposed project:

The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

- (a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local

general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

- (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

### ***State CEQA Guideline §15162 and 15168***

LAFCo has determined that for the environmental analysis for this project, a Program EIR under CEQA will provide the most appropriate level of detail. Section 21166 of the CEQA Statutes, and State CEQA Guideline § 15162 and §15168 set forth the standards of a Program EIR. A Program EIR is generally used for projects that will result in the issuance of rules and regulations that are likely to result in a series of linked, logical actions. These actions are typically related geographically, likely to have comparable environmental effects, and if needed, are able to be mitigated through the implementation of standard measures. Similar to a Project Level EIR, the Program EIR still evaluates the proposed project and considers the environmental effects. However, because a site-specific development proposal is generally not available at this time, a sufficient level of detail about future potential projects that could occur within the SOI Plan update area are not known. Therefore, a Program EIR is the most appropriate CEQA document for the potential future series of secondary actions and effects.

### ***Program EIR***

This EIR is being prepared as a Program EIR in accordance with Section 15168 of the CEQA Guidelines, which states the following:

- a) *General. A Program EIR is an EIR, which may be prepared on a series of actions that can be characterized as one large project and are related either:*
  - 1) *Geographically,*
  - 2) *As logical parts in the chain of contemplated actions,*
  - 3) *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
  - 4) *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*
- b) *Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:*
  - 1) *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*

- 2) *Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,*
  - 3) *Avoid duplicative reconsideration of basic policy considerations,*
  - 4) *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
  - 5) *Allow reduction in paperwork.*
- c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.*
- 1) *If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
  - 2) *If the agency finds that pursuant to Section 15162, no new effects could occur, or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
  - 3) *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
  - 4) *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.*
  - 5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

Based on the State CEQA Guidelines related to the Program EIR, this is the type of CEQA document that is being used for the SOI Plan update. Based on the nature of the scope and scale of the proposed project all information that would be required for completion of project-specific CEQA evaluations is not known. Therefore, in accordance with CEQA requirements the PEIR discusses the environmental effects in sufficient detail based on the information currently known and to be used by future projects when applicable.

***State CEQA Guideline §15152 - Tiering***

- (a) “Tiering” refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.

Although the strategy of tiering can occur using other types of EIRs, a Program EIR is more commonly used for this purpose. State CEQA Guideline §15152(b) encourages agencies to tier environmental analysis for separate but related projects so that repetitive discussions can be reduced. However, this does not excuse an agency from reasonably analyzing foreseeable effects and use of the Program EIR for tiering does not justify deferral of analysis. Additionally, CEQA provides that the level of detail in a first-tier EIR need not be greater than that of the program, plan policy, or ordinance being analyzed.

It should be noted that while this EIR is intended to be tiered from, if specific information is known about particular development sites or specific information is known about potential future projects those elements are sufficiently discussed in this EIR. In other situations, when specific information is not known, the EIR discusses the information and impacts at an appropriate level of detail and notes that future analysis will be provided in a future environmental document when the full details of that project are known. Accordingly, this EIR evaluates the potential environmental impacts of the SOI Plan update at the level of detail allowed by the plan and known projects.

State CEQA Guideline § 15152 (c) provides that because site-specific information may not feasibly be known, discussion of that information may be deferred. In many instances, this will be until such time as the lead agency prepares a future environmental document in connection with a project of more limited geographical scale. This can occur as long as deferral does not prevent adequate identification of significant effects of the planning approval at hand. There are two discussion points regarding this matter.

First, although LAFCo is the lead agency for the SOI Plan update, it is anticipated that the City will be the lead agency on most future projects within the SOI. On future projects, the City, or other future lead agency (such as a utility district), would be able to utilize this EIR, as appropriate, as a first-level document and tier from it. Simply stated, if a future lead agency for a related project can use information, analysis, or mitigation from this document to reduce redundant disclosures - they may do so.

Second, where adequate information exists to fully explore potential impacts on a particular site, this EIR identifies those impacts. In other instances, where specific information is not known, and it would be speculative and require guesswork to define a project and potential impacts, this EIR appropriately defers the discussion to a future time when those facts are known. In accordance with CEQA requirements, this will not excuse a future project or action from being fully analyzed, future impacts from being fully disclosed, and appropriate mitigation being incorporated. Accordingly, if a subsequent activity would have effects not within the scope of this EIR, the lead agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or project level EIR. In these instances, the EIR may still serve a valuable purpose as the first-tier environmental analysis.



**State CEQA Guideline §15125 – Environmental Setting**

- (a) An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives

*For the purpose of the proposed project, the environmental setting may be presented differently depending on a site-specific resource and how the 17 listed resources differ. For example, the environmental setting for air quality generally encompass a large area because the existing conditions are typically defined by the air quality within an overall air basin, which will usually have a much larger footprint than a project. In comparison, impacts related to aesthetics are generally related site-specific and deal with the visual changes that would occur within the project site itself.*

**Baseline**

The existing environmental setting of the project site will typically be considered the baseline physical conditions which the lead agency will use to determine if changes that would occur from a project would result in an impact to the environment. Therefore, as required by CEQA Guidelines § 15125(a), the baseline for the environmental analysis is the present physical environment and development as they exist on the ground within the area of the SOI recommended by LAFCo.

In developing such analysis, it may generally be assumed that the level of development facilitated by the extension of services will be consistent with that allowed under the Nevada City General Plan (NCGP) currently in effect. As simple as this may appear, there are different ways to interpret the State CEQA Guidelines related to establishing the baseline. Generally, for a project that proposes a development or for a plan for an area where no plan exists it is very reasonable to use the existing conditions as they exist on the ground and evaluate impacts based on what would happen when that plan is initiated. However, for the proposed project this typical procedure is not applicable. The proposed project is for a SOI Plan update which neither proposes any construction resulting in direct impacts, nor is it a plan that would authorize development.

Thus, even if an undeveloped area has been included in an agency's SOI for many years, if the general plan would allow substantial development and the services provided by the agency is necessary for that development, the environmental analysis must consider the foreseeable impacts of that development on the environment. This requires that the environmental analysis of a SOI must use as its baseline the existing conditions "on the ground," not what the prior SOI or applicable general plan permits.

Accordingly, it is allowable for an agency such as LAFCo to rely on previous EIR's for information to include in a SOI EIR provided the information is still current. However, Public Resources Code 21094(b) specifically requires that the agency proposing to rely upon a prior EIR for a later project must do an initial study first

to determine whether the prior EIR meets CEQA's requirements for use with the later project. The agency may only rely upon the prior EIR if its study determines that all of the following are true:

- (1) The later project is consistent with the program, plan, policy, or ordinance for which an environmental impact report has been prepared,
- (2) The later project is consistent with applicable local land use plans and zoning of the city, county, or city and county in which the later project would be located, and
- (3) The circumstances under which a supplemental EIR would be required under PRC §21166 do not exist. Section 21166 in turn specifies three grounds for requiring a supplemental EIR to supplement an existing EIR. Those grounds are:
  - (a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report,
  - (b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report, or
  - (c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

The most common problems in using a prior EIR for a SOI update is that the EIR was completed for an area different than that proposed for the SOI and that the EIR is out of date. If the EIR is out of date, it increases the probability that either the circumstances surrounding the project have changed or that new information becomes available that requires new evaluation. For example, a common problem today is that prior EIR's often did not consider GHG emissions and the change in legal requirements is either a "change in circumstances surrounding the project" or "new information" that requires a supplemental environmental document.

Even if the EIR being relied upon is reasonably current, and otherwise does not require supplementation under §21166, use of the prior EIR does not necessarily avoid doing a new or supplemental EIR for a SOI update. If the county or city general plan being relied upon for the SOI update made findings of unavoidable significant impacts remaining after mitigation, then any environmental document tiered off or relying upon that EIR must make similar findings. If a LAFCo, acting as lead agency, wants to rely upon such a city or county general plan EIR that does contain significant and unavoidable environmental impacts, then it must likewise adopt the overriding findings. Under CEQA that can only be done in the context of an EIR or Supplemental EIR.

This EIR will use information from previous environmental documents where appropriate. However, because the existing environmental documentation for the previous SOI is limited and not current, this EIR will not rely upon those previous environmental documents as a substitute for addressing the issues in this EIR.

This DEIR follows CEQA Guideline Section 15125 and analyzes the environmental impacts of the SOI Plan update against a baseline of the existing physical conditions as they exist on the ground at the time the

NOP was published. Accordingly, this DEIR compares the current conditions and level of development with what would foreseeably occur if the area is annexed and City zoning and services are expanded into an area as allowed by the new SOI. It does not use as a baseline the level of development allowed under the existing NCGP or the Nevada County General Plan (County General Plan) nor does it speculate as to impact of possible rezoning to higher density.

### ***State CEQA Guideline §15145 - Speculation***

State CEQA Guideline Addresses Speculation in §15145. The guidelines state, “If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.”

What is too speculative to address is particularly salient to understand for the purposes of this proposed project. The project plans for the long-term development of the City. As with any long-term planning, it is likely that circumstances will arise after the SOI Plan update is adopted that result in development different than what is planned. However, trying to predict such changes and address the environmental impacts of such possible changes in this document would be extremely problematic and “speculative.” Consequently, this EIR assumes that future development will occur consistent with the present City General Plan and zoning and focuses on the indirect environmental impacts that would result from such annexation and development.

## **1.5 REPORT ORGANIZATION**

The Draft EIR is organized into eight sections, as follows:

- Section 1.0, INTRODUCTION AND PURPOSE, provides an introduction and overview describing the intended use of the Draft EIR and the review and certification process. It also provides summaries of the chapters included in the EIR, and summaries of the issues and concerns received from the public and public agencies during the NOP review period.
- Section 2.0, EXECUTIVE SUMMARY, summarizes the elements of the proposed project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. Acknowledges alternatives that would reduce or avoid significant impacts.
- Section 3.0, PROJECT DESCRIPTION, provides a detailed description of the proposed project, including the project’s location, background information, major objectives, and technical characteristics.
- Section 4.0, DESCRIPTION OF ENVIRONMENTAL SETTING (Impacts and Mitigation Measures), contains a detailed environmental analysis of the existing conditions, proposed project impacts, recommended mitigation measures, and unavoidable adverse impacts (if applicable). The analysis of each environmental category in Section 4.0 is organized as follows:

o Environmental Setting -

- “Regulatory Setting” described the Federal, State, and Local agencies and policy and regulatory documents that are applicable to the proposed project.
  - “Standards of Significance” provides the thresholds that are the basis of conclusions of significance, for which the primary source for the criteria is Appendix G of the State CEQA Guidelines (California Code of Regulations [CCR], §15000 through §15387). LAFCo has not adopted any local thresholds of significance,
  - “Project Impacts and Mitigation” describes potential environmental changes (no impact, less than significant impact, less than significant impact with mitigation incorporated, or significant and unavoidable impact) to the existing physical conditions that may occur if the proposed project is implemented.
  - “Level of Significance After Mitigation” discusses whether the proposed project and the project’s contribution to cumulative impacts can be reduced to levels that are considered less than significant.
  - “Conclusion” provides a summary of the anticipated project impacts and mitigation including significance conclusion.
  - “Cumulative Impacts” describes potential environmental changes to the existing physical conditions that may occur with the proposed project, together with all other reasonably foreseeable, planned, and approved future projects.
- Section 5.0, GROWTH-INDUCING IMPACTS, discusses significant environmental changes that would result from the proposed action, should it be implemented, and discusses growth-inducing impacts of the proposed project.
  - Section 6.0, Alternatives to the proposed project, describes a reasonable range of alternatives to the proposed project or to the location of the project that could feasibly attain the basic project objectives, and provides and a determination of the environmentally superior alternative.
  - Section 7.0, AGENCY CONTACTS AND PREPARERS lists persons from the Lead Agency and preparers of the EIR.

## 1.6 INCORPORATION BY REFERENCE

As permitted in Section 15150 of the CEQA Guidelines, an EIR may reference all or portions of another document that is a matter of public record or is generally available to the public. Information from the documents that have been incorporated by reference has been briefly summarized in the appropriate sections of this EIR, along with a description of how the public may obtain and review these documents.

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## 2.0 EXECUTIVE SUMMARY

### 2.1 INTRODUCTION

This summary is provided in accordance with California Environmental Quality Act Guidelines (State CEQA Guidelines) Section 15123. As stated in Section 15123(a), “an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical.” As required by the guidelines, this chapter includes (1) a summary description of the Sphere of Influence (SOI) Plan Update for Nevada City (proposed project or project), (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, (4) a discussion of the areas of controversy associated with the project, and (5) issues to be resolved.

### 2.2 PROJECT LOCATION

The proposed project is located within Nevada County (County) and comprises the City of Nevada City (City) and the proposed SOI Plan update area that encircles the City. The City is the County seat of Nevada County and is situated within the western third of Nevada County in the valley of Deer Creek. The City of Nevada is one of three incorporated cities within Nevada County; Grass Valley (immediately south of the City) and Truckee (approximately 40 miles northeast of the City) being the other two. Urbanization within the County is primarily located within these three City centers and consists of residential, commercial, industrial, and other uses typical of small cities. Geographically, the County is bounded by the Middle Fork of the Yuba River and Sierra County on the north, the state of Nevada to the east, the Bear River and Placer County to the south, and Yuba County to the west. The City is in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, and lies in the area of transition between the valley to the west and the generally steep, granitic terrain of the Sierra Nevada mountains further east. The City’s unique topography of hills and valleys is due to its geographical setting within a basin on the western slope of the Sierra Nevada Mountains.

The major transportation routes that provide regional connectivity through the City is the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49) which through the City are joined. SR-20 and SR 49 are the major connectors through the City and to points east. SR-49 provides access to the northwesterly areas of the City and SOI west from the SR-20/SR-49/Uren Street Intersection. SR-20\49 connects Nevada City to the City of Grass Valley approximately four miles to the southwest. SR-20 runs in a northeasterly direction for approximately 25 miles connecting Nevada City with the unincorporated portions of Nevada County before linking with Interstate 80 (I-80) near Nevada County’s southern border with Placer County. I-80 is the major connector for the region and links Sacramento and the Bay area, and points east including Reno and beyond.

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## 2.3 PROJECT DESCRIPTION

The proposed project is an update to the SOI Plan for Nevada City and comprises the proposed SOI Plan update area that encircles Nevada City. The City's jurisdictional boundaries include approximately 1,470 incorporated acres (2018 Nevada County GIS data) and the current SOI (exclusive of the incorporated area) includes approximately 2,702 acres. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, police, fire protection, and recreation and park services. Land in all directions outside of the City boundaries and within the current SOI consists of unincorporated county land, with the exception of the City of Grass Valley to the south. The land patterns within the SOI are discussed in additional detail in *Chapter 3.0 Project Description*.

The proposed project or any update to the SOI does not include any changes to existing land uses, land use designations, or zoning, but inclusion in the SOI is the first step towards annexation of the territory. Annexation would result in the area becoming a part of the incorporated City and thus the area(s) would have access to municipal services. As discussed in *Chapter 1.0 Introduction*, the Nevada County LAFCo has the specific authority to make determinations regarding annexations, incorporations, reorganizations, and other changes of government boundaries in this region. Future actions that may result from the proposed project and implementation of the SOI Plan would be subject to LAFCo's review. However, LAFCo is prohibited from directing specific land use or zoning actions, and therefore, imposition of mitigation and conditions of approval on projects and areas to be annexed is typically the responsibility of the associated municipality. LAFCo is required to adopt a SOI plan for each city and district in its jurisdiction *every five years*, as necessary, review and update each SOI. Nevada City's SOI was first adopted by LAFCo in 1983 with no environmental review. The SOI was affirmed by LAFCo in 2008 with a negative declaration. LAFCo is now in the process of updating the SOI Plan for the City again as required by policies and provisions of the Cortese-Knox Hertzberg Act (CKH).

The discussion of the proposed project includes the LAFCo/City Preferred Consensus Alternative (Consensus Alternative), as shown in *Figure 2-1: LAFCo/City Consensus Alternative*, which is specifically identified as the Preferred Alternative in accordance with CEQA requirements. The Consensus Alternative has been developed over the last few years through a collaborative process and coordination between the City and LAFCo. Under the Consensus Alternative, the City and LAFCo staff have developed a 'consensus map' that includes four priority annexation areas and also excludes some territory represented in the current 2008 City SOI that would be removed from the SOI. The Consensus Alternative is summarized below. The EIR also includes three other alternatives, which are listed below, discussed further in *Chapter 3.0 Project Description* and analyzed in *Chapter 6.0 Alternatives*.

LAFCo and the City have identified four priority annexation areas (Annexation Area #1, #2, #3, and #4) that are intended for annexation in the very near future. These four areas are generally developed, and three of the areas include parcels that have already been connected to the City's sewer system. Annexation of these four areas is unlikely to increase existing development levels.

Additionally, six Potential Development Areas (Providence Mine East, Hurst Ranch, HEW Building, Manzanita Diggings, Highway 49 Planned Development Area and Gracie/Gold Flat) have been identified, and are included in each project alternative (with the exception of the 'No Project Alternative.' These six areas have the potential for annexation and further development using sewer service from the City. Inclusion of these Potential Development Areas in the SOI would indirectly induce growth by facilitating annexation or enabling extension of public services to both developed and undeveloped properties within these areas.

## 2.4 AREAS OF CONTROVERSY

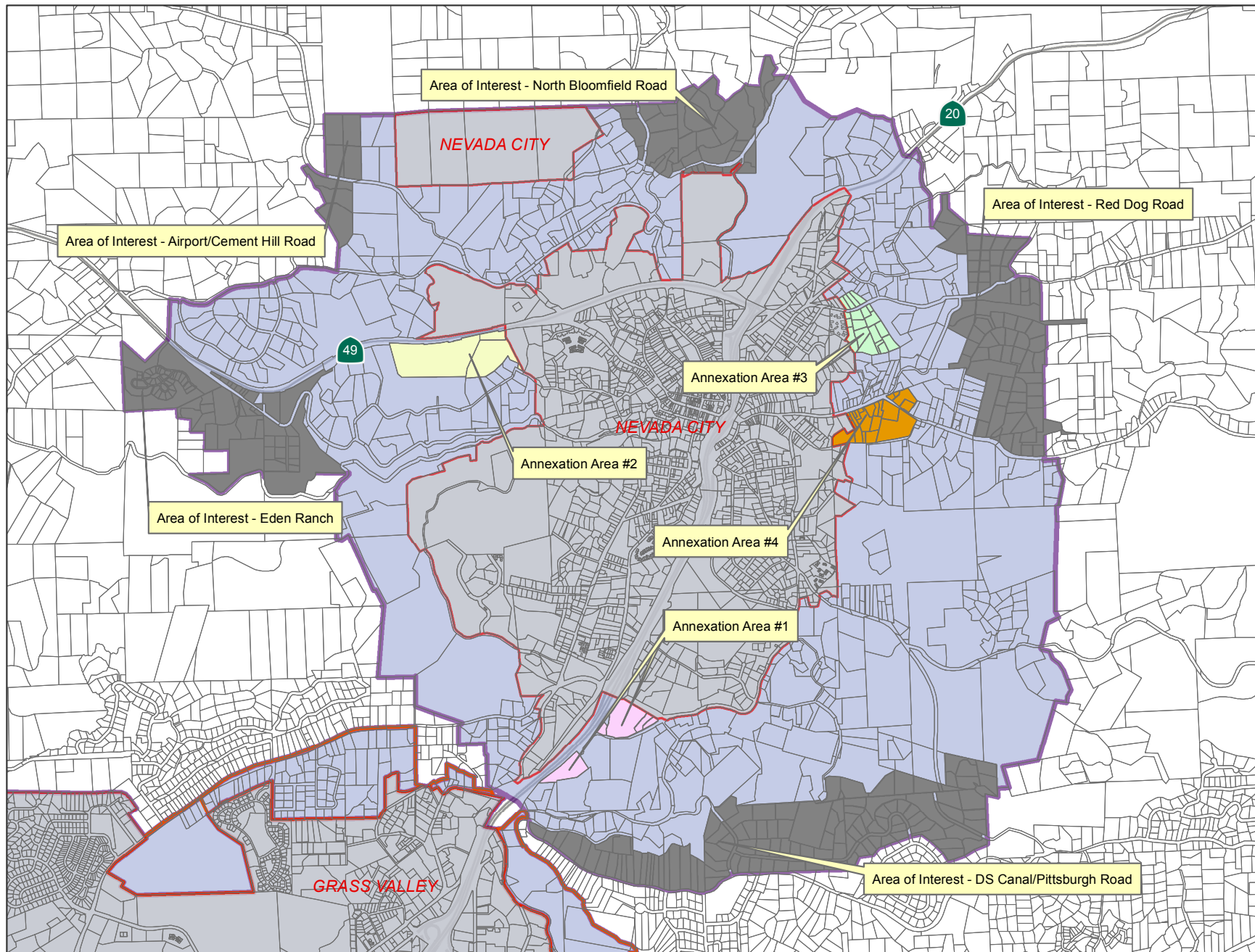
Pursuant to CEQA Guidelines Section 15123(b)(2), this EIR acknowledges the areas of controversy and issues to be resolved that are known to the City of Nevada and/or were raised during the EIR scoping process. These issues were identified during the NOP review period. Seven comment letters were received from agencies, organizations, and individuals in response to the NOP comment period (February 25, 2019 through March 27, 2019). These comments on the NOP are included in Appendix A.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters:

Issue Area:	Concerns Related To:
<b>Project Description</b>	<ul style="list-style-type: none"> <li>• The project description must be stable and contain clear objectives, and include usable maps</li> <li>• The No Project Alternative should be the existing Sphere of Influence (SOI)</li> <li>• Tiering does not excuse an adequate analysis</li> <li>• The existing development patterns and setting must be adequately described</li> </ul>
<b>Aesthetics</b>	<ul style="list-style-type: none"> <li>• Clear before and after visual conditions should be provided</li> </ul>
<b>Air Quality and Greenhouse Gasses</b>	<ul style="list-style-type: none"> <li>• EIR should evaluate AQ and GHG</li> <li>• The existing conditions and non-attainment status should be stated to adequately address impacts including cumulative</li> <li>• To evaluate AQ and GHG as key environmental issue in EIR</li> <li>• Compliance with required GHG reduction plans must be discussed</li> </ul>
<b>Biological Resources</b>	<ul style="list-style-type: none"> <li>• A full accounting of impacts to biological resources, including cumulative resources, and species in the California Natural Diversity Database (CNDDB) should be included</li> <li>• Mitigation should be supported by the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS) and U.S. Army Corps of Engineers (USACE)</li> </ul>



Issue Area:	Concerns Related To:
<b>Cultural and Tribal Resources</b>	<ul style="list-style-type: none"> <li>• Comply with the requirements of Assembly Bill 52 and Senate Bill 18</li> <li>• Archaeological resources need to be adequately evaluated and mitigated</li> </ul>
<b>Hydrology and Water Quality</b>	<ul style="list-style-type: none"> <li>• Discuss the Central Valley Regional Water Quality Control Board (CVRWQB) Basin Plan, antidegradation policy, Construction General Permit, Storm Water Pollution Prevention Plan, Municipal Separate Storm Sewer System Permits, Clean Water Act, and other needed NPDES permits</li> <li>• Discussion of potential violations of water quality standards must be discussed</li> <li>• Existing SOI was done to protect Deer Creek</li> </ul>
<b>Land Use</b>	<ul style="list-style-type: none"> <li>• The SOI update is not needed per the Cortese-Knox-Hertzberg-Act</li> <li>• Include an analysis of potential to subdivide</li> <li>• Discuss compatibility with existing land use and planning documents</li> <li>• The DEIR should not make recommendations to land uses</li> </ul>
<b>Population and Housing</b>	<ul style="list-style-type: none"> <li>• Discuss the potential for substantial inducement of population</li> <li>• Discuss the existing affordable housing within the City</li> </ul>
<b>Public Services</b>	<ul style="list-style-type: none"> <li>• Increased demand to public services must be evaluated</li> <li>• Discuss current capacity of schools and parks</li> <li>• Emergency response during peak traffic hours should be analyzed</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>• The DEIR should utilize VMT to discuss traffic impacts</li> <li>• Improvements to traffic safety</li> <li>• Include mitigation to reduce effects on transit services</li> </ul>
<b>Utilities and Services</b>	<ul style="list-style-type: none"> <li>• Include mitigation for County sanitation facilities and services</li> <li>• Include mitigation for solid waste collection</li> <li>• Potential to be required to be annexed and cost of extending services</li> <li>• Discuss current capacity of wastewater treatment and landfills</li> <li>• The volume of water needed to serve the project should be evaluated and there is adequate evidence that sufficient supply exists</li> </ul>
<b>Wildfire</b>	<ul style="list-style-type: none"> <li>• Discuss the impacts associated with wildfires</li> </ul>
<b>Cumulative Impacts</b>	<ul style="list-style-type: none"> <li>• The incremental effects of all project, and those under environmental review must be accounted for</li> </ul>
<b>Alternatives</b>	<ul style="list-style-type: none"> <li>• The EIR needs to include a reasonable range of Alternatives and that reduce the projects impacts</li> </ul>



**FIGURE 2-1: LAFCO/City Consensus Alternative**  
Nevada City SOI Plan Update

## 2.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2 (b) of the CEQA Guidelines requires an EIR to “describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”

The specific mitigation measures summarized in Table ES-1 would reduce the level of project-specific significant impacts to less than significant. Similarly, many impacts are identified that would be less than significant without the need for additional mitigation measures. Significant and unavoidable impacts were identified in the analysis.

## 2.6 ALTERNATIVES TO THE PROJECT

*Chapter 6.0* of this EIR evaluates alternatives to the proposed project in accordance with the CEQA Guidelines Section 15126.6. The analysis of project alternatives takes into consideration the base assumption that all applicable mitigation measures associated with the project would be implemented with the appropriate alternatives. However, applicable mitigation measures may be scaled to reduce or avoid the potential impacts of the alternatives under consideration and may not precisely match those identified for the project. If a specific impact is not raised within the discussion of an alternative, it is because the effect is expected to be the same as that associated with the implementation of the proposed project. Detailed descriptions and analyses of the project alternatives can be found in *Chapter 6.0 Alternatives*. The following is a summary of the alternatives evaluated in this EIR.

As part of the project development process, and as required by CEQA three alternatives have been developed to the preferred LAFCO/City Consensus Alternative. The Alternatives were developed through consultation with City staff, consideration of the public interest, consideration of the legal requirements of CEQA and the environmental review process. The three Alternatives are briefly described below and discussed in additional detail in *Chapter 6.0 Alternatives*.

### ALTERNATIVE 1: ORIGINAL LAFCO STAFF RECOMMENDATION ALTERNATIVE

The Original LAFCo Staff recommendation was prepared by LAFCo staff as an update to the City SOI Plan and is shown on *Figure 2-2: Original LAFCo Staff Recommendation Alternative*. This plan includes the same overall SOI Plan update boundary with the exception of five exclusion areas from the outermost boundary of the SOI. These areas have been proposed for exclusion because the areas are either already developed and unlikely to require the City’s services within the timeframe of the sphere plan, or the provision of City services to the area is likely to be infeasible. The exclusion areas are described as follows:

The exclusion areas under this alternative also include the same five pockets surrounding the City as discussed in the Consensus Alternative, but overall the areas are larger. This would reduce the overall

area of the SOI. To avoid repeating names and confusion, these exclusion areas are numbered 1-5 and the additional areas to be excluded are shown on *Figure 2-2 Original LAFCo Staff Recommendation Alternative*.

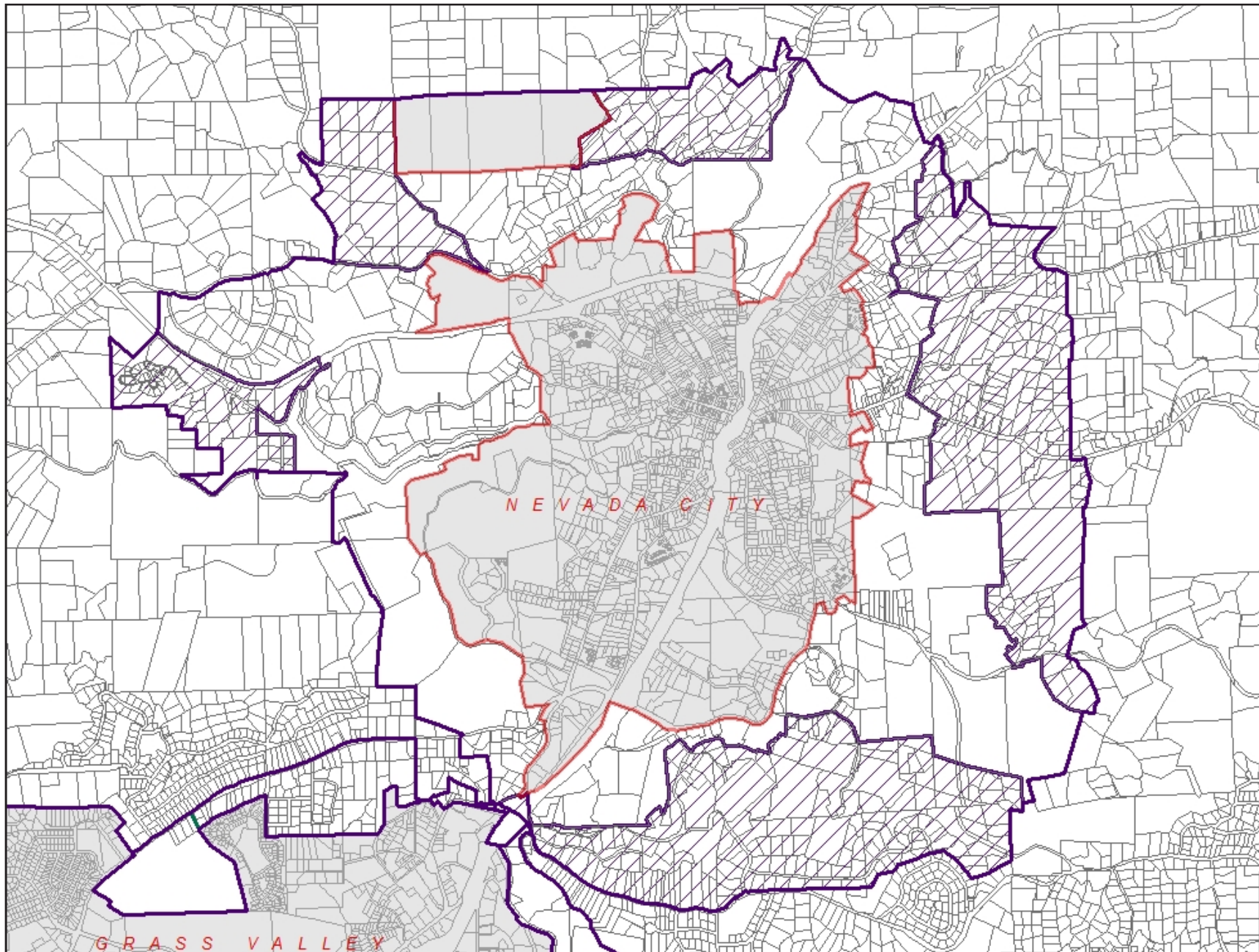
Exclusion Area 1 - This southeastern exclusion area would still be delineated by Banner Lava Cap Road on the south but would extend northerly to Pittsburg Road, Gold Flat Road, Pinewoods Road, and low-density residential parcels on the north. This area contains additional area than the Area of Interest DS Canal/Pittsburg Road of the Consensus Alternative.

Exclusion Area 2- The eastern exclusion area would be expanded compared to the Area of Interest Red Dog Road. This Exclusion Area would extend south of Red Dog Road to Banner Mountain Trail on the south. This include a block of properties south of Banner Mountain Trail bound by Stillwater Creek Road on the west and Big Blue Road on the east. The westerly boundary of Exclusion Area 2 also would be expanded approximately 1,000 feet west to include undeveloped and rural parcels. In addition, the northerly boundary would extend to Highway 49.

Exclusion Area 3- The northern exclusion area would be similar in size to Area of Interest North Bloomfield Road but would be expanded easterly to include approximately 10 properties. The westerly boundary would become the incorporated City island property known as the Old Airport Property.

Exclusion Area 4- The northwesterly exclusion area would increase in size from the Area of Interest Airport/Cement Hill Road to and would extent. The boundary would include approximately nine additional properties and be and be bound by the Old Airport Property and Cement Hill Road on the east.

Exclusion Area 5 – The westerly exclusion area would be substantially the same as Area of Interest Eden Ranch but would be contracted westerly. This would slightly increase the area in the SOI to include four additional properties.



**FIGURE 2-2: Original LAFCo Staff Recommendation Alternative**  
Nevada City SOI Plan Update

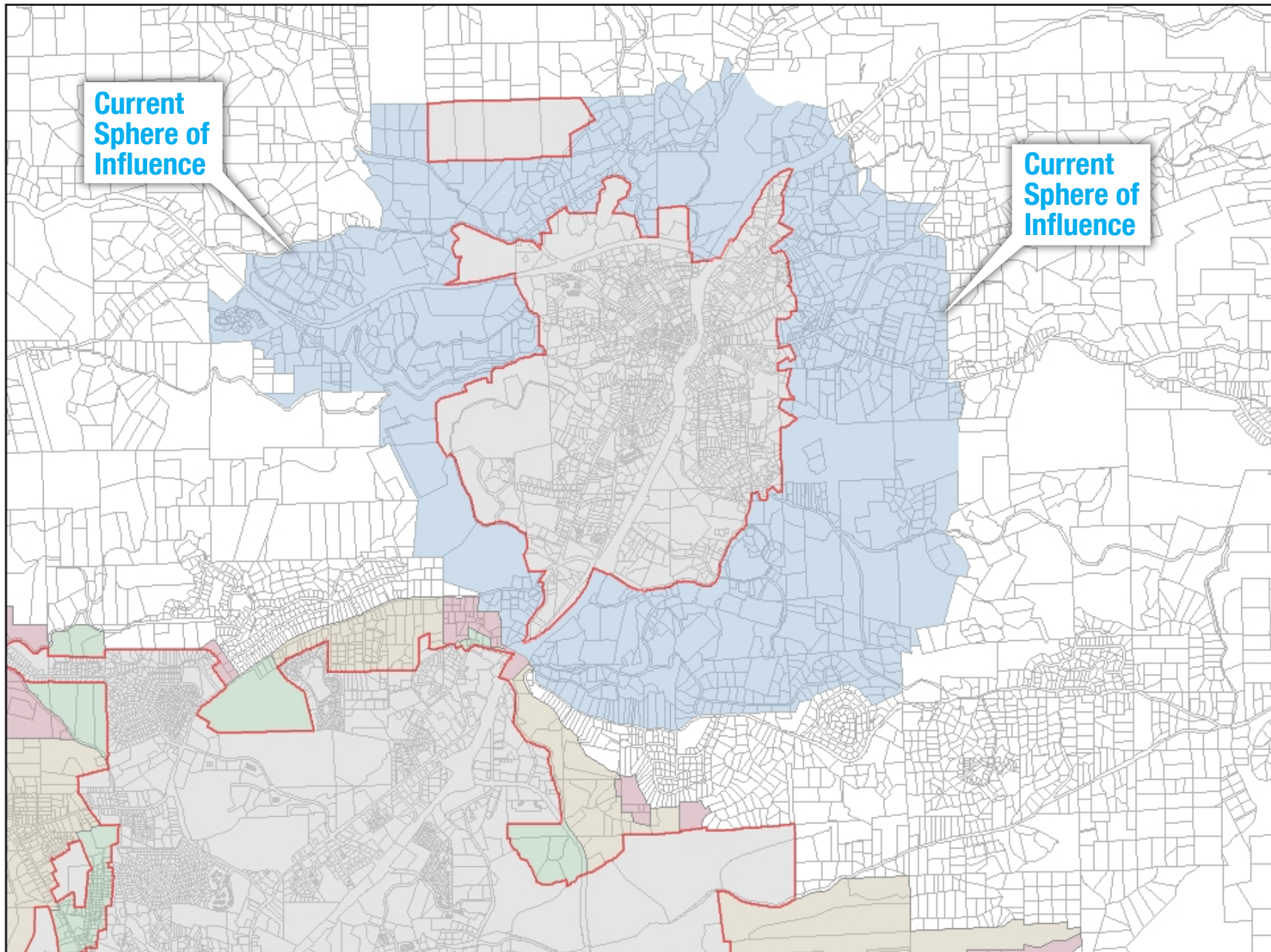
## **ALTERNATIVE 2: CITY RECOMMENDATION ALTERNATIVE**

The City has indicated it would prefer to retain all territory included in its current SOI (as initially adopted in 1983 and updated in 2008). The City Recommendation Alternative includes an area of approximately 1,650 acres surrounding the City and is shown in *Figure 2-3: City Recommendation Alternative*. This Alternative would maintain the SOI boundary which roughly extends east approximately 0.75 miles from the current City on the east. On the west, the SOI would extend to as much as one mile and as little as approximately 0.33 miles beyond the existing City limits. To the south, the SOI would extend southerly approximately 0.6 miles to Banner Lava Cap Road, and on the north, the SOI would extend approximately 0.5 miles and connect with the existing island of City land generally. In some areas the SOI would not be delineated by a particular physical landmark, most notably the eastern and northern boundaries, though the northern boundary loosely follows the ridgelines of Cement Hill and Sugarloaf Mountain. In these areas the SOI would trend north to south, and east to west, respectively, and cross through mostly undeveloped and rural residential areas. As discussed, the western boundary would be irregularly shaped and also not delineated by a particular physical landmark. The southern boundary would largely be delineated by Banner Lava Cap Road east of SR 20. West of SR 20 the boundary begins to trend in a northwesterly direction trends through undeveloped and rural residential areas

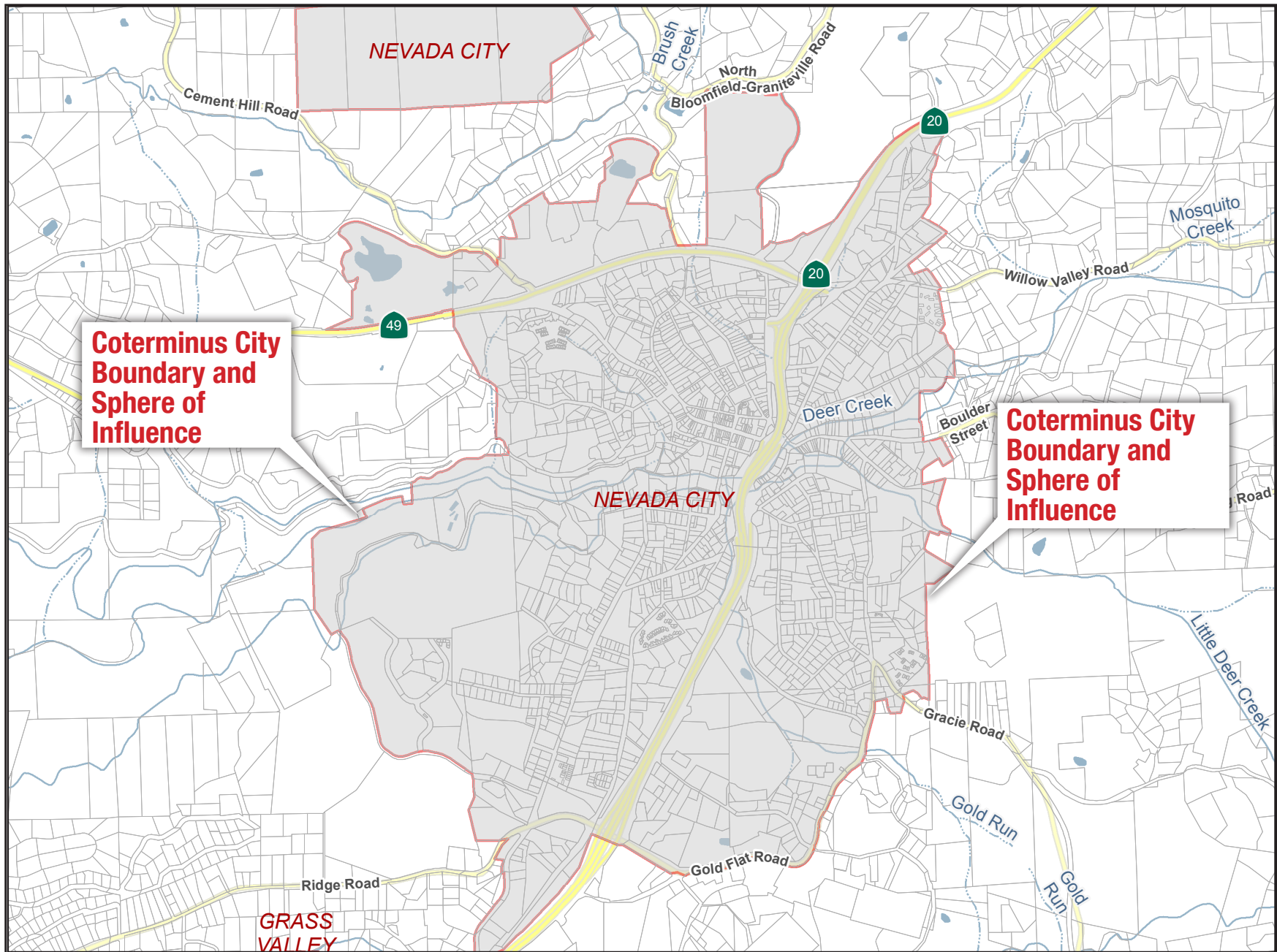
## **ALTERNATIVE 3: COTERMINUS SPHERE – NO PROJECT ALTERNATIVE**

The Coterminous Sphere - No Project Alternative includes adoption of a coterminous SOI. Under this alternative, the City's SOI includes only the territory within the City's jurisdictional boundary, as depicted in *Figure 2-4: Coterminus Sphere – No Project Alternative*. CEQA requires that environmental analysis use as its baseline for analysis the existing physical conditions on the ground, rather than what is proposed in existing planning documents. This alternative assumes no additional expansion of the City and would not extend City services to any unincorporated County land.





**FIGURE 2-3: City Recommendation Alternative**  
Nevada City SOI Plan Update



**FIGURE 2-4: Coterminus Sphere - No Project Alternative**  
Nevada City SOI Plan Update



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## 2.7 ENVIRONMENTAL IMPACT SUMMARY

Table ES-1 (Summary of Environmental Impacts and Mitigation Measures) has been organized to correspond with the environmental issues discussed in *Chapter 4.0* of this Draft EIR. The summary table is arranged in four columns:

- Environmental impacts (“Impact”).
- Level of significance without mitigation (“Significance Before Mitigation”).
- Mitigation measures (“Mitigation Measure”).
- The level of significance after implementation of mitigation measures (“Significance After Mitigation”).

If an impact is determined to be significant or potentially significant, mitigation measures are identified, where appropriate and feasible. More than one mitigation measure may be required to reduce the impact to a less-than-significant level. This Draft EIR assumes that all applicable plans, policies, and regulations would be implemented, including, but not necessarily limited to, City General Plan policies, laws, and requirements or recommendations of the City planning staff or Board.

Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each issue area and within the relevant impact analysis. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in *Chapter 1.0 Introduction*.

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>Chapter 4.1 – AESTHETICS</b>			
<b>Impact AES-1:</b> Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact AES-2:</b> Substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact AES-3:</b> Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact AES-4:</b> Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>Chapter 4.2 - AIR QUALITY</b>			
<b>Impact AQ-1:</b> Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact AQ-2:</b> Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	Potentially Significant Impact.	<b>MM AIR-1:</b> Prior to LAFCo approval an annexation involving new, non-ministerial development and construction, the City shall determine if an air quality study is required. If required, the project applicant shall demonstrate to the reasonable satisfaction of the City that the project was reviewed for the potential to result in a cumulatively considerable net increase of any criteria pollutant during construction. Such projects shall be reviewed for conformance to applicable NASQMD Rules and other measures intended to reduce impacts to air quality. Based on the initial evaluation, the City may require applicants to adopt an air quality management plan that complies with NASQMD requirements and meets best practices.	Less Than Significant Impact with Mitigation Incorporated.
<b>Impact AQ-3:</b> Expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact.	<b>MM AIR-2:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the project applicant shall show to the reasonable satisfaction of the City, that the project site is not located within 0.25 miles of a sensitive receptor and would not locate sensitive receptors in proximity to an emitter. If the project is located within 0.25 miles of a known sensitive receptor or would locate a sensitive receptor less than 0.25 miles from a known emission source, an initial evaluation to determine if a Health Risk Assessment (HRA) would be needed shall be made. If an HRA is needed, the HRA shall include mitigation measures	Less Than Significant Impact with Mitigation Incorporated.

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		to reduce impacts to less than significant and will be included to the project.	
<b>Impact AQ-4:</b> Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Potentially Significant Impact.	<b>MM AIR-3:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the project applicant shall show to the reasonable satisfaction of the City that the project would not locate an odor generating use in proximity to substantial numbers of receptors, and would not locate a new project in proximity to an odor generating use. If the proposed project would result in odor impacts, the City shall require appropriate buffers or means of odor control, such as using air filters to ensure receptors are not substantially affected by the source of the odor.	Less Than Significant Impact with Mitigation Incorporated.
<b>Cumulative Impacts</b>	Potentially Significant Impact.	<b>Implement MM AIR-1 through MM AIR-3.</b> No additional mitigation measures are required.	Less Than Significant Impact with Mitigation Incorporated.

### Chapter 4.3 – BIOLOGICAL RESOURCES

<b>Impact BIO-1:</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact.	<b>MM BIO-1:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the project applicant shall demonstrate to the City that the project will comply with the following measures: <ul style="list-style-type: none"> <li>If the proposed action requires a grading permit or other action requiring substantial ground disturbance or removal of vegetation including trees, review of the site by a qualified biologist shall be required. The site shall be reviewed for the presence of special-status species, sensitive habitat, or waters or wetlands to identify resources that may occur in or</li> </ul>	Less Than Significant Impact with Mitigation Incorporated.
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**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>around the project site and that may be disturbed by construction or operation of the project. If the biological survey does not identify any sensitive wildlife or plant species and no impacts would occur, no further mitigation is required.</p> <ul style="list-style-type: none"> <li>▪ If the biological resources survey identifies special-status species, sensitive habitat, or waters or wetlands that would be disturbed by implementation of the proposed project, the qualified biologist shall develop a mitigation plan to the satisfaction of the City. The mitigation plan shall include measures such as the following but not limited to: <ul style="list-style-type: none"> <li>○ All ground disturbing activities shall be required to be conducted outside of nesting season and after preconstruction surveys to minimize impacts to nesting birds;</li> <li>○ The project site shall be evaluated for the presence of special status plant species. If special status plants have the potential for presence, a site survey by a qualified biologist shall be conducted during the blooming period. If special status plant species are located, the qualified biologist shall develop a mitigation plan for the sensitive plant species.</li> <li>○ The project site shall be evaluated for the presence of any riparian habitat or other sensitive natural community. If such habitats are located or would be potentially impacted by the project, a mitigation plan to the satisfaction of the CDFW and RWQCB, as required, shall be implemented.</li> <li>○ The project site shall be evaluated for the presence of waters of the U.S. wetlands. If such</li> </ul> </li> </ul>	

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>waters or wetlands are located or would be affected by the project, a mitigation plan for the resources to the satisfaction of the CDFW, RWQCB, and USACE, as required, shall be implemented.</p> <ul style="list-style-type: none"> <li>○ The project site shall be evaluated for the presence of any native resident or migratory fish or wildlife species or the potential to be used as a migratory wildlife corridor, or native wildlife nursery sites. If the site is determined to have the potential of being such a resource, a site survey by a qualified biologist shall be conducted. If these resources are located or the site would function as such and the project would substantially impede the use, the qualified biologist shall develop a mitigation plan for the resources.</li> <li>○ The project site shall be evaluated for potential conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. If the site is determined to have the potential of such a conflict, a site survey by a qualified biologist or evaluation by a qualified professional shall be conducted. The qualified biologist or professional shall develop a mitigation plan to comply with planning requirements.</li> </ul>	
<b>Impact BIO-2:</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the	Potentially Significant Impact.	<b>Implement MM BIO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
California Department of Fish and Game or US Fish and Wildlife Service?			
<b>Impact BIO-3:</b> Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant Impact.	<b>Implement MM BIO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
<b>Impact BIO-4:</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant Impact.	<b>Implement MM BIO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
<b>Impact BIO-5:</b> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact.	<b>Implement MM BIO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
<b>Impact BIO-6:</b> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact.	<b>No mitigation measures are required.</b>	No Impact.
<b>Cumulative Impacts</b>	Potentially Significant Impact.	<b>Implement MM BIO-1.</b> No additional mitigation measures are required.	Less Than Significant Impact with Mitigation Incorporated.

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>Chapter 4.4 – CULTURAL AND TRIBAL RESOURCES</b>			
<b>Impact CUL-1:</b> Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Potentially Significant Impact.	<p><b>MM CUL-1:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the City shall ensure that the project has been reviewed by a qualified archaeologist for its potential to damage, destroy, or harm the integrity of a historical, cultural, or archaeological resource. After initial review, if necessary, the City shall require the applicant to have a qualified archaeologist conduct a review of the project site and determine the appropriate level of study (e.g., Cultural Resources Report, Cultural Resources Study, or Technical Memorandum) needed to evaluate the potential for presence and/or protection measures for cultural resources either known or unknown. If a formal study is required, all California Native American tribes that are traditionally or culturally affiliated with the geographic area or that have requested notification, shall be contacted. If requested by any tribal group, the City will agree to all mandatory consultation requirements.</p> <p>As part of the Cultural Resources evaluation or study, the qualified archaeologist shall include all reasonable steps needed to fully document, recover, or preserve in place resources within the project site and develop a mitigation plan to prevent damage or destruction to the resource(s). These measures could include, but not be limited to the following:</p> <p>Cultural Resources Protection Measures Implemented Prior to Construction:</p> <ul style="list-style-type: none"> <li>▪ Review archival records at the NAHC, etc.;</li> </ul>	Less Than Significant Impact with Mitigation Incorporated.



**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>▪ Consultation with culturally affiliated tribes or other Native American representative(s);</li> <li>▪ Use of Native American monitors during ground disturbing activities;</li> <li>▪ Demarcation and preservation in place of any known prehistoric/Native American archaeological, or historical resource;</li> <li>▪ Evaluation of the historical archaeological site or resources for potential listing on the National Register of Historic Places (NRHP);</li> <li>▪ Implement a Construction Worker Environmental and Cultural Awareness Training Program meeting or exceeding the Secretary of the Interior's Standards for professional archaeology;</li> </ul> <p>Cultural Resources Protection Measures Implemented During Construction:</p> <ul style="list-style-type: none"> <li>▪ Demarcation and preservation in place of any previously unknown located prehistoric/Native American archaeological, or historical resource;</li> <li>▪ Cessation of ground disturbance with 50 feet of any located resource (s);</li> <li>▪ Preservation of resources in place if possible;</li> <li>▪ If resources are not able to be preserved in place, they shall be appropriately documented and recovered;</li> <li>▪ Preparation of a report documenting the resource(s);</li> </ul> <p>Cultural Resources Preservation Performance Standards:</p> <ul style="list-style-type: none"> <li>▪ Retention of distinctive materials, features, spaces and spatial relationships;</li> <li>▪ Retain and preserve the historical character of the site and/or resources;</li> </ul>	

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>▪ Preservation of distinctive materials, finishes, and/or construction techniques;</li> <li>▪ Recordation and documentation of the resources.</li> </ul>	
<b>Impact CUL-2:</b> Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Potentially Significant Impact.	<b>Implement MM CUL-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
<b>Impact CUL-3:</b> Disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially Significant Impact.	<b>Implement MM CUL-1 and MM CUL-2.</b>  <b>MM CUL-2:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the City shall ensure the applicant will conform to the following measure: If human remains are uncovered during any ground disturbing activities, all construction activities onsite shall cease. The construction contractor shall immediately contact the Nevada County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. The City Planning Department shall be contacted immediately after the coroner. If the County coroner determines that the remains are Native American, the Native American Heritage Commission shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). No further construction activity shall occur until consultation is complete with the most likely descendent, the Coroner and the City staff. Authorization to resume construction shall only be given by the City after concurrence with the most likely descendent and shall include implementation of all appropriate measures to protect any possible burial sites or human remains.	Less Than Significant Impact with Mitigation Incorporated.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><b>Impact CUL-4:</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>			
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	Potentially Significant Impact.	<b>Implement MM CUL-1 and MM CUL-2.</b>	Less Than Significant Impact with Mitigation Incorporated.
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	Potentially Significant Impact.	<b>Implement MM CUL-1 and MM CUL-2.</b>	Less Than Significant Impact with Mitigation Incorporated.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Cumulative Impacts</b>	Potentially Significant Impact.	<b>Implement MM CUL-1 and MM CUL-2.</b> No additional mitigation measures are required.	Less Than Significant Impact with Mitigation Incorporated.

## Chapter 4.5 – GEOLOGY AND SOILS

**Impact GEO-1:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Less than Significant Impact.	<b>No mitigation measures are required.</b>	Less than Significant Impact.
ii) Strong seismic ground shaking.	Less than Significant Impact.	<b>No mitigation measures are required.</b>	Less than Significant Impact.
iii) Seismic related ground failure, including liquefaction.	Potentially Significant Impact.	<b>MM-GEO-I:</b> Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, of habitable structures in or adjacent to hydraulically mined areas or steep slopes, the City shall require a geotechnical\geologic hazard investigation of the site and surrounding area to determine if there is a risk of land subsidence. The geotechnical investigation shall describe the potential for the site to experience subsidence either due to seismic ground shaking or soil saturation leading to liquefaction, lateral spreading,	Less Than Significant Impact with Mitigation Incorporated.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
		subsidence, or collapse. If the investigation indicates such risk, the applicant shall provide to the satisfaction of the City a design-level geotechnical report and investigation for the subject property. The design level geotechnical investigation shall prescribe, as necessary design and construction features or mitigation that will adequately mitigate the risks of such land subsidence both on the development and surrounding area.	
iv) Landslides.	Potentially Significant Impact.	<b>Implement MM GEO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
b) Result in substantial soil erosion or the loss of topsoil;	Less than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
c) Be located on a geologic unit or soil that is unstable, or what would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Potentially Significant Impact.	<b>Implement MM GEO-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
d) Be located on expansive soil, as defined Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	Potentially Significant Impact.	<b>Implement MM GEO-1</b>	Less Than Significant Impact with Mitigation Incorporated.
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are	Less than Significant Impact.	<b>No Mitigation is Required.</b>	Less Than Significant Impact.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
not available for the disposal of wastewater			
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant Impacts	<b>No Mitigation is Required.</b>	Less Than Significant Impact.
Cumulative	Potentially Significant Impact.	<b>Implement MM GEO-1.</b>	Less Than Significant Impact.

## Chapter 4.6 – GREENHOUSE GAS EMISSIONS

**Impact GHG-1:** Generate greenhouse gas emissions, either directly or indirectly, that could have a significant impact on the environment?

Potentially Significant Impact.

**MM GHG-1:** Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the City shall ensure the project applicant will implement, to the extent feasible, measures in compliance with all state and local requirements and policies to reduce the volume of GHGs released from construction and operation of their project. As part of the required CEQA review for future annexations, as applicable, the City shall provide the applicant with a list of measures that can be included to projects to reduce GHGs. The list shall consist of but not be limited to the following:

Less Than Significant Impact with Mitigation Incorporated.

### **Construction**

- Work collaboratively with applicants to obtain low-interest financing to meet minimum energy efficiency;
- Adopt the California Title 24 minimum requirements and require new construction to meet Tier 1 or Tier 2 standard of the CALGreen Code.
- Require the install of SmartMeters on all new construction in the SOI Plan update area;
- Require and enforce state requirements for cool roofs on new projects;

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>Encourage the use of native and drought-tolerant landscaping plants;</li> <li>Require landscaping to use drip irrigation when feasible;</li> <li>Public projects should use high albedo paving materials;</li> <li>Use prefabrication when possible to reduce waste materials;</li> <li>Encourage new homes and businesses to be pre-wired for solar installation;</li> <li>Encourage new construction to use recycled building materials;</li> <li>Require the use of No-VOC floor sealant and when feasible, No-VOC building materials;</li> <li>Request applicant's plant or replant additional trees to minimize the urban-heat island effect;</li> <li>Set a goal of achieving 50% paved-surface shading within five to ten years of project completion.</li> </ul>	
		<p><b>Operation</b></p> <ul style="list-style-type: none"> <li>Provide businesses and residents with information regarding rebate programs;</li> <li>Encourage the use of solar installation to power newly completed projects;</li> <li>Encourage the use of alternative transportation;</li> <li>Require the use of photosensors and time clocks to turn off exterior lighting;</li> <li>Require new lighting to provide even light distribution and use LED lamps;</li> <li>Require the use of high-efficiency restroom features; and</li> <li>Require the use of computerized building management systems for HVAC operation.</li> </ul>	

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Impact GHG-2:</b> Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Potentially Significant Impact.	<b>Implement MM GHG-1.</b>	Less Than Significant Impact with Mitigation Incorporated.
<b>Cumulative Impacts</b>	Potentially Significant Impact.	<b>Implement MM GHG-1.</b> No additional mitigation measures are required.	Significant and Unavoidable.

## Chapter 4.7 – HYDROLOGY AND WATER QUALITY

<b>Impact HYD-1:</b> Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact HYD-2:</b> Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact HYD-3:</b> Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.



**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
i) Result in substantial erosion or siltation on or off-site?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact HYD-4: d)</b> In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Impact HYD-5:</b> Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Chapter 4.8 – LAND USE AND PLANNING</b>			
<b>Impact LU-1:</b> Physically divide and established community?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Impact LU-2:</b> Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.

## Chapter 4.9 – PUBLIC SERVICES

**Impact PS-1:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire Protection?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
b) Police Protection?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
c) Schools?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
d) Parks?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.
e) Other public facilities?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact.

## Chapter 4.10 – TRANSPORTATION

<b>Impact TR-1:</b> Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TR-2:</b> Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TR-3:</b> Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact TR-4:</b> Result in inadequate emergency access?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact

Table ES-1: Project Impacts and Proposed Mitigation Measures

Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>Chapter 4.11 – UTILITIES AND SERVICE SYSTEMS</b>			
<b>Impact UT-1:</b> Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact UT-2:</b> Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact UT-3:</b> Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Impact UT-4:</b> Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
<b>Impact UT-5:</b> Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
<b>Cumulative Impacts</b>	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact

## Chapter 4.12 – WILDFIRE

**Impact WLD-1:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Potentially Significant Impact.

**MM WLD-1:** Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction of habitable structures, the City shall require project applicants for projects within the wildland urban interface to submit for review and approval, an evacuation plan to the City. The evacuation plan shall be consistent with any comprehensive plan adopted by the City, and shall consider the increased demand the project would place on existing development, roadways, and the available capacity of resources to accommodate evacuees from the new project should a wildfire occur. If required, the City shall require new developments to include an evacuation improvement plan that will include measures such as roadway widening or installation of traffic control measures that would facilitate evacuation of the project

Less than Significant Impact With Mitigation Incorporated.

**Table ES-1: Project Impacts and Proposed Mitigation Measures**

<b>Impact</b>	<b>Level of Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Level of Significance After Mitigation</b>
		site. Future applicants will be required to make a fair share contribution to the necessary improvements.	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildlife?	Potentially Significant Impact.	<b>Implement MM WLD1.</b> No mitigation with more stringent requirements than current building codes and other firesafe building regulations are available.	Significant and Unavoidable.
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less Than Significant Impact.	<b>No mitigation measures are required.</b>	Less Than Significant Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Potentially Significant Impact.	<b>Implement MM WLD1.</b> No mitigation with more stringent requirements than current building codes and other firesafe building regulations are available.	Significant and Unavoidable
<b>Cumulative Impacts</b>	Potentially Significant Impact.	<b>Implement MM WLD-1.</b> No mitigation with more stringent requirements than current building codes and other firesafe building regulations are available.	Significant and Unavoidable.

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## 3.0 PROJECT DESCRIPTION

The project description is a required part of an Environmental Impact Report (EIR) and provides the context to analyze the potential impacts of the proposed project in accordance with California Environmental Quality Act (CEQA) Guidelines § 15124. An adequate project description need not be exhaustive but should supply the information necessary for the evaluation and review of the project's effects on the environment.

For the purposes of CEQA, a complete project description must contain the following information:

- a) the precise location and boundaries of the project area, shown on a detailed map, preferably topographic, along with a regional map of the project's location;
- b) a statement of the objectives sought by the project, which should include the underlying purpose of the project and may discuss the project benefits;
- c) a general description of the project's technical, economic, and environmental characteristics; and
- d) a statement briefly describing the intended uses of the EIR by the lead or other agencies for decision making, permits or other approvals, and consultation requirements integrating CEQA.

The purpose of this section therefore is to provide a complete project description in compliance with the above requirements of CEQA for the Project: the Nevada County Local Agency Formation Commissions (LAFCo) update to the proposed Sphere of Influence (SOI) Plan for the City of Nevada City (proposed project). It is intended to provide to the public, agencies, and decision-makers a clear understanding of 1) the environmental setting of the project, 2) the regulatory setting, 3) the particulars of the project, 4) the assumptions and limitations concerning the Project upon which the environmental analysis will be based, 5) the Project objectives, and 6) the discretionary approvals needed for the project.

### 3.1 PROJECT LOCATION AND SETTINGS

#### Regional Location

The City of Nevada City (City) is the County seat of Nevada County (County) and is in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, CA. Nevada County is bounded by the Middle Fork of the Yuba River and Sierra County on the north, the state of Nevada to the east, the Bear River and Placer County to the south, and Yuba County to the west. Nevada County's total land area is approximately 978 square miles and has an estimated total population of 99,155 people of which 66,207 people live in unincorporated areas and 32,948 people live in the three incorporated cities. The three incorporated cities include Grass Valley with 13,041 people, Truckee with 16,681 people, and Nevada City with 3,226 people [California Department of Finance (CDOF), 2018]. *Figure 3-1: Regional Location Map*, shows the position of the Nevada City in the County and northern California and in relation to the surrounding counties. *Figure 3-2: Vicinity Map* shows Nevada City in relation to other cities, towns,



and major roadways in the vicinity of the project area Urbanization within the County is primarily located within these three City centers and consists of residential, commercial, industrial, and other uses typical of small cities. The majority of land uses and housing outside the incorporated cities generally consists of low density and rural residential, open space, undeveloped land, agricultural uses and intermittently located commercial and industrial uses. Within the eastern portions of the County, east of Nevada City, there are large tracts of Forest Service and Bureau of Land Management land.

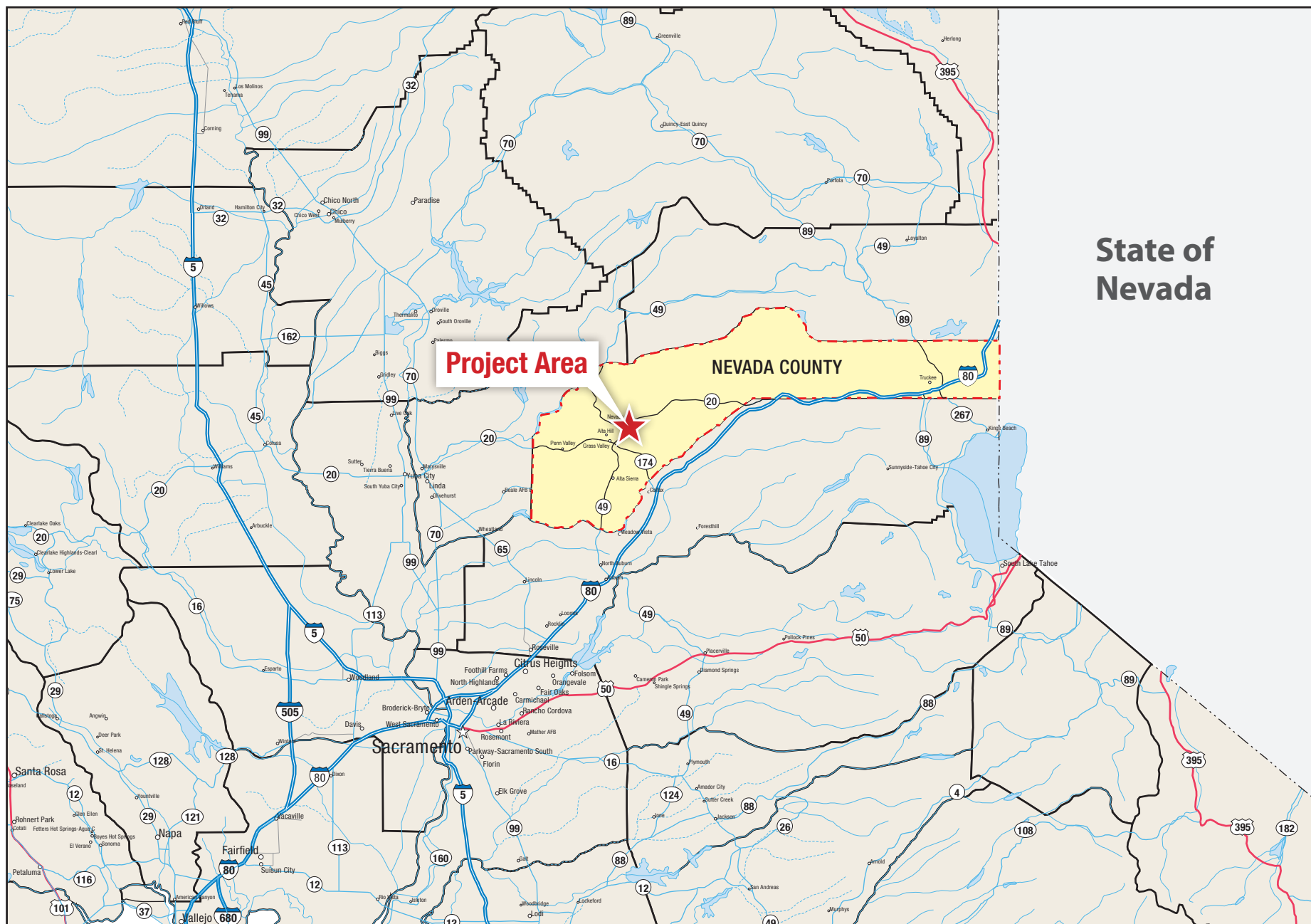
The regional geography of the County transitions from low lying foothills on the edge of the Sacramento Valley on the west to the high mountains of the Sierra Nevada Range rising above 8,000 feet, and high plateau further the east. Nevada City is within the western third of Nevada County in the valley of Deer Creek at an altitude of approximately 2,500 feet. Nevada City lies in this area of transition between the valley to the west and the generally steep, granitic terrain of the Sierra Nevada mountains further east.

The major transportation routes that provide regional connectivity through the City is the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49) which through the City are joined. SR-20 and SR 49 are the major connectors through the City and to points east. SR-49 provides access to the northwesterly areas of the City and SOI west from the SR-20/SR-49/Uren Street Intersection. SR-20\49 connects Nevada City to the City of Grass Valley approximately four miles to the southwest. According to the Nevada City Housing Element, Grass Valley is larger and contains a larger more diverse and urbanized area than Nevada City. Land Uses in Grass Valley include planned employment centers, Sierra College's Western Nevada County Campus, larger-scale shopping centers, small and large auto dealerships, a number of planned residential communities, apartment complexes and senior retirement centers (Nevada City, 2014).

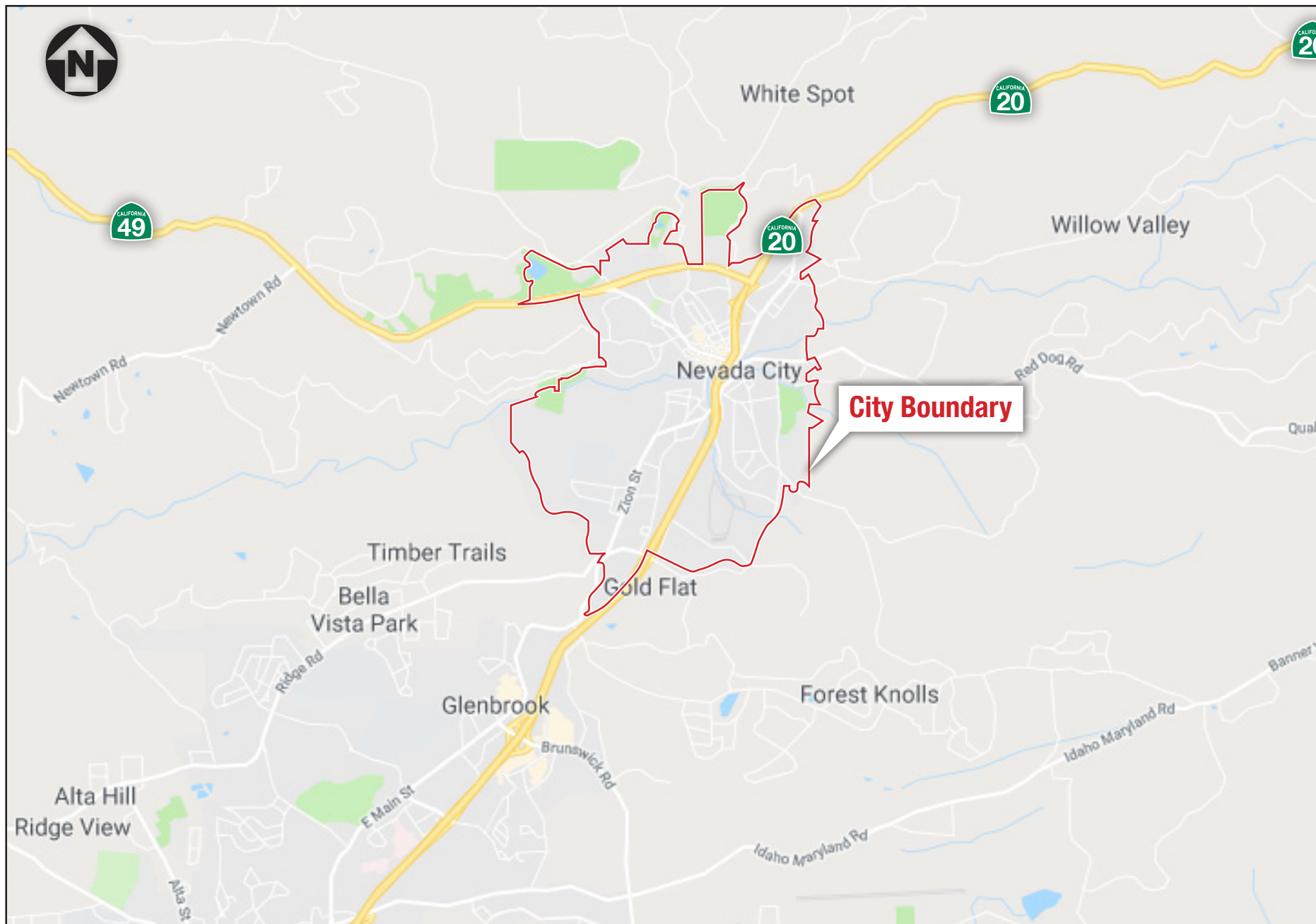
SR-20 runs in a northeasterly direction for approximately 25 miles connecting Nevada City with the unincorporated portions of Nevada County before linking with Interstate 80 (I-80) near Nevada County's southern border with Placer County. I-80 is the major connector for the region and links Sacramento and the Bay area, and points east including Reno and beyond.

## Local Vicinity

Nevada City was founded in 1850 and incorporated on April 19, 1856. Nevada City started as a gold-mining community one hundred and fifty (150) years ago and is now characterized as a modern City but still with modest cottages, elegant Victorian houses and impressive classic brick buildings. The City has a unique blend of housing and businesses that provide residents with a high quality-of-life. Due to its rich history associated within the California gold rush, historic preservation is a top priority and ordinances protect not only the downtown district, which is on the National Register of Historic Places, but homes in the residential areas have been enacted. The City's focus on preservation and the community's keen sense of place, coupled with geographic, topographic, increasing building costs, and infrastructure constraints has resulted in limited growth. This is evidenced by the fact that from 1980 to 2010 the yearly population increase was approximately 32 people per year (Nevada City, 2014)., a rate which has remained relatively consistent to date.



**FIGURE 3-1: Regional Location Map**  
Nevada City SOI Plan Update



**FIGURE 3-2: Vicinity Map**  
Nevada City SOI Plan Update

The City is located within a basin on the western slope of the Sierra Nevada granting it a unique topography with hills and valleys and visually appealing aesthetic and scenic views. The town is located in a natural “bowl” giving the impression that the historic mining town is compact as it is surrounded by hills and trees (Nevada City, 2017). Of note is the 36-acre parcel with the approximately 3,080-foot Sugarloaf Mountain to the east. The City maintains a vision of preserving the natural appearance of the mountain from the surrounding area as it serves as a visual backdrop to the City and fosters an appreciation for the open space surrounding the City. Present, Nevada City maintains its identity as an entertainment, cultural, social, and recreational center based on this foundation as historical, in addition to its history of compact growth and surrounding wooded hills. According to the Nevada City 2017 Annexation Plan and Strategy, this identity drives the City’s tourist-oriented economy and attracts the existing culture and entertainment.

Residential development within the City boundaries is predominantly single-family and exists within an approximate 30-acre area on the westerly side of SR 20 that takes primary access from Broad Street. The City boundaries are generally surrounded by rural residential development and undeveloped coniferous forest. These areas extend from the City boundary in all directions and are included in the proposed City SOI. These unincorporated lands are primarily designated and developed for residential uses and are discussed in additional detail under the *Project Site*, heading immediately below.

## **Project Site**

The project proposed comprises an update to the SOI Plan for Nevada City. The proposed SOI Plan update area encircles the City. The City’s jurisdictional boundaries include approximately 1,470 incorporated acres (2018 Nevada County GIS data) and the current SOI (exclusive of the incorporated area) includes approximately 2,702 acres. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, police, fire protection, and recreation and park services. Based on the existing roadways and landscape, the surrounding uses are described in four general directions including southeast, northeast, northwest, and southwest. With the exception of the City of Grass Valley to the south, land in all directions consists of by unincorporated county land. The land use patterns within the SOI are discussed in additional detail below. Land uses are separated into quadrants delineated by major roadways and landmarks. Due to the lack of completely uniform development these areas are generalized and shown on *Figure 3-3: Generalized Land Use Areas*.

## **Roadways and Access**

The major roadways serving the areas include SR-20\49 which generally trends north and south and enters the SOI northerly from the City of Grass Valley, Glenbrook, and community of Town Talk. Hwy 20 runs through the City of Nevada City and then northeasterly existing the City and SOI. SR-49 intersects SR 20 in the northern portion of the SOI and extends westerly providing access to the western areas of the SOI and other collector roads. Major collector roads starting in the southeast SOI include Banner Lava Cap Road, Gracie Road, and Red Dog Road. In the northerly area major roadways include Willow Valley Road, Lewis Road, North Bloomfield Road, Cement Hill Road/Wet Hill Road/Indian Flat Road. In the westerly and southwesterly area major roadways include Old Downieville Hwy and Champion Mine Road, Ridge

Road, and Nevada City Highway. Within all these areas there are numerous local roads as well as private roads that provide access to the various uses within the SOI area.

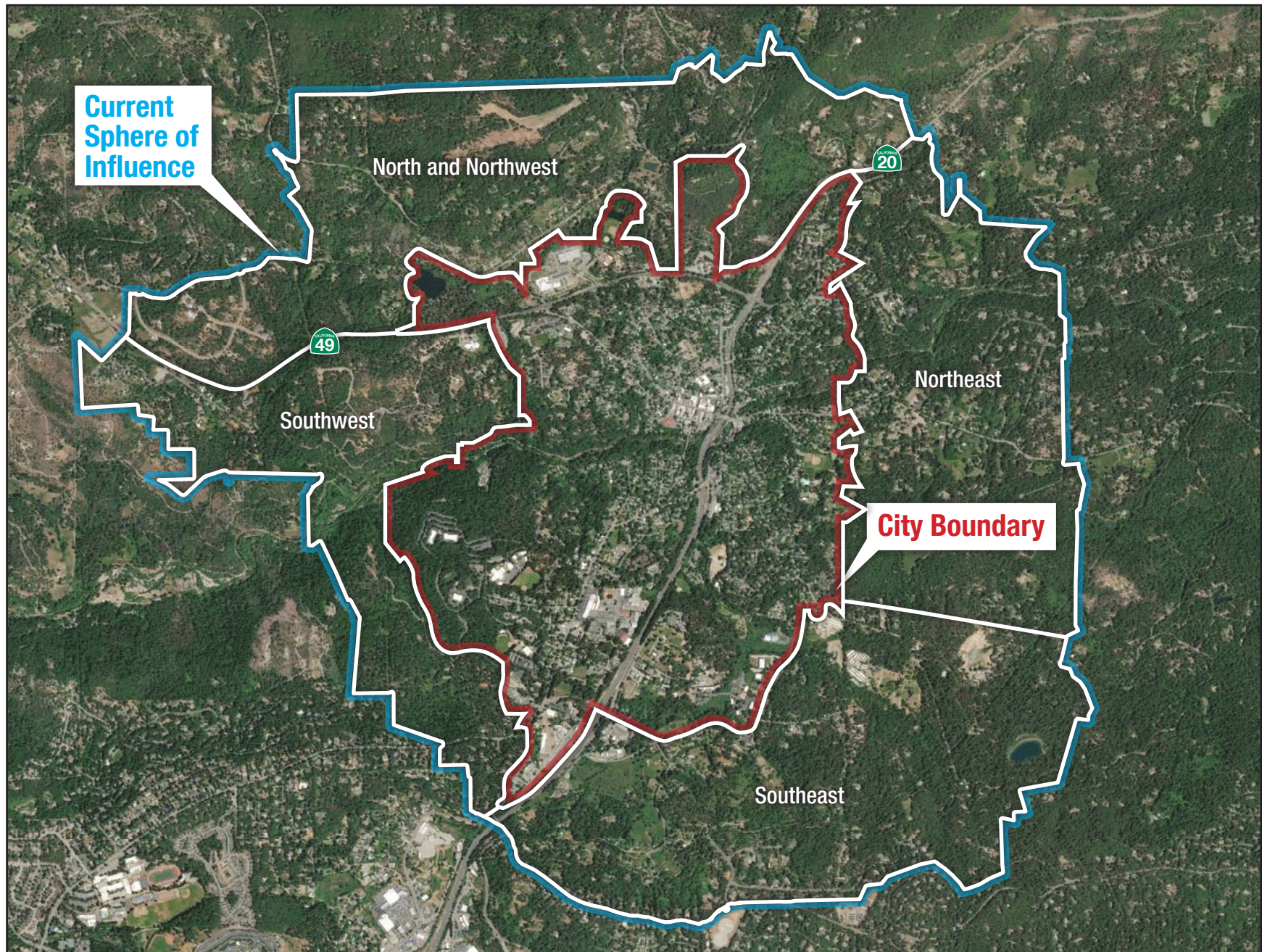
***Southeast***- This portion of the proposed SOI area is located to the east of SR 20\49 and community of Town Talk. This area is primarily accessed via Pittsburg Road, Granholm Lane, Gracie Road, and Gold Flat Road as well as local and neighborhood roads that provide access to the interior rural residential uses. The moderately hilly landscape provides some distant views and is thickly vegetated by tall trees and dominated by species of evergreen. Commercial development in this area is limited and largely adjacent to SR-20 and consists of a nursery, child development center, and construction yard. Within the northeastern portion of this quadrant is a self-storage facility and Nevada County Sportsmen's Club.

***Northeast*** – This portion of the proposed SOI area is located east of the existing City boundary and southeast of northerly portion of SR-20. This area is primarily accessed via Red Dog Road, Willow Valley Road, as well as local and neighborhood roads that provide access to interior land uses areas. Similar to the southeastern quadrant, land uses typically consisting of low density rural residential, which are situated in hilly tree-covered terrain. Commercial development in this area is minimal. Due to the variation in elevation, some distant views are afforded through breaks in the tree and vegetative canopy.

***North and Northwest***-This portion of the proposed SOI area is located west of SR-20\49 and northerly of SR-49. From this intersection SR-49 trends westerly through the City into the proposed SOI area and unincorporated County Land. This area is primarily accessed via Coyote Street, North Bloomfield Road, Wethill Road/Indian Flat Road, and Cement Hill Road, as well as local and neighborhood roads that provide access to interior areas. Residential land uses in this portion of the proposed SOI consist of predominantly low density residential and rural residential uses with limited commercial and industrial uses. Within this area is the Nevada County Consolidated Fire District, and the topography is more varied lower valleys including a small lake, to the approximate 3,070 Sugarloaf Mountain and the hill leading to the "Old Airport Property" at a height of 3,100 feet.

***Southwest*** – This portion of the SOI area is located south of SR-49, west of the City boundary and northwesterly from SR-20 and Town Talk. This area is primarily accessed via, Champion Mine Road on the north and Ridge Road on the south. The central portion of this area is strongly characterized by Deer Creek which flows in a meandering westerly direction and the Deer Creek Tribute Trail which provides for some recreational opportunities. Residential areas consist of rural residential uses, and other areas are undeveloped, heavily forested and have elevation changes of a few hundred feet which provides for some distant views through breaks in the vegetation.





**FIGURE 3-3: Generalized Land Use Areas**  
Nevada City SOI Plan Update



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## 3.2 SURROUNDING LAND USES

The SOI area would surround Nevada City.

### Surrounding Land Uses

The SOI area is surrounded by land uses that are similar to those areas within the SOI. Based on the existing roadways and landscape, the surrounding uses are described in four generalized quadrants similar to the project site above. These areas surrounding the SOI are generalized into southeast, northeast, north and northwest, and southwest quadrants. Except for the City of Grass Valley to the south, the areas in all directions are surrounded by unincorporated county land. This section also describes the portions of the incorporated City adjacent to the proposed SOI area.

***Southeast-*** To the southeast, the proposed SOI area is bound by the DS Canal/Pittsburg Road Area of Interest (described in additional detail below). Land uses generally consist of rural residential areas including the Forest Knolls Community, Idaho Maryland Road, and the Nevada City Airpark (approximately 1.5 miles to the southeast) and Banner Reservoir. Further south and east of the airpark residential parcels largely consisting of rural residential lots that would be primarily accessed by Greenhorn Road, Loma Rica Drive and Idaho Maryland Road. Within the northern portion of this quadrant, Red Dog Road extends to the east delineating the northern boundary of this quadrant area. To the south of Red Dog Road, the area is mostly undeveloped with Banner Mountain rising approximately 3,900 feet making it the dominant visual landmark.

Within the City adjacent to this area residential uses are predominantly single-family but occur on smaller lots and are not considered rural residential. The boundary in this area is delineated by Gold Flat Road which provides access to an area developed with business professional and commercial uses off New Mohawk Road in the south. North of Railroad Avenue adjacent to the east and west of Nimrod Avenue land uses transition back to single low-density family and with sports fields located at Pioneer Park in the northerly area just south of Red Dog Road.

***Northeast*** – To the northeast the proposed SOI is bound by the Red Dog Road Area of Interest (described in additional detail below) and land uses that consist of rural residential that take principle access via Red Dog Road, Willow Valley Road, and Lewis Road. The area is bound by SR 20 on the northwest which extends northeasterly out of the SOI area to the northeast. The unincorporated community of Willow Valley is approximately one mile east of the edge of the SOI and is access via Willow Valley Road.

Within the City boundaries adjacent to the proposed SOI areas north of Red Dog Road the existing City boundary is not defined by any roadways but instead is along property parcels lines. Land uses consist of low density and rural residential and extend westerly within through City land to SR-20 approximately 0.33 miles to the west. This pattern of residential land uses continues in a northerly direction beyond the east-west trending Willow Valley Road northerly to SR-20 approximately 0.5 miles north. Other than SR-20, north-south access within this area of the City is primarily provided by Nevada Street, which provides

a direct connection between the downtown area and its northerly intersection with SR-20 approximately one mile to the north.

**North and Northwest** - The northwest area of the proposed SOI is bound by the North Bloomfield Road Area of Interest (described in additional detail below), the “Old Airport Property,” which is a City island and the Airport/Cement Hill Road Area of interest on the west (described in additional detail below). To the north and west are areas developed with rural residential uses and enveloped parcels, all of which are thickly vegetated. These areas are primarily accessed via Lake Vera Purdon Road, Tower Hill Road, Cement Hill Road, and Indian Flat Road. The area west of this quadrant is accessed via Hwy 49 which extends out of the proposed SOI area to the west and provides access to rural residential uses off Crooked Arrow Lane.

Within the City boundaries north of the proposed SOI areas is a United States Forest Service office, SR-49, and the Nevada County Government Center which houses the County Library, Sheriff’s Department, as well as Nevada City Government offices. South of SR-49 area residential uses include the Nevada County Cohousing development as well as low-density residential.

**Southwest**- To the southwest the proposed SOI is bound by the Eden Ranch Area of interest (described in additional detail below), rural residential development accessed via Champion Mine road, undeveloped areas adjacent to Deer Creek, single-family residential development accessed via Ridge Road including Nevada Union High School, and the, town/community of Glenbrook, and unincorporated community of Town Talk. SR-20 provides northerly access to Nevada City and bounds this quadrant on the east.

Within the City boundaries adjacent to the proposed SOI areas to the west and north are the unoccupied and occupied office complexes accessed via Providence Mine Road. This area also includes a fire station, small commercial retail stores, and the Seven Hills Middle School and Deer Creek Elementary School. The primary roadway serving this area is Zion Street which trends northeasterly and provides access to downtown Nevada City. Adjacent to the SOI boundary on the south is a construction yard, Preschool and Kindergarten which are accessible by Ridge Road and Nevada City Highway.

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## 3.3 LAND USE DESIGNATIONS AND ZONING

### Local Agency Formation Commission

LAFCo’s were created by state legislation to ensure that changes in governmental organizations occur in a manner which provides efficient and quality services and preserves open space and agricultural land resources. Accordingly, LAFCo is charged with applying the policies and provisions of the Cortese-Knox Hertzberg Act to its decisions regarding annexations, incorporations, reorganizations, and other changes of government. LAFCo is required to adopt written policies and procedures and to exercise its powers in a manner consistent with those policies and procedures and with the policy directives of the Act. On April 28, 1994 and as amended on September 17, 2015, LAFCo adopted formal a formal guidance document listing the policies to which LAFCo would adhere in performance of their responsibilities and duties.



The purpose of the policies is to do the following:

- Provide information;
- Set criteria;
- Ensure greater consistency;
- Facilitate Communication;
- Minimize Adverse Impacts; and
- Provide for Planned, Well-ordered, and efficient urban development patterns.

One way in which LAFCo's accomplish the State Legislatures directives is through the use of their specific authority to review and approve, conditionally approve, or deny certain boundary proposals submitted by cities and special districts. In regard to the proposed project and future actions that may result from implementation of the SOI Plan, LAFCo has the following specific authorities:

- Annexations to, or detachments from cities or districts;
- Consolidation of reorganization of cities or districts;
- The development of, and amendments to, SOI plans for each city and district;
- Extension of service beyond an agency's jurisdictional boundaries;
- Activation of district latent powers; and
- Pursuant to Section 56434, the Commission may review and approve proposals that extend service into previously unserved territory in unincorporated areas (LAFCO, 2015).

## **Nevada City General Plan**

California Government Code Section 65300 requires every city and county in California to adopt a comprehensive, long-term General Plan for the physical development of the jurisdiction. A General Plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a General Plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content.

Nevada City General Plan (NCGP) was adopted March 24<sup>th</sup>, 1986 and later updated to incorporate Resolution 2009-49 (Land Use Element) and SOI boundaries map dated October 8, 2008, and the 2014-2019 Housing Element adopted January 2014. The overall purpose of the NCGP, is to preserve the existing essential character of Nevada City. Using policies to guide land uses and City actions, the NCGP directs land uses based on four major principles that include:

- Preserve the Sense of Wooded Enclosure;
- Enhance the Historic Core;
- Reinforce Existing Commercial Concentrations; and
- Create Opportunities for Employment and Revenue Generators.

The NCGP includes a total of 14 land use designations that are currently applicable to the lands within the City boundaries. The City has also applied land use designations to areas within the present SOI. As areas within the SOI are annexed to Nevada City, they would be likely to maintain or have a similar land use designation. *Chapter 4.9 Land Use* provides a detailed description of the land use designations used by

the City and provides the current General Plan Land Use Map, including the areas of the SOI is shown in *Figure 3-4 – Nevada City General Plan and SOI Land Use Map*, in that Section.

## **The Nevada City Zoning Ordinance**

The Nevada City Zoning Ordinance is Title 17 – Zoning, of the 2020 Nevada City Code of Ordinances. As described in § 17.04.010, the zoning ordinance for the City is a precise and detailed plan for the land uses based on the NCGP for the City and enacted in order to promote the public health, safety, comfort and general welfare throughout the City. The Zoning Ordinance establishes various zone districts which specifies among other things, where it is allowable to construct, alter or maintain certain buildings, use certain lands, and consists of appropriate regulations to be enforced in the applicable zones.

To accomplish these purposes and to be consistent with the NCGP land use designations and guidance for growth within the City, the Zoning Ordinance establishes 14 base zoning districts and eight combining districts. As areas within the SOI are annexed to Nevada City, they would likely maintain or have a similar land use designation and LAFCo law (Government Code Section 56375) generally requires that cities pre-zone land proposed for annexation. *Chapter 4.7 Land Use* provides a detailed description of zoning designations used by the City and provides the current Zoning Map for City areas shown in *Figure 3-5– Nevada City and SOI Zoning Map*, in that Section.

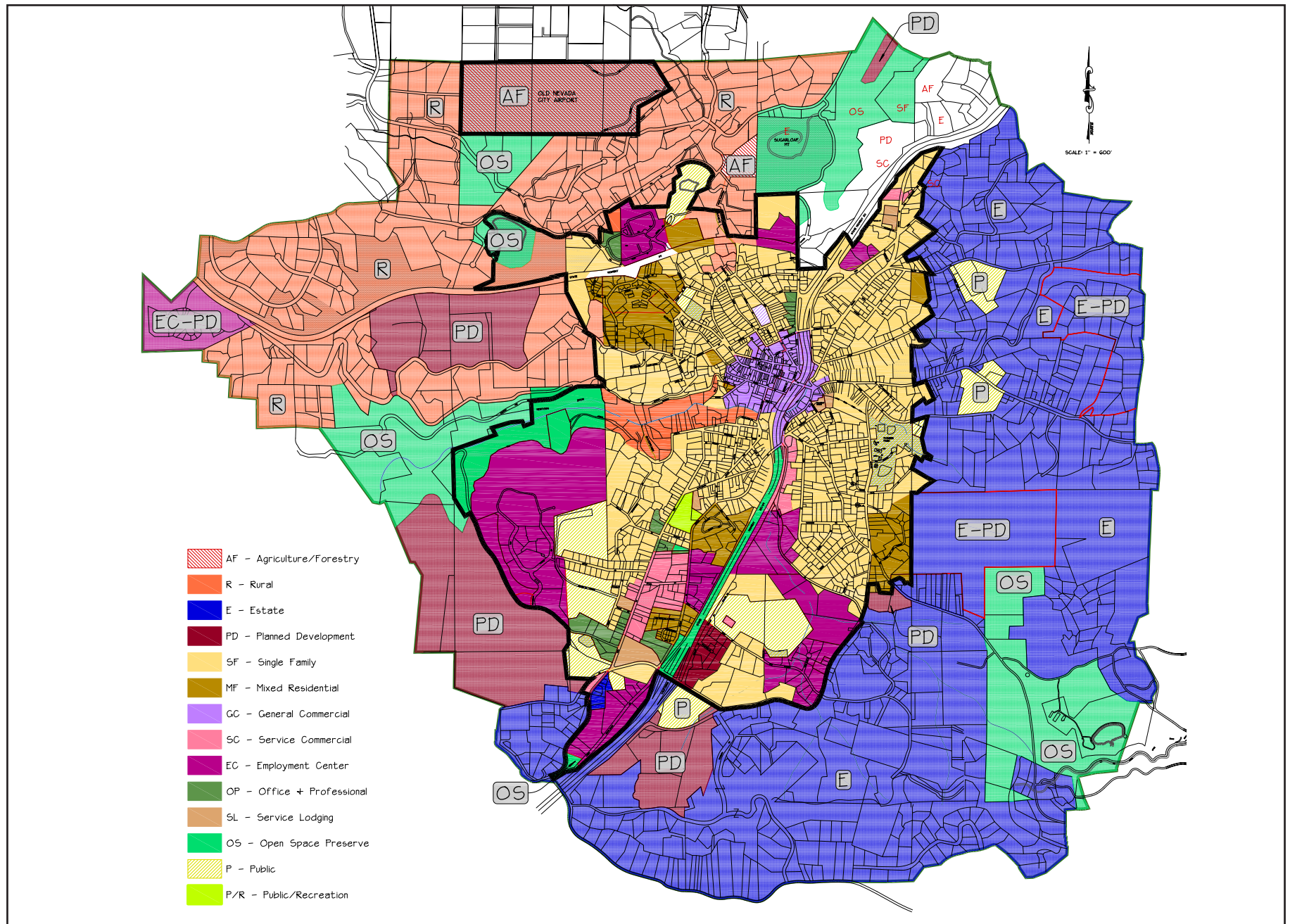
## **Nevada County**

The SOI Plan update area is within unincorporated Nevada County. Until such time areas within the SOI are annexed to the City, the land uses would remain under the authority of the County. The Nevada County General Plan and Nevada County Zoning Ordinance are the guiding documents in this regard.

### ***Nevada County General Plan***

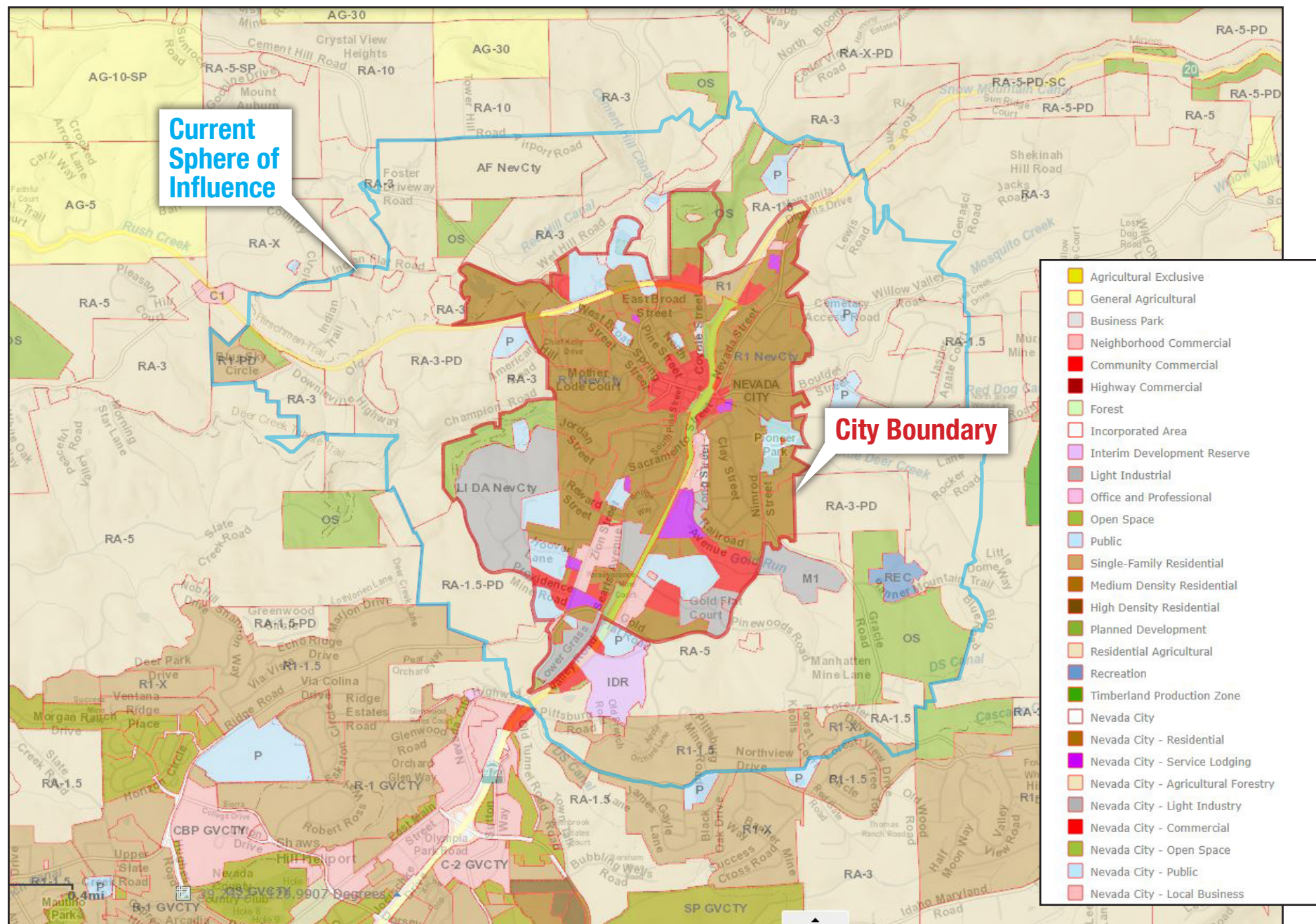
Nevada County's General Plan (County General Plan) is the long-term policy guide for the physical development of the County. The County views the General Plan as its constitution for the physical use of the County's resources and the foundation upon which all land use decisions are made. The County General Plan expresses the County's development goals and embodies public policy relative to the distribution of future public and private land use. The County General Plan is based on four central themes which articulate the vision for the development of the County, which include:

- Fostering a rural quality of life;
- Sustaining a quality environment;
- Development of a strong diversified, sustainable local economy;
- Planned land use patterns that will determine the level of public services appropriate to the character, economy and environment of each region.



**FIGURE 3-4: Nevada City General Plan Land Use Map**  
Nevada City SOI Plan Update





**FIGURE 3-5: Nevada City and County Zoning Map**  
Nevada City SOI Plan Update

These themes are the standard by which the appropriateness of goals, objectives and policies are tested and are responsive to the environmental, economic, and social qualities of the County. The County land use designation of the areas within the SOI is shown on *Figure 3-6: Nevada County General Plan Land Use Map for SOI*. Further detail and evaluation of the County General Plan is provided in *Section 4.7 Land Use*.

### **Nevada County Zoning Ordinance**

The Nevada County Land Use Development Code (Zoning Ordinance) serves as the primary tool to implement and ensure consistency with the goals, objectives, and policies of the County General Plan by providing information on zoning types, site development standards, permitting requirements, allowed land uses and other development standards. The Zoning Ordinance applies to all land uses and development within the unincorporated areas of Nevada County to include the City SOI area up until an area is annexed. Ordinance provisions are held to be the minimum requirements for the promotion of the public safety, health, convenience, comfort, prosperity and general welfare. Further detail and evaluation of the Nevada County Zoning Ordinance is provided in *Section 4.7 Land Use*.

## **3.4 PROPOSED PROJECT**

### **Sphere of Influence Plan Update**

LAFCo is required to adopt a SOI for each city and district in its jurisdiction, and to review and update each SOI plan as necessary every five years. A SOI is defined as a plan for the probable physical boundary and service area of a local agency, as determined by the approving LAFCo. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 defines the purpose and intent of a SOI as an important planning tool for "planning and shaping the logical and orderly development and coordination of local agencies so as to advantageously provide for the present and future needs of the county and its communities." Annexations to a city or district cannot be approved by LAFCo unless they are consistent with the SOI plan for the district. Therefore, including property within a city's SOI implies annexation within the timeframe of the respective SOI plan. Accordingly, for a city such as Nevada City that provides multiple services to residents, approval of a SOI indicates that LAFCo has determined that the lands within the SOI area are likely to be developed at a level that would require municipal services and annexed within the 20-year timeframe established by LAFCo policy.

It should be noted, that even though lands may be designated within a SOI, this does not guarantee that certain development projects will be constructed, does not change or modify land uses or zoning, and does not provide any entitlements for development. Adoption or update of a SOI plan does not alter or authorize changes to existing land uses or designations, zoning regulations, or the jurisdictional boundary of the subject agency. Inclusion in the sphere, however, does make the land eligible for annexation into the City. The SOI does reflect the boundaries of likely and logical inclusion to a city or district. Most significantly, the SOI denotes territory that would be eligible to receive City services, such as public sewer service and other municipal services such as police and fire protection, if the City submits an annexation proposal or application for extension of those services and that proposal or application is approved by LAFCo. Lands annexed to the City will be subject to the City's land use authority and development requirements.





# Nevada City S01 Plan Update

## Project Background

The SOI Plan update for Nevada City had not been updated in approximately ten years and based on the Commission's work program and schedule for SOI reviews and updates, as well as LAFCo's responsibility to encourage logical development, in February 2017, LAFCo initiated an update to the SOI Plan. The 2017 LAFCo proposed SOI would have reduced the acreage within the SOI boundary from the reaffirmed 2008 boundary by nearly 50%. LAFCo's proposal was based on the city's low historic annexation rate, which indicated to LAFCo that it was unlikely that much of land in the 2008 SOI would be annexed within the designated planning horizons. Further consideration was given to the low-density land use and need for service within the sphere area, as well as the city's service capacity and patterns of development.

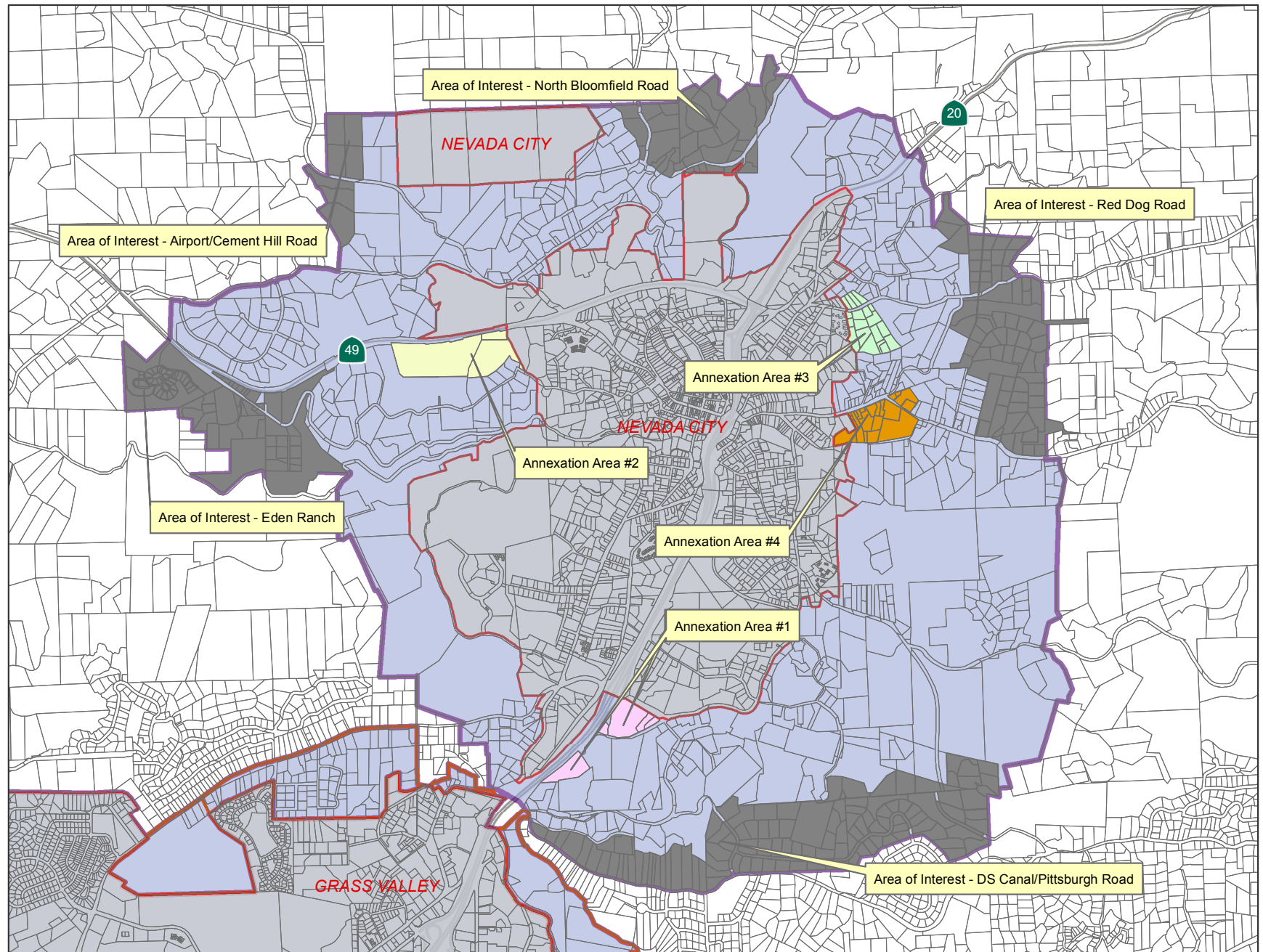
The City was strongly opposed to the LAFCo proposal for the reduction in the SOI. In March 2017 the City began preparing an Annexation Plan and Strategy to justify retention of the City's existing sphere. The City's annexation document was completed in September 2017, entitled City of Nevada City – 2017 Annexation Plan and Strategy (2017 City Annexation Plan). The 2017 City Annexation Plan addressed the provision of sewer service and other public services including police, and fire protection, and street improvement and maintenance to lands within the city's SOI. This also included a discussion of several areas with significant growth potential as well as priority areas for annexation. The 2017 City Annexation Plan identified 16 properties that are served by City water or sewer but that are outside the City boundaries, which the 2017 City Annexation Plan prioritized for annexation in the period before 2022. A map depicting the City's 2017 Annexation Plan is shown on *Figure 3-7 – City of Nevada City Annexation Plan (2017)*. The 2017 City Annexation Plan reflects a more aggressive approach by the City to annexation of lands than had been the City's previous practice.

Over the last two years, the City and LAFCo have worked together and developed the LAFCo/City Preferred Consensus Alternative (Consensus Alternative). This annexation strategy was prepared as a compromise proposal for the 2017 City Annexation Plan. This Consensus Alternative has been designated as the Preferred Project Alternative for the purposes of this EIR. Therefore, while the proposed project is a SOI Plan update, the EIR describes and evaluates how the Consensus Alternative differs from the 2017 City Annexation plan in that it would remove some of the lands included in the 2008 SOI boundary also reflected in the 2017 City Annexation Plan. However, the Consensus Alternative does include four areas designated for priority annexation. The priority annexation areas are termed Annexation Area #1, Annexation Area #2, Annexation area #3, and Annexation Area #4.









**FIGURE 3-8: LAFCO/City Consensus Alternative**  
Nevada City SOI Plan Update

The EIR will discuss all lands within the SOI Plan update area. The EIR also will, as appropriate and as information is available, provide additional detail related to the annexation and development potential of the four priority annexation areas. The priority annexation areas are discussed in additional detail below and are shown graphically in *Figure 3-8 – LAFCo/City Consensus Alternative*.

## Project Description

As discussed above, LAFCo is updating the SOI of the City of Nevada City, which was initially approved in 1983 and was reaffirmed in 2008 without change. The existing SOI surrounds the City in a roughly spherical shape and is shown in *Figure 3-9: Nevada City Sphere of Influence Map*. The current SOI surrounding the City boundary occupies approximately 2,702 acres (2018 Nevada County GIS data) with the City occupying approximately 1,470 acres. The total area is approximately 4,172 acres. The SOI Plan update would occur within the area defined by the existing SOI and does not include any lands within the existing City boundaries.

Adoption of any SOI update itself does not directly include or propose any physical alterations or improvements to any area within the SOI or any other land. But the annexation of areas to the City as authorized by this SOI Plan update would allow for the development in accordance with City planning regulations and extension of City services to the areas that would become a part of the City. The annexation of these areas may indirectly facilitate development within these areas. Inclusion in the SOI is the first step towards annexation of the territory, and annexation would result in the area becoming a part of the incorporated City and thus the area(s) would have access to municipal services. This would facilitate increased development potential within the context of the underlying NCGP land use designations as compared to development potential within the context of the underlying Nevada County GP land use designations. This EIR will analyze the indirect impacts of the potential development facilitated by inclusion in the SOI.

It is possible that as part of future annexations the City may change land use designations and zoning. However, contemplation of such changes at this time is considered remote and speculative and hence, it is not appropriate for discussion within the context of this EIR. Consequently, this EIR will examine at a general program level the indirect environmental impacts of the proposed project resulting from the potential development under existing land uses when as appropriate.

LAFCo and the City have identified four priority annexation areas (Annexation Area #1, #2, #3, and #4) that are intended for annexation in the very near future. These four areas are generally developed, and three of the areas include parcels that have already been connected to the City's sewer system. Annexation of these four areas is unlikely to increase existing development levels.

Additionally, six Potential Development Areas (Providence Mine East, Hurst Ranch, HEW Building, Manzanita Diggings, Highway 49 Planned Development Area and Gracie/Gold Flat) have been identified, and are included in each project alternative (with the exception of the 'No Project Alternative.' These six areas have the potential for annexation and further development using sewer service from the City. Inclusion of these Potential Development Areas in the SOI would indirectly induce growth by facilitating

annexation or enabling extension of public services to both developed and undeveloped properties within these areas.

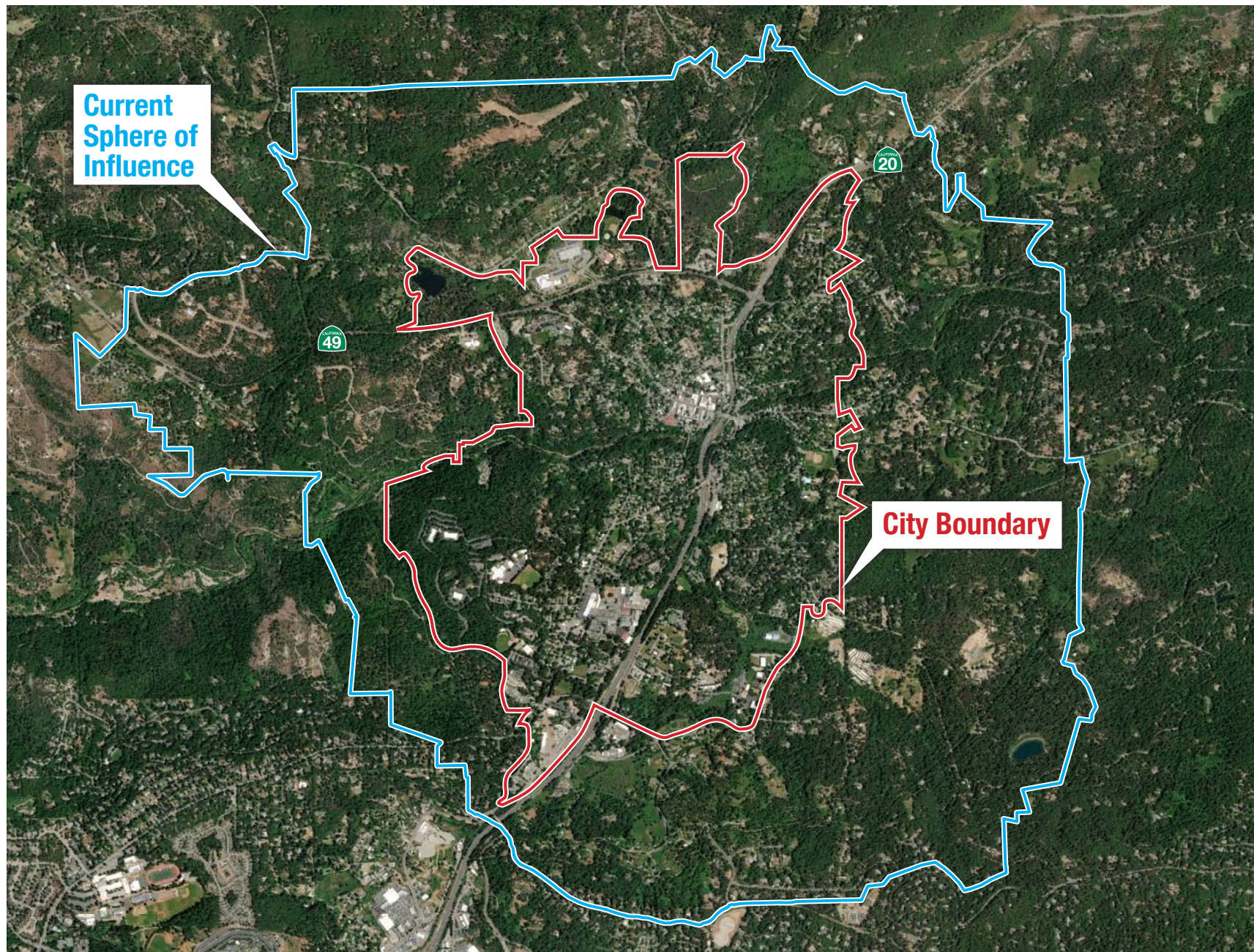
Under the Consensus Alternative there are five areas of the existing SOI that are recommended for exclusion from the SOI. These areas are designated as an “Areas of Interest” and future development in these areas could be approved by Nevada County or another applicable agency. The designation of “Area of Interest,” would provide for the City to be notified of development proposals and other projects that may have potential for impacting the City. LAFCo’s policies define an “Area of Interest” as a geographic area beyond the SOI in which land use decisions or other governmental actions of one local agency may impact directly or indirectly on another local agency. LAFCo policy stipulates that the LAFCo Commission will notify “interested agencies” of known proposals within the Area of Interest and give great weight to the comments of the “interested agency.

For those areas that remain within the SOI but outside the boundaries of the City, jurisdiction for land use matters for all of the land areas would remain with the County. However, the Land Use Element of the County’s General Plan under Goal 1.8 on coordinating with cities in land use planning and development within their spheres provides that within a City’s SOI, the County General Plan Land Use Maps will generally reflect the City’s land use mapping, sometimes less intense, but never significantly more intense (Policy 1.8.3) and provides that for all discretionary projects the County shall first request that the City determine whether it desires to annex the project and, if it does, the applicant will be directed to the City and, if it doesn’t the application will be referred to the City for review and comment.

## **Consensus Alternative**

Nevada City and LAFCo staff have developed the ‘consensus map,’ which is the Consensus Alternative for the purposes of this EIR. The Consensus Map or Consensus Alternative encompasses the same SOI area as described above but includes four Priority Annexation Areas as well as five areas that would be excluded from the 2008 SOI pursuant to the original LAFCo Staff recommendation. *Figure 3-8 -LAFCo/City Consensus Alternative*, depicts the consensus map. The five exclusion areas are included for reference and for comparison with the existing 2008 SOI. Although these areas would not be within the boundaries of the Consensus Alternative, they are a part of the City Recommendation Alternative, which is discussed in detail in *Section 7.0 Alternatives*, and therefore are warranted for discussion in this section. The four Priority Annexation Areas are discussed immediately below and the areas that would be excluded are discussed on the following page.





**FIGURE 3-9: Nevada City Sphere of Influence Map**  
Nevada City SOI Plan Update



**Annexation Area #1** - is located just south of the City adjacent to SR 20. Annexation Area #1 consists of a northerly and southerly area separated by approximately 500 feet. The areas total 16.63 acres. The northerly location is a triangular-shaped parcel approximately 5.29 acres in size and is generally bound by SR 20 to the west, Gold Flat Road to the north, and is accessed by Granholm Lane to the south. The second parcel is approximately 11.34 acres in size and is bound by SR 20 to the west and undeveloped lands to the north, east, and south. Existing land uses on this site include the California Department of Transportation facility (currently connected to City sewer), the Prospector's Nursery, and the Little Friends Child Development Center along Gold Flat Road.

**Annexation Area #2** - is located in the vicinity of the northwestern part of the City adjacent to SR 49. Annexation Area #2 is approximately 86 acres in size and is generally bound by SR 49 on the north, existing City Boundary to the east, American Hill Road to the south, and Constitution Court to the west. Annexation Area #2 consists of three parcels and the land uses include the County Juvenile Hall (currently connected to City sewer), and two adjacent and vacant County-owned properties, located south of SR 49.

**Annexation Area #3** - is located in the vicinity of the northeastern part of the City and is approximately 17 acres in size. Annexation Area #3 includes parcels on both sides of Willow Valley Road east of the existing City Boundary. Annexation Area #3 consists of 19 parcels. Three parcels are connected to the City sewer system, and two are undeveloped. It should be noted that Annexation Area #3 does not include the building locally known as the County Health, Education, and Welfare (HEW) Building.

**Annexation Area #4** - is located in the vicinity of the northeastern part of the City, approximately 0.25 miles south of Annexation Area #3. Annexation Area #4 is approximately 23 areas in size. Annexation Area #4 is generally bound by Red Dog Road on the north, Park Avenue on the east and south, and the City boundary to the west. Annexation Area #4 contains 22 parcels and land uses include a cemetery that fronts on Boulder Street and Park Avenue Extension and 18 intervening privately owned properties.

### ***Areas to be Excluded from Current Sphere***

As discussed above, the Consensus Alternative also would remove some areas from the existing 2008 SOI. The exclusion areas occur in five pockets on the exterior periphery of the existing SOI and would be excluded from the SOI in consideration of the limited need of these areas for City services. In addition, the low-density development of these areas and their distance from services would limit the feasibility of extending city services to these areas. The Consensus Alternative provides that these areas would be designated by LAFCo as "Areas of Interest." The City will be notified of all projects in the areas. The areas are described as follows:

**Area of Interest DS Canal/Pittsburg Road** The southern boundary of this area is delineated by Banner Lava Cap Road, and the northern boundary is delineated by Pittsburg Road. From Pittsburg road the boundary extends easterly through undeveloped and rural residential areas to Gracie Road. This area includes 111 parcels, most of which are designated for residential use. 87 parcels are developed and the remaining 24 are unimproved.

**Area of Interest Red Dog Road-** The southern boundary of this area is delineated by Red Dog Road. The areas north of Red Dog Road proposed for extends north and beyond Willow Valley Road and terminate

at Lewis Road south of SR 20. This area includes 63 parcels designated for residential uses; 56 are improved and 7 are unimproved.

*Area of Interest North Bloomfield Road-* This area is generally bound by North Bloomfield Road and East Pepper Lane on the south and extends just beyond Lake Vera Purdon Road on the west but does not reach the boundary of the “Old Airport Property.” The northern boundary is not delineated by a particular physical landmark and extends generally east to west through undeveloped and rural residential areas. This area includes 34 parcels, all of which are designated “Estate” by the NCGP. Only one parcel is unimproved.

*Area of Interest Airport/Cement Hill Road-* The western and eastern boundaries of this area are not delineated by a particular physical landmark and each generally trend south to north through undeveloped and rural residential areas. The southern boundary would end at a point at the intersection of a private road and Indian Flat Road. the northern boundary would pass through rural residential areas and terminate just north of Picton Way. This area contains 7 parcels; all are designated “Estate” by the NCGP. Four parcels are developed and the remaining 3 are unimproved.

*Area of Interest Eden Ranch-* This area is irregularly shaped and is located on the westerly portion of the existing SOI. This area is bound by SR 49 on the north, a portion of Old Downieville Highway on the east, and Champion Mine Road to the south. The westerly boundary is not delineated by a particular physical landmark and trends in a southeast to northwesterly direction through rural residential areas to its westerly boundary near Oak Hollow Circle. Most of the parcels in this area are designated for residential use. It includes 80 parcels, 58 of which are developed. A small residential development known as Eden Ranch is located in this area; the project receives public sewer service from the County Sanitation District through a small wastewater treatment system. When the development was proposed in 1997, connection to the City’s sewer system was found to be infeasible and consequently, the project was annexed to the County Sanitation District.

### ***Future Project Assumptions***

As previously discussed, the proposed project is a long-range planning document. The proposed SOI Plan update does not include any construction or land development activities with direct environmental impacts. The proposed project; however, would result in indirect impacts by facilitating development that would be enabled through future annexations and by the associated extension of services, particularly utilities. This EIR will examine those indirect impacts.

This EIR will assume that development of the areas proposed for inclusion in the SOI will occur in a manner consistent the current NCGP and zoning designations. While such land use restrictions are subject to change, it would be too speculative to attempt to consider any such possible changes at this time.

### ***Water and Wastewater***

The City currently provides wastewater or water service to several properties that are outside City boundaries. These properties were prioritized for annexation by the City between the years 2017-2022 and are shown in *Figure 3-7 - City of Nevada City Annexation Plan (2017)*.

### *Water*

Developed properties in the SOI and well outside the SOI, rely upon the Nevada Irrigation District (NID) for treated water service or have their own private wells. NID's service area also overlaps with City boundaries, with only the original City area of one square mile being outside NID's boundaries and service area. Service agreements exist between NID and the City which allows service to be provided by one or the other depending on proximity and eligibility of existing infrastructure (Nevada City, 2017). In addition, NID also sells water to the City every year to augment the City's water supply. The SOI Plan update does not directly or indirectly propose any extensions of water services or infrastructure and would not result in the construction of any new water service facilities. However, some properties and groups of properties within the SOI Plan update area would be in proximity to existing service lines. Inclusion in the SOI could indirectly induce extension of services to these areas.

As areas are annexed, if public water service is desired and if it can be feasibly provided, in almost all cases it will be provided by NID. NID would plan for the financing and extension of infrastructure to serve these areas. However, because of the presence of alternative water sources, specifically water wells that are used in the low-density rural areas, it is not anticipated that NID would need to provide water service to most areas within the SOI. This EIR assumes that only those areas identified in *Table 3-1, Properties with Reasonable Water and Wastewater Service Potential* will demand public water service at a significant level. The potential for future annexation areas to be provided service would be determined as more comprehensive development plans and entitlements are proposed or approved.

### *Wastewater*

Wastewater generated from the City is treated at the City of Nevada City Wastewater Treatment Plant (NCWWTP) adjacent to Deer Creek within the existing City boundary and near the western boundary of the SOI area. Most properties in the SOI Plan update area are not connected to any public sewer system. As noted above, however, within the areas of interest a small number of properties outside City boundaries are connected to the City's sewer system. Also, as discussed above, a small subdivision known as Eden Ranch located approximately two miles west of the City is sewered by a package wastewater treatment system that is operated by the County Sanitation District. The Eden Ranch neighborhood is proposed for exclusion from the SOI Plan under the Consensus Alternative.

With the exception of Eden Ranch, the County does not provide wastewater collection and treatment to properties within the unincorporated SOI Plan update area. Most of the county land including the SOI area, uses on-site sewage disposal/septic systems (OWTS). Due to the predominant use of OWTS, the low-density city zoning of many of the parcels, and lack of sewer infrastructure in the area, it is not anticipated that the City would immediately provide wastewater services to most of the SOI even upon annexation except in instances of septic failure. The project does not propose direct expansion or extension of any wastewater treatment facilities or other infrastructure. However, some properties and groups of properties within the SOI Plan update area would be in proximity to existing service lines. Inclusion in the SOI could indirectly induce extension of services to these areas.

The City has identified six potential development areas which could reasonably receive sewer service from the City. These areas are assumed to have the necessary scale to make sewer extension feasible and reasonably foreseeable and this EIR assumes they will receive future service. These areas and approximate development densities are listed in *Table 3-1, Properties with Reasonable Water and Wastewater Service Potential*. This EIR assumes that in general, other areas within the sphere will not require wastewater service due to density limitations and lack of development proposals and entitlements. This does not mean extensions to other properties will not occur in the future, but contemplation at this time is considered speculative. For example, in order to remedy issues with private septic systems, some individual homeowners may request connection to the City sewer system. The potential for other future annexation areas to be provided wastewater services would be determined as more comprehensive development plans and entitlements are proposed or approved.

As discussed above, the SOI Plan update does not entitle any development. The EIR; however, does assume that the above referenced six potential development areas that have been identified by the City will be proposed as future separate actions and not as a part of the SOI Plan update. The SOI Plan update would not permit the development of these projects but they are presented in this EIR to ensure full disclosure because they would be facilitated by extension of public services enabled by inclusion to the SOI. Additionally, these projects do not yet have site-specific designs or footprints, and it is not possible to specifically address the environmental concerns at this time and is outside the scope of the SOI Plan update and such discussion would be premature. None the less, these projects are considered reasonably foreseeable and hence, presented in general terms this EIR. None of these projects would be permitted by the City until they undergo site-specific review and City planned project by project CEQA analysis. CEQA analysis would commence upon planning approval of an application or entitlement.

**Table 3-1: Properties with Reasonable Water and Wastewater Service Potential**

Property Name	Nevada City General Plan Designation	Acres	Density Ratio	Max Density Potential
<b>Providence Mine East</b>	Estate (E)-PD	126.11	1-3 acre minimum	42-126 units
	Open Space (OS)	13.11	No Density	
<b>Hurst Ranch</b>	E-PD	89.89	1-3 acre minimum	23-89 units
<b>HEW Building</b>	Public (P)	7.25	40 EDU	30-60 units*
<b>Manzanita Diggins</b>	Rural (R)-PD	7.75	1-5 acre minimum	40-319 units
	Service Lodging (SL)-PD	39	8 units/acre	
	OS	79.2	No Density	
<b>Highway 49 Planned Development Area</b>	R-PD	27.11	105-acre minimum	5-27 units
<b>Gracie/Gold Flat</b>	Mixed Residential (MF)	6	8 units/acre	30-181 units
	E	70	1-3 acre minimum	
<b>Total:</b>	--	<b>465.42</b>	--	<b>170-622</b>
Source: City of Nevada City, 2017				
* There is no assigned density for this property because it currently has a "Public" General Plan designation. The density range therefore represents the subject property as well as intervening parcels that would annex with the HEW building.				

**Providence Mine East** - This undeveloped territory is adjacent to the Nevada City Tech Center at the end of Providence Mine Road and will provide opportunities for the development of workforce/estate



housing, trail connectivity and preservation of significant open space. The City expects to conduct a CEQA analysis on the overall development proposal soon. The City has recently been engaged with representatives of the property owner and expects to see a formal project proposal before the end of 2019.

**Hurst Ranch** – Is located adjacent to the southern border of Little Deer Creek Slopes in excess of 20% are prevalent throughout the property. Because of the sensitive resources on the site, staff has indicated that a PD overlay would benefit development of the property to allow flexibility of standards in exchange for creative design that preserves the integrity of the landscape.

**HEW Building** – The HEW building is located on Willow Valley Road and is an existing structure.

**Manzanita Diggins**- Manzanita Diggins is located on the easterly side of Coyote Street and westerly of SR-20. The property is designated in the County General Plan as RES and as SL-PD in the City, which allows for R1 and R2 uses.

**Highway 49 Frontage** – This property is located south of Gold Flat and represents a principle gateway to the City and is in the transition area between the City and Grass Valley. The large parcels south of Granholm Lane are owned by only a few landowners. It is important that this area be developed sensitively because it represents a transition from Grass Valley to Nevada City and should maintain community distinction. The adjacent Caltrans facility is presently served by the City for wastewater.

**Gracie/Gold Flat** – This property has been under consideration for development since 1999. Project plans are being developed and a CEQA exemption may apply. There are several other parcels nearby that may be suitable to include in this proposed annexation territory. The City will initiate a survey of adjacent parcels upon receipt of an annexation application to determine if there is interest in expanding the annexation territory.

## 3.5 PROJECT OBJECTIVES

Section 15124(b) of the CEQA Guidelines requires that an EIR include “[a] statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the proposed project.” The underlying purpose of the proposed update to the SOI Plan update is to establish the area which is the most practical for extension of City services and areas which are most likely to be annexed and served by the City. In sum, the SOI Plan update is a tool for, planning and shaping the logical and orderly development and coordination of local agencies so as to advantageously provide for the present and future needs of the county, city, and many communities within. Within this overall goal, the LAFCo has defined the following objectives for the proposed project:

- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 by updating the SOI Plan of Nevada City to accommodate orderly and sustainable growth without encouraging premature conversion of agricultural or open space lands;
- Adopt a plan that delineates clearly defined areas that the City can reasonably serve with existing and planned public services;
- Establish a logical SOI boundary for Nevada City to ensure protection of environmental resources;
- Include sufficient areas to provide for development that meets reasonable growth needs and ensures a sustainable jobs-housing balance;
- Be consistent with the applicable goals and policies of LAFCo, and to the extent they do not conflict, those of the City of Nevada as well.

## 3.6 DISCRETIONARY ACTIONS AND APPROVALS

The Nevada County LAFCo is considered the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of this Program EIR. As discussed above, and in *Section 1.0: Introduction* and *Section 2.0: Executive Summary*, future development activities or plans for development within the Nevada City SOI may utilize this Program EIR, as appropriate and as allowed pursuant to CEQA Guidelines, as a basis to begin environmental analysis. However; subsequent environmental analysis on a project-specific basis would be required for consideration by Nevada City because that agency will have approval authority for future project sites that would be annexed into the City boundaries. Based on the information provided in future project-specific applications for annexation, the City Planning Department would determine if potential impacts are covered in the context of this Program EIR. If it is determined that pursuant to State CEQA Guidelines Section 15162, that no new effects would occur, or no new mitigation measures would be required, then the City could approve the project with a findings document stating these facts and incorporating all required elements of the Program EIR. Conversely, if a future project would have impacts that were not identified in the Program EIR, a new initial study would be required to determine the appropriate environmental document to be prepared, such as a Mitigated Negative Declaration (MND) or site-specific EIR.

With respect to this specific project, the SOI Plan update for Nevada City, Nevada County LAFCo is the sole agency with discretionary approval authority over the proposed project. While input from the City and other affected agencies is required, none have approval authority over the SOI. Consideration and implementation of the proposed project would require discretionary actions and approvals by LAFCo for implementation of the proposed project, which includes:

- SOI Plan update for Nevada City – Nevada County LAFCo;
- Certification by the Nevada County LAFCo that a Final Program EIR has been completed in compliance with CEQA and has been reviewed and considered by the decision-makers; and
- Adoption of a Mitigation and Monitoring and Reporting Program (MMRP).

Future approvals for any subsequent development to occur will require action by other agencies. These include the City of Nevada City and possibly some of the following agencies:

**LOCAL**

- Nevada Irrigation District;
- Northern Sierra Air Quality Management District;

**STATE**

- California Air Resources Board – (Northern Sierra Air Quality Management District) -Fugitive Dust Control Plan, Authority to Construct, Permit to Operate;
- California Department of Fish and Wildlife (CDFW), Agreements/Permits/Authorizations pursuant to the California and Federal Endangered Species Acts, if necessary;
- Central Valley Regional Water Quality Control Board (Central Valley RWQCB)
- California Water Boards
  - Regional Water Quality Certification (401 Permit)
  - Statewide Construction General Permit
  - General Industrial Storm Water Permit (WQO-2014-0057-DWQ)
- California Department of Transportation (Caltrans)
- California Department of Public Health
- California Environmental Protection Agency

**FEDERAL**

- United State Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)

## 4.0 ENVIRONMENTAL ANALYSIS

As mentioned in Chapter 3, Project Description, of this Draft EIR, the proposed Project consists of an update to the Sphere of Influence of Nevada City. The proposed Project occurs over an area of SOI includes approximately 2,702 acres of unincorporated county land. The environmental analysis of the Project in this Draft EIR is made up of 12 subchapters. This chapter describes the environmental topics discussed in the Draft EIR and the assumptions and methodology of the cumulative impact analysis. The remaining 16 sub-chapters evaluate the direct, indirect, and cumulative environmental impacts of the proposed Project. The potential environmental effects of the proposed Project are analyzed for the following issue areas.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Public Services
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

For the reasons identified under Section 5.5 of Chapter 5, CEQA-Mandated Sections, of this Draft EIR, no environmental impacts associated with agricultural and forestry resources, energy, hazards and hazardous materials, mineral resources, noise, population and housing, and recreation are expected to occur as a result of the proposed Project. These resource topics will not be addressed further in this Draft EIR.

### CHAPTER ORGANIZATION

This chapter consists of 12 sub-chapters that evaluate the environmental impacts of the proposed Project. Each issue area uses generally the same organization and consists of the following subsections:

- The Environmental Setting section provides a Regulatory Framework section that describes which local, State, and/or federal regulations are applicable to the proposed Project, as well as an Existing Conditions section that describes current conditions with regard to the environmental issue area reviewed.
- The Thresholds of Significance section describes how an impact is judged to be significant in this Draft EIR. These standards are derived from CEQA Appendix G Guidelines unless stated otherwise.
- The Impact Discussion assesses potential impacts (direct and indirect) and explains why impacts were found to be significant or less than significant.
- The Cumulative Impact Discussion section analyzes impacts that the proposed Project may have when considered in addition to other past, present, and reasonably foreseeable projects. (See further discussion below).

## ASSUMPTIONS AND METHODOLOGY REGARDING CUMULATIVE IMPACTS

A cumulative impact consists of an impact created as a result of the combination of the Project evaluated in the EIR, together with other reasonably foreseeable projects causing related impacts. Section 15130 of the CEQA Guidelines require an EIR to discuss cumulative impacts of a project when the Project's incremental effect is "cumulatively considerable." In the case of a General Plan, cumulative effects occur when future development under the General Plan is combined with development in the surrounding areas or in some instances in the entire region.

Where the incremental effect of a project is not "cumulatively considerable," a Lead Agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. Where the cumulative impact caused by the Project's incremental effect and the effects of the other projects is not significant, the EIR must briefly indicate why the cumulative impact is not significant.

The cumulative discussions in Chapters 4.1 through 4.12 of this Draft EIR explain the geographic scope of the area affected by each cumulative effect (e.g., immediate project vicinity, county, watershed, or air basin). The geographic area considered for each cumulative impact depends upon the impact that is being analyzed. For example, in assessing macro-scale air quality impacts, development within the air basin may contribute to regional emissions of criteria pollutants while aesthetic impacts, typically involve development within the localized area of change that would contribute to a cumulative visual effect since the area of change is only visible within the vicinity of that area.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects within are listed in *Table 4.0-1: Cumulative Projects List*. Based on the current growth and development trends within the City and surrounding County the list captures reasonably foreseeable development that would be likely to use similar resources such as freeway and roadway capacity, similar biological resources, similar surface water drainage patterns, and similar public services and utilities. The list of projects in Table 4.0-1 was used for generally used for all cumulative impact discussions in this Draft EIR.

**Table 4.0-1: Cumulative Projects List**

<b>Project</b>		<b>Location</b>	<b>Proposed Use</b>	<b>Project Status</b>	<b>Distance from the Project Site</b>
1	Proposed Project –	170 Ridge Road	Affordable Housing project for 56-apparment units with 11 one-bedroom units, 30 two-bedroom units, and 15 three-bedroom units.	Proposed	0.25 miles
2	Providence Quartz Mill Site	Assessor Parcel Number (05-100-87)	This Project relates to potential clean-up and remediation efforts and alternatives for the previous mining site.	Proposed	Within
3	Sugarloaf Trail	Assessor Parcel Number (036-020-026)	A proposed multi-use trail within a 30.59-acre open space parcel.	Proposed	0.25 miles
4	The Grove	Off Providence Mine Road	Two phased development with 15 large lot single family homes and 32 clustered townhomes and 12 clustered single-family lots.	Proposed	100 feet
5	Dunne Parcel Map	198 - Gold Flat Road	Subdivision of a 3.01-acre parcel into three residential lots.	Proposed	500 feet

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## 4.1 AESTHETICS

This section describes the existing visual environment in and around the City of Nevada City (City) including the Sphere of Influence (SOI) area related to the Nevada County Local Agency Formation Commission (LAFCo) update to the SOI Plan for the City (proposed project). This section uses accepted methods of evaluating visual quality, as well as identifying the type and degree of change the proposed project would likely have on the character of a landscape. The project analysis is based on information provided by LAFCo, visual observations of the project area by Kimley-Horn personnel, aerial photographs, as well as review of the Nevada City General Plan (NCGP), Nevada County General Plan, and other documents with pertinent descriptions of the SOI and areas within the City. Where additional information has been used to evaluate the potential impacts, that information has been referenced.

The following discusses impacts associated with the potential for the proposed project to degrade the existing visual character or quality of the project site and its surroundings through changes that would occur to the existing landscape and visual environment. The analysis assesses the potential for direct and indirect impacts to aesthetics including light and glare and other visual resources within the project area. The analysis also addresses impacts that may occur to areas outside the project boundaries, and that may be affected by adoption of the SOI Plan update. Potential effects are evaluated relative to important visual features such as elevated landforms, and other parts of the existing visual landscape and people who view and use these areas. Degradation of the visual character of a site is usually addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment and the proposed project-related project elements that would alter the visual setting.

### 4.1.1 ENVIRONMENTAL SETTING

#### Regional Setting

The City is located within Nevada County which contains a variety of natural and man-made visual resources. The scenic landscape in the County is characterized by the rolling vistas of the foothills and valleys in the west, to the scenic views of mountains, meadows, forests, and unique granitic landscapes characteristic of the Sierra Nevada in the eastern portions of the County. The eastern areas have 16 peaks greater than 8,000 feet (Nevada County Peaks, 2018) and many scenic views are afforded from roadways and highways and public and private lands. Prominent visual resources also include views from within the central areas of the County in foothills and include some of the lower-lying mountains, ridgelines, oak groves, river corridors; scenic highway corridors; open space; and historic architecture in the City and other towns and communities.

Development within the County is similar to that within and surrounding Nevada City in that it is predominantly rural in character. This contributes to the County's overall feel of sparse development and open landscapes. The most suburban development is concentrated in incorporated cities which include Nevada City, the City of Grass Valley, and the Town of Truckee. Grass Valley and Truckee are both more



densely developed City with a population of 12,769 and 16,434, respectively, compared to the 3,122 residents of the City [California Department of Finance (CDOF, 2019)]. Grass Valley is located approximately four miles southwest of the City. Truckee is located approximately 45 miles to the east.

The scenic values and aggregate appearance of all these areas and the more dispersed and rural unincorporated towns and communities combine to define the unique aesthetic quality of Nevada County. Like the City, the County preserves its unique visual character through the establishment of permanent open spaces, public forests, conservation areas, zoning regulations and general plan guidance, and promotes urban design through architectural controls, historic preservation ordinances and regulations, to guide land use patterns and regulate some visual elements such as lighting and protect resources. Much of the mountain region is under the ownership and operation of the U.S. Forest Service (USFS) in the Tahoe National Forest (TNF) located approximately five miles east of the City. Other large tracts of undeveloped forest land are under the ownership and control of the Bureau of Land Management (BLM), which is done in part to preserve the scenic quality of the region.

### **Local Setting and Project Site**

Nevada City and the surrounding SOI Plan update area is located in the foothills of the Sierra Nevada Mountains in a transitional area between the Sacramento Valley approximately 17 miles to the west and the steep and rugged topography of the mountain region to the east. The City is characterized by a unique blend of housing and businesses that combine historic structures including Victorian designs, modest cottages, and classic brick structures with more modern architecture and developments that have occurred in the recent decades. The City focuses on preservation of historic areas as well as the preservation of notable geographic and topographic features.

The City is located within the hills and valleys of a larger basin or bowl which provides visually appealing aesthetic and scenic views of the surrounding hills, mountains, and dense wooded areas (Nevada City, 2017). On the northern boundary of the City is the approximately 3,080-foot Sugarloaf Mountain. The City emphasizes preservation of Sugarloaf Mountain because it serves as a visual backdrop to the City and the fosters an appreciation for the surrounding open space.

Development within the City is centralized around State Route 20 (SR-20) which traverses the City from south to north. In the northern portion of the City, State Route 49 (SR-49) intersects SR-20 at Uren Street and provides access to the northwesterly portions of the City. To the east of SR-20 other major roadways include Red Dog Road, Willow Valley Road, Banner Mountain Trail, and Gold Flat Road, which provide access to the City and unincorporated less densely developed rural areas. The western portions of the City and surrounding unincorporated areas contain more dispersed development and are primarily accessed via Ridge Road and Old Downieville Highway and local roads.

Within the City, development is centralized in two main locations both adjacent to SR-20. The northerly area within the City boundaries is an approximate 50-acre core area that contains the majority of commercial, industrial, and other resident serving uses. This area contains the densest residential development with residential uses generally becoming more dispersed and rural proceeding away from

this City core. The second area with more focused development is approximately 140 acres in size and is located in the southern portion of the City adjacent to the western side of SR-20. Although this area covers a larger area, it has less concentrated commercial and residential serving uses, and also contains more diversified housing types and two schools.

Beyond the boundaries of the City and within the adjacent unincorporated areas including the proposed SOI Plan update area, development generally consists of low density and rural residential with very dispersed commercial and industrial development. Similar to the City areas, topography is varied with hills and small valleys, with access to these areas generally provided via rural roadways. The majority of the area between residences contains undeveloped parcels and larger tracts with thick coniferous forest. This pattern of land use generally extends in all directions from the City boundary becoming less populated nearer the edge of the proposed SOI Plan updated boundary.

### **Scenic Highway Corridors**

The scenic highways in Nevada City are administered by Caltrans and are an important scenic resource. California's Scenic Highway Program that was created by the California Legislature in 1963 and is managed by the California Department of Transportation (Caltrans). The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated "scenic" depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers' enjoyment of the view.

Within Nevada City, there are two "Eligible State Scenic Highways" (SR-49 and SR-20) in the California Scenic Highway Program. SR-49 also is a designated scenic corridor in the unincorporated area of Nevada County. In order to protect these scenic resources and those associated with the SR-49, the County has established a Scenic Corridor Combining District (SSCD) for areas along the highway.

The Eligible State Scenic Highways in Nevada county include segments of most of the other major roadway segments in the County. This includes State Route SR-49 from the southern county boundary with Sierra County to the northern boundary with Yuba County. The section of State Route 174 (SR-174) from the southern county boundary with Sierra County to its intersection with SR-20 in Grass Valley also is included. SR-20 from the intersection with SR-49 east to the above described Officially Designated segment also is eligible (Caltrans, 2011).

In addition, portions of SR-20 and SR-49, also are a part of the United States Forest Service Scenic Byway program and are discussed in additional detail below. See *Figure 4.1-1, State Scenic and Eligible Scenic Highways in Nevada County*.



**FIGURE 4.1-1: State Scenic and Eligible Scenic Highways in Nevada County**  
Nevada City SOI Plan Update

## ***Visual Analysis Terminology***

### ***Visual Quality***

Visual quality can be defined as what viewers like and dislike about visual resources that compose the visual character of a particular scene. When viewing the same landscape, people may have different responses to that landscape and different responses to proposed visual changes based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. Different viewers evaluate specific visual resources based on their interests and values they place on things like natural harmony, cultural order, and environmental coherence. For examples, neighbors of a particular site and travelers through that same area likely may have different opinions on what they like and dislike about a scene (Federal Highway Administration [FHWA], 2015).

Overall, a viewer's visual impression of an area is determined by the attractiveness of the area or view. This is influenced by the particular characteristics of the landscape or structures within an area and includes landscape and landforms, including rocks, water features, and vegetation patterns; as well as the types, sizes, colorings, and scale of buildings within the built environment. Accordingly, the attributes of all the existing components in the area combine in various ways to create landscape characteristics whose variety, vividness, coherence, uniqueness, harmony, and pattern contribute to the overall visual quality of the viewshed area. Because the City contains several distinct areas with distinct characteristics, the visual quality of a particular location or view within that site can be considered within the context of that area as a whole.

In general, the overall visual character of an area can be categorized using three primary criteria: vividness, intactness, and unity, which are defined as follows:

- **Vividness** is the extent to which a landscape is memorable and is associated with the distinctiveness, diversity, and contrast of visual elements. A vivid landscape will typically make an immediate and lasting impression on the viewer.
- **Intactness** is the integrity of the visual order in the landscape and the extent to which the natural landscape is free from visual intrusion.
- **Unity** is the extent to which visual intrusions are sensitive to and in visual harmony with the natural landscape (Caltrans, 2008).

As discussed above, views are evaluated differently by different types of viewer groups such as neighbors, travelers, or site-seers, and each typically places a different level of importance on each of the listed criteria. For example, activities such as driving for commuting, shopping, or working can distract the observer from the visual environment, while driving for leisure or being involved in recreational activities like hiking can create a greater sensitivity to the visual surroundings. A viewpoint with exceptionally high visual quality may be considered a scenic vista. A scenic vista is generally considered to be a location from which the public can experience unique and exemplary high-quality views—often from elevated vantage points that offer panoramic views of great breadth and depth. Additionally, the value of a view or views

from a site are further differentiated by factors that would modify perception, such as the viewers location, activity, and awareness or concern.

### ***Light and Glare***

There are two typical types of light intrusion. First, there is light that emanates from the interior of structures and passes out through windows. Second, there is light that can project from exterior sources, such as security lighting and landscape lighting, as well as other outdoor sources such as street lighting. “Light spill” is typically defined as the presence of unwanted and/or misdirected light on properties adjacent to the property being illuminated. Light introduction can be a nuisance to adjacent residential areas and diminish the view of the clear night sky. In addition, the light can disturb wildlife in natural habitat areas.

Perceived glare is the unwanted and potentially objectionable sensation as observed by a person when looking directly into the light source of a luminaire. Glare also results from sunlight reflection off flat building surfaces, with glass typically contributing the highest degree of reflectivity.

Currently, the number and intensity of light sources within the City and SOI Plan update area are dependent on the amount of and type of development. In more densely populated areas such as the interior City areas and on more heavily traveled roadways such as SR-20 and major local roadways, more light and glare is emitted from structures and vehicles. Secondary to the downtown areas are the fringes of the City with less densely developed residential neighborhoods and commercial centers. In these rural areas and those with sparse or no development lighting is dispersed. Less light and glare is generated because fewer structures exist and fewer vehicle trips along the rural roadways occurs.

### ***Sensitive Viewers***

The responses of viewers and their sensitivity to changes in the visual settings are inferred from a variety of factors. These factors include but may not be limited to the distance and viewing angle, types of viewer, number of viewers, duration of the view, and the viewers activities. The viewer type and associated viewer sensitivity are distinguished among viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources. Residential viewers generally have moderate sensitivity but experience extended viewing periods. Viewers in commercial, military, and industrial areas are considered to have low sensitivity.

The sensitivity of viewer groups also may vary based on their levels of concern regarding changes to the visual environment. For example, viewers who are very familiar with surroundings, such as residents or frequent visitors, would be more aware of adverse changes and may be more sensitive to changes than viewers who may pass through an area on an infrequent basis.

Additionally, certain variables related to the particular view including how visible the changes are within the landscape; how far the viewer is from the change; duration of the view, if the viewer is looking up or down at the change, if the view is panoramic, or is the view focused and narrow through intervening vegetation or structures. Taken in sum, or individually, these factors will determine how sensitive a viewer is to changes in the view scape.

### ***Viewer Groups in The County***

Based on the above, three basic viewer groups can be delineated within the City and SOI Plan update area. These user groups and their expected visual sensitivity are discussed as follows:

#### ***Residents and Other Land Owners***

Residential viewer groups would include all permanent and seasonal residents at all residential locations that may have views, or experience views of the SOI Plan update area. Rural residents could be highly sensitive to changes in views within the project area because they generally experience views with relatively less dense development than the more urbanized area within the City. Rural areas also are typically afforded wider viewsheds and panoramic views of open and undeveloped lands. While urban residents, generally have less exposure to scenic and panoramic views, if those views are afforded from City areas and the views are of an area that would be developed, those viewers can be sensitive to the reductions in scenery and replacement with a structure(s). In addition, these viewers also may have a high sensitivity to changes in viewsheds while traveling through rural areas or if they are accustomed to undisrupted views.

#### ***Motorists, Cyclists, and Pedestrians***

Residents, visitors, and others passing through the City and SOI update area would use roadways and other corridors for commuting, business purposes, and basic transportation. Cyclists and pedestrians also would use local roadways but for generally shorter trips both in distance and duration. Due to driving speeds, motorists' views of a given parcel or viewshed are typically of moderate duration, where views for cyclists would be longer and the viewing time for pedestrians is the longest. Generally, views from local roadways would be slightly extended compared to views from highways due to slower travel speeds. However, distant views from elevated portions of highways and roadways are available for extended periods in some locations within the City and SOI Plan update area. Motorists, cyclists, and pedestrian who are most familiar with views from the existing highways and roadways would likely be more sensitive to land use and visual changes within the proposed project area. This is because the landscapes would be more familiar to them than users passing through the area or those who use the travel ways intermittently.

#### ***Visitors and Recreationists***

Nevada City and surrounding areas visited for tourism and other outdoor recreational opportunities. People use these areas for activities including camping, fishing, hiking, cycling, golf, rafting and boating, winter sports, and for site seeing. Visitors and recreationists using trails, visiting parks, or using other outdoor facilities are considered a sensitive group. This group would be susceptible to physical changes

to the surrounding landscape, where a change in the quality of visual resources can diminish the experience for these users.

## 4.1.2 REGULATORY SETTING

This regulatory framework identifies the federal, State, regional, and local statutes, ordinances, or policies that govern the light, glare, viewshed, and scenic character to be considered by LAFCo for the proposed project and during the subsequent decision-making process for future projects that may occur within the SOI Plan update area. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historical, natural, recreational, or scenic qualities.

### Federal

#### *National Wild and Scenic Rivers System*

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the distinctive character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection (WSR, 2018a). There are no wild and scenic rivers in Nevada City or the SOI Plan update area (WSR, 2018b).

#### *Yuba Donner Scenic Byway*

The Yuba Donner Scenic Byway is an approximate 175-mile paved loop, the majority of which runs through Nevada County. The balance of the byway is located in Yuba County and Sierra County. The route provides view of alpine valleys and rugged mountains and over both Donner Pass and Yuba Pass (Trails.com, 2018). The portion of the byway through Nevada County is approximately 72 miles in length and includes segments beginning at State Route 89 from Sierra County on the north to Interstate 80 (I-80) near the town of Truckee. The byway follows I-80 west and transitions to State Route 20 (SR-20) near Emigrant Gap continuing west to Nevada City. From Nevada City, the byway transitions to State Route 49 (SR-49) north through San Juan Ridge and North San Juan to the border with Yuba County.

### State

#### *State Scenic Highway Program*

In 1963, the State Legislature established the California Scenic Highway Program through Senate Bill 1467 (Farr). Subsequent legislation in Senate Bill 1467 added Sections 260 through 263 to the Streets and Highways Code. In part, the intent and purpose of these laws were to develop a scenic highway program to add to the pleasure of the residents of the state and to encourage the growth of recreation and tourism. Senate Bill 1467 further provided for special conservation treatment and protection and enhancement of certain locations based on the scenic beauty of areas including scenic corridors comprised of primarily

scenic and natural features. This legislation provides Caltrans with full possession and control of all State highways and places the Scenic Highway Program under the stewardship of Caltrans. Accordingly, Caltrans manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations, and citizens with the process to officially designate scenic highways (Caltrans, 2008).

### ***California Building Standards Code***

Title 24 in the California Code of Regulations (CCR) is the California Building Standards Code. Part 2 of Title 24 is the California Building Code (CBC), which is based on the International Building Code and combines three types of building standards. The CBC also includes standards authorized by the California legislature that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

One example of a code that is specific to California pertaining to aesthetics is Part 6 of Title 24 of the California Energy Code. It includes standards for lighting that are intended to improve energy efficiency and reduce light pollution and glare by regulating light power and brightness and sensor controls. The CBC includes standards for outdoor lighting that are intended to improve energy efficiency and to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls.

## **Local Framework**

### ***Nevada City General Plan***

The Nevada City General Plan provides a long term comprehensive plan to guide development within the City. The General Plan contains numerous elements to address the various conditions that exist within the planning area. The elements typically contain goals, objectives, and policies that provide direction and a way to evaluate projects for consistency with the General Plan. Accordingly, the General Plan lists principles, goals, and objectives, related to aesthetic and visual resources, those that are applicable to the proposed project are listed below.

#### *Principle:*

- Preserve the sense of wooded enclosure by protecting views from highways by maintaining rural density surrounding a tight urban cluster.

#### *Objectives:*

- Foster compact rather than scattered development pattern in order to preserve the existing impression of a tightly clustered, fine-grained core with tree-covered, rural surroundings, to prevent “strip” development along the highways, and reduce the extent and cost of public services.
- Determine appropriate use for land in Nevada City on the basis of the following criteria:
  - o Physical characteristics (slope, soils, vegetation, visual sensitivity, accessibility, etc.)



- Priority level (first priority for annexation are areas already on public services; second are areas within planned extensions of public services)
- Special resource or landmark significance implying consideration for open space or public use (e.g., Sugar Load Reservoir and Bowl, Old Seven Hills School properties).

*Policies:*

- Do not permit urban density uses beyond the SOI boundary as shown on the land use plan.
- Encourage urban-type development to occur as infill within the City. Urban-type development in county territory in most cases is inconsistent.
- Change specific land use designations only after it has been determined that the change enhances eventual achievement of the objectives, policies, and the plans of the General Plan, and that it will serve a public purpose in making such a change.
- In recognition of the visual value of Sugarloaf Mountain and the nearby ridgetops, the following restriction shall be included in any development for these areas:
  - Avoid any land disturbance such as major grading and/or tree removal which would cause visible scars.
  - Any structures shall be carefully sited so that they are not visible.
  - In the vicinity of any structures, the tree canopy shall be retained to screen views.
  - Building material shall be in natural colors which will blend into the hillside. No materials which cause visible glare or reflection will be used.
- Regarding the property located between ridge road and the Nevada City Highway, just southwest of the intersection of the two roadways, the following development restrictions shall apply:
  - Any development of the property shall recognize that the parcel is a visually sensitive corridor property.
  - The property shall be developed using generous setbacks.
  - At least 50% of the property shall remain as open space.
  - Scenic Corridor combining district zoning regulations, when adopted, shall apply to the development of the property.
  - Any development plan for the property shall include the necessary street dedications for the improvement of the intersection.

## ***Conservation and Scenic Resources***

### Objectives:

- Preserve the existing impression of a historic town surrounded by open forest, especially from the “Gateway” at the Ridge Road.
- Preserve and enhance the important natural features, e.g., Sugarloaf, the ridges, the creeks, Gold Run, the hills within the City, and the steep terrain lying west of the City core.

### Policies:

- Reinforce important vistas and scenic corridors by reducing roadside clutter and emphasizing focused views to important landmarks (e.g., Sugarloaf).
- Develop and implement a program to secure special easements to protect streamside zones as potential open space or pedestrian/bike trails, wildlife habitat, and permanent open space.
- Discourage tree cutting within the City.
- Prevent soil erosion and hillside scarring through control of grading, restrictions on removal of vegetation, and limitation of development on steep slopes

## ***Scenic Highways.***

### Objectives:

- To encourage the designation of both Highway 20 and Highway 49 as Official State Scenic Highways.
- To protect and enhance the scenic qualities of these highway by controlling the type and form of development within the adjacent corridor as discussed under findings: Scenic Highways

### Policies:

- Include specific provisions such as the following:
  - o Prohibition of billboards and similar signage
  - o Discouragement of individual access in favor of commonly planned joint access to adjacent properties.
  - o Encouragement of PD or similar planned development along such routes.

## **Nevada City Municipal Code**

The Nevada City Municipal Code includes development regulations related to aesthetics resources and sets design standards to help ensure the visual environment is preserved. The Municipal Code applies to visual elements that would come from new developments to include the scale of new buildings, building materials, setbacks from roadways, fencing, building heights and other elements that would affect the visual character of a site or area. Portions of the Municipal Code related to aesthetics and that are applicable to the SOI Plan update are listed below.

**Section 17.68.240 - Planned Developments.** This section sets forth performance standards to which projects in the City, and those sites that would be annexed, must comply. Any approved development design shall provide high overall performance standards of open space (including preservation of existing trees and vegetation, and the addition of landscaping), circulation, off-street parking and other conditions in such a harmonious, integrated project of sufficient unity and harmony with the historic character of the city to justify exception to the normal regulations of this title.

**Section 17.80.215 – Outdoor Lighting Standards.** This section sets criteria for new outdoor lighting on private property (other than single-family or duplex) to include limitation on lighting heights, energy efficiency, shielding and direction, glare reduction, and the reduction of spill light.

**Chapter 18.01 –Tree Preservation.** This section states that the quality of life and character of Nevada City is directly related to native and ornamental trees and these features contribute to the rural atmosphere and aesthetic appeal. To preserve these resources, the policy of preserving trees uses a development review process and requires permits for remove or cutting of protected trees; and requires coordination with the City for maintenance of street trees.

**Chapter 15.04 – Building Standards.** This section sets standards related to the scale of new buildings, building materials, setbacks from roadways, fencing, building heights and other elements that would affect the visual character of a site or area. This section was enacted for the purpose of providing minimum standards to safeguard life or limb, health, property and public welfare by regulating, on private property, within this jurisdiction in conformity with the 2019 edition of the California Building Standards and consistent with and complementary to standards adopted by the County of Nevada (Nevada City, 2018).

**Section 17.68.200 - Scenic Corridor Combining District.** This section defines the purpose of the districts and states that the classification is intended to be applied to scenic corridors and to recognize new corridors that may be designated by the City council. These roadways are generally entryways to Nevada City which were recognized in the General Plan as being particularly important to protect the existing essential character of Nevada City, namely that of a small, compact historical town surrounded by green, wooded hills, by hiding development from view from the highways and preserving the existing tree cover to the greatest extent possible and assuring visually pleasing corridors through design control. This section further defines requirements for development within the SC Corridors to include review by planning commission, conformance to setbacks, architectural and design features, building color and texture, parking areas, landscaping, and take into account existing vegetation, landforms, and scenic corridors.

**Section 17.88.010 - Site Plans.** This section requires that no building other than an accessory building, shall be erected for any use or uses, except single-family dwelling uses, until a site plan covering the parcel or parcels to be used has been approved or conditionally approved, as herein provided, and no building permit for such building shall be issued until such approval or conditional approval has been given.

## Nevada City Design Guidelines

The Nevada City Design Review process is discussed in the Nevada City Design Guidelines document originally adopted in September 1995 and updated in August of 2015. The design review process is discussed in Chapter 2.0, which discusses review for the historic district and the numerous layers of required review. This chapter also discusses review required for larger projects which require environmental review in conformance with CEQA. In these instances, staff would prepare or have prepared, the appropriate environmental document pursuant to CEQA and the project would then be reviewed by the Advisory Review Committee (ARC) which is comprised of two Planning Commission members and staff. The ARC reviews the proposed environmental document and the project (layout and design) and provides recommendations to the Planning Commission (Nevada City, 2015).

In addition, the Design Guidelines document also discusses constraints of potential developments sites to include compatibility with existing neighborhoods and other structures, scale, setback, consideration of natural features such as rock outcroppings, slopes, watercourses, and trees, and area that should be protected. The guidelines also discuss signage, lighting of signage and interior lighting, landscaping, façade materials, windows, and parking lots and driveways. Design Review is required for the following types of projects:

- In all Residential Neighborhoods.
- Commercial, Office, or Industrial Uses Adjacent to Residential Areas.
- Commercial, Industrial, Office/Professional Areas Outside the Historic District.
- Restoration/Renovations/Demolitions

Any future development in an area proposed for or previously annexed to the City and that fell under one of the above categories would undergo the appropriate CEQA review and/or City Design Review process and comply with any mitigation measures or conditions of approval applied to the project.

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### 4.1.3 STANDARDS OF SIGNIFICANCE

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact to aesthetic resources if it would; except as provided in Public Resources Code 21009:

- a) Have a substantial adverse effect on a scenic vista.
- b) Substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly

accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

#### 4.1.4 PROJECT IMPACTS AND MITIGATION

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in *Chapter 6.0 Alternatives*. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

##### Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to aesthetics. This discussion is applicable to each impact, Impact AES-1 through AES-4, below, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

Within the Consensus Alternative boundaries there are four priority annexation areas. These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. Given that disturbance in these areas would be relatively low, and given the sites have exiting uses, the development density is anticipated to remain low. Associated improvements are not anticipated to induce substantial growth resulting in substantial indirect changes to visual resources.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for build out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

All future City development after annexation within the Consensus Alternative area would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to preservation of scenic vistas and visual resources. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to aesthetics.

***Impact AES-1: Have a substantial adverse effect on a scenic vista?***

A scenic vista is generally considered to be a view of an area that represents a substantial or remarkable visual element in the landscape. Project sites can contain a scenic vista, scenic vistas can be viewed from a project site, or they can be affected by a project. For example, construction of a new building could block an existing viewshed and result in a change to the scenic resource. The Consensus Alternative area generally consists of hilly terrain with elevated ridgelines as well as low-lying valleys that are characterized by steep to gentle slopes and that typically vary in elevation by a few hundred feet. The lowest elevations in the Consensus Alternative area are approximately 2,200 feet and occur in Deer Creek west of the City and progressively rise to just over 2,700 feet east of the City. The highest point in the Consensus Alternative area is Sugarloaf Mountain at approximately 3,080 feet in the northern portion of the area. Although there are areas within the City that may be considered scenic resources, the City does not designate any areas as scenic vistas.

The visual quality within the Consensus Alternative area is considered to be medium to high. Views of the ridges and valleys from roadways or properties would likely be valued by viewers due to the undeveloped and rural character of the resource and landscape. In some locations, views from area roadways provide expansive views, and views of unique topographic features including watercourses, rock outcroppings, and undisturbed forest. Views of these features are intermittent through breaks in the vegetative cover, dependent on roadway elevation, and dependent on viewer awareness.

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and would not change any existing land use designations. The Consensus Alternative would not result in any direct impacts to any scenic vistas. The Consensus Alternative does include six potential development areas; however, future development of these areas will be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed.

As detailed in the *Impacts Discussion Overview* above, it is anticipated conformance with all the listed City and environmental requirements would ensure future projects within the Consensus Alternative area are consistent with the City's scenic resource protection requirements and indirect impacts to scenic vistas would be reduced. Therefore, although the existing visual character and changes to the views in the Consensus Alternative area would change over time, through confirmation of project conformance with the listed Nevada City General Plan objectives and policies as part of the future project review process, indirect impacts of future projects would be less than significant. No mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

***Impact AES-2: Substantially damage scenic resources including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

The City boundaries and the SOI area includes hilly and mountainous terrain containing trees and thick forest lands and rock outcroppings. Within the City there are historic buildings and SR-20/49, which traverse the City and Consensus Alternative area are listed in the California Scenic Highway Program as eligible state scenic highways. Neither are officially designated State scenic highways. SR-20/49 are designated by the City as Scenic Corridor Combining Districts (SCCD) but these designations stop at the City existing boundary.

The Consensus Alternative does not propose, nor would it directly result in any construction or development. Implementation of the Consensus Alternative would not have any direct impacts to trees, rock outcroppings, or historic buildings within a state scenic highway. The Consensus alternative does include six potential development areas; however, future development of these areas will be subject to the City's review and regulation when development plans are submitted, and application(s) filed.

Priority Annexation Area #1 is located adjacent to the terminus of the southern boundary of the City SCCD at Gold Flat Road and adjacent to SR-20. There are no plans for further development of this area. It has been designated as a priority annexation area in consideration of the fact that the City has extended sewer service to the existing Caltrans facility. Priority Annexation Area #2 abuts the southern right-of-way of SR-49 in the western portion of the Consensus Alternative update area. This area is not proposed for any new development and contains the County Juvenile Hall and is currently connected to the City's wastewater system.

Segments of SR-20 and SR-49 are within the SOI Plan update area but do not have City designated SCCD status in County lands. This includes the portions of the highways that extend beyond the existing City boundaries adjacent to areas that may be developed in the future. Approximately 1.25 miles of SR-49 is included as a SCCD but this designation does not extend into the County. As areas along highways and roads are annexed to the City, the City may choose to extend the SCCD designations. All development would be required to conform to associated visual resources standards.

As detailed in the *Impacts Discussion Overview* above, it is anticipated that conformance with all the listed City and environmental requirements would ensure future projects are consistent with the City's scenic

resource protection requirements and indirect impacts to resources within a state scenic highway would be less than significant. Further, both SR-20 and SR-49 have been identified as eligible for listing as a Scenic Highway but have not been officially designated. Therefore, indirect impacts would be less than significant, and mitigation is not required.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact AES-3:** *Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The Consensus Alternative SOI area does not include highly urbanized land uses and would not conflict with a zoning or other regulatory document concerning scenic quality in these areas. The Consensus Alternative SOI area generally consists of rural and low-density development, undeveloped properties, open space and limited commercial uses. The visual character of the area is influenced by ridgelines and valleys, watercourses, rock outcroppings, dense forest, and some distant views. The Consensus Alternative would result in an update of the SOI boundary for the City but does not propose, nor would it directly result in any construction or development. Implementation of the Consensus Alternative would not have any direct impacts related to degradation of the existing visual character or quality of public views of the SOI Plan area or its surroundings.

Priority Annexation Areas #1, #2, #3 and #4 are largely built-out and contain a Caltrans facility, County Juvenile Hall, a cemetery, rural residential development and a few vacant lots designated for rural residential uses. The Consensus Alternative would enable the annexation of these areas; however, there are no known plans for expansion and given the developed nature of the sites, no substantial changes to the visual character is anticipated.

The Consensus Alternative does include six potential development areas that if approved, could result in new construction within the City. If these site are developed, it would change the existing visual character of the sites as viewed from the location and as viewed from some off-site locations. There are no approved development plans for these areas and project impacts are considered indirect.

Indirect impacts would be evaluated for future actions on a project by project basis. This would include and evaluation of conformance to City development regulations and site-specific CEQA review as detailed in *Impacts Discussion Overview*, above. In addition, this evaluation would include verification of conformance to City Codes such as Planned Developments 17.68.240, Scenic Corridor Combining District of Title 17.68.200, and title 18.01 regarding tree preservation. Although the existing visual character and changes to the views in the Consensus Alternative area would change over time, through conformance with all the listed review requirements, indirect impacts of future projects would be less than significant, and no mitigation is required.



**Mitigation Measures:** No Mitigation Measures are Required.

***Impact AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Existing development within the Consensus Alternative area is sparse and generally consists of rural residential, undeveloped properties, open space, and limited commercial uses. These uses typically do not generate substantial amounts of glare during the daytime or substantial lighting/illumination at night. Within these areas lights from vehicles and intermittent glare from vehicle windows can make contributions light and glare. As development on currently undeveloped areas within the Consensus Alternative occurs, changes to the visual environment, including an increase of nighttime lighting and daytime glare are anticipated. New sources of light would occur from outdoor as well as interior lighting and daytime glare from sunlight reflecting off the structure surfaces and windows.

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the SOI update would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts from light and glare as a result of adoption of the Consensus Alternative would not occur, and mitigation would not be required.

The Consensus Alternative includes Priority Annexation Areas #1, #2, #3 and #4, which are largely built-out and contain a Caltrans facility, County Juvenile Hall, a cemetery, rural residential development and a few vacant lots designated for rural residential uses. The Consensus Alternative would enable the annexation of these areas; however, there are no known plans for expansion and given the developed nature of the sites, no substantial changes to associated with light and glare are anticipated.

The Consensus Alternative does include six potential development areas that if approved, could result in new construction within the City. If these site are developed, it would change the existing lighting environment as viewed from the sites and as viewed from some off-site locations. There are no approved development plans for these areas and project impacts are considered indirect.

Indirect impacts also would be evaluated for future actions on a project by project basis. This would include and evaluation of conformance to City development regulations and site-specific CEQA review as detailed in *Impacts Discussion Overview*, above. In addition, this evaluation would include verification of conformance to applicable City Codes including Section 17.80.215 which provides guidance for outdoor lighting standards and for new outdoor lighting fixtures. This code requires lighting fixtures to be shielded to minimize light spill that would be seen from adjoining non-residential properties. It is anticipated conformance with all the listed review requirements would ensure future projects are consistent with the City's scenic resource protection requirements and indirect impacts would be less than significant. No mitigation as part of this project is required.

**Mitigation Measures:** No Mitigation Measures are Required.

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### 4.1.5 CONCLUSION

The proposed project consists of an update to the SOI Plan. As discussed above, the Consensus Alternative would not directly result in impacts to the visual elements of the project area or surrounding locations. Future development projects that are annexed to the City would be subject to the City's land use authority, as set forth in the NCGP and City zoning ordinances and the City, as lead agency for those projects, would require mitigation of significant aesthetic and other impacts as necessary.

The SOI Plan update area includes areas with significant visual resources. However, future annexations into the City are not anticipated to conflict with any existing NCGP goals, policies, objectives relative to the protection of visual character, and would not conflict with the City Zoning Code. All future projects that may be entitled within the Consensus Alternative area would be required to undergo the City development and review process to ensure that project-specific impacts related to impacts on trees, rock outcroppings, historic buildings, and nighttime glare. Therefore, the indirect changes to the Consensus Alternative could result after adoption of the proposed project do not constitute significant impacts to visual and aesthetic resources.

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### 4.1.6 CUMULATIVE IMPACTS

Adoption of the Consensus Alternative and future development undertaken in accordance with the City's General Plan upon annexation from to the City would result in continued changes to the aesthetic and visual environment within the area. As development occurs within the City, residents and visitors to the area may notice the visual effects of increased development. The significance of these visual and aesthetic changes can be difficult to determine, because aesthetic value is subjective and potential impacts are site-specific.

Overall, buildout in conformance with the NCGP could result in increased development throughout the SOI Plan update area as those areas are annexed into the City's jurisdiction. The cumulative nature of projects in the SOI Plan update area would contribute to changes to the viewshed of the Consensus Alternative area. The lands within the Consensus Alternative area are currently developed with predominantly rural and estate residential uses, separated by open tracts of undeveloped land. With the exception of a few locations designated for planned development, open space, and employment commercial, the vast majority the Consensus Alternative is anticipated to be developed with residential units at similar densities.

Accordingly, buildout of these areas and within the City in accordance with the NCGP would result in increased development and result in changes to the visual and aesthetic resources of the area. Visually, the Consensus Alternative area would become more developed as the projects are approved. Future projects; however, are anticipated to be designed to be sensitive to and implement the goals, policies and objectives of the NCGP and be designed and developed in accordance with requirements of the Municipal Code. This would be the same for past, current, and future projects which have been and would also be subject to the City's design and review process on a project-by-project basis.

From a visual standpoint, future development within the Consensus Alternative area and surrounding locations would alter the visual environment. It should be noted that the proposed project itself would not result in any development and does not include any entitlements for development. The project itself is an adjustment and update to the SOI Plan area and the Consensus Alternative does not propose any physical development. As discussed above, all future projects would be subject to the city's design and review process, which also would ensure that all proposed lighting conforms to requirements and all facades would be designed to minimize the potential for glare. Thus, cumulative impacts on the long-term character and quality of the site and City as a whole would be less than significant, and the Consensus Alternative would not significantly contribute to cumulative long-term visual impacts.

**Mitigation Measures:** No Mitigation Measures are Required.

## 4.2 AIR QUALITY

This section of the Environmental Impact Report (EIR) provides a discussion of existing air quality, evaluates potential air quality impacts associated with the proposed Sphere of Influence (SOI) Plan update (SOI Plan update) for the City of Nevada City (proposed project). This section describes the affected environment and regulatory setting for air quality in the City, Nevada County (County), and the region. It also describes the impacts on air quality that would result from implementation of the proposed project, and mitigation to reduce identified impacts where feasible. Information in this section is based on methodologies and assumptions recommended by the Northern Sierra Air Quality Management District (NSAQMD) and other air quality guidance documents and environmental documents for projects in the area.

- Northern Sierra Air Quality Management District.
- California Air Resources Board.

### 4.2.1 ENVIRONMENTAL SETTING

#### Topography and Meteorology

Nevada City and SOI Plan update area are located in western foothills of Nevada County which is located in the Mountain Counties Air Basin (Basin). The Basin is in the northeastern region of the State of California. The Basin is bounded to the east by the Sierra Nevada Mountain Range, to the west by the Coastal Mountain Range and to the south by the Tehachapi Mountains. The SOI Plan update area consists of areas surrounding Nevada City in generally hilly mountainous terrain with thick forest covering most of the project area.

Overall, Nevada County exhibits a large variation in terrain and consequently experiences variations in climate, both of which affect air quality. The eastern portions of the County include steeper slopes of the Sierra Nevada Range and river canyons. The warmest areas within the County are found at the lower elevations along the west side of the County, while the coldest average temperatures are found at the highest elevations in the Sierra Nevada Mountains. The SOI Plan update area falls in the middle of these two zones. The climate of the SOI Plan update area generally consists of dry and mild to hot summers and relatively wet winters. In the upper elevation of the City and Grass Valley, snow levels are usually above 5,000 ft. The averages minimum and monthly maximum temperatures of from the Nevada City area in the foothills to the valley area near the Town of Lincoln from approximately 26 to 93 degrees Fahrenheit (°F).

The prevailing wind direction over the County and SOI Plan update area is westerly. However, the terrain of the area has a great influence on local winds, which results in a wide variability in wind direction. Afternoon winds are generally channeled up-canyons, while nighttime winds generally flow down-canyons. Winds are, in general, stronger in spring and summer and lower in fall and winter. Periods of calm winds and clear skies in fall and winter often result in strong, ground-based inversions forming in

mountain valleys. These layers of very stable air restrict the dispersal of pollutants, trapping these pollutants near the ground, representing the worst conditions for local air pollution.

## Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOX), sulfur dioxide (SO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), fugitive dust and lead are primary air pollutants. Of these, CO, NOX, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are criteria pollutants. ROG and NOX are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O<sub>3</sub>) is formed by a chemical reaction between ROG and NO<sub>x</sub> in the presence of sunlight. O<sub>3</sub> and nitrogen dioxide (NO<sub>2</sub>) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in *Table 4.2-1, Air Contaminants and Associated Public Health Concerns*.

**Table 4.2-1: Air Contaminants and Associated Public Health Concerns**

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O <sub>3</sub> )	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) <sup>1</sup> and nitrous oxides (NO <sub>x</sub> ) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO <sub>2</sub> )	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.

**Table 4.2-1: Air Contaminants and Associated Public Health Concerns**

<b>Pollutant</b>	<b>Major Man-Made Sources</b>	<b>Human Health Effects</b>
Nitrogen Dioxide (NO <sub>2</sub> )	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase-out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
<b>Notes:</b> 1. Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROG and VOCs. Both ROG and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation). Source: California Air Pollution Control Officers Association, Health Effects, <a href="http://www.capcoa.org/health-effects/">http://www.capcoa.org/health-effects/</a> , Accessed June 17, 2019.		

Ozone, or smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between ROG and NO<sub>x</sub> in the presence of sunlight. Ozone formation is greatest on warm, windless, sunny days. The main sources of NO<sub>x</sub> and ROG, often referred to as ozone precursors, are combustion processes (including motor vehicle engines) the evaporation of solvents, paints, and fuels, and biogenic sources. Automobiles are the single largest source of ozone precursors in the Basin. Tailpipe emissions of ROG are highest during cold starts, hard acceleration, stop-and-go conditions, and slow speeds. They decline as speeds increase up to about 50 miles per hour (mph), then increase again at high speeds and high engine loads. ROG emissions associated with evaporation of unburned fuel depend on vehicle and ambient temperature cycles. Nitrogen oxide emissions exhibit a different curve; emissions decrease as the vehicle approaches 30 mph and then begin to increase with increasing speeds.

Ozone levels usually build up during the day and peak in the afternoon hours. Short-term exposure can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, it can aggravate existing respiratory diseases such as asthma, bronchitis and emphysema. Chronic exposure to high ozone levels can permanently damage lung tissue. Ozone can also damage plants and trees, and materials such as rubber and fabrics.

### Existing Air Quality

Table 4.2-2, *Nevada County Attainment Status*, presents the air quality attainment status for Nevada County. Attainment status is determined from air monitoring in the adjacent city of Grass Valley. Grass Valley and Nevada County as a whole is in nonattainment for applicable state and federal ozone standards, in nonattainment for state PM<sub>10</sub> standards and unclassified for federal PM<sub>10</sub> standards, and unclassified/attainment for state and federal PM<sub>2.5</sub> standards.

**Table 4.2-2: Nevada County Attainment Status**

Pollutant	Designation/Classification	
	National Standards <sup>a</sup>	State Standards <sup>b</sup>
O <sub>3</sub> : 1 hour	No Federal Standard <sup>c</sup>	Nonattainment
O <sub>3</sub> : 8 hour	Nonattainment	Nonattainment
PM <sub>10</sub>	Unclassified	Non-attainment
PM <sub>2.5</sub>	Unclassifiable/Attainment	Unclassified
CO	Unclassifiable/Attainment	Unclassified
Source: NSAQMD, 2016. <sup>a</sup> See 40 CFR Part 81. <sup>b</sup> See CCR Title 17 Sections 60200–60210. In addition, the entire district is either Attainment or Unclassified for all State and federal NO <sub>2</sub> , SO <sub>2</sub> , Pb, H <sub>2</sub> S, visibility reducing particles, sulfates, and vinyl chloride standards.		

### Ambient Air Monitoring

The CARB and NSAQMD monitor the local ambient air quality around the SOI Plan update area and other locations within the County. CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. Air quality monitoring stations typically measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

The CARB and NSAPCD operate a network of air monitoring stations in Nevada County. The monitoring station network provides air quality monitoring data, including real-time meteorological data and ambient pollutant levels, as well as historical data. Data was collected from monitoring stations at Grass Valley's Litton Building, White Cloud Mountain and Truckee Fire Station. Due to the distance from the SOI Plan update area, only data from the Grass Valley station is used.

Table 4.2-3, *Existing Air Quality Monitoring Data in Proposed Project Area* presents the measured ambient pollutant concentrations and the exceedances of state and federal standards that have occurred at the Grass Valley Litton Building located within Nevada County from 2015 through 2017, the most recent years for which data are available.

**Table 4.2-3: Existing Air Quality Monitoring Data in SOI Plan Update Area**

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2016	2017	2018	2016	2017	2018
<b>O3 – 1-hour CAAQS (0.09 ppm)</b>						
Grass Valley – Litton Building	0.101	0.108	0.112	6	13	5
<b>O3 – 8-hour CAAQS (0.07 ppm)</b>						
Grass Valley – Litton Building	0.097	0.099	0.102	46	85	28
<b>O3 – 8-hour NAAQS (0.07 ppm)</b>						
Grass Valley – Litton Building	0.097	0.099	0.114	39	78	22
<b>PM10 – 24-hour CAAQS (50 µg/m3) – no data</b>						
<b>PM10 – 24-hour NAAQS (150 µg/m3) – no data</b>						
<b>PM2.5 - 24-hour NAAQS (35 µg/m3)</b>						
Grass Valley – Litton Building.	11.7	68.1	142.8	0	3	12.1
Source: CARB, 2018a, b, and c, Notes: ppm= parts per million * There was insufficient (or no) data available to determine the value.						

### ***Sensitive Receptors***

The NSAQMD identifies a sensitive receptor as human populations or individuals (especially children, senior citizens and sick persons). The locations where these sensitive receptors congregate are considered sensitive receptor locations and where there is a reasonable expectation of continuous human exposure to pollutants, according to the averaging period for ambient air quality standards, such as 24 hours, eight hours or one hour. Sensitive Receptor locations may include hospitals, schools, and daycare centers, and such other locations as the air district board or California Air Resources Board may determine (California Health and Safety Code § 42705.5(a)(5)) (CARB, 2019). Known Sensitive Receptors within 0.25 miles of the SOI Plan update area are shown in *Table 4.2-4, Sensitive Receptors Within 0.25 Miles*.

**Table 4.2-4: Known Sensitive Receptors Within 0.25 Miles of the SOI Plan Update Area**

Receptor	Address	Distance (miles)
County of Nevada Superintendent of School – District Office	380 Crown Point Circle.	Adjacent
Deer Creek Elementary School	805 Lindley Avenue	Within City Boundaries
Seven Hills Middle School	700 Hoover Lane	Within City Boundaries
Home Study Charter School	750 Hoover Lane	Within City Boundaries
Nevada County Juvenile Hall	15434 CA-49	Within the SOI
Nevada City School	Main Street and Cottage	Within City Boundaries
Nevada City Senior Apartments	841 Old Tunnel Road	0.20 miles
Sutton Way Hospitality House	1262 Sutton Way	0.20 miles
*based on available information, this table presents the known sensitive receptors in proximity to the proposed project.		



## 4.2.2 REGULATORY SETTING

### Federal

#### ***Federal Clean Air Act***

Air quality is federally protected by the Clean Air Act and its amendments. Under the Federal Clean Air Act (FCAA), the U.S. Environmental Protection Agency (U.S. EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of federal notification, the U.S. EPA is required to develop a federal implementation plan for the identified nonattainment area or areas. The U.S. EPA has designated enforcement of air pollution control regulations to the individual states.

The EPA and the CARB have established health-based ambient air quality standards for criteria air pollutants listed in Table 4.2-1 above. The EPA sets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Primary standards provide public health protection, including protecting the health of “sensitive” populations, such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. In addition, CARB has established California Ambient Air Quality Standards (CAAQS) standards for these pollutants, as well as for sulfate (SO<sub>4</sub>), visibility reducing particles, hydrogen sulfide (H<sub>2</sub>S), and vinyl chloride. California standards are generally stricter than national standards. The NAAQS and the CAAQS are shown in Table 4.2-5, *National and California Ambient Air Quality Standards*.

**Table 4.2-5: National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	National Standards <sup>a</sup>	California Standards <sup>b</sup>
Ozone (O <sub>3</sub> )	8 Hours	0.070 ppm (137 µg/m <sup>3</sup> ) <sup>c</sup>	0.070 ppm (137 µg/m <sup>3</sup> )
	1 Hour	-- <sup>d</sup>	0.09 ppm (180 µg/m <sup>3</sup> )
Carbon Monoxide (CO)	8 Hours	9 ppm (10 mg/m <sup>3</sup> )	9.0 ppm (10 mg/m <sup>3</sup> )
	1 Hour	35 ppm (40 mg/m <sup>3</sup> )	20 ppm (23 mg/m <sup>3</sup> )
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average	0.053 ppm (100 µg/m <sup>3</sup> )	0.030 ppm (56 µg/m <sup>3</sup> )
	1 Hour	100 ppb (188.68 µg/m <sup>3</sup> )	0.18 ppm (338 µg/m <sup>3</sup> )
Sulfur Dioxide (SO <sub>2</sub> )	3 Hour	0.5 ppm (1,300 µg/m <sup>3</sup> )	--

**Table 4.2-5: National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	National Standards <sup>a</sup>	California Standards <sup>b</sup>
	24 Hours	0.14 ppm (365 µg/m <sup>3</sup> )	0.04 ppm (105 µg/m <sup>3</sup> )
	1 Hour	75 ppb (196 µg/m <sup>3</sup> )	0.25 ppm (655 µg/m <sup>3</sup> )
Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	-- <sup>e</sup>	20 µg/m <sup>3</sup>
	24 Hours	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
Particulate Matter—Fine (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12.0 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24 Hours	35 µg/m <sup>3</sup>	--
Sulfates (SO <sub>4</sub> )	24 Hours	--	25 µg/m <sup>3</sup>
Lead <sup>f</sup> (Pb)	Rolling Three Month Average	0.15 µg/m <sup>3</sup>	--
	30-day Average	--	1.5 µg/m <sup>3</sup>
Hydrogen Sulfide (H <sub>2</sub> S)	1 Hour	--	0.03 ppm (42 µg/m <sup>3</sup> )
Vinyl Chloride (chloroethene)	24 Hours	--	0.01 ppm (26 µg/m <sup>3</sup> )
Visibility-Reducing Particles (VRPs)	8 Hours	--	-- <sup>g</sup>

Source EPA, 2016a; CARB, 2016,

ppm = parts per million; ppb = parts per billion; mg/m<sup>3</sup> = milligrams per cubic meter; µg/m<sup>3</sup> = micrograms per cubic meter.

<sup>a</sup> The NAAQS, other than O<sub>3</sub> and those based on annual averages, are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than 1. The National Primary Standards, which reflect the levels of air quality necessary, with an adequate margin of safety to protect the public health, are presented.

<sup>b</sup> The CAAQS for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24-hour standards), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

<sup>c</sup> On October 1, 2015, the U.S. EPA Administrator signed the notice for the final rule to revise the primary and secondary NAAQS for O<sub>3</sub>. The U.S. EPA is revising the levels of both standards from 0.075 ppm to 0.070 ppm, and retaining their indicators (O<sub>3</sub>), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). The U.S. EPA is in the process of submitting the rule for publication in the Federal Register. The final rule will be effective 60 days after the date of publication in the Federal Register. The lowered national 8-hour standards are reflected in the table.

<sup>d</sup> One-hour O<sub>3</sub> standard revoked effective June 15, 2005.

<sup>e</sup> Annual PM<sub>10</sub> standard revoked effective December 18, 2006.

<sup>f</sup> On October 15, 2008, U.S. EPA strengthened the lead standard.

<sup>g</sup> Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amounts to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

## State

### *California Air Resources Board*

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS (Table 4.2-5), are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

### ***California Clean Air Act***

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The Basin attainment status with respect to State standards is summarized in Table 4.2-3, above.

### ***Toxic Air Contaminants***

Toxic air contaminants (TACs) are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer-causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

## **Regional**

### ***Northern Sierra Air Quality Management District***

Air districts have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of CARB and the EPA. Air districts adopt and enforce rules and regulations to achieve state and federal ambient air quality standards and enforce applicable state and federal law.

The local air quality agency is the NSAQMD. The NSAQMD is comprised of three contiguous, mountainous, rural counties in northeastern California (Nevada, Sierra, and Plumas counties). The NSAQMD is part of the Mountain Counties Air Basin. The NSAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates open burning. Through its permitting powers, the NSAQMD enforces limitations for emission of criteria and toxic air contaminants. Other NSAQMD responsibilities include monitoring air quality, preparation of clean air plans and responding to citizen air quality complaints.

According to NSAQMD, significant impacts are projects that would generate 136 tons per day of ROG, NOX or PM<sub>10</sub>. Among the criteria used by the NSAQMD to evaluate a project's air quality impact is the project's potential to emit pollutants exceeding the established threshold amounts for individual pollutants. Level A thresholds require only standard mitigation applicable to all projects, which the NSAQMD typically recommends. Level B thresholds represent a "cumulatively considerable" emission that requires additional mitigation. Level C thresholds require the use of all feasible and reasonable mitigation strategies. Unmitigated emissions above 136 pounds per day are considered to represent a significant impact. In cases when predicted emissions are projected to be below the Level C thresholds but exceeding the Level A thresholds (thereby placing project-related air quality impacts at Level B), the project would be considered potentially significant, subject to the recommended measures of NSAQMD's Mitigation for Use During Design and Construction Phases for Classifications as Level B Threshold (2009). Implementation of the appropriate NSAQMD mitigation from this collection of measures would reduce Level B air quality impacts to a less than significant level. Refer to *Table 4.2-6, NSAQMD Thresholds for Significant Contribution to Regional Air Pollution*.

**Table 4.2-6: NSAQMD Thresholds for Significant Contribution to Regional Air Pollution**

Criteria Pollutant	Threshold (pounds per day)		
	Level A	Level B	Level C
Oxides of Nitrogen (NO <sub>x</sub> )	24	24-136	136
Reactive Organic Gases (ROG)	24	24-136	136
Particulate Matter (PM <sub>10</sub> )	79	79-136	136

Source: NSAQMD, Draft Guidelines for Assessing Air Quality Impacts of Land Use Projects, 2009, Accessed June 17, 2019.

The NSAQMD has not yet established significance thresholds for greenhouse gas emissions from project operations.

NSAQMD sets for rules related to air quality emissions that are known as the Rules and Regulations of NSAQMD. The rules related to prohibitions, burning, authorizations, and other procedural requirements. The rules most pertinent to the SOI Plan update area and uses that may occur in the future are listed below.

Rule 205, Nuisance. This rule prohibits the discharge of air contaminants or other material from any source which cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or which endangers the comfort, repose, health, or safety of any such persons, or the public or which cause to have a natural tendency to cause injury or damage to business or property.

Rule 207, Particulate Matter. This rule prohibits the release or discharge into the atmosphere from any source or single processing unit, exclusive of sources emitting combustion contaminants only, particulate matter emissions in excess of 0.1 grains per cubic foot of dry exhaust gas at standard conditions.

Rule 226, Dust Control. This rule requires the submittal of a Dust Control Plan to the NSAQMD for approval prior to any surface disturbance, including clearing of vegetation.

Rule 308, Land Development Clearing. The NSAQMD finds it more economically desirable to dispose of wood waste from trees, vines, and bushes on property being developed for commercial or residential purposes by burning instead of burial at a sanitary landfill. In such instances, disposal by burning shall comply with NSAQMD rules, including, but not limited to, Rule 312, Burning Permit Requirements; Rule 313, Burn Days; Rule 314, Minimum Drying Times; Rule 315, Burning Management; and Rule 316, Burn Plan Preparation.

Rule 501, Permit Required. Before any source may be operated, a Permit to Operate shall be obtained from the Air Pollution Control Officer. No Permit to Operate shall be granted either by the Air Pollution Control Officer or the Hearing Board for any source constructed or modified without authorization or not in compliance with other NSAQMD rules and regulations, including those specified in NSAQMD

#### *Regulation IV.*

The NSAQMD contains a Primary Screening Process which requires any project located near sensitive receptors such as a school, daycare facility, hospital or senior center, be reviewed for initial and recurring potential air emissions of criteria pollutants. Under the Primary Screening Process, both short term and long-term emission sources must be considered. In addition, any project with potential to emit odors which may impact a considerable number of persons, leading to a public nuisance, requires in-depth review. Lead agencies are encouraged to address potential land use conflicts or exposure of sensitive receptors to odors as early as possible in the development review process (NSAQMD 2016).

#### ***Western Nevada County Ozone Attainment***

In 2018, a staff report from CARB prepared the CARB Review of the Ozone Attainment Plan for Western Nevada County. The (OAP) includes the areas east of Nevada City and the SOI Plan update area to the western county boundary. Elevated ozone concentrations occur in Western Nevada County during the late spring through early fall, when high temperatures and stable atmospheric conditions favor ozone formation. The nearest ozone monitoring station to the proposed project area is the Grass Valley monitoring station. Between 2007 and 2012, the Grass Valley design value declined by 19 percent from 95 ppb to 77 ppb, but between 2013 and 2017, the design value increased by 13 percent from 77 ppb to 87 ppb. Also, between 2013 and 2017, the number of days per year when the 8-hour ozone concentration exceeded the 75-ppb standard increased from 4 to 58.

To reduce future emissions, CARB has implemented a stringent mobile source emissions control program. The program consists of emissions standards for new vehicles, in-use programs to reduce emissions from existing vehicle and equipment fleets, cleaner fuels, and incentive programs to accelerate the penetration

of the cleanest vehicles beyond that achieved by regulations alone. The control strategy CARB Control Program, District Control Program, Conformance with Applicable Clean Air Act Requirements (emission inventory, reasonable available control measures demonstration, reasonable further progress demonstration, contingency measures, and transportation conformity budgets).

Among other staff recommendations to the board that they approve the Ozone Plan, including the emission inventories, attainment demonstration, RACM demonstration, RFP demonstration, contingency measures, and transportation conformity budgets, and the CARB Staff Report WOE and supplemental information on contingency measures as a revision to the California SIP (CARB, 2018).

## **Nevada City General Plan**

The Nevada City General Plan (NCGP) does not contain an element related to Air Quality. In May 2015, an Energy Action Element (EAE) was added to the NCGP to address greenhouse as emission and does relate to air quality. For example, retrofitting homes can reduce fossil fuel dependency resulting in fewer emissions-reducing air quality. The elements of the EAE are discussed in detail in Chapter 4.5 – Greenhouse Gas Emissions.

### ***Nevada City Municipal Code***

The Zoning Ordinance of Nevada City Municipal Code (NCMC) is contained in Title 17 – Zoning. The purpose of the zoning is for the establishment of various zone districts and define where locations it would be lawful to erect, construct, alter or maintain certain buildings, or to carry out certain trades or occupations, or to conduct certain uses of land or of buildings; within which certain open spaces shall be required about future buildings; and consisting of appropriate regulations to be enforced in such zones, all as set forth in this title. Although not specifically listed as a requirement for all development projects, Section 17.30.090 Other Required Conditions, lists provisions required for the R3 district and under sub J, states, “Meet the site construction air quality best management practices of the NASQMD.”

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## **4.2.3 STANDARDS OF SIGNIFICANCE**

### **Significance Criteria and Thresholds**

Based upon the criteria derived from Appendix G of the State CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

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## 4.2.4 PROJECT IMPACTS AND MITIGATION

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in *Chapter 6.0 Alternatives*. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to air quality. This discussion is applicable to each impact, Impact AIR-1 through Impact AIR-4, below, but is provided here to avoid repetitive discussion.

### Impacts Discussion Overview

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

Within the Consensus Alternative boundaries there are four priority annexation areas (Annexation Areas #1, #2, #3, and #4). These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. Given that most of these areas would not require the extension of services such as public sewer or water, disturbance would be low, and given the sites have exiting uses, the pressure to increase development density is low. Associated improvements are not anticipated to induce substantial growth resulting in indirect impacts.

The six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for built out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with some areas designated for planned development, employment centers, public uses, or service commercial.

All future City development after annexation within the Consensus Alternative area would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to protection of air quality. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to air quality.

***Impact AIR-1: Conflict with or obstruct implementation of the applicable air quality plan?***

A potentially significant impact on air quality would occur if the Consensus Alternative would conflict with or obstruct implementation of the applicable Air Quality Plan. The Consensus Alternative does not include any proposal for new development and would not entitle any projects that would directly result in any construction activities. In addition, the SOI Update plan would leave the County General Plan and zoning code and other land use regulations in effect for all land areas until they are annexed. No land use designation, amendments or rezoning are authorized or included in this project. Therefore, the proposed project would not directly result in any impacts to the violation of an air quality plan.

The proposed project does include four priority annexation areas and six potential development areas and annexation of these areas and future extension of services could result in additional development and the release of construction and operational emissions. The four priority annexation areas are included in the Consensus Alternative and are logical locations for annexation due to the existing development and proximity to existing services. Priority Annexation Area #1 contains an existing Caltrans facility and Priority Annexation Area #2 contains the County Juvenile Hall but there are no plans for expansion on either site. Priority Annexation Areas #3 and #4 are largely developed with existing uses, including a cemetery and rural density residential uses, but a few parcels are vacant that could be developed with similar residential uses.

The six other potential development areas were identified by the City as potential future sites, but development plans and entitlements are not proposed or approved. There are no formal proposals for the sites and no specific site footprints are known. Based on allowable densities, the total development densities for these projects have a broad range from 170-622 total units on a total of 465.42 acres. Due to the lack of plans for these sites it is not possible to quantify specific impacts that may occur. As applications are received and the picture of the potential development becomes clear, these and other projects within the SOI Plan Update area will undergo individual CEQA analysis to determine conformity with the applicable air quality plan(s).



All future projects would be required to follow the NSAQMD implementation plans to reduce pollutants and improve air quality. On November 15, 2018, CARB adopted resolution 18-36 related to the SIP and maintaining the National Ambient Air Quality Standards for the NASQMD basin. As part of the resolution, the District developed the Ozone Attainment Plan for Western Nevada County (Ozone Plan). The purpose of this plan is to meet the serious ozone nonattainment area planning requirement for the 75 ppb 8-hour ozone standard. The resolution states that the Ozone Plan includes an attainment demonstration that shows attainment as expeditiously as practicable by July 20, 2021 (CARB, 2018). Further based on photochemical modeling in the NSAQMD ozone plan, it was demonstrated that attainment of 2008 8-hour ozone NAAQS is likely by 2020 (NSAQMD, 2018), which would qualify as reasonable further progress (RSP). As part of the plan to achieve attainment, additional planning and emission control demonstrations for serious non-attainment areas are needed to comply with the CAA. These conditions include the implementation of the following: Reasonably Available Control Measures (RACM), Reasonable Further Progress (RFP); Attainment demonstration, and contingency measures in the event RFP is not shown (NSAQMD, 2018). This is anticipated to result in future projects being consistent with the applicable air quality plan and subsequently be consistent with the goals, objectives and assumptions in the respective plan to achieve the federal and state air quality standards.

As discussed above, the Consensus Alternative would not result in any direct development but may result in indirect impacts to air quality by facilitating future development. Because these developments are not known, it is not feasible or practical to perform specific air quality analysis on potential indirect impacts. However, future projects would be evaluated for conformance with the applicable air quality plans as they are proposed on a project by project basis. This would include an evaluation of conformance to City development regulations and site-specific CEQA review. In addition, this evaluation would include verification of conformance to NSAQMD standards and requirements and all grading standards, including those to reduce dust emissions, set forth by the City municipal code. Therefore, this impact would be less than significant.

### ***Mitigation Measures:***

No Mitigation is Required

### ***Impact AIR-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

Nevada County is in non-attainment for air quality for the federal and state  $O_3$ -8-hour standards; and the  $O_3$ -1 hour and  $PM_{10}$  applicable state standard. The Consensus Alternative does not include any specific development plans or entitlements that would authorize any construction that would result in the release of  $O_3$ , or  $PM_{10}$  in violation of any applicable federal or state standard.

Indirectly, the Consensus Alternative could result in the annexation and eventual development of properties within the SOI Plan update area. Priority Annexation Area #1 consists of an existing Caltrans facility that is already developed and to which and Priority #2 consists of the Juvenile Hall facility adjacent

to SR-49. Inclusion in the SOI area would enable annexation of these sites and ability to be served by the City. Priority Annexation Areas #3 and #4 contain existing rural residential uses, a few undeveloped parcels, and cemetery. Development potential in these areas is limited. Therefore, the potential for emissions of ROG, NOX, PM10 or PM2.5, and fugitive dust emissions from improvements or new construction in any of the Priority Annexation Areas to result in cumulatively considerable impacts is considered slight.

The Consensus Alternative does include the six potential development areas. The future development of these sites would generate air emissions with the listed air contaminants. Depending on the size of these or other future projects, additional review, evaluate both short term-construction emissions and long-term operational emissions could be needed. If required, the evaluation of construction emissions would include a discussion of the construction activities including demolition, site grading and excavation, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces, and the potential for these activities to result in air quality impacts. Construction emissions are relatively short term and of temporary duration, lasting only as long as construction activities occur. However; these emissions can be considered a significant air quality impact if the volume of pollutants generated exceeds the relevant thresholds of significance.

Depending on the components of future projects, operational emissions could require additional evaluations. Operational emissions from potential future projects would typically be generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling, heating, and cooking); and area sources (landscape equipment and household products).

Because the nature of air emissions is largely a cumulative impact, both construction and operational emissions from separate projects within the NASQMD basin would be additive and could result in a considerable net increase of criteria pollutants of State and federal standards. Although it is not anticipated that any individual project would result in a violation of standards, future projects could result in cumulatively considerable impacts to the air basin. As a result, future project-level mitigation may be required to reduce impacts associated impacts.

As applications are received and the specific development projects are known, these and other projects within the SOI Plan update area would undergo individual and site-specific CEQA analysis to determine conformity with the applicable air quality plan(s). The subsequent CEQA review would be use determine the necessary mitigation measures that would be needed to reduce impacts to less than significant. It is anticipated that this review and mitigation developed in accordance with MM-AIR-1 below, would reduce the potential for cumulatively considerable contributions to occur.

### ***Mitigation Measures:***

**MM AIR-1:** Prior to LAFCo approval an annexation involving new, non-ministerial development and construction, the City shall determine if an air quality study is required. If required, the project applicant shall demonstrate to the reasonable satisfaction of the City that the project was reviewed for the potential to result in a cumulatively considerable net

increase of any criteria pollutant during construction. Such projects shall be reviewed for conformance to applicable NASQMD Rules and other measures intended to reduce impacts to air quality. Based on the initial evaluation, the City may require applicants to adopt an air quality management plan. The air quality management plan would include measures such as the following but not be limited to:

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

***Impact AIR-3: Expose sensitive receptors to substantial pollutant concentrations?***

Sensitive receptors include, but are not limited to, persons in hospitals, schools, daycare facilities, elderly housing, convalescent facilities, and other medically sensitive populations. These are areas where the occupants can be more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care should be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors (EPA, 2017). Based on available information, there are approximately seven locations, as shown in *Table 4.2-4: Known Sensitive Receptors within 0.25 Miles of the SOI Plan Update Area*, within 0.25 miles of the SOI area.

The SOI Plan update does not propose any construction and would not result in the entitlement of any new projects. Direct impacts associated with air quality that could affect the sensitive receptors in any of these locations or any other location within the Consensus Alternative or site within the City; therefore, would not occur.

Indirect impacts to sensitive receptors could occur as areas are annexed and construction occurs. The majority of sensitive receptors within the Consensus Alternative area include existing schools. The existing schools are largely surrounded by existing residential development, but some areas are within 0.25 miles of undeveloped areas. Two other locations with sensitive receptors include a senior apartment complex and a shelter near the western City boundary.

Priority Annexation Areas #1 and #2 include the Caltrans facility and County Juvenile Hall site. Both these sites are already constructed, and no improvements are planned except to extend utility services. Priority Annexation Areas #3 includes an approximate 17-acre site with 19 parcels around the existing HEW site. No development is proposed; however, some development may be induced if utility services are enabled through annexations. Priority Annexation Area #4 is adjacent to Red Dog Road and consists of a cemetery and rural residential lots, most of which are developed. The Juvenile Hall site would contain school-aged children, but none of the other areas are within proximity to known sensitive receptors.

Regarding the six potential development areas, some portion of these sites and areas upon which development could occur, may be located in proximity to sensitive receptors. However, there are no formal development plans for these sites and the exact development footprints and final uses are unknown.

It should be noted that due to the long-term nature of development that could occur within the SOI Plan update area, and the fact that it is not possible to know what or when future annexations may occur. During this time it is possible that new sensitive receptors or the location of existing sensitive receptors

may change as projects are proposed. Therefore, impacts to sensitive receptors may occur in the future and this is considered a potentially significant impact.

To account for this potential, all future annexations and future projects, as applicable and per City Municipal Code, are required to undergo individual CEQA analysis. As part of this analysis sensitive receptors will be noted if they occur within 0.25 miles of future projects. In accordance with Mitigation Measure (MM-AIR-2), potential impacts related to air quality emissions will be evaluated. MM-AIR-2 sets forth these requirements and would reduce impacts to less than significant.

***Mitigation Measures:***

***MM AIR-2:*** Prior to LAFCo approval of an annexation involving new non-ministerial development and construction, the project applicant shall show to the reasonable satisfaction of the City, that the project site is not located within 0.25 miles of a sensitive receptor and would not locate sensitive receptors in proximity to an emitter. If the project is located within 0.25 miles of a known sensitive receptor or would locate a sensitive receptor less than 0.25 miles from a known emission source, an initial evaluation to determine if a Health Risk Assessment (HRA) would be needed shall be made. If an HRA is needed, the HRA shall include mitigation measures to reduce impacts to less than significant and will be included to the project.

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

***Impact AIR-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

A potentially significant impact related to emission of odors would occur if the Consensus Alternative would enable new uses that would emit odors and adversely affect a substantial number of people. The Consensus Alternative does not include any proposal for new development and would not entitle any projects that would directly result in emission of any odors and impacts in this regard would be less than significant.

Priority Annexation Areas #1 and #2 include the Caltrans facility and County Juvenile Hall. Both these sites are already constructed, and no improvements are planned except to extend utility services. Priority Annexation area #3 includes an approximate 17-acre site with 19 parcels around the existing HEW site. No development is proposed; however, some limited residential development may be induced if utility services are enabled through annexations. Priority Annexation Area #4 consists of a cemetery and rural residential lots, most of which are developed. The vacant lots also may be developed likely with residential uses.

The six other potential development areas do not yet have any development proposals and no specific site footprints and ultimate uses are not known. Because the exact development footprints and final uses are unknown, future development of these site and others within the future SOI area, could result in the emission of objectionable odors.

To account for this potential, all future annexations and future projects, as applicable and per City Municipal Code, are required to undergo individual CEQA analysis. As part of this analysis the potential to emit objectionable odors would be evaluated. MM-AIR-3 sets forth these requirements and would reduce impacts to less than significant.

***Mitigation Measure:***

**MM-AIR-3:** Prior to LAFCo approval of an annexation involving new development or construction, the project applicant shall show to the satisfaction of the City that the project would not locate an odor generating use in proximity to substantial numbers of receptors, and would not locate a new project in proximity to an odor generating use. If the proposed project would result in odor impacts, the City shall require appropriate buffers or means of odor control, such as using air filters to ensure receptors are not substantially affected by the source of the odor.

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

## 4.2.5 CONCLUSION

The Consensus Alternative would not directly result in impacts to localized or regional the air quality or non-attainment issues. Future development projects that are annexed to the City would be subject to the City's land use authority, as set forth in the NCGP and City zoning ordinances and the City, as lead agency for those projects, would require mitigation of significant air quality emissions and other impacts in accordance with state CEQA Guidelines as necessary.

The Consensus Alternative is in the Mountain Counties Air Basin and is in an area that is in non-attainment for the federal and state O<sub>3</sub>-8-hour standards; and the O<sub>3</sub>-1 hour and PM<sub>10</sub> applicable State standard. Additionally, it is possible that future uses could be located in proximity to sensitive receptors, generate odors, or be located in areas affected by odor generating uses. Future annexations into the City; however, are not anticipated to conflict with any existing air quality management plan or result in any other air quality impacts. All future projects that may be entitled within the Consensus Alternative area would be required to undergo the City development and review process to ensure that they are consistent with the applicable air quality management plan and do not result in exposure to odors, or exposure of sensitive receptors to potentially harmful emissions. All annexation projects would be evaluated for incorporation of measures listed in the MM-AIR-1 through MM-AIR-3, above. Therefore, the indirect impacts that could result if the Consensus Alternative is adopted do not constitute significant impacts to air quality.

## 4.2.6 CUMULATIVE IMPACTS

Adoption of the Consensus Alternative and future development undertaken in accordance with the City's General Plan upon annexation from to the City would result in additional changes to the local and regional air environment. As development occurs within the City these changes, taken in sum with past, present, and reasonably foreseeable projects could affect existing residents and visitors.

Overall, buildout in conformance with the NCGP could result in increased development throughout the SOI Plan update area as those areas are annexed into the City's jurisdiction. The cumulative nature of projects in the air basin area could contribute to changes to air quality. The lands within the Consensus Alternative area consist of areas currently developed with predominantly rural and estate residential uses, separated by open tracts of undeveloped land. With the exception of a few locations designated for planned development, open space, and employment commercial, the vast majority the Consensus Alternative area is anticipated to be developed with residential units at similar densities as to what currently exists. These types of uses are not anticipated to make cumulatively significant contributions to an air quality management plan. Accordingly, NSAQMD's approach to assessing cumulative impacts dictates that a project's contribution to cumulative impacts to regional air quality would be considered potentially significant if the project's impact would be individually significant (i.e., exceeds the NSAQMD's quantitative thresholds). For a project that would not individually cause a significant impact, the project's contribution to any cumulative impact may be considered less than significant, provided that the project is consistent with all applicable regional air quality plans.

Additional construction in the basin and within Consensus Alternative area could result in development that would result in changes that could result in potential exposure of sensitive receptors to harmful air emissions and expose people to odors. Analysis and mitigation measures required CEQA review, would be needed on a project by project basis and would be required by MM-AIR 1 through MM-AIR-3, above. This would reduce impacts in this regard to less than significant.

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

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## 4.3 BIOLOGICAL RESOURCES

This section provides a discussion and overview of biological resources known or with potential to occur in Nevada City (City) and evaluates potential impacts associated with the SOI Plan update to the City of Nevada (proposed project). The information presented in this section of the DEIR is based on review of existing and available information, data, analysis, and findings provided in this section are programmatic for broad application under the Consensus Alternative, rather than site-specific. The current condition and quality of biological resources were based on an overview of the anticipated resources within the SOI Plan update areas and used as the baseline to compare potential impacts of the implementation in the Consensus Alternative area. Using that information, this section describes potential effects of project implementation on known resources. Biological resources include common vegetation and habitat types, sensitive plant communities, and special status plant and animal species. The analysis includes a description of the existing environmental conditions, the methods used for assessment, the potential direct and indirect impacts of project implementation, and mitigation measures, when appropriate, are recommended to address impacts determined to be significant or potentially significant.

### 4.3.1 ENVIRONMENTAL SETTING

The Consensus Alternative area contains sites with a range of development densities with the majority of the area characterized by rural and estate residential uses and some limited commercial development, and areas used for recreation and open space. There also are large tracts and parcels containing undeveloped land that is characteristic of mountain woodlands within the hills and valleys. The Consensus Area Alternative contains a diverse makeup of vegetative species that provides habitat for a variety of wildlife. The following portions of this section contain information on the existing biological resources within the SOI update area:

- project location;
- land cover types and associated biological habitat uses;
- special status species;
- sensitive natural communities;
- waters of the United States (including wetlands);
- wildlife movement corridors; and
- habitat conservation plans.

#### Project Location

The City's jurisdictional boundaries include approximately 1,470 incorporated acres (2018 Nevada County GIS data) and the SOI includes approximately 2,900 acres. The City is located within a basin on the western slope of the Sierra Nevada and it has a unique topography with hills and valleys, watercourses, and defined seasons to which a variety of plant and wildlife species have adapted. Residential development within the City boundaries is predominantly single-family and exists within an approximate 30-acre area on the westerly side of SR 20 that takes primary access from Broad Street. The City boundaries are generally



surrounded by rural residential development and undeveloped coniferous forest. These areas extend from the City boundary in all directions and are included in the proposed City SOI.

## Baseline Data Collection

### Literature Search and Review of Existing Data

The assessment of biological resources for the proposed project began with a review of documents and species and habitat data available through the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Native Plant Society, National Oceanic and Atmospheric Administration (NOAA) and other agencies. Biological resource data sources included, but were not limited to, the following:

- California Natural Diversity Database records
- CDFW California Wildlife Habitat Relationships database species accounts and range maps
- California Native Plant Society Inventory records

### Land Cover Types

The California Department of Fish and Wildlife (CDFW) maintains the California Wildlife Habitat Relationships System (CWHRS), which provides generalized mapping related to the 59 wildlife habitats found in the state. These habitats include 27 tree habitats; 12 shrub habitats; 6 herbaceous habitats; 4 aquatic habitats; 8 agricultural habitats; 1 developed habitat; and 1-nonvegetated habitat. Within Nevada County as a whole, there are 28 different land cover types. Of these habitats, there are approximately 20 that occur or that have the potential to occur within and around the SOI area due to its presence within the transitional foothills. Accordingly, not all of the following habitat types may be present within the proposed project area, but the following descriptions provide a generalized description of the habitat characteristics, basic species composition, and animals for which the area may provide habitat. The following descriptions summarize the CWHRS descriptions of the habitat types.

#### ***Sierran Mixed Conifer***

A Sierran Mixed Conifer habitat supports a variety of coniferous tree species and often includes several hardwood species. Within Nevada County, this habitat is located in the interior and eastern portions such as in and around Nevada City and is dominated by ponderosa pine. Other species also may include incense cedar (*Calocedrus decurrens*), Douglas-fir, and sugar pine (*Pinus lambertiana*). Hardwoods include California black oak (*Quercus kelloggii*) and Pacific madrone (*Arbutus menziesii*). The understory is often shrubby and common species are toyon (*Heteromeles arbutifolia*), white-leaf manzanita (*Arctostaphylos viscida*), and coffeeberry (*Frangula californica*), and depending on the presence of fires, many of the shrubs could be absent. Due to the past history of the timber industry within the County and around the City, many of the Sierran Mixed Conifer areas exhibit evidence of recent or historic timber harvesting. Harvesting for the purpose of fuel reduction, or treatments to reduce tree stem density or clearing of the understory shrub layer may also be evident.

### **Douglas Fir**

Douglas fir forest composition will vary depending on soil, moisture, topography, and disturbance of the habitat (e.g., history of logging). Douglas fir forests in dry habitats often contain canyon live oak (*Q. chrysolepis*), tanoak, Pacific madrone, sugar pine, ponderosa pine (*P. ponderosa*), and black oak. In habitats with more moisture, Douglas fir can be associated with species like Pacific yew (*Taxus brevifolia*) and Port Orford cedar (*Chamaecyparis lawsoniana*). Douglas fir habitat is widespread throughout Nevada County and are primarily located in the interior portions. Due to its range throughout the state, Douglas fir compositions provide habitat for many wildlife species, including bird species (e.g., northern spotted owl [*Strix occidentalis caurina*], varied thrush [*Ixoreus naevius*], chestnut-backed chickadee [*Poecile rufescens*]), amphibians (e.g., coast giant salamander [*Dicamptodon tenebrosus*], northwestern salamander [*Ambystoma gracile*], Ensatina [*Ensatina* sp.]), and various mammal species (e.g., fisher [*Pekania pennanti*], dusky-footed woodrat [*Neotoma fuscipes*], Douglas squirrel [*Tamiasciurus douglasii*]).

### **Ponderosa Pine**

Ponderosa pine habitat is located within the western interior portion of Nevada County and can be found in and around Nevada City. Plant assemblages for this habitat type vary based on elevation and geographic area; however, typical tree associates include white fir, incense-cedar, Coulter pine (*P. coulteri*), Jeffrey pine, sugar pine, Douglas-fir, bigcone Douglas-fir (*Pseudotsuga macrocarpa*), canyon live oak, California black oak, Oregon white oak, Pacific madrone and tanoak. Associated shrubs include manzanita, ceanothus (*Ceanothus* spp.), mountain-misery (*Chamaebatia foliolosa*), Pacific dogwood (*Cornus nuttallii*), hairy yerba-santa (*Eriodictyon trichocalyx*), yellowleaf silktassel (*G. flavescens*), bitter cherry (*Prunus emarginata*), California buckthorn (*Fragula californica*), poison-oak (*Toxicodendron diversilobum*), Sierra gooseberry (*Ribes roezlii*). Grasses and forbs include slimleaf brome (*Bromus marginatus*), Orcutt brome (*B. orcuttianus*), smallflower melicgrass (*Melica imperfecta*), bracken fern (*Pteridium aquilinum*), bush morning-glory (*Ipomoea leptophylla*), rhomboid clarkia (*Clarkia rhomboidea*), Sierra iris (*Iris hartwegii*), Inyo bush lupine (*Lupinus excubitus*), and summer lupine (*L. formosus*).

Ponderosa pine sometimes is a transitional or migratory habitat for deer and can be extremely important for nutrition and use as migration holding areas. A mixture of early and late successional stages closely interspersed can provide good general wildlife habitat. These areas also may contain riparian zones and depending on wildlife species may require special consideration during management planning. Special status species such as the Sierra Nevada red fox (*Vulpes necator*) can be found within this habitat

### **Juniper**

Juniper habitats are characterized as woodlands of open to dense aggregations of junipers and are found in elevations ranging from 330 feet to 10,170 feet and are strongly influenced by soil depth, type and moisture influence, and composition of other plants in juniper habitats. Associated tree and shrub species, depending in part on species of juniper and its distribution, include white fir, Jeffrey and ponderosa pine, singleleaf pinyon, curl leaf mountain-mahogany, antelope bitterbrush, and big sagebrush. Wildlife associations are like the sagebrush, and bitterbrush habitats in the County. Wintering birds also are reliant on the juniper as the juniper berries are an important food source. Juniper foliage also is

consumed by several species of mammals and may be an important food source for some of these animals, especially during harsh winters.

### ***Closed-Cone Pine-Cypress***

Closed-cone pine-cypress habitat occurs sporadically and sparsely within the interior of Nevada County but is mapped within the area occupied by Nevada City and the SOI area. The dominant cypress species within these habitats is MacNab cypress (*Hesperocyparis macnabiana*) and the dominant closed-cone pine species include Bishop pine (*P. muricata*), knobcone pine, and lodgepole pine (*Pinus contorta*). Various wildlife species use this habitat for foraging and cover, and great horned owl (*Bubo virginianus*) and red-tailed hawk (*Buteo jamaicensis*) have been known to nest within closed-cone pine habitats.

### ***Montane Hardwood-Conifer***

Montane hardwood-conifer habitats contain at least one-third conifer and one-third broad-leaved hardwood trees. Species assemblages often include ponderosa pine, Douglas fir, incense cedar (*Calocedrus decurrens*), black oak, tanoak, Pacific madrone, and Oregon white oak (*Q. garryana*). Other potential species within this habitat type include golden chinquapin (*Chrysolepis chrysophylla*), canyon live oak, white fir, red alder (*Alnus rubra*), western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), and knobcone pine (*P. attenuata*). Montane hardwood-conifer habitat is mapped through the heart of Nevada County but is found predominately in the western portion of the County. Species assemblages will vary widely depending on specific location and other variables such as elevation, temperature ranges, and food sources.

### ***Montane Hardwood***

Montane hardwood habitats are dominated by broad-leaved hardwood tree species; primarily canyon live oak on canyon slopes, and huckleberry oak (*Q. vacciniifolia*) at higher elevations. Other species associated with montane hardwood habitat include white fir, Jeffrey pine (*P. jeffreyi*), Douglas fir, tanoak (*Notholithocarpus densiflorus*), Pacific madrone, bay laurel (*Umbellularia californica*), black oak, knobcone pine (*P. attenuata*), foothill pine (*P. sabiniana*), Oregon white oak (*Q. garryana*), and coast live oak (*Q. agrifolia*). Montane hardwood habitat in Nevada County is widespread and intergrades with Sierran mixed conifer and Douglas fir habitat within the County. Wildlife species that use acorns as a primary food source include Steller's jay (*Cyanocitta stelleri*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), western gray squirrel (*Sciurus griseus*), black bear (*Ursus americanus*), and mule deer (*Odocoileus hemionus*). Similar to Montane Hardwood-Conifer, the range within the County is widespread and includes locations within Nevada City and the surrounding areas.

### ***Montane Riparian***

Riparian habitat is associated with rivers and streams and occurs throughout the County, as well as the City and SOI area, where there is both intermittent and perennial water flows and the riparian habitat occurs adjacent to the aquatic habitat. Characteristic species of montane riparian habitat include black cottonwood (*Populus trichocarpa*), bigleaf maple (*Acer macrophyllum*), Pacific dogwood, boxelder (*Acer negundo*), and bay laurel. Valley foothill riparian habitat also contains western sycamore (*Platanus*

*racemosa*), white alder (*Alnus rhombifolia*), and Oregon ash (*Fraxinus latifolia*). Riparian habitat provides very important habitat for wildlife species and often supports a diversity of species. Sensitive species that utilize riparian habitat include foothill yellow-legged frog, California red-legged frog, bank swallow (*Riparia riparia*), willow flycatcher (*Empidonax traillii*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*).

### **Montane, Chamise, and Mixed Chaparral**

Chaparral habitat within Nevada County is widespread and can be intermixed with other habitat types. Plant assemblages for this habitat type vary based on elevation and geographic area; however, chaparral habitat generally includes manzanita, various ceanothus species (*Ceanothus* sp.), huckleberry oak, chinquapin, boxleaf silk tassel (*Garrya buxifolia*), and birch leaf mountain mahogany (*Cercocarpus betuloides*). Chaparral provides important foraging habitat for mammals (e.g., deer and rabbits), as well as for many bird species. The physical structure of chaparral habitat also provides protection, cover, and nesting habitat for many wildlife species.

### **Grassland**

Grassland habitat includes both annual and perennial grassland types, and occurs within both the western and eastern portions of the County. Annual grasses include wild oats (*Avena* sp.), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Chinook brome (*Bromus laevipes*), and wild barley (*Hordeum* sp.). Perennial grasses include species such as California oatgrass (*Danthonia californica*), American dune grass (*Elymus mollis*), and Kentucky bluegrass (*Poa pratensis*). While dominated by grasses, grassland habitats are often interspersed with forbs species. Grasslands provide habitat for many wildlife species, including garter snakes (*Thamnophis* sp.), western fence lizard (*Sceloporus occidentalis*), voles (*Microtus* sp.), mice (*Reithrodontomys* sp. and *Peromyscus* sp.), and various bird species. Areas where valley oak grow within the grassland community, typically contain exceptional specimens with a diameter at breast height (dbh) of over 40 inches.

### **Wet Meadow**

Wet meadow habitat is found in association with aquatic features, such as rivers and creeks. Many different plant species can be associated with wet meadow habitats, including sedges (*Carex* sp.), rushes (*Juncus* sp.), bulrush (*Scirpus* sp.), willow (*Salix* sp.), and various grasses. Mule deer and elk often feed in wet meadows, and waterfowl and other bird species also use the habitat. Special status amphibian species, such as foothill yellow-legged frog and California red-legged frog can also be found within wet meadow habitat.

### **Freshwater Emergent Wetland**

Fresh Emergent Wetlands may be found in and around water sources including, rivers, creek, and contained water bodies such as lakes and ponds. These areas are characterized by erect, rooted herbaceous hydrophytes. The upper margins of Fresh Emergent Wetlands, saturated or periodically flooded soils support several moist soil plant species including big leaf sedge, baltic rush, redroot nutgrass and on more alkali sites, saltgrass. On wetter sites, common cattail, tule bulrush, river bulrush, and

arrowhead are potential dominant species. Fresh emergent wetland habitats may occur in association with terrestrial habitats or aquatic habitats including Riverine (RIV), Lacustrine (LAC) and Wet Meadows (WTM). Many wildlife species utilize this productive habitat.

### ***Riverine***

Intermittent or continually running water distinguishes rivers and streams. Riverine habitats can occur in association with many terrestrial habitats. Riparian habitats are found adjacent to many rivers and streams. Riverine habitats are also found contiguous to lacustrine and fresh emergent wetland habitats. Wildlife Considerations-- The open water zones of large rivers provide resting and escape cover for many species of waterfowl. Gulls, terns, osprey and bald eagle hunt in open water. Near-shore waters provide food for waterfowl, herons, shorebirds, belted kingfisher and American dipper. Many species of insectivorous birds (swallows, swifts, flycatchers) hawk their prey over water. Some of the more common mammals found in riverine habitats include river otter, mink, muskrat and beaver.

### ***Lacustrine***

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water (Cowardin 1979). They may vary from small ponds less than one hectare to large areas covering several square kilometers. Depth can vary from a few centimeters to hundreds of meters. Typical lacustrine habitats include permanently flooded lakes and reservoirs, intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life, but the more intermittent types usually do not. The relatively calm waters of lakes and ponds offer environmental conditions that contrast sharply with those of running water. Lacustrine habitats may occur in association with any terrestrial habitats, including riverine and fresh emergent wetlands.

### ***Urban***

Urban habitat makes up less than four percent of the total land cover within the county and occurs sporadically within incorporated towns and unincorporated communities including Nevada City and some existing development within the SOI area. Urban habitat includes urban landscaping, lawns, parks, and green zones. Common urban wildlife species include rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and racoon (*Procyon lotor*). Because much of the Nevada City urban areas are located adjacent to more natural habitats, species such as gray fox (*Urocyon cinereoargenteus*), mule deer, and a variety of resident and migratory songbirds can also be common within suburban areas.

### ***Barren***

Barren habitat is devoid of vegetation and can include rocky outcroppings, open sandy beaches, mudflats, riverbanks, canyon walks, or areas associated with urbanization. Barren habitats are present along the major rivers and streams, as well as along the edges of lakes, and adjacent to urban areas. Barren habitats vary widely in their composition and wildlife associations are also variable. Barren, vertical cliffs along

river banks can provide habitat for bank swallows. Mudflats and open sandy beaches provide foraging and nesting habitat for shorebirds, including the federally threatened western snowy plover.

## Special Status Species

Special status species are plants and animals that are legally protected under the California Endangered Species Act (CESA; Fish and Game Code, Section 2050 et seq.), federal Endangered Species Act (ESA), or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. For this program EIR, special status species are defined as:

- species listed or proposed for listing as threatened or endangered under the ESA (50 Code Fed. Regs., Section 17.12) for listed plants, (50 Code Fed. Regs., Section 17.11) for listed animals, and various notices in the Federal Register for proposed species;
- species that are candidates for possible future listing as threatened or endangered under the ESA (75 Code Fed. Regs., Section 69222, USFWS 2018; NOAA Fisheries 2018a);
- species that are listed or proposed for listing by the State of California as threatened or endangered under the CESA of 1984 (14 Cal. Code Regs., Section 670.5);
- plants considered by CDFW and the California Native Plant Society (CNPS) to be “rare, threatened, or endangered in California” (Rare Plant Ranks 1A, 1B, 2A, and 2B; CDFW 2018b; CNPS 2018);
- species that meet the definition of rare or endangered under the State CEQA Guidelines, Section 15380;
- animals fully protected in California (Fish and Game Code, Section 3511 for birds, Section 4700 for mammals, and Section 5050 for reptiles and amphibians); or
- animal species of special concern to CDFW (CDFW 2018b).

The California Natural Diversity Database was consulted to determine what species and the status of the species that may occur within the SOI update area. Sensitive species lists for four quadrangles, Nevada City, Grass Valley, North Bloomfield, and Chicago Park were evaluated. Although approximately 80% of the SOI update area occurs within the Nevada City Quadrangle, small portions of the area occur in the other three. It should be noted that due to the proximity of the locations, many of the species do overlap. There were 14 species listed in the Nevada City quadrangle, 20 listed in the Grass Valley quadrangle, 23 listed in the North Broomfield quadrangle, and 12 in the Chicago Park quadrangle. Accounting for the species listed in multiple quadrangles, there were a total of 31 sensitive plant and wildlife species with the potential to occur within the Consensus Alternative area. It should be noted that the listing within the quadrangle indicates an actual observation and because a species is not listed within a quadrangle does not mean it would not be present in an adjacent quadrangle.

**Table 4.3-1: Special Status Wildlife Species Known to Occur in Nevada City, Grass Valley, North Bloomfield, and Chicago Park Quadrangles**

Species	Regulatory Status <sup>1</sup>		Quadrangle of Occurrence
	Federal	State	
Invertebrates			
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T	--	All quadrangles
Vernal pool tadpole shrimp ( <i>Lepidurus</i> ) <i>packardi</i>	E	--	All quadrangles
Fish			
Central Valley steelhead DPS ( <i>Oncorhynchus mykiss</i> )	T	--	Nevada City and Grass Valley.
Central Valley spring-run chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	T	T	Nevada City and Chicago Park.
Amphibians			
Foothill yellow-legged frog ( <i>Rana boylei</i> )	--	CT, SSC	Nevada City, North Bloomfield, and Chicago Park.
California red-legged frog ( <i>Rana draytonii</i> )	T	SSC	North Bloomfield
Birds			
Great gray owl ( <i>Strix nebulosi</i> )	-	E	Nevada City
California spotted owl ( <i>Strix occidentalis occidentalis</i> )	-	SSC	Nevada City and North Bloomfield
California black rail ( <i>Laterallus jamaicensis coturniculus</i> )	--	T, FP	Nevada City and Chicago Park
Yellow-breasted chat ( <i>Icteria virens</i> )	--	SSC	Grass Valley
Yellow warbler ( <i>Setophaga petechia</i> )	--	SSC	Grass Valley
Olive-sided flycatcher ( <i>Contopus Cooperi</i> )	--	SSC	Grass Valley
Cooper’s hawk ( <i>Accipiter cooperii</i> )	--	WL	North Bloomfield
Northern goshawk ( <i>Accipiter gentilis</i> )	--	SSC	North Bloomfield
Golden eagle ( <i>Aquila chrysaetos</i> )	--	FP, WL	North Bloomfield
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	DL	E, FP	North Bloomfield
Mammals			
Fisher – West Coast DPS ( <i>Pekania pennanti</i> )	--	T, SSC	Chicago Park
Townsend’s big-eared bat ( <i>Corynorhinus townsendii</i> )	--	SSC	Grass Valley and North Bloomfield

**Table 4.3-1: Special Status Wildlife Species Known to Occur in Nevada City, Grass Valley, North Bloomfield, and Chicago Park Quadrangles**

Species	Regulatory Status <sup>1</sup>		Quadrangle of Occurrence
	Federal	State	
Sierra Nevada red fox ( <i>Vulpes necator</i> )	C	T	North Bloomfield
<b>Reptiles</b>			
Western pond turtle ( <i>Emys marmorata</i> )	--	SSC	All quadrangles
Coast horned lizard ( <i>Phrynosoma blainvilli</i> )	--	SSC	Nevada City, Chicago Park, and Grass Valley
<b>Insects</b>			
Western bumble bee ( <i>Bombus occidentalis</i> )			
<sup>1</sup> Status explanations: <u>Federal</u> C = proposed candidate for listing under the federal Endangered Species Act. E = listed as endangered under the federal Endangered Species Act. T = listed as threatened under the federal Endangered Species Act. DL = delisted. <u>State</u> E = listed as endangered under the California Endangered Species Act. T = listed as threatened under the California Endangered Species Act. CT = candidate for listing as threatened under the California Endangered Species Act. SSC = state species of special concern			

**Table 4.3-2: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence**

Species	Regulatory Status <sup>1</sup>			Quadrangle of Occurrence
	Federal		State	
Stebbins' morning-glory ( <i>Calystegia stebbinsii</i> )	E	E	1B.1	Grass Valley
Chaparral sedge ( <i>Carex xerophila</i> )	--	--	1B.2	Grass Valley
Pine Hill flannelbush ( <i>Fremontodendron decumbens</i> )	E	R	1B.2	Grass Valley
Finger rush ( <i>Juncus digitatus</i> )	--	--	1B.1	Grass Valley
Cantelow's lewisia ( <i>Lewisia cantelovii</i> )	--	--	1B.2	Nevada County and North Bloomfield
Inundated bog club-moss ( <i>Lycopodium inundatum</i> )	--	--	2B.2	North Bloomfield
Sierra bluegrass ( <i>Poa sierrae</i> )	--	--	1B.3	Chicago Park,
Brownish beaked rush ( <i>Rhynchospora capitellata</i> )	--	--	2B.2	Nevada City, Chicago Park, Grass Valley, and North Bloomfield
Scadden Flat checkerbloom ( <i>Sidalcea stipularis</i> )	--	E	1B.1	Chicago Park and Grass Valley
<sup>1</sup> Status explanations: -- = no listing.				



**Table 4.3-2: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence**

Species	Regulatory Status <sup>1</sup>		Quadrangle of Occurrence
	Federal	State	
Federal			
E	=	listed as endangered under the federal Endangered Species Act.	
T	=	listed as threatened under the federal Endangered Species Act.	
State			
E	=	listed as endangered under the California Endangered Species Act.	
R	=	listed as rare under the California Endangered Species Act.	
T	=	listed as threatened under the California Endangered Species Act.	
California Native Plant Society			
1A	=	List 1A species: extirpated in California, rare or extinct elsewhere	
1B	=	List 1B species: rare, threatened, or endangered in California and elsewhere.	
2B	=	List 2B species: rare, threatened, or endangered in California but more common elsewhere.	
0.1	=	Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)	
0.2	=	Moderately threatened in California (20%-80% occurrences threatened/moderate degree and immediacy of threat)	
0.3	=	Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)	

### **Critical Habitat**

Critical habitat is a term defined and used in the Endangered Species Act (ESA). It refers to specific geographic areas designated by USFWS or NOAA Fisheries that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. There is no critical habitat mapped for any listed threatened or endangered species within the SOI update area.

### **Sensitive Natural Communities**

Sensitive habitat types include those that are of special concern to CDFW, or that are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, the Porter-Cologne Act, and Section 404 of the Clean Water Act (CWA), as discussed in *Section 4.4.2: Regulatory Setting*, below. Sensitive habitats may be of special concern to regulatory agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special status species.

CDFW maintains a list of plant communities that are native to California. Within that list, CDFW identifies special status plant communities (i.e., sensitive natural communities), which it defines as communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status species or their habitat. Special status plant communities are tracked in the California Natural Diversity Data Base (CNDDDB). Four sensitive natural communities were reported in the CNDDDB and occur within the County and include Darlingtonia Seep habitat (south of Celina Ridge, about three miles southeast of Graniteville); Great Basin Cutthroat Trout/Paiute Sculpin Stream (upper Sagehen Creek and upper Prosser Creek); and Great Basin Sucker/Dace/Redside Stream with Cutthroat Trout [(Prosser Creek, above the Prosser Reservoir, and lower Sagehen Creek from SR 89 to Stampede Reservoir (CDFW 2018b)]. Due to the

defined boundaries, none of these three sensitive natural communities would occur within the SOI update area.

The fourth sensitive natural community; Fen Habitat; however, could exist within the SOI update area. Fen Habitat has a state rarity ranking of S1.2 and is considered threatened. It is estimated there is less than 2,000 acres remaining in California. Fens are dominated by a dense growth of low-growing, herbaceous perennials and low shrubs (Sawyer et al. 2009). Peat accumulates in cold, poorly drained areas. Fens have nutrient-rich water creating a diverse and rich flora. Fens can be found anywhere from sea level to 6,000 feet in elevation. There is the potential for Fen habitat to be located within the SOI update area.

## **WETLANDS AND WATERS OF THE U.S. AND STATE**

Nevada County contains over 23,000 wetland and riverine features as mapped by the USFWS (2018d). These features include freshwater emergent wetlands, freshwater forested/shrub wetlands, freshwater ponds and lakes, and riverine features such as rivers, creeks, and streams.

Within the City and SOI update areas there are areas that would contain wetlands including portions of Deer Creek and its tributaries. Deer Creek is one of the three main watercourses within the SOI Update area. The other two watercourses are Little Deer Creek and Gold Run. All three waterways flow in a westerly direction and converge within the City and join to form Deer Creek which then continues to flow to the southwest. Little Deer Creek begins approximately four miles east of the City and receives flows from a few smaller tributaries until it joins Deer Creek. Gold Run flows in a northwesterly direction from near Forester Drive and converges with Deer Creek near South Pine Street. Deer Creek flows out of Scotts Flat reservoir approximately 4.5 miles to the southwest and receives flows from Mosquito Creek and Willow Valley Creek east of the SOI Update area. Deer Creek then flows into and through the City in a southwesterly direction roughly parallel to Champion Mine Road. Due to the nature of the terrain, the SOI Update area also contains numerous ephemeral drainages that receive intermittent flows from rain and snow events.

Some areas within the watercourses would be considered wetland areas. These and other locations that are saturated for long periods of time and that can support wetland vegetation. Within the SOI Update area, mapping from the National Wetland Inventory shows wetland in various areas and is discussed immediately following.

## **National Wetlands Inventory**

According to the United States Fish and Wildlife Service (USFWS), the agency tasked with providing information to the public on the status and trends of the nation's wetland, the National Wetlands Inventory (NWI) shows there are four wetland habitat types that occur within the SOI Plan update area. The US FWS National Wetlands Inventory (NWI) is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of US wetlands. The NWI provides a high-level accounting for wetlands within the United States to include Nevada County and the SIO Plan update

area. Table 4.3-3, *Wetlands in the SOI Plan Update Area*, shows this information, below. The four-wetland habitat types in these areas are based on the NWI and include the following:

**Freshwater Emergent Wetlands:** The Emergent Wetland Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants. All water regimes are included except subtidal and irregularly exposed (NPWRC, 2019).

**Freshwater Forested/Shrub Wetland:** The forested shrub wetlands are characterized by low woody vegetation and may include forested wetlands that have been harvested and are in the process of regeneration to forest. These areas generally occur where low-growing, multi-stemmed woody plants such as swamp azalea, highbush blueberry, and sweet pepperbush occur (USDA, 1995);

**Freshwater Pond:** The Freshwater Pond is a well-defined basin that is filled with stagnant water and ringed by vegetation. It is fed mainly by rainstorms and snowmelt, and loses most of its water through seepage and evaporation. In hot, dry months, parts of a Pond may dry out, exposing mudflats. In shallow Ponds, bottom rooted plants such as water lilies can reach the surface, while milfoils, pondweeds and other submergent plants thrive below the water's surface

**Riverine:** The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

**Table 4.3-3: Wetlands in the SOI Plan Update Area**

Wetland	City	SOI	Total
Freshwater Emergent Wetland	0.19	1.84	<b>1.04</b>
Freshwater Forested/Shrub Wetland	5.06	6.82	<b>11.89</b>
Freshwater	3.74	8.40	<b>12.15</b>
Riverine	15.08	23.11	<b>38.20</b>
<b>Total:</b>	<b>24.10</b>	<b>40.20</b>	<b>64.30</b>
Source: NWI, 2019			

## INVASIVE PLANT SPECIES AND NOXIOUS WEEDS

An invasive plant is one that is not native to a region, but rather is introduced, and tends to crowd out native vegetation and thereby adversely affect the wildlife that feeds on it. There are many types of invasive plant species, and they occur within all habitat types (Nevada County, 2018). Aggressive noxious weeds such as yellow star-thistle (*Centaurea solstitialis*), Scotch broom (*Cystisus scoparius*), Spanish broom (*Spartium junceum*), spotted knapweed (*Centaurea maculosa*), French broom (*Genista monspessulana*), and Scotch thistle (*Onopordum acanthium*) can invade grasslands and pastures and

exclude native grassland species. Riparian and wetland habitats can be adversely affected by invasive plants such as purple loosestrife (*Lythrum salicaria*), red sesbania (*Sesbania punicea*), giant reed (*Arundo donax*), leafy spurge (*Euphorbia esula*), and perennial peppergrass (*Lepidium latifolia*), excluding native aquatic and riparian species.

### INVASIVE WILDLIFE SPECIES

The introduction of nonnative wildlife species can be detrimental to native species assemblages. Common nonnative wildlife species such as bullfrog (*Lithobates catesbeianus*), crayfish (*Procambarus clarkii*), and red-eared sliders (*Trachemys scripta elegans*), which are common in most of California's waterways are likely to be distributed within the SOI update area. Brown-headed cowbirds (*Molothrus ater*) also have become permanent residents in many areas and in part because of nesting parasitism have resulted in a reduction of habitat for the Willow flycatcher (*Empidonax traillii*) (CDFW 2018). Additionally, several invasive invertebrate species, such as Asian clam (*Corbicula* spp.) and New Zealand mud snail (*Potamopyrgus antipodarum*), could potentially occur in area waterways as this species has been observed in the Yuba River since 2016 (CDFW 2018c).

### WILDLIFE MOVEMENT CORRIDORS

The SOI update area contains areas that are largely undeveloped and that would provide relatively undisturbed wildlife habitat and provide connectivity to larger open space areas. Although the proposed project area is not listed by CDFW as being in an essential connectivity area, the project area still may be beneficial to species as they may be a part of a functional network providing connectivity between the various habitat communities and animal populations in the area and region.

## 4.3.2 REGULATORY SETTING

### Federal

The Federal Endangered Species Act (ESA) provisions protect federally listed threatened and endangered species and their habitats from unlawful take and ensure that federal actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Under the ESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] Section 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project site and determine whether the project will result in "take" of any such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536[3], [4]).

Critical habitat is defined in Section 3(5)(A) of the ESA as "(i) the specific areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection;

and (ii) specific areas outside the geographical area occupied by the species upon a determination by the Secretary of Commerce or the Secretary of the Interior that such areas are essential for the conservation of the species.” The effects analyses for designated critical habitat must consider the role of the critical habitat in both the continued survival and the eventual recovery (i.e., the conservation) of the species in question, consistent with the recent Ninth Circuit judicial opinion, *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*.

Section 7 of the ESA provides a means for authorizing incidental take of federally endangered or threatened species that result from federally conducted, permitted, or funded Projects. Similarly, Section 10 authorizes incidental take of federally endangered or threatened species that result from non-federal Projects.

### ***Federal Migratory Bird Treaty Act***

The federal Migratory Bird Treaty Act (MBTA) (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs, and includes raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. The MBTA is administered by the United States Fish and Wildlife Service (USFWS) and special permits from the agency are generally required for the take of any migratory birds. This act applies to all persons and agencies in the U.S., including federal agencies.

### ***Federal Clean Water Act***

Areas meeting the regulatory definition of “Waters of the U.S.” (Jurisdictional Waters) are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act (CWA)(1972) and Section 10 of the Rivers and Harbors Act (1899). The CWA’s purpose is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “waters of the United States” without a permit from the United States Army Corps of Engineers (Corps). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide. The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a Corps permit.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. Substantial impacts on wetlands may require an individual permit. As a part of the permit process, the USACE works directly with the USFWS to assess project impacts on biological resources. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the applicable Regional Water Quality Control Board (RWQCB).

## State

### ***California Endangered Species Act***

Under the California Endangered Species Act (CESA), CDFW has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Department of Fish and Game Code (CFGF) Section 2070). Pursuant to the requirements of CESA, an agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project site and determine whether the proposed project will result in take of any such species. Under CESA, “take” is defined as the action of or attempt to “pursue, hunt, shoot, capture, collect, or kill.” Habitat degradation or modification is not expressly included in the definition of “take” under CDFW Code. The CDFW may authorize the incidental take of a state-listed species under Section 2081 of the CFGF. For species that are listed as threatened or endangered under both the ESA and CESA, and for which an incidental take permit has been issued in accordance with Section 10 of the ESA, CDFW may authorize take after certifying that the incidental take permit is consistent with CESA, pursuant to Section 2080.1 of the CFGF.

In addition to federal and State-listed species, CDFW also has produced a list of Species of Special Concern to serve as a “watch list.” Species on this list are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Species of Special Concern may receive special attention during environmental review, but they do not have statutory protection.

### ***California Department of Fish and Game Code***

The CDFW provides protection from take for state-listed and non-listed species. The CFGF defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CFGF Section 2080 prohibits take of a species listed as endangered or threatened under the CESA and CFGF Section 2081 allows CDFW to issue an incidental take permit in accordance with Title 14 California Code of Regulations (CCR) Sections 783.4(a) and (b), and CFGF Section 2081(b). Eggs and nests of all birds are protected from take under CFGF Section 3503. Raptors and raptor nests or eggs are protected from take under CFGF Section 3503.5. Migratory birds are expressly prohibited from take under CFGF Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGF Sections 3511, 4700, 5050, and 5515.

### ***Porter-Cologne Water Quality Control Act***

The Porter-Cologne Water Quality Control Act (Porter-Cologne) imposes stringent controls on any discharges into the “waters of the state” (California Water Code § 13000, et seq.). Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050(e)). Pursuant to Porter-Cologne, the State Water Resources Control Board (SWRCB) has the ultimate authority over state water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality at the local/regional level. Under Porter-Cologne, the state retains authority to regulate discharges of waste into any waters of the state,

regardless of whether the USACE has concurrent jurisdiction under Section 404 of the CWA. This applies specifically to isolated wetlands considered non-jurisdictional by the USACE.

### ***Native Plant Protection Act***

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by the CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. The CESA provides further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

### ***California Streambed Alteration Notification/Agreement***

Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application be submitted to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, submits a proposal for measures to protect affected fish and wildlife resources to the developer. The final proposal that is mutually agreed upon by the CDFW and the developer is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the Corps under Section 404 of the Clean Water Act. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

## **Local**

### ***Nevada City General Plan***

The Nevada City General Plan (NCGP) discusses biological resources in the sense of conservation and preservation of the existing natural environment to the extent feasible. The Conservation element discusses the great beauty that should be preserved and talks about open space preservation and mentioned Deer Creek and Little Deer Creek. The NCGP notes that the existing open space is a distinctive characteristic of the City and one of the goals of the City is to preserve a strong sense of entry and distinctness created by the surrounding green and wooded hills and an effort should be made to preserve the surrounding forest. Regarding to the protection of riparian corridors are the policies related to flooding and drainage. These policies are as follows:

- In cooperation with the county, enforce a required building setback from all drainageways;
- Include assessment of drainage impact of proposed projects as part of the environmental review process

### ***Zoning Ordinance***

Chapter 17.80.120- Stream zone standards defines the requirements for building in proximity to a stream or watercourse. Watercourse is defined as a lake, river, creek, stream, wash, arroyo, channel or other topographic feature over which water flows at least periodically. More specifically, this section states the following: “Building closer than one hundred feet from a perennial (runs year-round) stream or closer

than twenty-five feet from a seasonal swale centerline shall be prohibited, unless a variance is granted under the provisions of Chapter 17.88 of this title. In cases where lot coverage is closer than one hundred feet to a stream or watercourse, a certified statement from a registered engineer or sanitarian attesting that such coverage or use will not pollute the stream or watercourse and that there will not be a hazard to the buildings or improvements due to flooding, may be a condition necessary for permit issuance. Nothing in this title shall waive additional requirements that might be imposed by the California Department of Fish and Game.”

Title 18 of the City Municipal Code in Chapter 18.01 discusses tree preservation and notes the quality of life and character of the City of Nevada County and value of property are directly related to the large number of native and ornamental trees. In particular the ordinance notes the benefits include aesthetics, natural watersheds, erosion and flooding control, air quality and temperature, noise reduction, and ecological balance. Based on this, the City policy is to do the following:

- Preserve Trees through the development review process;
- Require permits for cutting and removal of protected trees; and
- Require property owners to coordinate with the city to ensure optimum maintenance and health of street trees.

Protected trees include the following species which are followed by the required diameter breast height (dbh) broadleaf maple (6 dbh); cedar (6 dbh), Fir 6 (dbh), Madrone (4 dbh), manzanita (4 dbh), oak (4 dbh), oak (4 dbh), pine [ponderosa, gray (6 dbh)], pine [sugar pine (all protected)], sequoia giganteum (6 dbh), and all other trees not specified (6 dbh) (Nevada City, 2019).

### 4.3.3 STANDARDS OF SIGNIFICANCE

Appendix G of the State CEQA Guidelines provides a checklist of potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.



- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 4.3.4 PROJECT IMPACTS AND MITIGATION

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in *Chapter 6.0 Alternatives*. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

##### Impacts Discussion Overview

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

Within the Consensus Alternative boundaries there are four priority annexation areas (Annexation Areas #1, #2, #3, and #4). In general, these areas are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries.

In addition, the six potential development areas identified by the City do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for build out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with some areas designated for planned development, employment centers, public uses, or service commercial.

All future City development after annexation within the Consensus Alternative area, including the six potential development areas would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to protection of air quality. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to biological resources.

***Impact BIO-1      Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The Consensus Area Alternative occurs within portions of four USGS quadrangles. According to the CDFW CNDDDB there are 22 special status wildlife species known to occur within the quadrangles. These species and their listing are shown in *Table 4.3-2*, above. In addition, there are a total of 9 special status plant species known to occur within the quadrangles. These species and their listings are shown in *Table 4.3-3*, above.

The Consensus Alternative would not directly result in the implementation of any new construction, authorize development proposals, or new entitlements or improvements. The Consensus Alternative would not result in any direct impacts to any special status species.

The timeframe over which annexations and subsequent development of improvements is unknown and no development authorizations exist at this time. In addition, the Consensus Alternative area covers a large area and conditions affecting the potential presence or absence of sensitive wildlife species could substantially change before any development activity does occur. Depending on the habitat types and availability of resources, there is the potential for some special-status species to be present within the Consensus Alternative area. Surveys for these species within the future development footprint of previously undisturbed areas and adjacent locations would likely be needed prior to annexation.

The Consensus Alternative includes Priority Annexation Areas #1, #2, #3, and #4, and the six potential development areas. Indirect impacts to special status species resulting from future annexation and development under the Consensus Alternative could occur. While most of the four Priority Annexation Areas are already developed, annexation would enable extension of services and some additional development could occur. In addition, inclusion of the six potential development areas within the

Consensus Alternative could result in annexation and subsequent improvements or development on those properties. Construction and operation of future projects could result in the disruption of some special status species should they be present on future projects sites or in adjacent areas.

All future annexations and development would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. This would provide a screening mechanism for the City to determine when and if biological resources studies are needed. As required by the City Municipal Code, all future annexations must include a site-specific CEQA evaluation. In addition, the following mitigation measure would be implemented to ensure impacts to special status wildlife and plant species are reduced to less than significant.

***Mitigation Measures:*** Implement MM-BIO-1

**MM-BIO-1:** Prior to LAFCo approval of an annexation involving new non-ministerial development and construction, the project applicant shall demonstrate to the City that the project will comply with the following measures:

- If the proposed action requires a grading permit or other action requiring substantial ground disturbance or removal of vegetation including trees, review of the site by a qualified biologist shall be required. The site shall be reviewed for the presence of special-status species, sensitive habitat, or waters or wetlands to identify resources that may occur in or around the project site and that may be disturbed by construction or operation of the project. If the biological survey does not identify any sensitive wildlife or plant species and no impacts would occur, no further mitigation is required.
- If the biological resources survey identifies special-status species, sensitive habitat, or waters or wetlands that would be disturbed by implementation of the proposed project, the qualified biologist shall develop a mitigation plan to the satisfaction of the City. The mitigation plan shall include measures such as the following but not limited to:
  - All ground disturbing activities shall be required to be conducted outside of nesting season and after preconstruction surveys to minimize impacts to nesting birds;
  - The project site shall be evaluated for the presence of special status plant species. If special status plants have the potential for presence, a site survey by a qualified biologist shall be conducted during the blooming period. If special status plant species are located, the qualified biologist shall develop a mitigation plan for the sensitive plant species.
  - The project site shall be evaluated for the presence of any riparian habitat or other sensitive natural community. If such habitats are located or would be potentially impacted by the project, a mitigation plan to the satisfaction of the CDFW and RWQCB, as required, shall be implemented.
  - The project site shall be evaluated for the presence of waters of the U.S. wetlands. If such waters or wetlands are located or would be affected by the project, a mitigation plan for

the resources to the satisfaction of the CDFW, RWQCB, and USACE, as required, shall be implemented.

- The project site shall be evaluated for the presence of any native resident or migratory fish or wildlife species or the potential to be used as a migratory wildlife corridor, or native wildlife nursery sites. If the site is determined to have the potential of being such a resource, a site survey by a qualified biologist shall be conducted. If these resources are located or the site would function as such and the project would substantially impede the use, the qualified biologist shall develop a mitigation plan for the resources.
- The project site shall be evaluated for potential conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. If the site is determined to have the potential of such a conflict, a site survey by a qualified biologist or evaluation by a qualified professional shall be conducted. The qualified biologist or professional shall develop a mitigation plan to comply with planning requirements.

**Mitigation Measures:** Implement MM-BIO-1

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated

**Impact BIO-2**      ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?***

The Consensus Alternative area contains some sites with sensitive habitats including riparian areas. There are three main watercourses within the Consensus Alternative area, including Deer Creek, Little Deer Creek, and Gold Run. The Consensus Alternative would not directly implement any development projects, new construction, new entitlements or improvements, and it would not change any existing land use designations. The Consensus Alternative would not result in any direct impacts to any of the listed watercourses, tributaries, or intermittent streams.

Indirect impacts due to annexation and future development would be enabled by inclusion to the Consensus Alternative areas and could result in indirect impacts to riparian or other sensitive habitats. Development could result in vegetation removal or trampling, filling of wetlands, hydrologic changes, deposition of dust or debris, soil compaction, or other disturbances that could temporarily affect the condition and function of sensitive habitats and the plants and animals that use them. Streams supporting riparian and wetland vegetation are regulated by CDFW under Section 1600-1616 of the CFGC, which provides for the protection of these habitats and fish, wildlife, and native plant resources that use these areas.

Riparian habitat within the Consensus Alternative area can be found adjacent to aquatic habitat such as streams and rivers. Due to the presence of the listed watercourses, the Consensus Alternative area also may contain four sensitive natural communities used by the Great Basin Cutthroat Trout/Paiute Sculpin

Stream and Great Basin Sucker/Dace/Redside Stream with Cutthroat Trout, and two aquatic plant communities including Darlingtonia Seep and Fen. Indirect impacts from future development that occurs under the Consensus Alternative could result in impacts to riparian areas.

There are five distinct tree-dominated habitat types as mapped by CALFIRE in the Consensus Alternative area. These habitat types including Douglas fir, montane hardwood, montane hardwood-conifer, ponderosa pine, and subalpine conifer and may contain old-growth and late-successional forests and may be considered sensitive habitat. Some special status wildlife species, including fisher, and California wolverine, use these habitats for denning and movement corridors. Loss of, or disturbance to sensitive habitats, including sensitive natural communities, riparian habitat, and old-growth habitat, would be a potentially significant impact.

The Consensus Alternative includes Priority Annexation Area #1, #2, #3, and #4 and the potential development areas. While most of the area within the four Priority Annexation areas are already developed annexation would enable the extension of utility services annexation and subsequent development could affect riparian habitat or other sensitive natural communities. Additionally, although the specific habitat types on the six potential development areas and other undeveloped locations within the SOI are not known, annexation of these areas and subsequent development and improvements could impact the listed resources. This is considered a potentially significant impact.

All future annexations and development would be subject to the City's review and regulation at the time development plans are submitted, and/or application(s) filed. Additionally, City Code Chapter 17.80.120 contains regulations regarding the prohibition of development within riparian and adjacent to stream zones. The City prohibits building closer than 100 feet from a perennial stream and closer than 25 feet from seasonal water (unless a variance is granted). This would prevent some, but possibly not all impacts to riparian habitat. As discussed above, all annexations also would must include a site-specific CEQA evaluation which would include needed mitigation anticipated to reduce impacts. Lastly, *MM-BIO-1* has been included to the proposed project to ensure impacts to riparian habitat or other sensitive natural community are reduced to less than significant.

**Mitigation Measures:** Implement MM-BIO-1.

**Level of Impact After Mitigation:** Less than Significant Impact with Mitigation Incorporated.

**Impact BIO-3**      ***Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The SOI Plan update area covers approximate 2,702 acres and contains some areas that are mapped as wetland. In sum, the SOI Plan update area contains four wetland habitat types including freshwater emergent wetlands, freshwater forested/shrub wetland, freshwater pond, and riverine. Within the SOI Plan update area there are approximately 1.84 acres of freshwater emergent wetland, 6.82 acres of

freshwater forested/shrub wetland, 8.4 acres of freshwater wetland, and 23.11 of riverine wetland (NWI, 2019).

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. The Consensus Alternative would not result in any direct impacts to any wetlands.

Indirect impacts due to annexation and potential future development would be enabled by inclusion to the SOI and could result in impacts to wetlands. Within the SOI Plan update area there are a total of approximately 40.2 acres of wetlands. Much of this area is associated with the existing riparian corridors discussed in Impact BIO-2. Mitigation to protect riparian habitats would protect the associated wetlands. This includes areas near Deer Creek, Little Deer Creek, Gold Run, other drainages, and smaller unnamed tributaries.

Each future annexation and subsequent project within the Consensus Alternative area that would affect waters of the U.S. would be required to obtain permits from the USACE in compliance with Sections 404 of the CWA. Each permit would identify mitigation requirements to ensure that the project attempts to achieve the USACE goal of “no net loss.” Regarding waters of the state, permits from the RWQCB would be required for future projects that could result in impacts to waters of the State. Such a permit would require measures to ensure no net loss of these water and each responsible or trustee agency would have the opportunity to add conditions of approval to their permits to ensure no net loss of the resource is achieved.

As discussed in Impact BIO-2, above City Code Chapter 17.80.120 contains regulations regarding the prohibition of development within riparian and adjacent to stream zones. Because many of the existing wetlands and most of the water of the U.S. and state would be adjacent to riparian zones, compliance with this code would help prevent impacts to wetlands and other habitat adjacent to watercourses.

To account for potential impacts, all future annexations and future projects, as applicable and per City Municipal Code, are required to undergo individual CEQA analysis. CEQA analysis would evaluate the projects for compliance with federal, state, and local regulations and is anticipated to reduce impacts to resulting from future annexations after adoption of the Consensus Alternative to less than significant. This would include an evaluation of compliance with USACE, RWQCB, and CDFW permit conditions. Lastly, implementation of *Mitigation Measure MM BIO – 1*, would require implementation of a mitigation plan for biological resources that would ensure impacts remain less than significant.

***Mitigation Measures:*** Implement MM-BIO-1.

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated

***Impact BIO-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Approval of the proposed Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. The Consensus Alternative does not propose any new development and would not directly result in a physical impact to the movement of any native fish, wildlife species, or nursery site.

Indirect impacts; however, could occur from future use, conversion, or development, and could adversely affect resident or migratory wildlife corridors from habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths. Impacts to movement corridors and habitat connectivity for some species would be potentially significant.

Aquatic wildlife movement corridors within the Consensus Alternative area occur within three major stream courses, their tributaries, and other connected drainages or water bodies. Fish species and other wildlife such as amphibians that rely on water for their lifecycle could be adversely affected if aquatic habitat or corridors were degraded from future construction after annexation. Construction adjacent to a watercourse also could result in disturbance of a surface water and adversely affect a resident or migratory wildlife species due to habitat fragmentation, degradation, or blockage. Impacts to movement corridors and habitat connectivity for these species would be potentially significant and would require approval and permits from NOAA Fisheries, CDFW, RWQCB, and the USACE.

The Consensus Alternative contain Priority Annexation areas #1, #2, #3, and #4. Priority Annexation areas #1 and #2, consist of an existing Caltrans site and the County Juvenile Hall. These sites are currently developed, and no additional expansion of the sites is proposed. Priority Annexation Areas #3 and #4 contain existing rural residential uses and a cemetery. The majority of the sites are developed with a few lots remaining undeveloped. A portion of a single lot within Priority Annexation Area #4 contains streamflow within Deer Creek and associated riparian habitat and would be used fish and other wildlife species.

Regarding the six potential development areas and other undeveloped areas within the SOI that could potentially overlap with migration routes and summer and winter ranges for some species, future annexation could impact these areas. New developments would increase the number of barriers to movement and reduce habitat available for use by these species. However, because the footprint, extent, and specific design of other future projects that could occur if the areas are annexed are not known, it is not possible to know the extent of potential impacts.

To account for potential impacts, all future annexations and future projects, as applicable and per City Municipal Code, are required to undergo individual CEQA analysis. CEQA analysis would evaluate the projects for compliance with federal, state, and local regulations, and to determine impacts to the movement of fish and wildlife or uses of a site as a corridor, breeding habitat or nursery site. This would include compliance with USACE, RWQCB, and CDFW permit conditions. Lastly, implementation of

*Mitigation Measure MM BIO – 1*, would require implementation of a mitigation plan for these types of biological resources and would ensure impacts remain less than significant.

***Mitigation Measures:*** Implement MM-BIO-1.

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

***Impact BIO-5                      Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Approval of the proposed Consensus Alternative would not directly authorize any new construction, development proposals, or new entitlements or improvements. The Consensus Alternative would not directly result in a conflict with a local policy or ordinance related to protection of biological resources including a tree preservation.

The Consensus Alternative contain Priority Annexation areas #1, #2, #3, and #4. Priority Annexation areas #1 and #2, consist of an existing Caltrans site and the County Juvenile Hall. These sites are currently developed, and not additional expansion of the sites is proposed. Priority Annexation Areas #3 and #4 contain existing rural residential uses and a cemetery. The majority of the sites are developed with a few lots remaining undeveloped. Within each area there are a number of trees and future development would likely require some tree removal. Regarding the six potential development areas, other undeveloped areas within the SOI and service potential, future annexation and development would result in removal of an unknown number and species of trees. Because the footprint, extent, and specific design of other future projects that could occur if the areas are annexed are not known, it is not possible to know the extent of potential impacts.

To account for potential impacts, all future annexations and future projects, as applicable and per City Municipal Code, are required to undergo individual CEQA analysis. CEQA analysis would evaluate the projects for compliance with federal, state, and local regulations, and to determine significance of impacts to these resources as well as conformance with Title 18 of the City Municipal Code in Chapter 18.01 regarding tree preservation. Lastly, implementation of *Mitigation Measure MM BIO – 1*, would require evaluation of potential conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. As needed on a project by project basis, a mitigation plan for would be implemented and would reduce impacts to less than significant.

***Mitigation Measures:*** Implement MM-BIO-1

***Level of Impact After Mitigation:*** Less than Significant Impact with Mitigation Incorporated.

***Impact BIO-6                      Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?***



There are no Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state HCPs that apply to the proposed project. Nevada County is not currently covered under any existing HCPs or NCCPs. Thus, there would be no direct or indirect impacts.

**Mitigation Measures:** No mitigation is required.

### 4.3.5 CONCLUSION

The proposed project consists of an update to the SOI Plan and this discussion specifically pertains to the Consensus Alternative. As discussed above, the Consensus Alternative would not directly result in land use impacts by authorizing or providing for any land use entitlement. Future development projects that are annexed to the City would be subject to the City's land use authority and would undergo individual CEQA review for all projects as set forth City zoning ordinance. The Consensus Alternative would be consistent with NCGP and conform to policies and procedures related to protection of biological resources. Upon annexation all applicable policies and guidance would be applied to the new City areas. Accordingly, if required based on further evaluation of biological resources and as the lead agency for these projects, the City would require mitigation to reduce impacts associated sensitive wildlife and plant species, sensitive habitats including riparian and wetlands, wildlife corridors (aquatic and terrestrial) and nursery sites, and all ordinances related to the preservation of biological resources such that significant impacts to the resources would be less than significant.

### 4.3.6 CUMULATIVE IMPACTS

Adoption of the Consensus Alternative and future development undertaken in accordance with the City's General Plan upon annexation from to the City would not result in any direct changes to existing land uses. The adoption; however, could result in indirect future changes the environment and affect biological resources. Long term, as development occurs this would result in changes to the environment from other future projects within unincorporated County land, future annexation areas, and within the City could contribute to cumulative environmental effects. The significance of these potential changes can be difficult to determine, especially under such a project as this SOI update. This is because there are no specific proposed land uses or plans to analyze and the likelihood of future development is uncertain.

Overall, if buildout occurs in conformance with the NCGP, this would result in a marked increase in development throughout the Consensus Alternative area as the areas are annexed into the City's jurisdiction. The cumulative nature of projects in the Consensus Alternative area would contribute to physical changes to biological resources and associated planning document resulting in potentially significant environmental impacts. Some of the lands within the Consensus Alternative area are currently developed with predominantly rural and estate residential uses, separated by open tracts of undeveloped land. These areas contain three main watercourses, diverse native vegetation, habitats used by sensitive wildlife and plant species, and other sensitive natural communities. With the exception of a few locations designated for planned development, open space, and employment commercial, the vast majority the Consensus Alternative area is designated for rural residential development. Such development would be consistent with the NCGP.

Construction, as well as daily uses in Consensus Alternative area and vicinity would result in changes to the environment and affect biological resources in the area. Under the Consensus Alternative, while no direct impacts would occur, there is the potential for the area to experience growth as future projects are approved. Future projects; however, are anticipated to be designed to be sensitive to and implement the requirements of the City Municipal Code, which would require additional CEQA review. All projects also would be subject to the City's design and review process on a project-by-project basis. This would provide an additional layer of review to help ensure impacts are minimized.

As discussed above, the proposed project itself would not result in any development and does not include any entitlements for development. The project itself is an adjustment and update to the SOI Plan area and the Consensus Alternative does not propose any physical development. As part of the aforementioned CEQA review, and as required by *MM-BIO-1*, future projects annexed to the City would be required to be evaluated for potential impacts and if needed, be evaluated by a qualified biologist to develop a plan with performance standards intended to reduce impacts. All appropriate permits also would be required including those issued by CDFW and USACE. Therefore, it is anticipated that the Consensus Alternative would not significantly contribute to cumulative long-term impacts to biological resources.

## 4.4 CULTURAL AND TRIBAL RESOURCES

This section of the Draft Environmental Impact Report (EIR) provides a summary of the cultural, historical, and paleontological resources located in SOI Plan Update area, the applicable federal, state, and local regulatory setting, and the analysis of the potential impacts associated with the implementation of the proposed SOI Plan for the City and specifically, the Consensus Alternative on cultural resources. This section also provides contextual background information on historical resources within the City and SOI Plan Update area including the area's prehistoric, ethnographic, and historical settings. If needed, mitigation measures in addition to conformance with the LAFCo policies to address adverse impacts are included as needed.

A cultural resource is the physical or observable traces of past human activity including, prehistoric habitation and activities, historic-era sites and materials, and places used for traditional Native American observances or places with special cultural significance. Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under various federal, state, and local regulations, including the California Environmental Quality Act (CEQA) and the National Historic Preservation Act of 1966. The following sources provided the data to support this section:

- California Office of Historic Preservation (2019)
- National Park Service (2017)
- University of California Museum of Paleontology
- Nevada City General Plan
- Nevada County General Plan (1995)
- Five Views, An Ethnic Historic Site Survey for California (1998)

For the purposes of CEQA, "historical resources" generally refer to cultural resources that have been determined to be significant, either by eligibility for listing in State or local registers of historical resources, or by determination of a lead agency (see definitions below). Historical resources can also include areas determined to be important to Native Americans that qualify as tribal cultural resources as defined in Public Resources Code (PRC) Section 21074 (sites, landscapes, historical, or archeological resources). Paleontological resources are also considered within this section.

### Terminology

Below are definitions of key cultural resources terms used in this section:

- Alluvium: a fine-grained sedimentary unit of soil consisting of mud, silt, and sand deposited by flowing water on floodplains, in river beds, and in estuaries,
- Archaeological Site: A site is defined by the National Register of Historic Places (NRHP) as the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g.,

fragments of tools, vestiges of utilitarian, or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). Prehistoric archaeological sites generally represent the material remains of Native American groups and their activities dating to the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. Ethnohistoric archaeological sites are defined as Native American settlements occupied after the arrival of European settlers in California. Historic archaeological sites reflect the activities of non-native populations during the Historic period.

- **Artifact:** An object that has been made, modified, or used by a human being.
- **Cultural Resource:** A cultural resource is a location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological resources and built environment resources (sometimes known as historic architectural resources) and may include sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include places that are considered to be of traditional cultural or religious importance to social or cultural groups.
- **Ecofact:** An object found at an archaeological site that has archaeological significance but has not been technologically altered, such as seeds, pollens, or shells.
- **Ethnographic:** Relating to the study of human cultures. “Ethnographic resources” represent the heritage resource of a particular ethnic or cultural group, such as Native Americans or African, European, Latino, or Asian immigrants. They may include traditional resource-collecting areas, ceremonial sites, value-imbued landscape features, cemeteries, shrines, or ethnic neighborhoods and structures.
- **Historic period:** The period that begins with the arrival of the first non-native population and thus varies by area. Modern history in Nevada County begins in 1848, when discovery of gold in California brought the first white settlers to Penn Valley and people of all nationalities came to work the mines (Nevada County, 2018g).
- **Historical resource:** This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) §5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Historical resources may also include tribal cultural resources including sites, features, places, cultural landscapes, sacred places, objects, and/or archeological resources with value to a California Native American Tribe per PRC §21074.

- Holocene: Of, denoting, or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene.
- Isolate: An isolated artifact or small group of artifacts that appear to reflect a single event, loci, or activity. Isolates typically lack identifiable context and thus have little interpretive or research value. Isolates are not considered to be significant under CEQA and do not require avoidance mitigation (CEQA Statute §21083.2 and CEQA Guidelines §15064.5).
- Lithic: Of or pertaining to stone. Specifically, in archaeology, lithic artifacts are chipped or flaked stone tools, and the stone debris resulting from their manufacture.
- Native American sacred site: An area that has been, or continues to be, of religious significance to Native American peoples, such as an area where religious ceremonies are practiced or an area that is central to their origins as a people.
- Paleontological Resources (Fossils): The physical remains of plants and animals preserved in soils and sedimentary rock units/formations. Paleontological resources contribute to the understanding of past environments, environmental change, and the evolution of life.
- Pleistocene (Ice Age): An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciations, during which continental glaciers covered nearly one-fifth of the earth's land.
- Prehistoric period: The era prior to 1848. The record of California prehistory is divided into three broad temporal periods that reflect similar cultural characteristics throughout the state: Paleoindian (ca. 11,500–8000 B.C.), Archaic (8000 B.C.– A.D. 500), and Late Prehistoric (A.D. 500– Historic Contact). Although early occupation in the High Sierra occurred at least 9,000 years ago, some evidence identifies occupation occurred during the Paleoindian Period (Nevada County, 2012).
- Quaternary Age: The most recent of the three periods of the Cenozoic Era in the geologic time scale of the International Commission on Stratigraphy (ICS). It follows the Tertiary Period, spanning  $2.588 \pm 0.005$  million years ago to the present. The Quaternary includes two geologic epochs: the Pleistocene and the Holocene Epochs.
- Stratigraphy: The natural and cultural layers of soil that make up an archaeological deposit, and the order in which they were deposited relative to other layers.
- Unique Archaeological Resource: This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it either contains information needed to answer important scientific research questions; has a special and particular quality such as being the oldest of its type or the best available example of its type; or, is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Unique Paleontological Resource: This term is defined as a fossil that meets one or more of the following criteria: (1) it provides information on the evolutionary relationships and developmental trends among organisms, living or extinct; (2) it provides data useful in determining the age(s) of

the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein; (3) it provides data regarding the development of biological communities or interaction between plant and animal communities; (4) it demonstrates unusual or spectacular circumstances in the history of life; or (5) the fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

#### **4.4.1 ENVIRONMENTAL SETTING**

##### **Regional Setting**

The SOI Plan Update area is located in unincorporated Nevada County (County) surrounding the City of Nevada City (City). Nevada County is bounded by the Middle Fork of the Yuba River and Sierra County on the north, the state of Nevada to the east, the Bear River and Placer County to the south, and Yuba County to the west. Within the 978 square mile boundary, Nevada County contains various environmental zones, geological characteristics, and geographical position that results in a rich and diverse history with a relatively large number of recorded prehistoric and historic sites. Urbanization within the County is primarily located within these Nevada City, the city of Grass Valley, and Town of Truckee. Uses outside these centers, such as in the SOI Plan Update area primarily consists low density and rural residential, open space, undeveloped land, agricultural uses and intermittently located commercial and industrial uses.

In relation to cultural resources, the County contains many prehistoric sites including native villages, multi-task camps, sites with task-specific resource such as bedrock mortar milling features, as well as sites that special use sites including hunting blinds, petroglyphs, and quarries. More modern historic areas within Nevada County are typically related to mining, water management, logging, transportation, emigrant travel, ranching and agriculture, and grazing. Cultural resources that are considered culturally sensitive, including architectural resources, within the County are generally located less than one-quarter mile from a source of water (i.e., streams, lakes, rivers), between 400 and 3,000 feet above mean sea level (amsl) and on the west side of the Sierra Nevada Mountains.

##### **Local Setting and Project Area**

The City is in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, CA. Nevada City is within the western third of Nevada County in the valley of Deer Creek at an altitude of approximately 2,500 feet. Nevada City lies in this area of transition between the valley to the west and the generally steep, granitic terrain of the Sierra Nevada mountains further east. Nevada City was founded in 1850 and incorporated April 19, 1856. Nevada City started as a gold-mining community one hundred and fifty (150) years ago and is now characterized as a modern city but still with modest cottages, elegant Victorian houses and impressive classic brick buildings. Due to its rich history associated within the California gold rush, historic preservation is a priority and ordinances protect not only the downtown district, which is on the National Register of Historic Places, as well as homes in the residential areas. Nevada City maintains its identity as an entertainment, cultural, social, and recreational center based on this foundation as an historic, in addition to its history of compact growth and

surrounding wooded hills. According to the Nevada City 2017 Annexation Plan and Strategy, this identity drives the City's tourist-oriented economy and attracts the existing culture and entertainment.

Two major transportation routes provide regional connectivity through the City and include the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49). The highways are joined as they traverse through the City and provide access to the adjoining northerly, easterly, and southerly of unincorporated areas of the county. Both SR-20 and SR-49 are listed as eligible State Scenic Highways but are not officially designated.

Nevada County has 18 sites listed on the National Register, 20 California State Historical Landmarks, and 32 Points of Historical Interest. There are no sites within the County listed in the California Register of Historical Resources (California Register). The following provides the criteria for listing as one of the named resources.

**National Register of Historic Places (NRHP)** - National list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture.

**California Historical Landmarks (CHLs)** - Buildings, structures, sites, or places that have been determined to have statewide historical significance and meet specific criteria.

**California Points of Historical Interest** - Sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value.

**California Register** - Encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act

There one listed historical resources in immediate proximity that is on the NRHP. This site and brief description is as follows:

*Martin Luther Marsh House* - 254 Boulder Street – This site is on the NRHP and was registered on January 19, 1972. The site is located on an adjacent 1.53 acres parcel (005-420-045) to the west SOI Plan Update area within the City. Martin Luther Marsh House was constructed in 1973 and is listed for architectural significance.

### ***Other Historical Resources***

There are five sites Listed as California Historical Landmarks. Four of these sites occur within the City, and the fifth, (North Bloomfield Mining and Gravel Company) is located 28 miles outside Nevada City. The sites within the City limits are located in downtown Nevada City and are all between approximately 0.3 and 0.5 miles from the SOI Plan Update area boundary. These four sites and brief description are as follows:

*South Yuba Canal Office (No. 832)* – 134 Main Street. This site was the headquarters for the largest network of water flumes and ditches in the state. The South Yuba Canal Water Company was the first incorporated to supply water for hydraulic mining. The original ditch was in use in May 1850, and this company office was in use from 1857 to 1880. The company's holdings later became part of the vast PG&E hydroelectric system.

*Nevada Theater (No. 863)* – 401 Broad Street. This is California's oldest existing structure erected as a theater, which opened September 9, 1865. Celebrities such as Mark Twain, Jack London, and Emma Nevada have appeared on its stage. Closed in 1957, the theatre was later purchased through public donations and reopened May 17, 1968 to again serve the cultural needs of the community

*National Hotel (No. 899)* - 211 Broad Street. The National Exchange Hotel opened for business on August 20, 1856, the exterior is virtually unchanged since its construction as three brick buildings in 1856. The National is one of the oldest continuously operating hotels west of the Rockies.

*First Manufacturing Site of the Pelton Wheel (No. 1012)* -325 Spring Street. The Pelton Water Wheel, was first commercially manufactured here at George Allan's Foundry and Machine Works in 1879 and was a major advancement in water power utilization and greatly advanced hard-rock mining. By the late 1800s, the Pelton Wheels were providing energy to operate industrial machinery throughout the world. In 1888, Lester Pelton moved his business to San Francisco, but granted continuing manufacturing rights to Allan's Foundry, where the wheels were manufactured into the early 1900s (California Office of Historic Preservation, 2019b).

## **Project Site**

The project proposed is an update to the SOI Plan Update area for Nevada City. The plan area encircles the City and includes approximately 2,702 acres. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, police, fire protection, and recreation and park services. The westerly portion of SOI Plan Update area is accessed by local roadways that provide access to the mostly rural low-density residential uses. The landscape is moderately hilly and thickly vegetated by tall trees and dominated by species of evergreen. Commercial development in this area is limited and scattered in small pockets throughout the area and includes a self-storage facility and Nevada County Sportsmen's Club.

## **County Designated Landmarks**

The Nevada County Historical Landmarks Commission's (Commission) purpose is to "promote the general welfare of Nevada County and its citizens through official recognition, recording, marking, preserving and promoting the historical resources of Nevada County." The Commission developed an interactive map, with the support of the Nevada County Geographical Information Systems unit, that provides detailed information on each of the landmarks and is currently available online (Commission 2017). As of 2017, the Commission has recognized and designated 196 landmarks in Nevada County, including 65 within Nevada City and immediate vicinity. The 65 landmarks include the five sites listed above. No additional sites are located outside the City boundaries in the SOI Plan Update area.



### ***Ethnic Historic Sites***

California's five largest minorities from 1848 to 1898 were Native American, African American, Chinese American, Japanese American, and Mexican American. In order to improve representation of these ethnic minority properties, the Office of Historic Preservation created a document called *Five Views: An Ethnic Historic Site Survey for California* (2004). The survey was intended to highlight areas with important ethnic historical context throughout the state. Within Nevada County, the survey identified eight ethnic historic sites. The African Methodist Episcopal Church Site, Alexander Street, the Nevada City Chinese American Cemetery, are listed in Nevada City. No sites were located within the SOI Plan Update area.

### ***Prehistoric Setting***

Until relatively recent years, the study of Sierran archaeology lagged far behind the central valley and coastal areas in terms of developing a regional chronology and basic understanding of the prehistory of the area. In 1953, however, scientists began to synthesize Sierran archaeology and proliferated major archaeological projects due to work on water projects and other cultural resource management-based research efforts. Since then, there have been several archaeological reconnaissance surveys conducted and although they do not occupy the region surrounding Nevada City, they are useful for piecing together the prehistory of the area (Ritter 1970b).

Artifacts in some the lower stratum (C) were radiocarbon dated at about 1400 B.C., and contained an assemblage similar to the Martis Complex, as defined at high-elevation sites in the Sierra. Found artifacts include large projectile points (mostly of basalt and slate), atlatl (dart-thrower) weights, numerous core tools, and several varieties of grinding implements. The collection looks typical to the Martis Valley, as there was an emphasis on small game hunting and plant gathering, which allowed for the existence of more permanent villages in ecologically rich areas. The next stratum (B) is less easily defined and appears to represent a transition between cultures represented by the upper and lower strata. Some of this transitional appearance may be attributable to the physical mixing of deposits; however, the basic integrity of the site is consistent with the two radiocarbon dates from stratum B (A.D. 1039±80 and 976±90). The upper stratum contains small projectile points (arrowheads), hopper mortars, and other artifacts comparable to recent archaeological collections elsewhere in the northern foothills. Stratum A is, therefore, most likely a manifestation of the ancestral Nisenan, the Indian group inhabiting the area at the time of Euro-American contact.

### ***Ethnographic Setting***

The County of Nevada and specifically the proposed project area lies within the ethnographic territory of the Nisenan, or Southern Maidu. The Nisenan occupied the upper drainages and the adjacent ridges of the Yuba, the north, middle and south forks of the American, and at least the upper north side of the Cosumnes River. The territory is conventionally believed to extend to the crest of the Sierra to the east and the Sacramento River to the west.

Nisenan has three main dialects – Northern Hill, Southern Hill and Valley Nisenan, with three or four subdialects. The Hill Nisenan lived along the foothills of the Sierra Nevada, primarily in small villages with family groups living outside the area of the main village. The main village had a reported dance house,

Tuyi, and was located in the Grass Valley area, although the exact location has not been matched to a known archaeological site. The Nisenan were socially integrated at the village or community group level, with the group participating in the decision-making process. The villages would range in size from 15 to 25 people to over 500 people in the Valley Nisenan. A headman, respected by all and residing in the major village, had the authority to call upon the smaller associated groups in times of need, although the smaller groups did not always have to obey.

The Nisenan, as with other Sierra Native American groups, moved into the higher elevations during the hot summer months. The main activity was the collecting of pine nuts and numerous other species of nuts, roots and berries. This was done primarily by women and children. The foraging groups in a locale could range from small, extended family groups, composed of a woman, her immediate female kin and their adolescent children to whole villages. The men spent most of their time hunting or fishing for a wide variety of fish and animals. Hunting was noted as often involving communal drives, with the best archers of the village posted to do the killing. Individual hunters made extensive use of decoys and imitative sounds.

Most Nisenan people never left the territory used by their own village group. However, there were, in most large villages, at least some individuals who engaged in rather extensive trade with several valley groups as well as Sierra groups, such as the Washo. The Hill Nisenan most likely acquired obsidian and basketry from the east, in exchange for acorns from the Washo, but it is presently unclear whether they were visited by the Washo or they visited the Washo or both. Presumably, the exchange network functioned in the summer and fall.

### ***Paleontological Resources in Nevada County***

Paleontological resources are the mineralized (fossilized) remains of prehistoric plants and animals and the mineralized impressions (trace fossils) left as indirect evidence of the form and activity of such organisms. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. In general, older sedimentary rocks (more than 10,000 years old) are considered most likely to yield vertebrate fossils of scientific interest. When fossils are discovered at the earth's surface, it is because the material in which the organism was fossilized has been eroded away by natural processes or exhumed by humans. These resources are considered to be nonrenewable.

Soils within Nevada County are diverse and consistent with soils formed over very long periods of time from complex geologic and volcanic processes, as well as the introduction of vegetative organic plant materials. The area was once covered by a vast inland sea; through geologic movement and uplift, the water in the sea receded and geologic processes resulted in the formation of some of the existing rock formations. Subsequently, the area experienced intrusion by ultrabasic rock and the existing formations began a long period of erosion exposing the granite rock below. Volcanic activity resulted in ash deposits throughout the County, as well as discharges and flows of andesitic materials mostly mudflows, dust, and lava flows. During the Pleistocene era, approximately 2.5 million years ago, faulting in the eastern portion of the County formed the Sierra Nevada range. Water began to flow westward washing much of the volcanic debris downstream and cutting the deep canyons exposing the volcanic ridges and the underlying materials that are seen today (USDA, 1993).

Today, Nevada County consists of the lower and middle foothills of the Sierra Nevada Mountains and those areas within the Sierra Nevada Mountains that are defined by steeply dipping, faulted, and folded metamorphic rock that has been intruded by several types of igneous rock. Igneous rocks result from the solidification of magma (molten rock) in environments that cause magma creation. As magma reaches the surface as lava, contact with biological organisms usually results in their destruction; as such, there is no plant or animal material present to fossilize. Metamorphic rocks are created when subjected to high levels of heat and pressure, and fossils do not usually survive these extreme conditions. Rock units in which vertebrate or significant invertebrate, plant, or trace fossils have been previously recovered include sedimentary formations, low-grade metamorphic rocks, and volcanoclastic formations that are temporally (over 11,700 years old) and lithologically suitable for fossil preservation.

Fossils generally occur in the Sierra Nevada in rocks that are young in age (less than 50 million years). The University of California Museum of Paleontology identifies approximately 500 vertebrate and invertebrate paleontological specimens that have been collected from geological formations dating to the Eocene (56-34 Million Years Ago), Miocene (approximately 23-5.3 Million Years Ago), Pleistocene (approximately 1.8 Million Years Ago to 11,000 Years Ago) epochs in Nevada County.

## 4.4.2 REGULATORY SETTING

### Federal

#### ***National Historic Preservation Act and the National Register of Historic Places***

Archaeological resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC 300101 et seq.); and its implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO), and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP). Prior to implementing an “undertaking” (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the ACHP and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (NRHP). As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the NRHP. Under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 Code of Federal Regulations (CFR) 60.4.

Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under the National Historic Preservation Act of 1966 (NHPA). A *historic property* is defined in the National Register [54 U.S.C. §300308] as any “prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register of Historic Places including artifacts, records, and material remains related to such a property or resource.” An *archaeological site* is defined

as “a location that contains the physical evidence of past human behavior that allows for its interpretation.” The term archaeological site refers to those that are eligible for or are listed on, as well as those that do not qualify, for the National Register.

Due to the considerable variety of properties associated with the prehistoric and historic past, a broad definition of National Register criteria and significance for evaluation of cultural resources was developed by the National Park System. In order for a property to be considered historically significant, the property must be:

- a) associated with events that have made a significant contribution to the broad patterns of our history;
- b) associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or that represent a significant and distinguishable entity whose components may lack, individual distinction; or
- d) have yielded, or may be likely to yield, information important in prehistory or history.

The integrity of a historic property to convey its significance is also considered when applying the criterion. The aspects of integrity are location, setting, design, workmanship, feeling, and association. Section 106 of the NHPA provides provisions for the protection of historic properties, which is codified in Title 36 of the Code of Federal Regulations (CFR) part 800, as amended.

The National Register generally excludes resources less than fifty years old. If a resource was once determined ineligible for the National Register because they were less than 50 years of age would need to be re-evaluated for eligibility after they have aged.

### ***Native American Graves Protection and Repatriation Act of 1990***

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

### ***National Historic Landmarks***

National Historic Landmarks are districts, sites, buildings, structures, and objects designated by the Secretary of the Interior as possessing national significance in American history, architecture, archeology, engineering, and culture.

## State

### ***California Environmental Quality Act***

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or archaeological resources.

CEQA offers Guidelines on determining the significance of impacts to archaeological and historical resources. CEQA states that if a project would have significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered. However, only significant cultural resources (termed “historical resources”) need to be addressed. Section 15064.5(a) of CEQA Guidelines generally defines a historical resource as:

- a) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (California Register);
- b) a resource listed in a local register of historical resources or identified in a historical resource survey meeting the requirements in Public Resources Code (PRC) Section 5024.1(g); and
- c) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines is historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record; or a resource determined by a lead agency to be “historical,” as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 of CEQA and 14 CCR 15064.4 of the CEQA Guidelines apply. If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired) in the significance of a historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (14 CCR 15064.4(b)(1), 15064.4(b)(4)).

If an archaeological site does not meet the historical resource criteria contained in the CEQA Guidelines, then the site may be treated as a unique archaeological resource in accordance with the provisions of PRC Section 21083. As defined in PRC Section 21083.2 of CEQA, a unique archaeological resource is an archaeological artifact, object, or site for which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;

- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site is to be treated in accordance with the provisions of PRC Section 21083.2, which states that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (PRC Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required.

The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (14 CCR 15064.4(c)(4)).

### ***California Register of Historical Resources***

The California Register of Historical Resources was created by an act of the State Legislature. Under the provisions of that legislation, the following resources are automatically included in the California Register (PRC Section 5024.1; Title 14 California Code of Regulations (CCR) Section 4852):

- 1) Resources formally determined eligible for, or listed in, the National Register of Historic Places through federal preservation programs administered by the OHP, including the National Register program; the Tax Certification program; NHPA Section 106 reviews of federal undertakings;
- 2) State Historical Landmarks numbered 770 or higher; and
- 3) Points of Historical Interest recommended for listing in the California Register by the State Historical Resources Commission (SHPO).

The OHP is responsible for maintaining a statewide inventory of identified and evaluated historical resources. The California Historical Resources Information System (CHRIS) includes the Historical Resources Inventory (HRI), information on resources which has been acquired and managed by OHP since 1975, as well as information and records maintained and managed by regional Information Centers (ICs) located throughout California and the maintained by OHP.

The eligibility criteria for the California Register are intended to serve as the definitive criteria for assessing the significance of historical resources for purposes of CEQA. The eligibility criteria for listing in the California Register are similar to those for National Register listing but focus on the importance of the resources to California history and heritage. In general, any building, site, structure, object or historic district over 50 years in age and meeting one or more of the following criteria may be eligible for listing in the California Register:

- a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b) is associated with the lives of persons important in our past;

- c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- d) has yielded, or may be likely to yield, information important in prehistory or history.

Eligibility for the California Register also depends on the integrity, or the survival of characteristics of the resource that existed during its period of significance. Eligible historical resources must meet one of the above criteria and retain enough of integrity to convey its period of historical significance. Seven aspects of integrity are evaluated with regard to location, design, setting, materials, workmanship, feeling and association.

Section 15064.5 of the State CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in demolition or material alteration in an adverse manner of those physical characteristics of a resource that:

- a) convey its historical significance and that justifies its inclusion in, or eligibility for inclusion in, the California Register;
- b) account for its inclusion in a local register of historical resources pursuant to Public Resources Code 5020.1(k) or its identification in a historical resources survey meeting the requirements of Public Resources Code 5024.1(g), unless the public agency reviewing the effects of the proposed project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- c) convey its historical significance and that justifies its eligibility for inclusion in the California Register, as determined by a lead agency for purposes of CEQA.

For historical buildings, CEQA Guidelines (§ 15064.5[b][3]) indicates that a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall mitigate impacts to a level of less than significant. The California Register special considerations for certain property types are limited to moved buildings, structures, or objects; historical resources achieving significance within the past 50 years; and reconstructed buildings.

### ***California Historical Landmarks***

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance by meeting at least one of the following criteria:

- a) the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California);
- b) associated with an individual or group having a profound influence on the history of California; or

- c) a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

***California Public Records Act, Sections 6254(r) and 6254.10***

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.” Section 6254.10 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission (NAHC), another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency.”

***California Penal Code, Section 622***

Title 14 Section 622 of the California Penal Code provides misdemeanor penalties for willfully injuring, disfiguring, or destroying any monument, or objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

***California Public Resources Code, Section 5097.5***

Section 5097.5 of the California Public Resources Code defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands or state lands.

***California Health and Safety Code, Sections 7050.5 and 7052***

Section 7050.5 of the California Health and Safety Code defines as a misdemeanor if a person knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law. Section 7052 defines as a felony any person who willfully mutilates, disinters, or removes from the place of interment any remains known to be human. However, alkaline hydrolyzed or cremated human remains may be removed for disposition.

***California Points of Historical Interest***

California Points of Historical Interest are sites, buildings, features, or events in history that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. California Points of Historical Interest are recommended by the State Historical Resources Commission and are also listed in the California Register. To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- a) the first, last, only, or most significant of its type within the local geographic region (city or county);



- b) associated with an individual or group having a profound influence on the history of the local area; or
- c) a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

## **SENATE BILL (SB) 18**

Senate Bill 18 (SB 18) went into effect January 1, 2005 and requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to “provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines published by the Governor’s Office of Planning and Research, the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government’s jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county’s jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least ten (10) days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

While Senate Bill 18 and the California Tribal Consultation guidelines does not specifically apply to a SOI, in keeping with the spirit of the intent of the legislation, and due to the potential for specific planning applications to result from the proposed project, the appropriate native groups were consulted with respect to the project’s potential impacts on Native American places, features, and objects.

## ASSEMBLY BILL (AB) 52

AB 52 went into effect on July 1, 2015 and requires CEQA lead agencies to engage in early consultation with California Native American Tribes on all projects. AB 52 creates a new CEQA resource: Tribal Cultural Resources, which include sites, features, places, cultural landscapes, sacred place, objects, or archeological resources with cultural value to a California Native American Tribe that is listed or eligible for listing in the national, California or local registers. AB 52 requires lead agencies to consider whether a project may cause a substantial adverse change in the significance of a Tribal Cultural Resource and to consider a tribe's cultural values when determining the appropriate environmental assessment, impacts and mitigation. AB 52 can draw upon SB 18's guidelines and can be completed in tandem. AB 52 applies to projects with a Notice of Preparation (NOP) or notice of a Negative Declaration or Mitigated Negative Declaration issued on or after July 1, 2015. Revisions to the CEQA Guidelines were adopted in 2016 in order to: (1) separate the consideration of paleontological resources from Tribal Cultural Resources and update the relevant sample questions and (2) add consideration of Tribal Cultural Resources with relevant sample questions.

On August 12, 2019, LAFCo received an AB 52 request from the United Auburn Indian Community (UAIC) formally requesting consultation regarding the SOI Plan Update area. The letter request specifically cited PRC 21080.3.2(a) and the type of environmental review proposed, project alternatives, significant effects, and mitigation measures for direct, indirect and cumulative impacts. The letter also indicated the tribe wishing to have input on design options to avoid impacts to tribal and cultural resources and that a UAIC tribal representative observe and participate in all cultural resource surveys. The UAIC was subsequently contacted by LAFCo to continue the consultation process. As of the publishing of this document, no response from UAIC was received.

## LOCAL

### City of Nevada City

The Nevada City General Plan (General Plan) notes the single most important purpose is to preserve the existing character and essence of the City. The General Plan further notes that growth has not detracted from the character of the historic town but recognizes that development pressure must be considerate of the historic qualities and it's preservation. In relation to the preservation of historic and cultural resources one of the four major City principles, enhancement of the historic core by appropriate complementary development such as visitor accommodations and infill residential. In sum, the General Plan provides constructive guidance toward community goals for the future of Nevada City.

The Historic Preservation element of the General Plan recognizes the importance of the gold rush as it strongly influences the historic character of both the city and setting. Goals relating to historic preservation include the following:

- The City aims to continue its efforts to preserve and enhance the architectural diversity of historic buildings in the central area, to maintain the remarkable collection of city-owned historic buildings and to encourage private efforts of historic preservation and restoration.

- Whereas many other Mother Load towns are being surrounded by modern subdivisions and commercial development, the Nevada City Basin remains nearly pristine. The city seeks means to preserve its sense of a historic town surrounded by open forest.
- As a city grows and new buildings are added outside the historic district, it is the City's aim to encourage design which is appropriate to our own age, but which is unassertive, allowing the dominance of the City's primary, nineteenth-century historic period.

The General Plan also provides more specific guidance in the form of Objectives and Policies. These are as follows:

#### Objectives

- Maintain the dominance of the City's primary, nineteenth-century historic period.
- Allow new development which is complementary to the form and scale of its content.
- Ensure continued concentration of public and cultural activities which reinforce the historic core as the "heart" of Nevada City.

#### Policies

- Encourage private efforts at historic rehabilitation and restoration.
- Seek innovative means to maintain and improve city-owned historic buildings.

### **Nevada City Municipal Code**

The Nevada City Municipal Code regulates development within the City in relation to among other things, development densities and design standards. The city uses allowable densities to facilitate protection of cultural and historic resources.

**Section 17.80.200** – Minimum Lot Sizes for Land Divisions states that the minimum lot size area is intended to be an absolute minimum lot size and applicants must show that development at that size may be raised if the health, safety and general welfare cannot be assured. In consideration of cultural and historic resources in relation to subdivisions, the decision to allow projects to proceed at the minimum standard is based on effects to the historical, cultural, aesthetic or archaeological value of the property proposed to be subdivided, including consideration of existing structures, improvements, landscaping, landforms and historical or cultural significance of the site.

**Chapter 17.68.010** Defines the purpose of combining districts which is to provide additional development standards for special cases. The combining district designation is combined with the base zoning district to achieve the desired level of development standards and land use application processing. -Section 17.68.020 defines the purpose of the Historical Combining District to preserve historic and aesthetic value of the places and buildings which are important historical exhibits and possess unique architecture. c This section further notes that Section 37361 of the California Government Code, provides special conditions and regulations for the protection, enhancement and perpetuation of places and buildings that have a special character or special historical or aesthetic interest or value. Some

appropriate and reasonable development restrictions controlling the appearance of neighboring properties is therefore, provided.

### 4.4.3 STANDARDS OF SIGNIFICANCE

#### SIGNIFICANCE CRITERIA AND THRESHOLDS

In accordance with the State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to cultural and tribal cultural resources, if it would:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.?
- c) Disturb any human remains, including those interred outside of dedicated cemeteries.
- d) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

#### Methodology

This analysis is based on the regional and site-specific information that is publicly available and relevant to the SOI Plan Update area. The evaluation of the project's potential effects on cultural or tribal cultural resources that may be present or associated with the project site stems from the prehistoric and historic context of the region and project site, the historical integrity the site exhibits, and association to significant people and or events.

Pertaining to tribal cultural resources, the NOP/IS was sent to the appropriate groups (refer to Appendix E of this EIR) and letters accordance with AB 52 were sent to tribal contacts that have requested consultation with respect to the proposed project's potential impacts on Native American places, features, and objects. In addition, based on responses from these individual. As mentioned above, one

response letter was received from the UIAC requesting consultation and to discuss the proposed project's potential impacts on Native American places, features, and objects. All relevant information has been evaluated against the thresholds of significance to determine the potential for environmental impacts.

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#### **4.4.4 PROJECT IMPACTS AND MITIGATION**

The proposed project consists of an update to the SOI Plan for the City. This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 6.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to cultural resources. This discussion is applicable to each impact, Impact CUL-1 through Impact CUL-5, below, but is provided here to avoid repetitive discussion.

##### **Impacts Discussion Overview**

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

Within the Consensus Alternative boundaries there are four priority annexation areas (Annexation Areas #1, #2, #3, and #4). These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for build out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents. The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with some areas designated for planned development, employment centers, public uses, or service commercial.

All future City development after annexation within the Consensus Alternative area would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to protection of cultural resources. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to cultural and tribal resources.

## Project Impacts

### ***Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?***

Cultural resources that are significant under Section 106 are evaluated in terms of eligibility for listing of in the NRHP. NRHP significance criteria applied to evaluate the cultural resources are defined in 36 CFR 60.4 as described in the Regulatory Settings above. The CRHR includes buildings, sites, structures, objects, and districts significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural history of California. To qualify for inclusion in the CRHR, a historical resource must meet the criteria previously described. If no eligible resources are identified within a project's area of potential effect (APE), then the project is not considered to have a significant impact on cultural resources.

The Consensus Alternative does not include any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. Therefore, the Consensus Alternative would not result in any direct impacts to the significance of a historical resource as defined in §15064.5.

The Consensus Alternative area does not contain any existing historical resources listed on the National Register or California National Register of Historic Places, California Historical Landmarks (CHLs), California Points of Historical Interest, or the California Register. Priority Annexation Area #4 does contain the Pine Grove Cemetery, but this location is not listed on the aforementioned historical resources list and no development or disturbance within the cemetery is proposed. The Forest View Cemetery is located on the northerly side of Red Dog Road and adjacent to Priority Annexation Area #4. This location also is not shown in the resources list and no development or disturbance in the cemetery is proposed. Priority Annexation Areas #1, #2, and #3, contain the Caltrans facility, County Juvenile Hall, and an area developed with rural residential uses and a few undeveloped parcels, respectively. These areas do not contain any known historical resources.

Regarding the six potential development areas and other undeveloped areas within the Consensus Alternative, annexation could result in subsequent improvements and development. Development and construction activities could result in damage to unknown historic resources should they be present on future projects sites or in adjacent areas. The City also has authority to prezone all future annexations

which would enable the City to specify conditions to ensure future projects incorporate all requirements related to preservation of cultural resources. All future annexations and developments would be reviewed by the City when development plans are submitted, and/or application(s) filed. This would provide a screening mechanism for the City to determine when and if historical resources are located on the site.

As required by the City Municipal Code, all future annexations would include a site-specific CEQA evaluation. In addition, as part of the annexation process, the City would implement MM-CUL-1, which requires, when applicable, an evaluation of future project sites for the potential to contain historical or archaeological resources. MM-CUL-1 requires evaluation by a qualified archaeologist and if needed development of a mitigation plan with performance standards. Implementation of MM-CUL-1 would reduce impacts in this regard to less than significant.

***Mitigation Measures:*** Implement MM-CUL-1

**MM-CUL-1:** Prior to LAFCo approval of an annexation involving new non-ministerial development and construction, the City shall ensure that the project has been reviewed by a qualified archaeologist for its potential to damage, destroy, or harm the integrity of a historical, cultural, or archaeological resource. After initial review, if necessary, the City shall require the applicant to have a qualified archaeologist conduct a review of the project site and determine the appropriate level of study (e.g., Cultural Resources Report, Cultural Resources Study, or Technical Memorandum) needed to evaluate the potential for presence and/or protection measures for cultural resources either known or unknown. If a formal study is required, all California Native American tribes that are traditionally or culturally affiliated with the geographic area or that have requested notification, shall be contacted. If requested by any tribal group, the City will agree to all mandatory consultation requirements.

As part of the Cultural Resources evaluation or study, the qualified archaeologist shall include all reasonable steps needed to fully document, recover, or preserve in place resources within the project site and develop a mitigation plan to prevent damage or destruction to the resource(s). These measures could include, but not be limited to the following:

Cultural Resources Protection Measures Implemented Prior to Construction:

- Review archival records at the NAHC, etc.;
- Consultation with culturally affiliated tribes or other Native American representative(s);
- Use of Native American monitors during ground disturbing activities;
- Demarcation and preservation in place of any known prehistoric/Native American archaeological, or historical resource;

- Evaluation of the historical archaeological site or resources for potential listing on the National Register of Historic Places (NRHP);
- Implement a Construction Worker Environmental and Cultural Awareness Training Program meeting or exceeding the Secretary of the Interior's Standards for professional archaeology;

Cultural Resources Protection Measures Implemented During Construction:

- Demarcation and preservation in place of any previously unknown located prehistoric/Native American archaeological, or historical resource;
- Cessation of ground disturbance with 50 feet of any located resource (s);
- Preservation of resources in place if possible;
- If resources are not able to be preserved in place, they shall be appropriately documented and recovered;
- Preparation of a report documenting the resource(s);

Cultural Resources Preservation Performance Standards:

- Retention of distinctive materials, features, spaces and spatial relationships;
- Retain and preserve the historical character of the site and/or resources;
- Preservation of distinctive materials, finishes, and/or construction techniques;
- Recordation and documentation of the resources.

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

**Impact CUL-2:** *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The Consensus Alternative does not include any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. Therefore, the Consensus Alternative would not result in any direct impacts to the significance of an archeological resource as defined in §15064.5.

The Consensus Alternative contains approximately 2,072 acres. Native American tribes are known to have occupied the area and it is likely that there may be unknown archaeological resources within the SOI Plan Update area. The Consensus Alternative area has the potential to contain known and unknown archaeological resources. Priority Annexation Areas #1 and #2 contain a Caltrans facility and County Juvenile Hall facility. These sites are largely developed, and no additional development is proposed. Priority Annexation Areas #3 and #4 contains a cemetery and rural residential development. Within these areas and the six potential development areas there may be unknown archaeological resources. While there are no approved developments or entitlements, adoption of the Consensus Alternative could induce indirect impacts and disturbance to to unknown resources could occur.



Once future projects are proposed or entitled, and specific development footprints are known, the potential for the annexation sites to contain archeological resources would be evaluated. The sites would be evaluated to determine if any constituents would qualify for listing under Section 106. The evaluations would include archival research, solicitation of comment from interested parties and stakeholders, and evaluation of previous surveys proximate to future annexation sites. This information would be used to determine the environmental context of the site and assessment of the sensitivity of the site. Based on information from these sources as determined by a qualified archaeologist, mitigation plans, and conditions of approval would be incorporated, as needed, to protect archaeological resource. Implementation of MM-CUL-1 and conformance with all other regulations and standards related to the protection and preservation of archaeological resources would reduce impacts in this regard to less than significant.

**Mitigation Measures:** Implement MM-CUL-1

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

**Impact CUL-3:** *Disturb any human remains, including those interred outside of dedicated cemeteries?*

The Consensus Alternative consists of an adjustment to the SOI boundary of the City. The Consensus Alternative does not propose any new development or include any entitlements that would lead to development or direct impacts to unknown buried human remains.

The location of gravesites and Native American remains can occur outside of dedicated cemeteries or burial sites. Future ground-disturbing and construction activities could uncover previously unknown human remains, which could be archaeologically or culturally significant. Indirect impacts to buried human remains due to annexation and future potential development could occur from adoption of the Consensus Alternative should the resources be uncovered during construction.

Approval of the Consensus Alternative would remove an obstacle to future development within the SOI and could lead to annexation of Priority Annexation Areas #1, #2, #3, and #4, the six potential development areas, and other sites within the Consensus Alternative. Future development of these areas could result in grading and soil disturbing activities that if present, could disturb these resources. Priority Annexation Areas #1 and #2 are developed with a Caltrans facility and County Juvenile Hall and no development is proposed. Priority Annexation Areas #3 and #4 could experience minimal development on a few undeveloped lots. In addition, the six potential development areas and other areas within the Consensus Alternative also could disturb such resources. This would be a potentially significant impact and mitigation would be required.

As part of the project approval process the City would specify conditions to protect the remains. In addition, all future annexations would require a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to such resources. Implementation of MM-CUL-2 and conformance with all other regulations and standards

related to the inadvertent discovery of human remains would reduce impacts in this regard to less than significant.

**Mitigation Measures:** Implement MM-CUL-2

**MM-CUL-2:** Prior to LAFCo approval of an annexation involving new non-ministerial development and construction, the City shall ensure the applicant will conform to the following measure: If human remains are uncovered during any ground disturbing activities, all construction activities onsite shall cease. The construction contractor shall immediately contact the Nevada County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. The City Planning Department shall be contacted immediately after the coroner. If the County coroner determines that the remains are Native American, the Native American Heritage Commission shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). No further construction activity shall occur until consultation is complete with the most likely descendent, the Coroner and the City staff. Authorization to resume construction shall only be given by the City after concurrence with the most likely descendent and shall include implementation of all appropriate measures to protect any possible burial sites or human remains.

**Level of Impact After Mitigation:** Less Than Significant Impact.

**Impact CUL-4:** *Would the project Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in PRC Section 21074, as Either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native american tribe, and that is:*

- I. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in prc section 5020.1(k)?*
- II. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 50241.1. In applying the criteria set forth in subdivision (c) of PRC Section 50241.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?*

As discussed in Impacts CUL-1 and CUL-2, above, the Consensus Alternative does not propose any construction activities and would not entitle any new development that would result in direct impacts to any cultural or archaeological resources. Similarly, the Consensus Alternative would not result in any direct impacts to a site, feature, place, or cultural landscape that is geographically defined by size and

scope of the landscape as a sacred place, or object with cultural value to a California native American tribe.

A formal survey for the SOI Plan Update area for the presence of cultural resources was not conducted. Because of the scale of the project and the fact it is unknown what areas may be disturbed as part of potential future annexation and potential development projects, such a study was not feasible and appropriate. Should future development occur after annexation, MM-CUL-1 would address potential impacts by requiring a mitigation plan as part of the required CEQA review that would occur on a project by project basis.

As of the publication of this DEIR, LAFCo received one comment from the UAIC. The letter was received on August 12, 2019, requesting consultation regarding the SOI Plan Update area. The letter request specifically cited PRC 21080.3.2(a) and asked for additional information regarding the project, requested the tribe have the ability to provide input on design option, and that a UAIC tribal representative observe and participate in all cultural resource surveys. The UIAC was subsequently contacted by LAFCo and a meeting was later held. During the conversation all of UIAC's previous questions were responded to and as per their letter, mitigation has been included to satisfy requests. During the meeting UIAC noted that certain known sites were within the SOI Plan Update area. Due to resource protection requirements, the precise locations have been omitted from this document. If development does proceed in these areas a mitigation plan in accordance with MM-CUL-1 shall be prepared.

No other comments have been received with respect to the proposed project's potential impacts on Native American places, features, and objects. As discussed in Section 4.4.1: Environmental Setting, the prehistoric and archaeological setting of the project area consists of a diverse history throughout the region. If, during potential subsequent construction activities tribal and cultural resources are located, all required protection measures shall be implemented. Implementation of MM-CUL-1 would ensure impacts remain less than significant.

**Mitigation Measures:** Implement MM-CUL-1

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

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## 4.4.5 CONCLUSION

It is anticipated that some future projects, if not properly mitigated, would result in the loss or destruction of historical, cultural and tribal resources, human remain, and paleontological resources. Mitigation measures MM-CUL-1, and MM-CUL-2 have been included and would reduce impacts to less than significant. Because the exact footprint and design of future projects are not known, site-specific mitigation cannot feasibly be proposed and could not account for all potential impacts. MM-CUL-1 presents a process and procedure that would require site-specific review by a qualified archaeologist that can be tailored for each future project to enable protection of cultural resources. MM-CUL-1 requires the project site to be evaluated and, if needed, implementation of a mitigation plan with performance standards for all applicable future annexation project required to be evaluated under CEQA. It should be

noted that not all sites will require formal mitigation. For example, if a site is to be annexed with no associated improvements, CEQA review under a categorical exemption may be appropriate and additional evaluation may not be required. In all instances where ground disturbance would occur, MM-CUL-1 shall apply. MM CUL-1 would reduce impacts to unknown cultural resources and paleontological resources to less than significant.

Therefore, based on the absence of known existing archaeological, cultural, and tribal cultural resources within the project site, and incorporation of mitigation to reduce impacts to unknown resources should they be discovered during site disturbance activities, impacts to these resources would be less than significant.

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#### **4.4.6 CUMULATIVE IMPACTS**

For these resources, impacts are site-specific and not generally subject to cumulative impacts unless multiple projects impact a common resource, or an affected resource extends off-site, such as a historic townsite or district. The cumulative analyses for historical, archaeological, and tribal cultural resources considers whether the Consensus Alternative, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect any common cultural or paleontological resources.

The proposed project could result in potential site-specific impacts to currently unknown archaeological, cultural, and tribal cultural resources. Other projects within the cumulative study area also have the potential to result in damage and/or loss to these resources. The combination of the proposed project as well as past, present, and reasonably foreseeable projects in the City and SOI Plan Update area would be required to comply with all applicable State, federal, and County and local regulations concerning preservation, salvage, or handling of cultural and paleontological resources, including compliance with required mitigation. Similar to the proposed project, these projects also would be required to implement and conform to mitigation measures, which would be likely to reduce impacts to less than significant. Although in the process of development, some known or unknown resources may be lost, it is not anticipated that these impacts would be cumulatively considerable. In addition, implementation of Mitigation Measures CUL-1 through CUL-2 would reduce project-specific impacts to a less than significant level. Therefore, the project's contribution to cumulative impacts would be less than significant.

## 4.5 GEOLOGY AND SOILS

This section evaluates potential impacts that could result from geologic and soils conditions if the proposed SOI Plan update (proposed project) is implemented. Information in this section comes from GIS mapping analysis as well as existing federal, state, and local regulations. The evaluation includes a discussion of the proposed project compatibility with these required applicable regulations and provides mitigation measures, if needed and as appropriate that would reduce these impacts. The following analysis of the potential environmental impacts related to geology and soils quality is derived primarily from the following sources and agencies:

- California Department of Conservation
- California Geologic Survey (CGS)
- Nevada City Zoning Ordinance
- Nevada County Safety Element

### 4.5.1 ENVIRONMENTAL SETTING

#### Regional Setting

Nevada County is within the Sierra Nevada Mountains, a geologic block approximately 400 miles long and 80 miles wide which extends in a north-south band along the eastern portion of California. The terrain of Nevada County is distinctly characterized by two features of the Sierra Nevada Mountains. The western third of the County is comprised of rolling foothills which form a transition between the low-lying Sacramento Valley to the west and the mountains to the east. The eastern two-thirds of the County is comprised of the steep terrain and exposed granite of the Sierra Nevada Mountains itself.

The geologic substructure of the county can be divided into three very broad groups, which are reflected in the surface soils:

- Western Foothills. This area, extending from the Yuba County border to just northeast of the Grass Valley/Nevada City area, is generally comprised of metavolcanic and granitic formations.
- Central Portion. The area extending northeast of the Grass Valley/Nevada City area to the upper mountainous area near Bowman Lake Road is generally comprised of sedimentary, metasedimentary and volcanic formations.
- Eastern Portion. This portion of the County through the high Sierra to the Nevada state line is generally comprised of volcanic and granitic formations.

#### Geologic Setting

Nevada County is a seismically active region, within the Sierra Nevada Mountains and foothills influenced heavily by uplift and faulting within the Mesozoic Sierra Nevada batholith, one of the largest and most

complex masses of granitic rock in the world. These movements create fractures or faults in the earth's crust to accommodate compressional strain, and many of the faults, which remain active today, have uplifted and tilted the range to the west, producing a spectacularly rugged eastern escarpment and a gently inclined western slope. The proposed project is located in a geologically complex and diverse area that has the potential for earthquake-induced hazards. Earthquakes are produced in Nevada County and throughout the state from sudden movements along faults, described in detail below, generating ground motion when the accumulated stress within the rocks is released as waves of seismic energy.

## **FAULTS AND SEISMIC HISTORY**

A fault is a fracture in the crust of the earth along which land on one side has moved relative to land on the other side. Most faults are the result of repeated displacement over a long period of time. A fault is defined as "a planar or gently curving fracture in the earth's crust across which there has been relative displacement." When movement occurs along a fault, the energy generated is released as waves, which causes ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment through which seismic waves move (City of Grass Valley, 2018). The mountain system rose to its current elevation, primarily by westward tilting along normal faults located along the eastern escarpment (DeCourten, 2018). Generally, the greater the number of faults within an area, the greater the risk of seismic activity.

The geologic structures that dominate the Sierra Nevada are the Foothills fault system on the west, and the active Sierra Nevada Frontal fault zone on the east. The Foothill Fault System is a broad zone of northwest-trending east dipping normal faults formed along the margin of the Great Valley and the Sierra Nevada geologic provinces on the western flank of the Sierra Nevada and southern Cascade mountain ranges. According to the U.S. Geological Service, Nevada County falls within five earthquake ground movement intensity zones. The western half of the County is in the lower intensity zones (8-20 % gravity), the middle portion is in the moderate zone (21-30% gravity) and the eastern edge is in the 31-40% gravity zone. No part of Nevada County is exposed to an earthquake probability of gravity 40% or more. The western half of Nevada County is in the lowest Earthquake Shaking Potential for California. It is likely that the region will be impacted by future seismic activity and with the exception of the far eastern edge of the County, the magnitude of the incident is not likely to be severe. (Nevada County, 2016).

According to the California Department of Conservation fault activity map, there are no faults under Nevada City. The nearest fault is the Grass Valley Fault approximately 3 miles to the west. The Grass Valley Fault is a pre-quaternary fault that has had recognized movement in the last 1,600,000 years. The nearest faults with more recent activity include the Giant Gap Fault approximately 10 miles to the east the Swan Ravine Fault approximately 16 miles to the west, and the Cleveland Fault within the most recent movement approximately 20 miles to the northwest near Oroville.

### ***Cleveland Hill Fault***

According to the California Department of Conservation (CDOC) Fault Activity Map, the closest historically active fault with surface displacement to the western portion of Nevada County is the Cleveland Hill Fault, which is located approximately 16 miles northwest of the boundary with Yuba County. The Cleveland Hill

Fault was active in 1975 and is associated with ground rupture during the Oroville earthquakes (Holdrege & Kull, 2018).

### ***The Swain Ravine Fault***

The Swain Ravine Fault is part of the western trend of the Bear Mountains fault zone. This zone includes a number of faults that trend from the southeast to northwest, and includes the Deadman near Auburn, Spenceville, Prairie Creek, and Cleveland Hills fault into the Oroville area. The northern portion of the Swain Ravine fault is identified as having possible late Quaternary activity due to its close association with the Cleveland Hills fault and Oroville earthquake. The late Quaternary portion of the Swain Ravine fault is located approximately 10 miles northwest of the boundary with Yuba County [California Department of Parks and Recreation (CDPR), 2009].

### ***Giant Gap Fault***

The Giant Gap Fault is within the Melones Fault Zone and has portions that experienced have movement within the 700,000 years (Quaternary) as well as sections that are undifferentiated in age and older than 2,000,000 years. The fault is overlain by Mio-Pliocene volcanics and underlain by pre-Cenozoic bedrock. Displacement can be seen and offsets with as much as a few hundred feet (Sierra College, 2009) are evidenced-based on a down-Pliocene mudflows that cap Giant Gap Ridge (CDMG, 1978).

## **GEOLOGIC HAZARDS**

### ***Strong Ground Shaking***

Seismicity is the geographic and historical distribution of earthquakes, including their frequency, intensity, and distribution. Geologic hazards associated with ground failure that can be induced from seismic events (earthquake shaking) include surface rupture, ground shaking, liquefaction, landslides, subsidence, expansive soils, tsunamis and seiches, and soil erosion. In addition, in the higher elevations of the county, during the winter or times with snow cover, a seismic event could result in an avalanche.

The county is underlain by a number of fault systems, three of which are in proximity to the proposed project area. Western County, in which the project is located, was identified as having low constraints in terms of seismicity, but because of the numerous geologic features within the County, all development within the County is subject to geologic hazards.

### ***Induced Seismicity***

The majority of earthquakes that occur each year are the result of natural causes; however, some earthquakes can result from human activity and are called induced-seismic events or induced earthquakes. Naturally occurring earthquakes result from the buildup of stresses and pressure caused by the lateral or vertical movement of blocks or plates moving against the other. When the plates move, suddenly the built-up energy is released and an earthquake can occur. Human activities that can result in induced seismic events include injection and withdrawal of fluids such as hydraulic fracturing, impoundment of reservoirs, mining and controlled explosions (including those underground).

### ***Ground Shaking***

Northern California is a seismically active region, and the City and project area may be subject to seismic shaking generated from a variety of regional sources. The intensity of seismic shaking, or strong ground motion, during an earthquake depends on the distance of a site to the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the area. Earthquakes occurring on faults closest to a site would have the potential to generate the largest ground motions. There are a number of faults that could result in an earthquake felt in the proposed project area.

### ***Fault Rupture***

Surface rupture occurs when movement on a fault breaks through to the surface of the earth. Fault rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Where fault rupture is a sudden deformation, fault creep is a slow and more or less continuous movement on faults due to ongoing deformation that tend not to produce large earthquakes. Fault rupture almost always follows preexisting faults, which are zones of weakness. Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. The California Geologic Survey (CGS) provides maps of earthquake zones of required investigation that show Alquist-Priolo Earthquake Fault Zones. Neither Nevada City nor any of the Sphere of Influence (SOI) area is underlain by a known fault (CGS, 2020).

### ***Expansive Soil***

Expansive soils are characterized by their ability to undergo significant volume change (i.e., to shrink and swell) as a result of variations in moisture content. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Expansion and contraction of expansive soils in response to changes in moisture content can lead to differential and cyclical movements that can cause damage and/or distress to structures and equipment.

### ***Landslides***

Earthquake motions can induce substantial stresses in slopes, causing earthquake-induced landslides or ground cracking when the slope fails. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion. Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, triggered either by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience soil slumps, rapid debris flows, and deep-seated rotational slides. Slope stability can depend on several complex variables, including the geology, structure, topography, slope geometry, and amount of groundwater present, as well as external processes such as climate and human activity.

Landslides are generally grouped into the following categories:

- Falls – falling of soil or rock masses where a sliding surface does not occur;



- Flows – surface material breaks up and moved down and slope and flows as a viscous fluid;
- Creeps – slow downslope movements of an earth mass; and
- Transitional or Rotational Slides – Movements of earth that involve a distinct rupture or zone of weakness separating the earth slide.

The California Department of Conservation maps some of the areas of the state are susceptible to landslide hazards. None of the SOI Plan update areas have been evaluated in this regard (CDOC, 2018). The California Geologic Survey (CGS), has mapped areas that contain smectite clay deposits that can be susceptible to land sliding hazards and published a geologic hazard notice for Nevada County. The notice provides a description of the soil materials and a generalized map of the County showing locations that contain smectite bearing geologic units. While the map is not localized enough to compare to specific locations with the SOI Plan area, because some locations may contain smectite soils, the notice and map have been inserted for reference, below.

Nevada County also has a history of mining including hydraulic mining which used jets of water to break down gold-laden gravel banks and wash the materials through gold separating devices (Central Pacific Railroad, 2004). Any area adjacent to a hydraulically mined area is subject to landslide activity. Uphill instability is increased by removal of the toe of the slope and a landslide can be triggered by seismic activity, heavy rainfall, overloading, grading activities, etc.

### ***Liquefaction***

Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. Liquefaction is caused by a sudden temporary increase in pore water pressure due to cyclic loading during earthquakes. Liquefaction most often occurs in areas underlain by young alluvium subject to shallow groundwater conditions and strong, long-duration earthquakes. The effects of liquefaction can include the temporary loss of soil shear strength (and therefore, its bearing capacity), regional or localized settlement, lateral gliding of large blocks on liquefied layers at depth, and the extrusion of large volumes of liquefied sand (as sand volcanoes). The California Department of Conservation maps some of the areas of the state are susceptible to liquefaction. None of the SOI Plan update areas have been evaluated (CDOC, 2020).

### ***Lateral Spreading***

Lateral Spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane (soil structure) and may often be associated with liquefaction.



## GEOLOGICAL HAZARD NOTICE

### From the California Geological Survey

CGS GeoHazard Notice 2009-001

Issued: December 23, 2009

### SMECTITE CLAY DEPOSITS IN SIERRA NEVADA FOOTHILLS

The California Geological Survey (CGS) recognizes that preliminary information generated in an on-going geologic investigation has provided sufficient data to warrant a *Geologic Hazard Notice*. This notice is directed to engineering and building departments of counties and cities whose jurisdictions encompass land within the following defined region: from the eastern margin of the Sacramento/San Joaquin Valleys to the eastern extent of historic hydraulic gold mines of the Sierra Nevada, between the Feather and Stanislaus River watersheds.

#### **Hazard Description**

Exposed in patchy, often isolated, localities within the defined region is a particular geologic unit composed of varying mixtures of durable sand and an unusual form of expansive smectite clay. Despite geologic field observations, geotechnical site investigations, and laboratory soil testing performed by experienced professionals, the recognition of these deposits and the behavior of the expansive clay component has proven problematical. As a consequence, a significant number of dwellings and other structures located in several foothill community developments have experienced severe foundation cracking and other significant structural damage resulting from unanticipated latent ground swelling. In other locations, landslides and other slope failures are associated with the subject geologic unit. Damage to structures due to expansive clay has been documented in Sacramento and Placer counties, and slope instability in this geologic horizon is known to have occurred in Placer, Nevada, Sierra, and Plumas counties. This geologic unit is also likely to be exposed in Butte, Yuba, El Dorado, Amador, Calaveras and Tuolumne counties (see attached map).

#### **Soil Recognition and Testing Issues**

Following are the basic issues related to the recognition, testing, and behavior of the subject geologic unit.

- Geologic mapping has historically portrayed the hazardous clayey materials as part of, or as the "upper" member of the Lone Formation. The Lone Formation is well known for producing non-expansive kaolinite clay for the ceramic industry. The expansive clay deposits stratigraphically lie above the commercial kaolinitic units, but have rarely been differentiated on geologic maps. Geologic investigations to date have demonstrated that the unusual form of these expansive clay deposits has caused geologists to variably assign them to geologic units besides the Lone Formation, including the Valley Springs, Mehrten, Riverbank, and Turlock Lake formations, as well as Quaternary surficial deposits. Such confusion suggests that the geologic map units listed above should be considered suspect and receive careful scrutiny when they appear on geologic maps and soil logs included in geotechnical reports.
- Field identification of the unit and its expansive clay fraction can be difficult. This is because the clay occurs mainly in the form of sand-sized nodules, or clasts that have thin coatings of silica, iron oxide, and other cementing agents (see photos). These physical characteristics often lead geologists,



engineering geologists, and geotechnical engineers to misinterpret the material as being composed largely of durable sand and granular constituents.

- Laboratory testing using conventional ASTM laboratory methods to obtain index engineering properties of the subject soil has been unreliable. ASTM grain size (sieve and hydrometer) tests appear unable to reliably detect the true proportion of potentially expansive clay during the relatively short time it takes to process soil samples in the laboratory. The cementing agents coating the clay inhibit the dispersion and expansive behavior of the clay until the cements are broken down by earthwork or dissolve following surface exposure. The latter process can take years to fully develop. This same phenomenon causes the ASTM Atterberg limits, Plasticity Index (PI), and the Expansive Index (EI) tests to indicate much lower plasticity and expansion potential than what actually occurs in the soil over time.
- Compaction specifications determined in the laboratory using ASTM methods often prove to be invalid. This is because the laboratory generated "optimum moisture" specifications only apply to the initial granular form of the subject clay and not its behavior once a significant amount of smectite is released from the encapsulating cementing agents. Absorption of water by the stabilized clay granules during the laboratory testing can be a small fraction of the soil's actual latent water absorption capacity. Likewise, when using the material for engineered fill, even careful moisture conditioning and compaction of the subject soil using recommended methods for expansive fill placement leaves enormous latent expansion potential. One local soil engineer found that up to 15% latent expansion potential remained in engineered fill following very careful moisture conditioning, compaction, and placement of fill material derived from the subject clayey soil.

#### **Supplemental Soil Test Methods**

It is apparent that conventional ASTM soil tests often fail to provide results that reflect the true engineering properties of the subject smectite clay. Some local consultants have been successful using petrographic techniques, including optical microscope and X-Ray Diffraction (XRD), to identify and characterize the smectite clay content of these problem soils. However, until a set of consistently reliable tests have been identified, permitting agencies should work closely with developers to ensure that contracted geotechnical firms are aware of the form and characteristic behavior of the smectite clay component.

#### **Ongoing Work**

An informal group of engineers and geologists from consulting, academic and state government organizations has been working to better understand the distribution and characteristics of this smectite clay unit. Geologic maps that more accurately depict the areal distribution of the problematic clay materials are in progress. Several foundation design strategies have been developed to accommodate the expansion potential of these soils, and if recognized beforehand, landslide-prone areas can be avoided or remediated prior to development.

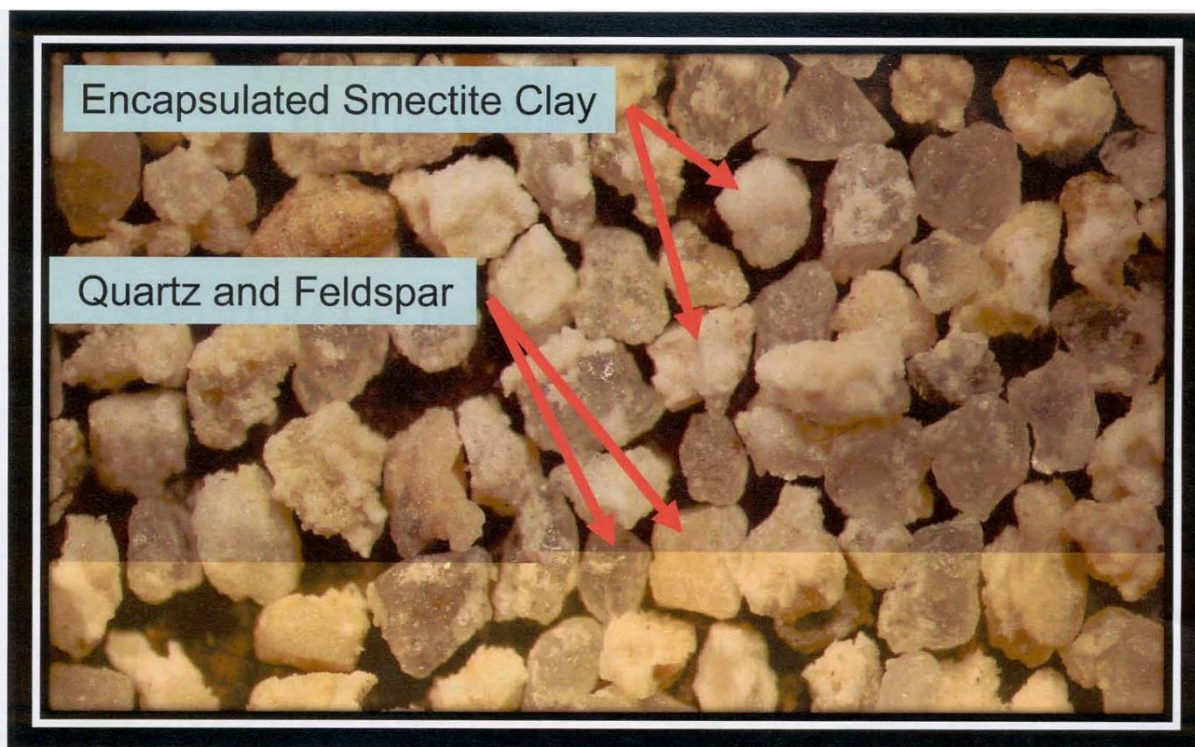
For more information contact CGS Senior Engineering Geologists Tim McCrink (916) 324-2549 or Ralph Loyd (916) 322-9207. CGS may issue a Revised Notice on smectite clay occurrences as more information becomes available.

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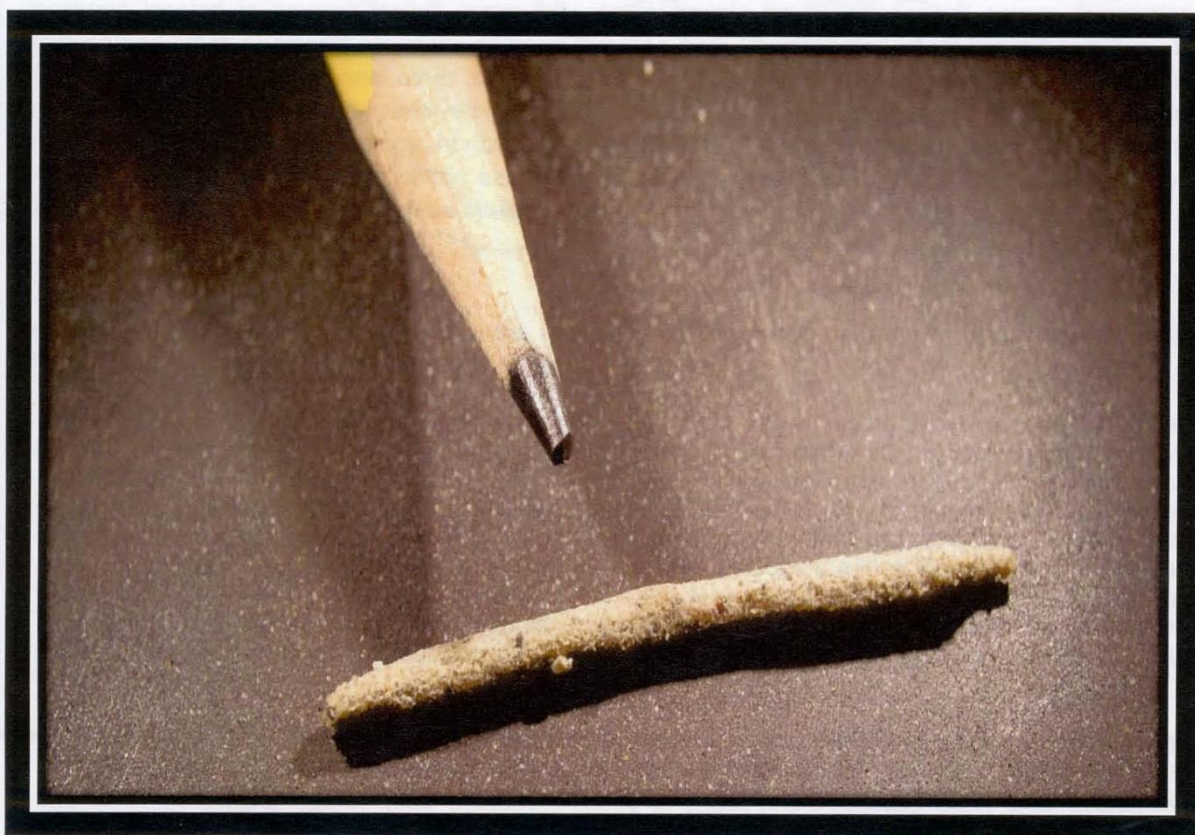
The California Geological Survey produces a wide variety of maps and data on the geology, geologic hazards, and other geology-related topics relevant to the State of California. For more information about CGS programs, please visit:

<http://www.conservation.ca.gov/cgs>

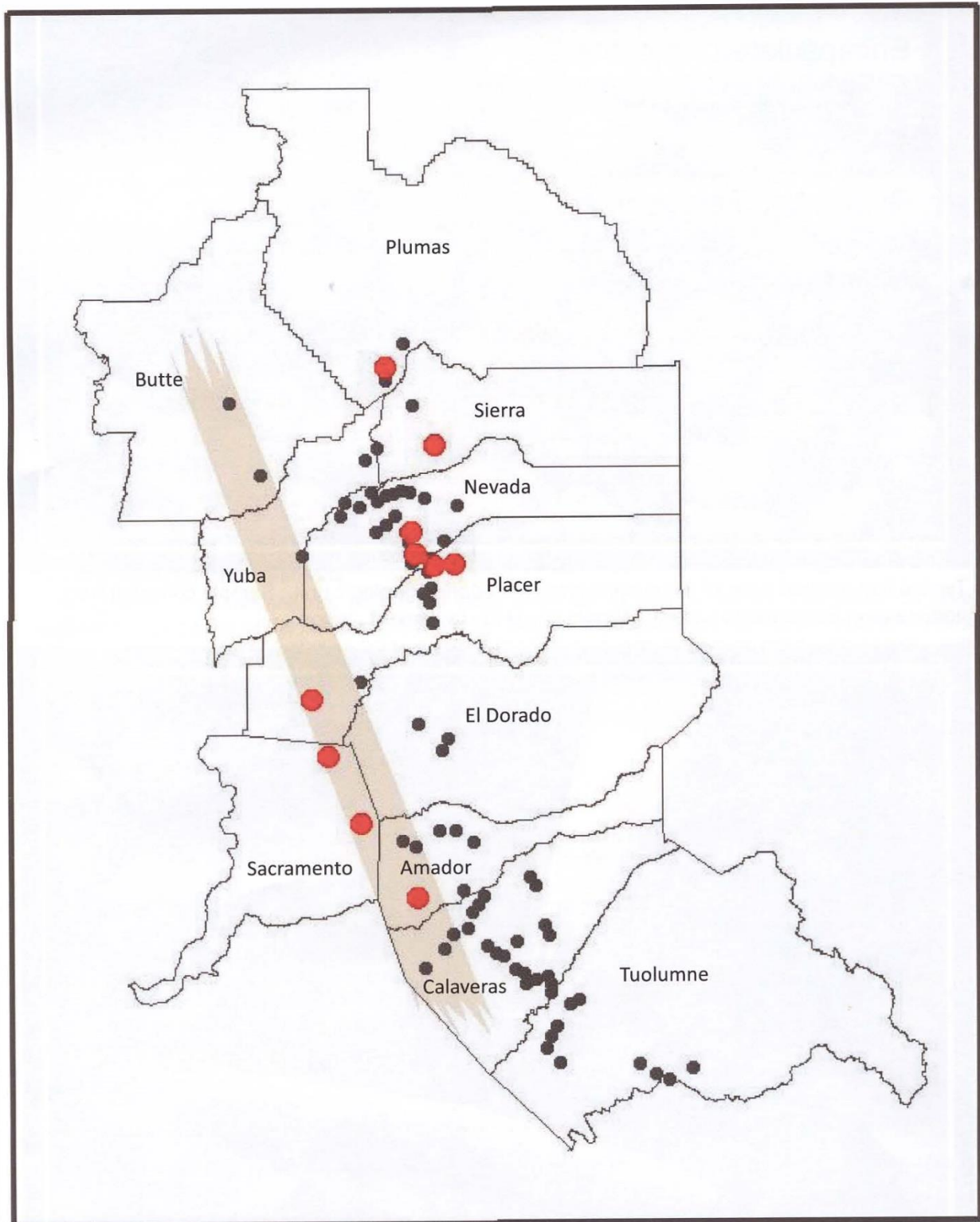




Typical fine-grained sand of the subject smectite-bearing geologic unit. Sample collected from northeastern Sacramento County. Microscope photo by James L. Wood.



Same fine-grained sand after adding moisture and hand rolling the sample. Photo by James L. Wood.



County map showing sites where swelling and slope failure of soils of smectite-bearing geologic unit have been documented (red dots); the lower Sierra Nevada foothill belt (tan colored) where deposits of the subject geologic unit are most likely to be encountered; and notable historic hydraulic pits (black dots) where the unit is commonly exposed immediately above the main channel gravel deposits of the Ancient Tertiary Rivers of the Sierra Nevada.

### ***Slumps or Land Subsidence***

Land subsidence can occur in various ways. Land subsidence is the gradual, local settling or shrinking of the earth's surface with little or no horizontal motion. Subsidence is normally the result of gas, oil, or water extraction; hydro-compaction; and/or peat oxidation and not the result of landslide or ground failure. Subsidence also can occur during an earthquake. Movement that occurs along faults can be horizontal or vertical or have a component of both. As a result, a large area of land can subside drastically during an earthquake. Land subsidence can also be caused during liquefaction.

### ***Corrosion***

Many factors can affect the corrosion potential of soil. In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor. Chloride and sulfate ion concentrations and pH appear to play secondary roles in affecting corrosion potential. High chloride levels tend to reduce soil resistivity and break down otherwise protective surface deposits, which can result in corrosion of buried metallic improvements or reinforced concrete structures. Sulfate ions in the soil can lower the soil resistivity and can be highly aggressive to Portland cement concrete (PCC) by combining chemically with certain constituents of the concrete, principally tricalcium aluminate.

Acidity is also an important factor of soil corrosivity. The lower the pH, the more acidic the environment, and the higher the soil corrosivity will be with respect to buried metallic structures. As soil pH increases above 7 (the neutral value), the soil is increasingly more alkaline and less corrosive to buried steel structures due to protective surface films which form on steel in high pH environments. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint.

### ***Avalanche***

Avalanche hazard areas are generally located on high, mountainous slopes and terrain at elevations above 7,000 feet. The most important factor necessary to release an avalanche is heavy snowfall. A rapidly increasing snow layer is unable to stabilize or bond with the old layer of snow or the ground below it, so that after a certain amount of time the new snow layer will simply slide off as an avalanche.

### ***Tsunamis and Seiches***

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands. These waves can move at a rate exceeding 500 miles per hour. In smaller closed water bodies like inland seas and lakes, a seiche, or a sloshing of the water may occur from earthquakes or underwater landslides (USGS, 2020).

### ***Subsidence***

Subsidence consists of surface land sinking into below-surface holes or fissures. Subsidence may be caused by a variety of natural conditions, some in combination with human activity. The primary cause of actual and potential subsidence in the Nevada City areas is previous underground withdrawal of material from mining. Less hazardous and generally better controlled is improper burial of organic materials during land



development. Subsidence hazards in Nevada City and surrounding vicinity are principally man-made rather than natural geologic phenomena, and are addressed under Mine-Related Hazards.

### ***Mine Related Hazards***

Although mining related hazards are not specifically called out by CEQA requiring evaluation for potential impacts, due to the changes to the local geologic setting that mining activities can create, certain geologic conditions particularly in relation to land sliding are applicable. This recognition also considers that a wealth of information about the locations of mine-related hazards is not known making analysis difficult absent site-specific evaluation.

Mine-related hazards include the presence of open holes at ground surface; inadequately covered/shored up shafts and tunnels below ground level; tailings, and other abandoned mining features. Safety and hazard concerns resulting from old mine operations include the risk of falling into open shafts, surface collapse/subsidence into old shafts, and landslides.

Numerous mining operations, both large and mechanized as well as smaller underground hand dug mines are present under the City and surrounding areas. Mining operations created shafts to access minerals and excavated materials or tailings were brought to the surface and dumped. The shafts created underground voids that can collapse, and the tailings of uncompacted unconsolidated mixed soils and rock dumped at the surface created areas with unstable surface soils. While some areas of abandoned mines are known, many are not and due to these unknown factors and without current, comprehensive information, it is difficult to assess the magnitude of the problem or to devise remedial programs (Nevada County, 2016).

## **4.5.2 REGULATORY SETTING**

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The California Environmental Quality Act (CEQA) is the major environmental statute that guides the design and construction of projects on non-federal lands in California. This statute sets forth a specific process of environmental impact analysis and public review. Relevant and potentially relevant statutes, regulations, and policies are discussed below.

### ***Earthquake Hazards Reduction Act***

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law (P.L.) 95–124. At the time of its creation, Congress’ stated purpose for NEHRP was “to reduce the risks of life and property from future earthquakes in the United States through the establishment

## **State**

### ***California Geologic Survey***

The mission of the CGS is to provide products and services about the State’s geology, seismology and mineral resources, including their hazards, which affect the health, safety and business interests of the

people of California. The programs operated by the California Geological Survey include responsibility for providing technical information, advice and production of maps that reflect landslide hazards, seismic hazards (earthquake faults), geological, mineral resources and hazards, and tsunamis.

### ***Alquist-Priolo Earthquake Fault Zoning Act***

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to prevent the construction of buildings used for human occupancy on the surface trace of active faults (those having evidence of surface displacement within about the last 11,000 years). It requires the State Geologist to delineate earthquake fault zones around the surface traces of active faults and publish maps showing these zones.

### ***Seismic Hazards Mapping Act***

The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. The Act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation of the site must be conducted, and appropriate mitigation measures incorporated into the project design.

### ***California Building Code***

The State of California provides minimum standards for building design through the CBC. The CBC is based on the International Building Code (IBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions within California. On January 1, 2014, a revised version of the CBC took effect. In accordance with the CBC, generally, a grading permit is required if more than 50 cubic yards of soil are moved during implementation of a proposed project. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures. Chapter 18 of the CBC contains standards and regulations relating to soil stability, design standards for seismic safety, and construction standards for building foundations. Specific regulations in Section 1803 require geotechnical investigations or preliminary soil reports as a condition of building permit approval. Section 1804 provides regulations on the siting of structures and site grading based on the soils and slope stability of a site. Section 1808 establishes regulations for the design and construction of building foundations, with emphasis on stability (i.e., issues pertaining to shifting soils, seismic overturning, and expansive soils) and design loads.

### ***Disaster Mitigation Act***

The Disaster Mitigation Act of 2000 (DMA 2000), PL-106-390 requires that each State develop a hazard mitigation plan, in order to receive future disaster mitigation funding following a disaster. California completed its most recent State of California Multi-Hazard Mitigation Plan (SHMP) in 2018. The SHMP represents the state's primary hazard mitigation guidance document, and is composed of comprehensive and valuable input provided by State Hazard Mitigation Team members and stakeholders. The 2018 SHMP continues to build upon the state's commitment to reduce or eliminate potential risks and impacts of



natural and human-caused disasters to help communities with their mitigation and disaster resiliency efforts. The 2018 plan includes: an updated statewide risk assessment, disaster history, and statistics; recent mitigation progress, success stories, and best practices; updated state hazard mitigation goals, objectives, and strategies; and updated climate mitigation progress and adaptation strategies. FEMA approved California's 2018 SHMP on September 28, 2018

### ***Local Hazard Mitigation Plan***

As part of the SHMP, development of local or county Local Hazard Mitigation Plans (LHMPs) are needed that particular county to be eligible for post-disaster mitigation funding. The purpose of these requirements is to encourage state and local government to engage in systematic and nationally uniform planning efforts that will result in locally tailored programs and projects that help minimize loss of life, destruction of property, damage to the environment and the total cost of disasters before they occur. The Nevada County Operational Area Emergency Services Council prepared the Local Hazard Mitigation Plan for Nevada County, for the years 2011 to 2016.

Nevada County specifically includes and adopts the most recent State of California Multi-Hazard Mitigation Plan where the State's plan relates to issues pertaining to Nevada County. However, in the interest of not duplicating State efforts, Nevada County in its plan refers to the State where the State has identified an issue or provided information that supplements Nevada County's plan. As part of the LHMP, various geotechnical issues pertinent to Nevada County area discussed. This includes landslides, earthquakes, avalanche, subsidence, and mine related hazards.

The Code of Federal Regulations (CFR) Section 201.6(c)(3) outlines the process for localities in developing their mitigation strategies. Specifically, the Local Hazard Mitigation Plan must "include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools." These strategies should be built on an assessment of hazard risks and vulnerabilities.

### ***Nevada City General Plan***

The Nevada City General Plan includes the Public Safety element that includes findings related to seismic hazards, and geotechnical hazards, and provides objectives and policies related to design and minimizing hazards. The Public Safety element discussed earthquake hazards both in terms of surface rupture and ground shaking and secondary hazards such as settlement, subsidence, liquefaction, and landslides. The Safety Element notes that there are no potentially active faults near Nevada City and because the city is underlain by igneous and metamorphic bedrock, the risk of secondary effects is low. The Safety Element does not discuss the potential for landslides due to past mining activities. This, however, is discussed in detail in the impacts section below. Immediately below are the Objectives and Policies from the NCGP pertinent to Geology and Soils.

#### **Objective:**

Ensure a high level of safety from earthquake, landslide, severe erosion, and other geotechnical hazards

Policies:

- Require detailed soils and geologic studies prior to approval for development in potentially hazardous areas. Require mitigation measures if significant hazards are identified.
- Encourage upgrading of unreinforced masonry buildings to prevent disastrous earthquake damage.
- Consider establishing a slope/density formula to limit development on steep hillsides.
- In cooperation with the county, maintain rural densities in areas not provided with public services.

***Nevada City Zoning Ordinance***

Title 15 – Buildings and Construction of the City Zoning Ordinance was enacted for the purpose of providing minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, regulated equipment, grading and construction activities that result in a land disturbance on private property within this jurisdiction in conformity with the 2016 edition of the California Building Standards and consistent with and complementary to standards adopted by the County of Nevada.

Chapter 15.04.015, relates specifically to the CBC, and, adopts specific codes and standards which are incorporated into the Municipal Code of the City of Nevada City by reference and have legal affect. In addition, Chapter 15.04.020 – of the Code adopts the County amendments to the 2019 California Building Standards that were adopted by Nevada County Ordinance No. 2424 and incorporates them by reference.

Chapter 17.80.100 discusses grading and erosion control measures in addition to the those in the CBC, and requires that a grading plan be approved by the building department in certain circumstances, the city engineer shall also have authority to approve grading plans. Grading is to be limited to All grading the dry season of the year, between May 1st and October 15th, unless the written permission is given. During the wet season (October 16th and April 30th, or as amended by the city), all grading is required to include temporary or permanent erosion control measures, as necessary to prevent soil erosion from the site. Erosion control shall include any and/or all effective methods generally accepted as normal practice, such as fertilization and seeding, straw mulch, jute netting, earthen berms, straw barricades, plastic sheeting, holding basins and flow dissipators. Lastly, this chapter provides the city has the authority to review all temporary and permanent erosion control measures, and may require additional measures.

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### **4.5.3 STANDARDS OF SIGNIFICANCE**

The interface of the natural and manmade environments creates potential safety hazards associated with landslides, earthquakes and associated hazards such as liquefaction, subsidence, and ground rupture, floods, and avalanches (in the higher elevations of the County). Each of these hazards has particular characteristics that affect the future development of the County. Some of these safety hazards can be minimized with emergency planning, while other hazards are reduced by development standards and land use planning.

## Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact to geology and soils if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction; or landslides;
- Result in substantial soil erosion or loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property; or,
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water.
- Directly or indirectly destroy a unique paleontological resources or site or unique geologic feature.

### 4.5.4 PROJECT IMPACTS AND MITIGATION

This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 6.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

## Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to geology and soils and seismic hazards. This discussion is applicable to each impact.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of the undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. The lands that could be annexed are anticipated to be built out over time and development in these areas is anticipated to be consistent with the existing designations and planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas. In general, these areas are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries.

In addition, there are six potential development areas identified by the City that are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for build out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

All future development within the Consensus Alternative area, including the six potential development areas identified by the City, would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to pre-zone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to geology and soils and seismic hazards. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to these topics.

***Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mins and Geology Special Publication 42?***

According to the California Department of Conservation geologic hazards mapping and the City General Plan there are no known earthquake faults that trace through the City or any portion of the SOI update area. None of the project areas are mapped in Alquist-Priolo Earthquake. As such, none of the Priority Annexation Areas, six potential development areas, or any other within the SOI would be affected by fault rupture. Therefore, this impact is less than significant, and mitigation is not required.

**Mitigation Measures:** No Mitigation Measures are Required.

***ii) Strong seismic ground shaking?***

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations in any of these areas. The Consensus Alternative would not result in any direct impacts associated with strong seismic ground shaking.

Indirect impacts from strong seismic ground shaking to the Consensus Alternative could occur if future areas are annexed to the City and developments occurs that experiences seismic ground shaking. Due to the large areas over which seismic ground shaking can be felt, the four priority annexation areas, six potential development areas, and SOI area overall, will likely experience moderate ground shaking from activity on faults within the County and other faults in the region. Strong seismic ground shaking could result in loss, injury, and death, but these effects can be reduced.

The effects of seismic ground shaking can be reduced if future site grading is performed in accordance with the recommendations of a site-specific geotechnical engineering report and development in accordance with the UBC and CBC. Using standard construction techniques and following the recommendations of a site-specific geotechnical investigations that would be required as part of all future projects, and applicable codes and requirements, structures can be designed and built to withstand the geologic shaking hazards.

Although some structural damage cannot be typically be completely avoided through seismic movements, building codes and local construction requirements help to protect against building collapse and personal injury during seismic events. Future developers within the SOI Plan update area would be required to comply with applicable City regulations, such as the CBC and Nevada County Code as required by Title 15 – Buildings and Construction of the City Zoning Ordinance, and the City of Nevada City General Plan. Conformance with these requirements would ensure a design-level investigation is completed and the findings of all future geotechnical engineering reports are incorporated to future project design. This reduce effects from seismic ground shaking to less than significant.

**Level of Impact After Mitigation:** Less Than Significant Impact.

***iii) Seismic-related ground failure, including liquefaction?***

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations in any of these areas. The Consensus Alternative would not result in any direct impacts associated with strong ground failure, liquefaction, or landslides.

As discussed in *Impact ii*, above, indirect impacts from future annexation and development could occur from seismic ground shaking. Seismic ground shaking can induce secondary effects such as liquefaction. Liquefaction is typically associated structures that overlay granular soils that are saturated or submerged and that can liquefy and temporarily behave as a dense fluid during an earthquake. The effects of liquefaction can include the temporary loss of soil shear strength (and therefore, its bearing capacity), regional or localized settlement, lateral gliding of large blocks on liquefied layers at depth. Liquefaction most often occurs in areas underlain by young alluvium subject to shallow groundwater conditions and strong, long duration earthquakes.

Much the Consensus Alternative area and SOI Update area overall is underlain by igneous and metamorphic rocks that are not typically associated with liquefaction hazards. None the less, there may be isolated areas underlying the four priority annexation areas, six potential development areas, or other areas within the SOI that may be subject to liquefaction. If liquefaction occurs, it could result in damage to overlying structures and harm or death to occupants. To reduce these potentials, MM-GEO-1 would require completion of a site-specific geotechnical evaluation that would account for liquefaction hazards and propose site-specific designs of mitigation that would reduce effects. It is anticipated this would reduce impacts to less than significant and no further mitigation is required.

**Mitigation Measures:** Implement MM-GEO-1.

**MM-GEO 1:** Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction of habitable structures in or adjacent to hydraulically mined areas or steep slopes, the City shall require a geotechnical\geologic hazard investigation of the site and surrounding area to determine if there is a risk of land subsidence. The geotechnical investigation shall describe the potential for the site to experience subsidence either due to seismic ground shaking or soil saturation leading to liquefaction, lateral spreading, subsidence, or collapse. If the investigation indicates such risk, the applicant shall provide to the satisfaction of the City a design-level geotechnical report and investigation for the subject property. The design level geotechnical investigation shall prescribe, as necessary design and construction features or mitigation that will adequately mitigate the risks of such land subsidence both on the development and surrounding area.

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

**iv) Landslides?**

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations in any of these areas. The Consensus Alternative would not result in any direct impacts associated with strong ground failure, liquefaction, or landslides.

Priority Annexation Area #1 contains the existing Caltrans facility and Priority Annexation Area #2 contains the existing County Juvenile Hall. There are no plans to expand or construct additional buildings on these

sites and the areas are on relatively flat ground and not adjacent to any steep slopes. Priority Annexation areas #3 and #4 contain an existing cemetery, rural residential uses and a few undeveloped parcels. Extension of services could encourage development of the undeveloped parcel. These areas have some moderately sloped terrain but substantial development that could result in significant potential to induce or be affected by landslides is not anticipated. However, because the specific nature of the geologic character is unknown, associated land sliding hazards, including slower slump landslides may exist.

The consensus alternative does include six potential development areas some of which are located on moderately sloped areas, and locations that are adjacent to locations with steeper slopes that may be prone to slumping. Future development of some of these may be affected by potential effects from landslides. In addition, due to the use of hydraulic mining within areas of the City and County, slopes adjacent to the six potential development areas, as well as other areas within the SOI area may be subject to landslide hazards from off-site areas.

It should be noted that the potential for landslides to affect a project are not limited to a development being placed on a site that is prone to sliding itself. Placement of a development adjacent to a landslide prone slope also requires consideration prior to initiation of the building process. Of the six potential development areas, Highway 49 Planned Development area and the Gold Flat/Gracie Road are on relatively flat terrain and are no adjacent to any steep slopes. The Hew Property, Providence West, Hurst Ranch, and Manzanita Diggins are located on areas with moderately sloping terrain, and may contain some areas with isolated steeper slopes. In addition, some of these sites are located in areas adjacent to areas with moderate to steep slopes including the Manzanita Diggins site. Manzanita Diggins is located adjacent to the Coyote Street which. According to the LHMP, Coyote Street has experience various cut bank failures resulting in debris entering the roadway. The LHMP notes that landslides have occurred in the past and given the nature of rocks and soils, such as areas with smectite clay as described in the CGS hazard notice inserted above, and certain locations within sloped areas of the County, landslides will likely continue to impact areas when heavy precipitation occurs (Nevada County, 2017).

All areas of future development as part of the annexation process would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. This would include City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, the potential for impacts to geology and soils would be considered, and depending on the evaluation, mitigation measures would be incorporated as conditions of project approval or as project-specific mitigation. Due to the potential for future projects to be located adjacent to land slide hazards, MM-GEO-1 would be implemented. This measures will require that all subsequent geotechnical evaluations for future project sites also evaluated the potential for adjacent slopes to affect or be affected by the project site. Implementation of MM-GEO-1 would reduce this impact to less than significant.

**Mitigation Measures:** Implement MM-GEO-1.

**Level of Impact After Mitigation:** MM GEO-1 would reduce impacts to less than significant.

***b) Result in substantial soil erosion or the loss of topsoil?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing land use or zoning designations. In this regard, direct impacts to erosion would not occur and no mitigation would be required.

Indirectly, the Consensus Alternative has the potential to induce growth and result in grading of currently vegetated areas resulting in an increased potential for erosion. No additional development within Priority Annexation Areas #1, #2, #3, and #4 is proposed and any new development that could occur after annexation would be limited to a few rural residential lots. The erosive effects from the potential changes to these sites is anticipated to be minimal. In addition, the city would ensure these projects comply with Chapter 17.80.100 which requires grading plans to be approved by the building department and which sets limits on the timing of grading, and requires grading to include temporary or permanent erosion control measures, as necessary to prevent soil erosion from the site. Conformance with these requirements in this regard is anticipated to reduce these impacts to less than significant.

Regarding the six potential development areas and any other future development site, these sites also would be subject to the City's review and regulation and also would be required to conform to requirements of Chapter 17.80.100 which would be verified when development plans are submitted, and/or application(s) filed. Although the specific footprint and site conditions and specific areas of disturbance are unknown, all future annexation sites greater than one acre would be subject to a Construction General Permit. The Construction General Permit requires implementation of a storm water pollution prevention plan (SWPPP), which would include best management practices designed to reduce potential impacts from water degradation, storm water runoff and associated erosion. Construction BMPs may include, but are not limited to, stabilization of construction entrances, straw wattles on embankments, and sediment filters on existing inlets. The SWPPP would be required to be kept on-site, updated as needed while construction progresses, and would contain a summary of the structural and non-structural BMPs to be implemented during both construction and post-construction periods. Both structural and non-structural BMPs would assist in reducing impacts from erosion.

Lastly, all future development within the City upon annexation would be subject to City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, the potential for impacts to erosion would be considered, and as discussed above, proper permitting and water quality protection measures would be incorporated as conditions of project approval or as project specific mitigation. Conformance with City code and participation with both the NPDES General Permit and the Construction General Permit, including the SWPPP and BMPs, would reduce potential impacts from erosion. As a result, impacts associated with erosion in this regard would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

- c) *Be located on a geologic unit or soil that is unstable, or what would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefactions, or collapse?***



The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any direct impacts to on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. No mitigation would be required.

Indirect impacts associated with the secondary effects of liquefaction and landslides are discussed in impacts **a iv) and a iv)**, above. Based on the evaluation, impacts would be less than significant.

Related to four priority annexation areas, six potential development areas, and other areas that may be annexed and developed in the future, future indirect impacts associated with lateral spreading, subsidence, and collapse, could occur depending on the nature of the project site and the specific sites susceptibility to these hazards. Much of the SOI Plan update area is underlain by igneous and metamorphic rock which are not typically as susceptible to these hazards as projects underlain by alluvium and thick sedimentary materials. Subsidence and collapse can occur if water from wells is withdrawn faster than the source is replenished. Most wells within the area; however, are from fissures in the underlying rock and not typically susceptible to subsidence and associated collapse of structures. Lateral spreading can occur on the margins of streams and rivers if the banks become unstable and liquefy during ground shaking events. This secondary effect of a ground shaking event also is considered unlikely.

All areas of future development as part of the annexation process would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. This would include City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, the potential for impacts to lateral spreading, subsidence, and collapse, would be considered, and depending on the evaluation, mitigation measures would be incorporated as conditions of project approval or as project-specific mitigation. In consideration of other potential effects from geotechnical hazards MM-GEO-1 would be adopted as part of the project. MM-GEO-1 would require site-specific geotechnical evaluations be prepared for future projects. As part of these evaluations, geologic conditions including lateral spreading, subsidence, and collapse of the sites would be evaluated and subsequent conditions or mitigation would be included on a project by project basis as needed. Implementation of MM-GEO-1, and conformance with all other requirements would reduce this impact to less than significant.

**Level of Impact After Mitigation:** Implement MM GEO-1.

**Level of Impact After Mitigation:** Less than Significant Impact with Mitigation Incorporated.

**d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any direct impacts associated with expansive soils. No mitigation would be required.

The four priority annexation areas, six potential development areas, and other areas that may be annexed and developed in the future may be located in areas or be located with isolated units of expansive soils.

Expansive soils can undergo substantial volume change (i.e., shrink and swell) as a result of variations in moisture content, which can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Expansive soils are typically very fine-grained and have a high to very high percentage of clay. If expansive soils underlay future project sites and they are not properly treated, subsequent expansion and contraction could lead to differential and cyclical movements and cause damage and/or distress to structures and equipment. It is now known if expansive soils underlay potential development areas, and this is considered a potentially significant impact.

All areas of future development as part of the annexation process would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. This would include City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, the potential for impacts associated with expansive soils would be considered, and depending on the evaluation, mitigation measures would be incorporated as conditions of project approval or as project-specific mitigation. In consideration of other potential effects from geotechnical hazards MM-GEO-1 would be adopted as part of the project. MM-GEO-1 would require site-specific geotechnical evaluations be prepared for future projects. As part of these evaluations the presence of expansive soils would be evaluated, and subsequent conditions or mitigation would be included on a project by project basis as needed. Implementation of MM-GEO-1, and conformance with all other requirements would reduce this impact to less than significant.

**Mitigation Measures:** Implement MM-GEO-1.

**Level of Impact After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

***e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any direct impacts associated with alternative wastewater systems. No mitigation would be required.

Annexation of the four priority annexation areas and six potential development areas are anticipated to connect to the existing sewer system through the expansion of on-site lines or lines in immediate proximity to these areas. Wastewater would be treated at the City of Nevada City Wastewater Treatment Plant and would not require the use of separate alternative wastewater disposal systems. No impacts associated with these connections would occur.

The potential for future annexation areas to be provided wastewater services would be determined as more comprehensive development plans and entitlements are proposed or approved. All future projects or individual developments that propose to utilize an alternative wastewater disposal system would be subject to the Regional Water Quality Control Board (RWQCB) regulations. For example, on June 19, 2012, the State Water Board adopted Resolution No. 2012-0032, the Water Quality Control Policy for Siting,

Design, Operation and Maintenance of Onsite Wastewater Treatment Systems. The purpose of the policy was to allow the continued use of Onsite Wastewater Treatment Systems (OWTS), while protecting water quality and public health. This Policy only authorizes subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters of the State and preventing or correcting conditions of pollution and nuisance.

All areas of future development as part of the annexation process would be subject to the City's review and regulation related to use of alternative wastewater treatment. This would include City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, if an alternative wastewater disposal system is proposed, the potential for associated impacts would be considered, and depending on the evaluation, mitigation measures would be incorporated as conditions of project approval or as project-specific mitigation. Conformance with all applicable regulations and site-specific review would reduce this impact to less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

The Consensus Alternative does not include any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. Therefore, the Consensus Alternative would not result in any direct impacts to a unique paleontological resource or a unique geological feature.

The four priority annexation areas are largely developed and are not proposed to undergo substantial changes should be the annexed in the future. Priority Annexation areas #1 and #2, consist of an existing Caltrans site and the County Juvenile Hall. These sites are currently developed, and no additional expansion of the sites is proposed. Priority Annexation Areas #3 and #4 contain existing rural residential uses and a cemetery. The majority of the sites are developed with a few lots remaining undeveloped. Future development within the remaining open parcels could contain unknown paleontological resources. While these areas may be undeveloped and contribute to the positive aesthetics of the sites and surroundings, none of these areas; however, are known to contain unique geologic features.

Considering the area over which the other six potential development areas and overall undeveloped area within the SOI, it is likely that some unknown paleontological resources would be present and could be disturbed or located during construction activities. Additionally, due to the nature and steep and rocky terrain of the areas within and surrounding Nevada City, it is possible that future projects may be located in areas with unique geologic features. If in either case, a unique paleontological resource or unique geologic feature is destroyed, a significant impact could result.

Potential impacts to these resources would be reduced through conformance with the requirement of the Nevada City Municipal Code. As part of all future annexations, projects would undergo a site-specific

CEQA evaluation and all projects would be evaluated by the City to determine potential impacts associated with these resources. The potential for associated impacts would be considered, and depending on the evaluation, mitigation measures, such as those requiring paleontological monitoring, a resource recovery plan, and/or worker awareness training would be incorporated as conditions of project approval or as project-specific mitigation. It is anticipated that this review and subsequent requirements would reduce impacts to less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

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## 4.5.5 CONCLUSION

It is anticipated that some future projects, if not properly mitigated, could result in impacts associated with hazards from seismic ground shaking and although unlikely due to the nature of the geologic conditions of the project areas, secondary seismic effects including liquefaction, subsidence, lateral spreading, or collapse. Future annexation areas also are anticipated to have potential, but minimal impacts associated with expansive soils, locations of alternative wastewater disposal systems, and loss of paleontological or unique geologic resources. However, because the exact footprint and design of future projects is not known, it is possible that certain project sites may contain existing resources or be located on sites that may be susceptible to geologic hazards. This is especially true of the potential effects from landslides. Due to the steepness of some slopes and history of hydraulic mining in the City and SOI Plan update areas, this risk is considered potentially significant. Thus, mitigation measures have been proposed to ensure these impacts are reduced to less than significant.

MM-GEO-1 requires that as part of annexation requests for future projects within the SOI, a geotechnical investigation be prepared. The geotechnical evaluation will evaluate project sites for the potential to experience seismic ground shaking and secondary effects including liquefaction, lateral spreading, subsidence, or collapse. In addition, due to the geologic considerations associated with landslides and the history of hydraulic mining, MM-GEO-1 incorporates language specifically related to lands that are adjacent to hydraulically mined areas or areas with steep slopes and requires an evaluation of a site to increase the potential for land subsidence or to be impacted from an adjacent or nearby area that may be susceptible to land sliding hazards. In all cases, the geotechnical investigation shall prescribe, as necessary, design features or additional mitigation that would be incorporated on a project by project basis to any future project.

The geotechnical investigations will be used as part of the site-specific CEQA review that would be required for all future projects. Through the incorporation of these measures and conformance to all UBC, CBC, and other applicable state codes and city codes and development standards, impacts would be reduced to less than significant.

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## 4.5.6 CUMULATIVE IMPACTS

The Consensus Alternative area is currently developed with predominantly rural and estate residential uses, separated by open tracts of undeveloped land. Under the Consensus Alternative, while no direct

impacts would occur, there is the potential for the area to experience growth as the future projects are approved.

The cumulative nature of geologic impacts occurs over both a wide area and are site-specific. For example, regionally significant faults, or those that are capable of generating large earthquakes can be felt over wide areas and will affect many existing as well as planned projects that will be but have not yet been constructed. At the same time, geologic hazards, typically secondary effects from ground shaking such as liquefaction, are typically site specified. Effects such as those resulting from landslides, are both site-specific if they occur on a project site, but landslides can also flow to adjacent areas, sometimes at substantial distances and cause damage or harm to these off-site areas. Lastly, cumulative impacts to paleontological resources and unique geologic features are typically site-specific and are mitigated on a case by case basis.

As discussed above, the proposed project could result in potential cumulative impacts, both from changes to the project site and from being located in a seismically active region, to geologic resources. The combination of the proposed project as well as past, present, and reasonably foreseeable projects in the City and SOI Plan Update area would be required to comply with all applicable State, federal, and County and local regulations related building and structural design that would be able to withstand anticipated shaking from a seismic event. Similar to the proposed project, these projects also would be required to perform site-specific geologic investigation and implement and conform to mitigation measures, which would be likely to reduce impacts to less than significant. In addition, implementation of Mitigation Measure GEO-1, above, would reduce project-specific impacts and therefore, the projects contribution to cumulative impacts would be less than significant level.

## 4.6 GREENHOUSE GAS

This section of the Environmental Impact Report (EIR) evaluates greenhouse gas (GHG) emissions associated with the SOI Plan update and analyzes Consensus Alternative compliance with applicable regulations. This section considers the SOI Plan update area and consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs. Information in this section is based on methodologies and assumptions recommended by the Northern Sierra Air Quality Management District (NSAQMD) and information from the City of Nevada City (City).

- Nevada City Energy Action Plan

### 4.6.1 ENVIRONMENTAL SETTING

#### Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere, classified GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere.

Table 4.6-1: Description of Greenhouse Gases describes the primary GHGs attributed to global climate change, including their physical properties.

**Table 4.6-1: Description of Greenhouse Gases**

Greenhouse Gas	Description
Carbon Dioxide (CO <sub>2</sub> )	CO <sub>2</sub> is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO <sub>2</sub> is variable because it is readily exchanged in the atmosphere. CO <sub>2</sub> is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N <sub>2</sub> O)	N <sub>2</sub> O is largely attributable to agricultural practices and soil management. Primary human-related sources of N <sub>2</sub> O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N <sub>2</sub> O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years. The Global Warming Potential of N <sub>2</sub> O is 298.
Methane (CH <sub>4</sub> )	Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase-out of Chlorofluorocarbons (CFCs) and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.

**Table 4.6-1: Description of Greenhouse Gases**

Greenhouse Gas	Description
Sulfur Hexafluoride (SF <sub>6</sub> )	SF <sub>6</sub> is an inorganic, odorless, colorless, and non-toxic, non-flammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF <sub>6</sub> is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase-out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen trifluoride	Nitrogen trifluoride (NF <sub>3</sub> ) is to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.
Source: Compiled from U.S. EPA, <i>Overview of Greenhouse Gases</i> , April 11, 2018 ( <a href="https://www.epa.gov/ghgemissions/overview-greenhouse-gases">https://www.epa.gov/ghgemissions/overview-greenhouse-gases</a> ); U.S. EPA, <i>Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016</i> , 2018; IPCC <i>Climate Change 2007: The Physical Science Basis</i> , 2007; National Research Council, <i>Advancing the Science of Climate Change</i> , 2010; U.S. EPA, <i>Methane and Nitrous Oxide Emission from Natural Sources</i> , April 2010.	

CO<sub>2</sub> is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO<sub>2</sub>. For example, CH<sub>4</sub> and N<sub>2</sub>O are substantially more potent GHGs than CO<sub>2</sub>, with GWPs of 25 and 298 times that of CO<sub>2</sub>, respectively.

In emissions inventories, GHG emissions are typically reported in terms of metric tons of CO<sub>2</sub> equivalents (MTCO<sub>2</sub>e). MTCO<sub>2</sub>e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH<sub>4</sub> and N<sub>2</sub>O have much higher GWPs than CO<sub>2</sub>, CO<sub>2</sub> is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO<sub>2</sub>e, both from residential developments and human activity in general.

## Potential Effects of Human Activity on GHG Emissions

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO<sub>2</sub> emissions (and thus substantial increases in atmospheric concentrations). In 1994, atmospheric CO<sub>2</sub> concentrations were found to have increased by nearly 30 percent above pre-industrial (circa 1860) concentrations.

There is international scientific consensus that human-caused increases in GHGs have contributed and would continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snowpack, sea-level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include the displacement of thousands of coastal businesses and residences, impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity. As the CARB Climate Change Scoping Plan noted,



the legislature in enacting Assembly Bill (AB) 32 found that global warming would cause detrimental effects to some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and the adequacy of electrical power generation. The Climate Change Scoping Plan states as follows: "The impacts of global warming are already being felt in California. The Sierra snowpack, an important source of water supply for the state, has shrunk 10 percent in the last 100 years. It is expected to continue to decrease by as much as 25 percent by 2050. World-wide changes are causing sea levels to rise – about 8 inches of increase has been recorded at the Golden Gate Bridge over the past 100 years – threatening low coastal areas with inundation and serious damage from storms." AB 32 is discussed further below under Regulatory Setting.

## 4.6.2 REGULATORY SETTING

The following sections provide federal, state, and local regulations for GHGs and global climate change. These agencies work jointly, as well as individually, to understand and regulate the effects of GHG emissions and resulting climate change through legislation, regulations, planning, policy-making, education, and a variety of programs.

### Federal

No national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

#### ***Clean Air Act***

The Federal Clean Air Act (FCAA) does not specifically regulate GHG emissions; however, on April 2, 2007 the U.S. Supreme Court in *Massachusetts v. U.S. Environmental Protection Agency*, determined that GHGs are pollutants that can be regulated under the FCAA. The EPA adopted an endangerment finding and cause or contribute finding for GHGs on December 7, 2009. Under the endangerment finding, the Administrator found that the current and projected atmospheric concentrations of the six, key, well-mixed GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) threaten the public health and welfare of current and future generations. Under the cause or contribute finding, the Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Based on these findings, on April 1, 2010, the EPA finalized the light-duty vehicle rule controlling GHG emissions. This rule confirmed that January 2, 2011, is the earliest date that a 2012 model year vehicle meeting these rule requirements may be sold in the United States. On May 13, 2010, the EPA issued the final GHG Tailoring Rule. This rule sets thresholds for GHG emissions that define when permits under the Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. Implementation of the federal rules is expected to reduce the level of emissions from new motor vehicles and large stationary sources.

### ***Energy Independence and Security Act of 2007***

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

### ***U.S. Environmental Protection Agency Endangerment Finding***

The U.S. EPA authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (carbon dioxide [CO<sub>2</sub>], methane [CH<sub>4</sub>], nitrous oxide [N<sub>2</sub>O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF<sub>6</sub>]) constitute a threat to public health and welfare. Therefore, it is the Supreme Court's interpretation of the existing Act and the U.S. EPA's assessment of the scientific evidence that form the basis for the U.S. EPA's regulatory actions.

### ***Federal Vehicle Standards***

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the U.S. EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the U.S. EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, U.S. EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the U.S. EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO<sub>2</sub> in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–

2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the U.S. EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the U.S. EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO<sub>2</sub> emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the U.S. EPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the U.S. EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

### ***Clean Power Plan and New Source Performance Standards for Electric Generating Units***

On October 23, 2015, the U.S. EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO<sub>2</sub> emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the U.S. EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO<sub>2</sub> emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, the federal government directed the U.S. EPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

### ***Presidential Executive Order 13783***

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

### ***Presidential Executive Order 13693***

Presidential Executive Order 13693, Planning for Federal Sustainability in the Next Decade, signed in 2015, seeks to maintain federal leadership in sustainability and greenhouse gas emission reductions. Its goal is to reduce agency Scope 1 and 2 GHG emissions by at least 40 percent by 2025, foster innovation, reduce spending, and strengthen communities through increased efficiency and improved environmental performance. Sustainability goals are set for building efficiency and management, energy portfolio, water use efficiency, fleet efficiency, sustainable acquisition and supply chain greenhouse gas management, pollution prevention, and electronic stewardship.

## **State**

### ***California Air Resources Board***

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of carbon dioxide equivalents (CO<sub>2</sub>e) in the world and produced 440 million gross metric tons of CO<sub>2</sub>e in 2015. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32 California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major legislation related to GHG emissions reduction.

## **California Environmental Quality Act and Climate Change**

### ***State CEQA Guidelines***

The State CEQA Guidelines are embodied in the California Code of Regulations (CCR), Public Resources Code, Division 13, starting with Section 21000. State CEQA Guidelines section 15064.4 specifically addresses the significance of GHG emissions, requiring a lead agency to make a "good-faith effort" to "describe, calculate or estimate" GHG emissions in CEQA environmental documents. Section 15064.4 further states that the analysis of GHG impacts should include consideration of: (1) the extent to which the project may increase or reduce GHG emissions; (2) whether the project emissions would exceed a locally applicable threshold of significance; and (3) the extent to which the project would comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions." The CEQA Guidelines also state that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (State CEQA Guidelines

§15064(h)(3)). The State CEQA Guidelines do not, however, set a numerical threshold of significance for GHG emissions.

The State CEQA Guidelines also include the following direction on measures to mitigate GHG emissions, when such emissions are found to be significant:

*Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of GHG emissions may include, among others:*

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;*
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;*
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;*
- (4) Measures that sequester greenhouse gases; and*
- (5) In the case of the adoption of a plan, such as a general plan, long-range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.*

### **Senate Bill 97 (CEQA: Greenhouse Gas Emissions)**

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions and thresholds to analyze the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The California Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the Natural Resources Agency adopted amendments to the State CEQA Guidelines, as required by SB 97. These State CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments became effective March 18, 2010.

### **Assembly Bill 32 (California Global Warming Solutions Act)**

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

### ***CARB Scoping Plan***

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan evaluates opportunities for sector-specific reductions; integrates early actions by CARB and the State's Climate Action Team and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the adopted role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several Sustainable Communities Strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation (CARB 2008).

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated considering current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e) to 545 MMTCO<sub>2</sub>e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California

and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

### ***Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)***

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan<sup>1</sup>. The 2017 Scoping Plan details how the State would reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other federal actions.

### ***SB 375 (The Sustainable Communities and Climate Protection Act of 2008)***

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

### ***AB 1493 (Pavley Regulations and Fuel Efficiency Standards)***

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the U.S. EPA's denial of an implementation waiver. The U.S. EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules would be fully implemented, new automobiles would emit 34 percent fewer CO<sub>2</sub> emissions and 75 percent fewer smog-forming emissions.

### ***SB 1368 (Emission Performance Standards)***

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions

<sup>1</sup> California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, [https://www.arb.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.gov/cc/scopingplan/scoping_plan_2017.pdf). Accessed November 13, 2018.

of a relatively clean, combined-cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 lbs. CO<sub>2</sub> per megawatt-hour (MWh).

### ***SB 1078 and SBX1-2 (Renewable Electricity Standards).***

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load-serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

### ***SB 350 (Clean Energy and Pollution Reduction Act of 2015)***

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 45 percent by 2027) and to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator (ISO) to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

## **Executive Orders Related to GHG Emissions**

California's Executive Branch has taken several actions to reduce GHGs with executive orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

### ***Executive Order S-3-05***

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.



***Executive Order S-01-07***

Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the Low Carbon Fuel Standard on April 23, 2009.

***Executive Order S-13-08***

Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

***Executive Order S-14-08***

Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly-owned electricity retailers.

***Executive Order S-21-09***

Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

***Executive Order B-30-15***

Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMCO<sub>2</sub>e. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The Executive Order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

## California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

### ***Title 20 Appliance Efficiency Regulations***

The appliance efficiency regulations (California Code of Regulations Title 20, §§1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

### ***Title 24 Building Energy Efficiency Standards***

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and take effect on January 1, 2020. Under the 2019 standards, homes would use about 53 percent less energy and nonresidential buildings would use about 30 percent less energy than buildings under the 2016 standards.

Among the key mandatory provisions are requirements that new buildings:

- Reduce indoor potable water use by at least 20 percent below current standards;
- Recycle or salvage at least 50 percent of construction waste;
- Utilize low VOC-emitting finish materials and flooring systems;
- Install separate water meters tracking non-residential buildings' indoor and outdoor water use;
- Utilize moisture-sensing irrigation systems for larger landscape areas;
- Receive mandatory inspections by local officials of building energy systems, such as HVAC and mechanical equipment, to verify performance in accordance with specifications in non-residential buildings exceeding 10,000 square feet; and
- Earmark parking for fuel-efficient and carpool vehicles.

## Northern Sierra Air Quality Management District

The NSAQMD has not yet established significance thresholds for GHG emissions from project operations. However, the NSAQMD requires quantification of GHG emissions for decision-makers and the public to consider.

## Nevada City

Nevada City approved the Energy Action Plan (EAP) in May of 2015, which is a roadmap for expanding energy-efficiency and renewable-energy efforts already underway in the City. The EAP report focused on energy consumed by buildings and municipal operations; and did not address other sectors such as transportation and solid waste. The two primary energy sources in the City are electricity and natural gas. Propane also could be a potentially significant fuel use, but due to data limitations was not addressed in the EAP. The Goals of the EAP address five key areas: 1) Energy efficiency in existing structures; 2) Energy performance in new construction; 3) Expansion of renewable energy options; 4) Energy efficiency in municipal operations; 5) Water conservation which reduces energy needed to transport and treat water. The strategies focus on voluntary measures that can be taken by residents, businesses and the local government. Key components include developing and disseminating information on existing rebate and incentive programs; public outreach via the City's website and printed materials; training for staff, contractors and developers; and partnerships with PG&E and local and regional organizations. The EAP includes an Implementation Program and provides a matrix with timetable, implementation action, which support strategies are relevant, and City department responsible for oversight to reach the 2020 goals. The success of the EAP is to be measured by evaluation of the EAP as a whole and evaluation of the individual strategies.

## Nevada City General Plan

The Nevada City General Plan does not contain a statement regarding air quality.

## Nevada City Municipal Code

Title 15 Buildings and Construction lists the purpose of this portion of the code in Chapter 15.04.005 Purpose. The chapter was enacted to provide the minimum standards to safeguard life or limb, health, property and public welfare by regulating building and associated activities consistent with the 2016 edition of the California Building Standards and consistent with and complementary to standards adopted by the County of Nevada. More specifically, Chapter 15.04.015 California Codes Adopted, subsection I states, "the 2019 edition of the California Building Standards Code, known as the California Code of Regulations, Title 24, Part 11 (California Green Building Standards Code), the whole thereof with State amendments."

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### 4.6.3 STANDARDS OF SIGNIFICANCE

#### Significance Criteria and Thresholds

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project minimum would have a significant effect on the environment if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

NSAQMD 2016 Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects requires GHG emissions to be quantified for decision-makers and the public to consider; however, it does not have thresholds for GHG emissions (NSAQMD 2016). As discussed in Section 15064.4 of the State CEQA Guidelines, the determination of the significance of GHG emissions calls for a careful judgment by the Lead Agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a Lead Agency should make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. This report provides an assessment of GHG emissions and impacts for informational purposes.

## Methodology

Global climate change is, by definition, a cumulative impact of GHG emissions. Because the proposed project consists of a SOI Plan update and no concrete project or plans, there is no project-level analysis. The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities almost doubled between 1970 and 2010 from approximately 20 gigatonnes (Gt) of CO<sub>2</sub>/yr to nearly 40 GtCO<sub>2</sub>/yr. As such, the geographic extent of the climate change and GHG emissions cumulative impact discussion is worldwide.

## 4.6.4 PROJECT IMPACTS AND MITIGATION

### Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to greenhouse gas emission. This discussion is applicable to each impact, Impact 4.5-1 and 4.5-2, below, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for built out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas. These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and

represent a logical progression of City boundaries. Given that most of these areas would not require the extension of services such as public sewer or water, disturbance would be low, and given the sites have exiting uses, the potential to generate a new source of greenhouse gas is minimal.

All future City development after annexation within the Consensus Alternative area, including the six potential development areas would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements from regulatory guidance related to GHGs. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to emissions.

***Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that could have a significant impact on the environment?***

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with transportation, industrial/manufacturing, utility, residential, commercial, and agricultural emissions sectors.

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements. Direct project-related GHG emissions include emissions from construction activities, area sources, and mobile sources. The Consensus Alternative would not result in any direct impacts to the production or emission of GHGs.

Indirectly, the Consensus Alternative could result in the emission of GHGs from the future annexation and development and eventual operation of projects. At that time construction impacts would occur from future projects could occur as well as from operational sources such as emissions from natural gas usage and automobile emissions, and secondary operations emissions from electricity consumption, water demand, and solid waste generation. Based on the potential development within Consensus Alternative, specifically within the six potential development areas, the CO<sub>2</sub> emissions (CO<sub>2</sub>e) were estimated. Because the specific details regarding construction including (grading, earthwork, number of workers, needed equipment, operational hours and days, area of disturbance, etc.) are unknown, it was not feasible to estimate the potential CO<sub>2</sub>e that would result from construction activities. However, based on the maximum potential density, the CO<sub>2</sub>e from operations of the six potential development projects was calculated. Emissions sources include area, energy, mobile, waste, and water and are shown in Table 4.15-17 GHG Operational Emissions.

**Table 4.6-2: GHG Operational Emissions**

<b>Emission sources</b>	<b>CO<sub>2</sub>e* (MT/y)</b>
Area	797
Energy	3,154
Mobile	11,564
Waste	274
Water	146
<b>Total</b>	<b>15,935</b>
Source: CalEEMod Version: CalEEMod.2016.3.2 Abbreviations: CO <sub>2</sub> e- carbon dioxide equivalent – expresses the amount of each different greenhouse gas in terms of CO <sub>2</sub> . MR/y – Metric tons per year	

The NSAQMD does not have adopted GHG thresholds; it is typical to reference thresholds applied within other air districts. In this case, many air districts use 10,000 metric tons per year threshold for determining whether a project's GHG impacts are significance. Other air districts use a project's ability to reduce emissions by 29% of Year 2005 emissions. In the absence of adopted thresholds and based on the Consensus Alternative emissions of 15,935 MT/y, the Consensus Alternative is considered to have a potentially significant impact on GHG.

Under Nevada City Municipal Code 15.04.015, the City has adopted the 2016 edition of the California Building Standards Code, known as the California Code of Regulations, Title 24, Part 11 (California Green Building Standards Code), the whole thereof with State amendments. Under this code, the City would require new construction to meet these standards.

It is important to note that LAFCo has a specific policy related to environmental consequences. This policy states that LAFCo shall operate in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000. LAFCo shall assess the environmental consequences of its actions and decisions and take actions to avoid or minimize a project's adverse environmental impacts, if feasible, or may approve a project despite significant effects because it finds overriding considerations exist in compliance with the State CEQA Guidelines. While this attention has been given to the Consensus Alternative, the same considerations will be given to future annexation proposals and would similarly reduce the potential for environmental impacts associated with GHG emission.

Lastly, as part of the project approval process the City will evaluate future annexations and development proposals on a project by project basis. As part of this review, the City may as reasonable and feasible impose conditions of approval on future projects. Conditions in regard to GHG emissions can be required prior to project approval. Accordingly, Mitigation Measure GHG-1 details this and lists a number of measures or conditions the City may require reducing GHG emissions that would indirectly result from approval of the SOI Plan update.

### ***Mitigation Measures:***

**MM-GHG-1:** Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction, the City shall ensure the project applicant will implemented, to the extent feasible, measures in compliance with all state and local requirements and policies to reduce the volume of GHGs released from

construction and operation of their project. As part of the required CEQA review for future annexations, as applicable, the City shall provide the applicant with a list of measures that can be included to projects to reduce GHGs. The list shall consist of but not be limited to the following:

### ***Construction-***

- Work collaboratively with applicants to obtain low-interest financing to meet minimum energy efficiency;
- Adopt the California Title 24 minimum requirements and require new construction to meet Tier 1 or Tier 2 standard of the CALGreen Code.
- Require the install of SmartMeters on all new construction in the SOI Plan update area;
- Require and enforce state requirements for cool roofs on new projects;
- Encourage the use of native and drought-tolerant landscaping plants;
- Require landscaping to use drip irrigation when feasible;
- Public projects should use high albedo paving materials;
- Use prefabrication when possible to reduce waste materials;
- Encourage new homes and businesses to be pre-wired for solar installation;
- Encourage new construction to use recycled building materials;
- Require the use of No-VOC floor sealant and when feasible, No-VOC building materials;
- Request applicant's plant or replant additional trees to minimize the urban-heat island effect;
  - Set a goal of achieving 50% paved-surface shading within five to ten years of project completion.

### ***Operation***

- Provide businesses and residents with information regarding rebate programs;
- Encourage the use of solar installation to power newly completed projects;
- Encourage the use of alternative transportation;
- Require the use of photosensors and time clocks to turn off exterior lighting;
- Require new lighting to provide even light distribution and use LED lamps;
- Require the use of high-efficiency restroom features; and
- Require the use of computerized building management systems for HVAC operation.

The NASQMD has not adopted thresholds related to the emission of GHG. As discussed above, GHG emissions have an impact that reaches across the globe and not just at a regional level. While it is anticipated that due to the relatively small-scale future development that would occur within the City post annexations, GHG emissions, with recommendations shown above would be reduced, it is uncertain if the reduction would be reduced to less than significant. Therefore, the indirect contribution of the proposed project is considered significant and unavoidable.

**Level of Impact After Mitigation:** Impacts would be significant and unavoidable.

**Impact GHG-2: *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

The latest CARB Climate Change Scoping Plan (2017) outlines the state's strategy to return reduce state's GHG emissions to return to 40 percent below 1990 levels by 2030 pursuant to SB 32. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements. Direct project-related GHG emissions include emissions from construction activities, area sources, and mobile sources. The Consensus Alternative would not result in any direct impacts to the production or emission of GHGs. Impacts in this regard would be less than significant.

Regarding the potential for indirect impacts from future annexation and subsequent development projects to result in impacts, these are considered potentially significant. MM-GHG-1 provides a number of reduction measures that the City can require to be implemented in an attempt to meet statewide standards. Additional strategies such requiring project to meet the Pavley I motor vehicle emission standards, the Low Carbon Fuel Standard (LCFS), and the 2016 Title 24 Energy Efficiency Standards, also could be implemented. It should be noted that even if GHG modeling was feasible for the SOI Plan update, the available modeling program(s) do not incorporate reductions from the Pavley II (LEV III) Advanced Clean Cars Program (extends to model year 2025), the Renewable Portfolio Standards (RPS), Green Building Code Standards for indoor water use, or the California Model Water Efficient Landscape Ordinance (outdoor water), or the latest 2019 Title 24 Energy Efficiency Standards (effective January 1, 2020).

The proposed project would not result in changes to existing planning document or increase the land use densities within the overall SOI plan area or the planned land use and densities within likely annexation areas. Potential incorporation to the City would not result in conflicts with land use planning or policy documents meant to avoid or mitigate environmental impacts including those targeted at reducing GHG emissions. As areas are annexed to the City, all applicable plans, policies and permitting requirements aimed at protection of environmental resources would be applied to the areas for which development and use is proposed. Therefore, in addition to the incorporation of MM-GHG-1, conformance to listed standards would help ensure the city will ensure that all future annexations and projects would implement all applicant statewide strategies to reduce GHG emissions. Therefore, impacts would be less than significant in this regard.

**Mitigation Measures:** Less than significant with Mitigation Incorporated.

## 4.6.5 CONCLUSION



As described above, the proposed project would exceed operational efficiency metrics should all the likely annexation areas be developed. This impact warrants the implementation of mitigation, but even with mitigation, impacts would remain significant. The proposed project would not conflict with the plans, programs, or policies designed to reduce greenhouse gas emissions. These impacts would be less than significant.

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#### 4.6.6 CUMULATIVE IMPACTS

It is generally the case that a SOI update, such as the proposed project, would not result in direct cumulative impacts because there is no associated development. The SOI Plan update; however, has the potential to result in indirect cumulative impacts. Due to the size and nature of the proposed project; it is not possible to specifically account for GHG emissions and to measure the influence climate change or account for if the project would result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. By definition, considering findings by the IPCC and State of California, cumulative GHG emissions are significant and unavoidable. As discussed above, the State has implemented a vast array of regulations, policies, and programs to reduce the State's contribution to global GHG emissions.

As discussed above, the NASQMD does not have any thresholds for GHG emissions and all future development with the potential to generate GHG emissions would be required to demonstrate compliance with applicable federal and state regulatory requirements, including City Municipal Code requiring conformance with title 24. The proposed project also would be consistent with the goals and policies in the CARB Scoping Plan. Lastly, the cumulative impacts to GHG emissions are anticipated to be mitigated on a project-by-project level with implementation of MM-GHG-1. Nonetheless, it is not possible to account for all potential emissions that could occur indirectly from approval of the SOI Plan update. Therefore, these impacts would be cumulatively considerable.

**Mitigation Measures:** Implement MM-GHG-1.

**Level of Impact After Mitigation:** Impacts would be significant and unavoidable.

## 4.7 HYDROLOGY AND WATER QUALITY

This section evaluates potential hydrology and water quality impacts that could result from the proposed SOI Plan update (proposed project). Information in this section comes from County of Nevada GIS mapping analysis as well as existing federal, state, and local regulations. The evaluation includes a discussion of the proposed project compatibility with these required applicable regulations and provides mitigation measures, if needed and as appropriate that would reduce these impacts. The following analysis of the potential environmental impacts related to hydrology and water quality is derived primarily from the following sources and agencies:

- Federal Emergency Management Agency (FEMA);
- United State Army Corps of Engineers (USACE);
- State Water Resources Control Board (SWRCB);
- Regional Water Resources Control Board (RWQCB);
- California Department of Fish and Wildlife (CDFW);
- Nevada City Zoning Ordinance

### 4.7.1 ENVIRONMENTAL SETTING

The area climate generally consists of dry and mild to hot summers and relatively wet winters. In the upper elevation around Nevada City (City) and Grass Valley, snow levels are usually above 5,000 ft. The averages minimum and monthly maximum temperatures of from the Nevada City area in the foothills to the valley area near the Town of Lincoln from approximately 26 to 93 degrees Fahrenheit (°F). The proposed SOI Plan update area is in the eastern portion of the service area and encircles the City. In this area, the City's jurisdictional boundaries include approximately 1,470 incorporated acres (2018, Nevada County GIS data) and the current SOI (exclusive of the incorporated area) includes approximately 2,702 acres. General land uses in the watershed are residential dwellings, managed forests, and undeveloped land. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, and solid waste. These services, providers, and characteristics of their resources are provided in additional detail below.

#### Watersheds

The SOI Plan update area is located in two main watersheds with the vast majority being located in the southerly portion of the Yuba River Watershed. The southernmost portion of Removal Area 1 is located in the northernmost portion of the Bear River Watershed. Both these watershed basins are discussed in additional detail below. Within Nevada City and the SOI Plan update area is the smaller local watershed, the Deer Creek Watershed. The watershed basins are discussed in additional detail below.

***The Yuba River Basin*** – The Yuba River has three forks: North, Middle, and South. The North and Middle Yuba Rivers come together below New Bullards Bar Reservoir and form the mainstem Yuba River. The South Fork and Middle Fork of the Yuba River combined make up the largest of three watershed areas within Nevada County. The Middle Fork of the River drains approximately 86 square miles of Nevada County and the South Fork drains approximately 343 square miles of the County before connecting with the Middle Fork of the Yuba River near Englebright Reservoir. There are more than 100 jurisdictional dams or diversions in the Yuba River Watershed. The diversions convey water to local users and to users in the Bear and North Fork American River Watersheds. A large amount of water is diverted from the watershed at Lake Spaulding on the South Fork for irrigation and power generation. The South Yuba River Watershed alone supports 20 reservoirs and 20 hydroelectric dams. The Deer and Squirrel Creeks flow westward into the Yuba River.

***The Bear River Basin*** – The Bear River originates about 20 miles west of the crest of the Sierra Nevada in northern Placer County within the boundaries of the Tahoe National Forest. The Bear River forms just below Spaulding Reservoir via the Drum Canal and is the second-largest tributary to the Feather River. It flows in a southwesterly direction and drains approximately 277 square miles of Nevada County. The river receives flows from the Sierra Nevada Mountains and for much of its course it forms the boundary between Nevada and Placer Counties. The Bear River Watershed is located between two much larger watersheds, the Yuba to the north and American to the south. The watershed is heavily managed for water conveyance for agricultural water supply and hydropower development that serves the western foothills region and beyond. Some areas of the watershed have been degraded by historical hydraulic mining and mercury contamination. The watershed spans four counties: Nevada, Placer, Sutter and Yuba. The Wolf, Greenhorn, and Steephollow Creeks drain into the Bear River. The Bear River discharges from Rollins Reservoir and flows southwest into Lake Combie near the community of Meadow Vista and near an area with heavy development pressure. The Bear River turns west and is fed by Wolf Creek and then enters into Camp Far West Reservoir, the largest water body in the Bear River Watershed. The Bear joins the Feather River south of Yuba City/ Marysville (Sacramento River Watershed Program, 2018). The Bear and Yuba subbasins are located within the American River subregion, which consists of roughly 5,375 square miles and includes portions of six counties.

***Deer Creek Watershed*** – The Deer Creek Watershed traces the southerly boundary of the Yuba River Watershed. Nevada City is at the approximate mid-point of the watershed and is approximately 12 miles west of the eastern watershed boundary near SR-20 and approximately 15 miles west of the watershed boundary near the Nevada County line. The watershed includes the area from Scotts Flat in the eastern reaches and Lake Wildwood in the western half. Deer Creek Watershed has been impacted from past uses including mining, development, water diversions, and agriculture (Friends of Deer Creek, 2011).

***Little Deer Creek Watershed*** – Little Deer Creek Watershed encompasses much of the City and SOI Plan Update area and is a tributary to Deer Creek. Other waters within the SOI Plan Update area that are tributary to Deer Creek include Gold Run Creek, Oregon Ravine, Woodpecker Ravine, Woods Ravine, Rogers Williams Ravine, and Manzanita Ravine. All of these watercourses flow or combine to flow through the downtown of City (Nevada City, 2017). Historical mining that has occurred throughout the Deer Creek

watershed has affected the water quality of the area and downstream locations. Deercreek and its tributaries were used as water sources for gold processing as well as discharge locations for mine wastes that has most notably resulted in excess mercury that is still present in river sediments.

## **Surface Water Quality**

### ***Water Quality***

The most common categories of stormwater pollutants include sediments, nutrients, trace metals, bacteria, and oil and grease. Water quality degradation can be caused by several sources, including wastewater disposal practices, stormwater runoff from parking lots and roadways, erosion, siltation, agricultural, mining, and logging operations, and some industrial operations. Receiving waters can assimilate a certain quantity of various runoff constituents. However, there are thresholds beyond which a measured constituent becomes a pollutant and results in an undesirable impact.

The State Water Resources Control Board (SWRCB) produces bi-annual qualitative assessments of statewide and regional water quality conditions. These assessments are focused on Clean Water Act (CWA) Section 303(d) impaired water listings and priority status for assignment of total maximum daily load (TMDL) requirements. Specifically, the Section 303(d) and TMDL assessments involve prioritizing waters on the basis of water quality (i.e., impaired) status and the necessity for assigning quantitative contaminant load restrictions (i.e., TMDLs), with these data submitted to the United States Environmental Protection Agency (USEPA) for review and approval.

### ***Sediment***

Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is typically the major pollutant by volume in surface water. The smallest particles of earthy or rock material are part of the process of siltation. These silt elements typically consist of 80 percent soil or silt and less than 12 percent clay. Suspended soil particles can cause the water to look cloudy and be turbid. The fine sediment particles also act as a vehicle to transport other pollutants, including nutrients, trace metals and hydrocarbons. Construction sites are the largest source of sediment for urban areas under development. Another major source is stream bank erosion, which may be accelerated by increases in peak flow rates and volumes of runoff due to urbanization. Agricultural operations are the largest source of sediment in rural areas.

### ***Nutrients***

Nutrients are a significant concern for surface water quality, especially phosphorous and nitrogen, which can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes or other non-moving water bodies. The orthophosphoric form of phosphorus is a readily available nutrient for plant growth. Orthophosphate from automobile emissions also contributes phosphorus in areas with heavy automobile traffic.

The ammonium form of nitrogen can also have severe effects on surface water quality. Ammonium is converted to nitrate and nitrite forms nitrogen in a process called nitrification. This process consumes

large amounts of oxygen, which can impair the dissolved oxygen (DO) levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied in excess of plant needs, nitrates can leach below the root zone, eventually reaching groundwater.

Generally, nutrient export is greatest from agricultural areas and developed areas with large impervious areas. Other problems resulting from excess nutrients are surface algal scums, water discolorations, odors, toxic releases, and overgrowth of plants. Common measures of nutrients are total nitrogen, organic nitrogen, total Kjeldahl nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC).

### ***Trace Metals***

Trace metals are primarily of concern because of their toxic effects on aquatic life and their potential to contaminate drinking water supplies. A shorter duration of exposure to a trace metal reduces its toxicity in the aquatic environment. The toxicity of trace metals in runoff also varies with the hardness of the receiving water. As total hardness of the water increases, so does the potential for adverse effects. Metals commonly found in urban runoff are lead, zinc, and copper. According to the General Plan EIR, the western portion of the County has naturally occurring elements such as heavy metals that can contribute to water quality degradation. Automobile emissions are also a major source of lead in urban areas. In the project area, pollution concerns from heavy metal mining include arsenic, iron, manganese, mercury, lead, and aluminum. A large fraction of the trace metals in stormwater runoff is attached to sediment. Sediment effectively reduces the level of trace metals that are immediately available for biological uptake and subsequent bioaccumulation (metals attached to sediment settle out rapidly and accumulate in the soil).

### ***Bacteria***

Bacteria levels in undiluted urban runoff can exceed public health standards for water. Bacteria can originate from both point and non-point sources are typically from anthropogenic sources. This Sources typically include unsatisfactory disposal of domestic sewage through the use of septic tanks and leach field systems, animal grazing, and to a lesser extent recreational activities such as backpacking within or close to waterways. Unproperly treated or uncontrolled waste from these sources can reach waterbodies resulting in contamination at the source and downstream. Natural sources of bacteria from domestic as well as wild animals also occur and can enters the water system (Waterboards, 2015, and Derlet et. all) 2006,

### ***Oil and Grease***

Oil and grease contain a wide variety of hydrocarbons, some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed in it. The major source of hydrocarbons in urban runoff is through leakage of crankcase oil and other lubricating agents from automobiles onto impervious surfaces. Hydrocarbon levels are highest in the runoff from parking lots, roads and service stations. Residential land uses generate less hydrocarbons export, although illegal disposal of waste oil into stormwater can be a local problem.

### ***Water Quality Assessment***

Both Deer Creek and Little Deer Creek are listed as 303(d) impaired water bodies. Deer Creek is listed as an integrated report category 5 for fecal indicator bacteria for a total length of approximately 16 miles from Deer Creek Reservoir to Lake Wildwood but the source is not known.

Little Deer Creek is listed for Integrated Report Category 5 for mercury and includes a length of stream approximately 4.06 miles in length. The exact source is unknown, but contaminants are most likely a result of past mining in the region.

Gold Run is listed for Integrated Report Category 5 for mercury for a length of approximately 1.9 miles. The exact source is unknown, but contaminants are most likely a result of past mining in the region (CVRWQCB, 2018).

### ***Groundwater***

Several key properties help determine whether the subsurface environment will provide a significant, usable groundwater resource. Most of California's groundwater occurs in material deposited by streams, called alluvium. Water infiltrates deep into the layers of sand and gravel, and silts and clays and coalesce into thin lenses and beds that contain water and are termed aquifers. California's groundwater basins usually include one or a series of alluvial aquifers with intermingled aquitards. Although alluvial aquifers are most common in California, other groundwater development occurs in fractured crystalline rocks, fractured volcanics, and limestones. This is the case in Nevada County where the majority of groundwater in the western portion of the County occurs in fractures of the hard rocks between 200 and 215 feet below ground. There is little groundwater found to occur in the alluvium and colluvium of the area. The groundwater in the Sierra Nevada foothills that is found is sourced from these reservoirs in fractured rock and that are recharged slowly overtime and generally well confined.

### **Flood Hazard**

Flooding typically occurs during the winter months between November through April. Severe flooding is more likely when the ground is already saturated or existing snow is melted by warmer rains. In general, the SOI Plan update area nor the City have significant, wide floodplains that are found in areas with less steep slopes.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate maps partitions flood areas into three zones: Zone A for areas of 100-year flood; Zone B for areas of 500-year flood; and Zone C for areas of minimal flooding. The National Flood Insurance Program (NFIP) 100-year floodplain is considered the base flood condition, which is defined as a flood event of a magnitude that would be equaled or exceeded an average of once during a 100-year period. Floodways are defined as stream channels plus adjacent floodplains that must be kept free of encroachment as much as possible so that the 100-year floods can be carried without substantial increases (no more than one foot) in flood elevations. Most portions of the SOI Plan update area and City are not within a NFIP designated flood hazard zones and most areas are considered to have a low risk of flooding.

Areas within the SOI Plan update area that are subject to 100-year and 500-year flooding include Deer Creek west from Scott's Flat Reservoir through Nevada City west to Lake Wildwood and beyond. These areas are designated as Zone A or Zone AE. The remainder of the unincorporated portions of the SOI Plan update area are designated as Zone X. Definitions of these zones is provided below:

Zone A – is a Special Flood Hazard Area (SFHA) with a 1% annual chance of flooding for an area which no base flood elevation (BFE) has been determined.

Zone AE – SFHA with a 1% annual chance of flooding for an area which a BFE has been determined.

Zone X – are areas determined to be outside 500-year floodplain determined to be outside the 1% and 0.2% annual chance floodplains.

## Wastewater Treatment

Nevada City provides a full range of wastewater services including collection, treatment, and effluent/biosolids disposal. No other agencies were identified that could provide these services on a City-wide basis. In addition to the City's internal governance processes, the City's wastewater system is heavily regulated by state agencies in terms of discharge. Nevada City operates under an NPDES Permit from the Central Valley Regional Water Quality Control Board (LAFCo Wastewater MSR).

The City's Wastewater Treatment Plant (WWTP) discharges an approximate average of 470,000 gallons per day (gpd) of treated effluent into Deer Creek on a year-round basis. A discharge permit from the Central Valley Regional Water Quality Control Board (RWQCB) was most recently issued in June of 2017, as Order No. R5-2017-0060. This permit is part of the National Pollutant Discharge Elimination System (NPDES) and it places limitations on specific constituents of effluent that are allowed to be discharged into Deer Creek. Certain standards and levels to ensure adequate water quality must be tested and met. The constituents that are measured for include biochemical oxygen demand, total suspended solids, potential hydrogen (pH), ammonia, dichlorobromomethane, coliform, residual chlorine, and zinc. Discharge permits are reviewed every five years by the Central Valley RWQCB (LAFCo 2015, updated 2019).

### 4.7.2 REGULATORY SETTING

#### Federal

##### ***Clean Water Act, Section 402, National Pollutant Discharge Elimination System***

Direct discharges of pollutants into waters of the U.S. are not allowed, except in accordance with the NPDES permit process established in Section 402 of the CWA. The Clean Water Act (CWA) (U.S. Government Code [USC], Title 33, Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and has given the U.S. Environmental

Protection Agency (U.S. EPA) the authority to implement pollution control programs. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain nonpoint source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402).

Section 402 authorizes the California State Water Resources Control Board (SWRCB) to issue NPDES General Construction Storm Water Permits (Water Quality Order 99-08-DWQ). Non-point source discharges to stormwater are regulated under stormwater NPDES permits for municipal stormwater discharges, industrial activities, and construction activities.

### ***Clean Water Act, Section 303, List of Water Quality Limited Segments***

Section 303 of the CWA requires that the state adopt water quality standards for surface waters. When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. States are required to compile this information in a list and submit the list to U.S. EPA for review and approval. An affected waterbody, and associated pollutant or stressor, is then prioritized in a list of impaired waterbodies known as the 303(d) List. The CWA further requires the development of a Total Maximum Daily Load (TMDL) for each listing.

Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body. In California, implementation of TMDLs is achieved through water quality control plans, known as basin plans. Basin plans contain specific water quality standards, as well as a program of implementation for how those water quality standards may be achieved. The project area is in the Central Valley Region and included in the Water Quality Control Plan (Basin Plan) of the California RWQCB Central Valley Region. The Basin Plan and required contents are discussed in additional detail below.

## **Clean Water Act**

### ***Sections 404 and 401***

Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. Waters of the U.S. are those waters that have a connection to interstate commerce, either directly via a tributary system or indirectly through a nexus identified in the USACE regulations. Under Section 401 of the CWA, the SWRCB must certify all activities requiring a 404 permit. Under the SWRCB, the RWQCB regulates these activities and issues water quality certifications for those activities requiring a 404 permit. For purposes of section 404 of the CWA, the limits of non-tidal waters extend to the Ordinary High Water (OHW) line, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank,



changes in the character of the soil, and presence of debris. When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

If applicable, construction would also require a request for Water Quality Certification (or waiver thereof) from the Central Valley RWQCB. Project activities would adhere to State and federal water quality standards and would be in compliance with Sections 401 and 404 of the CWA.

## State

### ***State Water Resources Control Board***

The National Pollution Discharge Elimination System (NPDES) was established per the 1972 amendments to the Federal Water Pollution Control Act, or Clean Water Act (CWA), to control discharges of pollutants from point sources (Section 402). Amendments to the CWA created a new section to the Act, which is devoted to stormwater permitting, with individual states designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The State Water Resources Control Board (SWRCB) issues both general construction permits and individual permits under this program.

#### *Construction Stormwater General Permit*

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The SWPPP specifies Best Management Practices (BMPs) intended to prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and are required to be inspected. Accordingly, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the construction site discharges directly to a water body listed on the 303(d) list for sediment. Increased compliance tasks under the adopted 2009 Construction General Permit include project risk evaluation, effluent monitoring, receiving water monitoring, electronic data submission of the SWPPP and all other permit registration documents, and a Rain Event Action Plan (REAP), which must be designed to protect all exposed portions of a project site within 48 hours prior to any likely precipitation event.

### *Phase 1 and II Municipal Separate Storm Sewer System (MS4) Permits*

The Phase I and II MS4 permits require the Permittees to reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process (CVRWQCB, 2019).

### *Industrial Storm Water General Permit*

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ (CVRWQCB, 2019). The Statewide General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ Industrial General Permit (IGP) implements the federally required storm water regulations in California for storm water associated with industrial activities discharging to waters of the United States. The IGP regulates discharges associated with 10 federally defined categories of industrial activities. The Industrial General Permit regulates industrial storm water discharges and authorized non-storm water discharges from industrial facilities in California. The Industrial General Permit is called a general permit because many industrial facilities are covered by the same permit, but comply with its requirements at their individual industrial facilities. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively, the Water Boards) implement and enforce the Industrial General Permit (SWRCB, 2019).

### *Waste Discharge Permit*

If USAGE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, a Waste Discharge Requirement (WDR) permit may be issued by Central Valley Water Board. Waste discharges that can be exempted from the California Code of Regulations (CCR) and typically include domestic or municipal wastewater, food processing related wastewater, and industrial wastewater. State regulations addressing the treatment, storage, processing, or disposal of waste are contained in Title 27, CCR, section 20005 et seq. (hereafter Title 27). Discharges that qualify for exemption from Title 27 must be consistent with the exemptions provided in Title 27 section 20090.

### *Dewatering Permit*

Construction or groundwater dewatering that is discharged to land requires coverage under State Water Board General Water Quality Order (Low-Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low-Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

### *Regulatory Compliance for Commercially Irrigated Agriculture*

Discharges from commercial irrigated agricultural are required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

- Obtain Coverage Under a Coalition Group. Join the local Coalition Group that supports landowners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group.
- Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order RS-2013-0100. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently \$1,277 + \$8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs.

## **California Water Code**

As discussed above, the primary responsibility for the protection of water quality in California rests with the SWRCB. The SWRCB sets Statewide policy for the implementation of State and Federal laws and regulations. To do this more effectively, the SWRCB is divided into nine regional water quality control boards (RWQCBs). The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) that recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

### ***Central Valley Water Quality Control Board***

The Central Valley Water Quality Control Board (CVRWQCB) is required to formulate and adopt Basin Plans for all areas with the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. The Basin Plan reflects, incorporates and implements applicable portions of a number of national and statewide water quality plans and policies, including the Porter-Cologne Act, California Water Code and the CWA. Basin Plans are reviewed every three years and assesses for appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. The Basin Plan includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region and includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain water quality standards. For water bodies with quality below the levels needed to meet the beneficial uses, plans for improving water quality are included.

The CVRWQCB revised their current Basin Plan in May of 2018. This Basin Plan covers the entire area included in the Sacramento and San Joaquin River drainage basins and is bound by the crests of the Sierra Nevada on the east and the Coast Range and Klamath Mountains on the west. The Basin Plan contains water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program to implement for achieving water quality objectives within the plan area. Federal regulations require each state to adopt water quality standards for protection of public health and welfare, enhance the quality of water and serve the purposes of the CWA. In California, the beneficial uses, water quality objectives, and Antidegradation Policy are the state's water quality standards. More specifically, the Antidegradation Policy states that all discharge or waste to high-quality waters must apply best practicable treatment of control not only to prevent a condition of pollution or nuisance from occurring but also to maintain the highest water quality. An antidegradation analysis is a mandatory element in the NPDES system and land discharge Waste Discharge Requirements (WDR's) permitting process (CVRWQCB, 2018).

### **Nevada City Municipal Code**

The Nevada City Municipal Code (NCMC) provides the requirements and regulations related to development and overall operations within the City. The NCMC also provides specific guidance related to some of the elements related to hydrology and water quality. More specifically, title 13 of the NCMC discusses public services include the water system, the sewer system, underground utility districts, and specifically pertaining to this Chapter of the EIR, floodplain management.

#### ***Section 13.20.010***

This section of the municipal code includes a discussion of the Findings of Fact and recognizes that certain areas are subject to periodic inundation by flood hazards. This section further states the purpose of the chapter is to reduce losses from flood hazards and includes five methods to reduce losses from floods. This includes restrictions of uses in certain areas; protection of vulnerable areas; control floodplain alteration; control filling, dredging and grading, and prevent or regulate construction of flood-barriers

## **4.7.3 STANDARDS OF SIGNIFICANCE**

The following significance criteria for hydrology and water quality were derived from the Environmental Checklist in the State CEQA Guidelines, Appendix G. An impact of the project would be considered significant and would require mitigation if it would meet one of the following criteria.

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- Result in substantial erosion or siltation on- or off-site.
- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

#### 4.7.4 PROJECT IMPACTS AND MITIGATION

This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 6.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

##### Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to hydrology and water quality resources. This discussion is applicable to each impact, Impact HYD-1 through HYD-8, below, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. The lands that would be annexed are anticipated to be built out over time and development in these areas is anticipated to be consistent with the existing designations and planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas. These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. The majority of the remaining undeveloped areas

within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for build out would occur over a period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

All future development within the Consensus Alternative area, including the six potential development areas identified by the City, would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to preservation of scenic vistas. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to hydrology and water quality

***Impact HYD-1: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

Water quality, waste discharges, and water quality is managed by the RWQCB and specifically the CVRWQCB in the vicinity of the SOI Plan update area. The SOI Plan update area is characterized by hilly with steep to gently sloping terrain, perennial and intermittent streams in a forested environment. The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations in any of these areas. The Consensus Alternative would not result in any direct impacts to water quality or result in the direct violation of a water quality standard or waste discharge requirements.

Indirect impacts from the Consensus Alternative could occur if grading, excavation, and other earthmoving activities that have the potential to cause substantial erosion to occur as a result of project implementation after annexation. If erosion is not prevented or contained during construction, sediments and particulates, along with other contaminants found on the project site, could be conveyed off-site and into downstream waters, resulting in water quality degradation and the subsequent violation of water quality standards.

Priority Annexation Area #1 contains the existing Caltrans facility and Priority Annexation Area #2 contains the existing County Juvenile Hall. There are no plans to expand or construct additional buildings on these sites and the potential for degradation to water quality is slight. Priority Annexation areas #3 and #4 contain an existing cemetery, rural residential uses and a few undeveloped parcels. Extension of services could encourage development of the undeveloped parcels but substantial development that could result

in significant violations of water quality standards is not anticipated. It should be noted, there are no proposed plans for further development of these areas.

The consensus alternative does include six potential development areas. Future development of these areas would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. These areas are all greater than one acre and would be required to obtain a Construction General Permit. The Construction General Permit requires implementation of a SWPPP, which would include BMPs designed to reduce potential impacts from water degradation and storm water runoff. Construction BMPs may include, but are not limited to, stabilization of construction entrances, straw wattles on embankments, and sediment filters on existing inlets. The SWPPP must be kept on-site, updated as needed while construction progresses, and would contain a summary of the structural and non-structural BMPs to be implemented during both construction and post-construction periods. The SWPPP would also contain a site map(s) showing the construction perimeter, existing and proposed buildings, storm water collection and discharge points, general pre- and post-construction topography, drainage patterns across the site, and adjacent roadways; a visual monitoring program; a chemical monitoring program for "non-visible" pollutants, should the BMPs fail; and a sediment monitoring plan, should the site discharge directly into a water body listed on the 303(d) list for sediment. BMP's would be verified installed and verified pursuant to the nonpoint source practices and procedures as required by the City's Public Works Department.

All future development within the City after annexation would be subject to City design and review as part of City's project review process including CEQA analysis. As part of the CEQA analysis, the potential for impacts to hydrology and water quality would be considered, and as discussed above, proper permitting and water quality protection measures would be incorporated as conditions of project approval or as project-specific mitigation. Preparation, implementation, and participation with both the NPDES General Permit and the Construction General Permit, including the SWPPP and BMPs, would reduce potential impacts to water quality to acceptable levels. As a result, impacts associated to water quality in this regard and wastewater discharge requirements would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact HYD-2:**      ***b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

Existing development within the Consensus Alternative area is sparse and generally consists of rural residential, undeveloped properties, open space, and limited commercial uses. The potential for groundwater recharge from these areas is substantial due to the general lack of impervious surfaces. If substantial development occurs within the Consensus Alternative area the potential for groundwater recharge could be reduced. The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts to groundwater recharge would not occur and mitigation would not be required.

Indirectly, the Consensus Alternative has the potential to induce growth and reduce the potential for groundwater recharge. No additional development within Priority Annexation Areas #1, #2, #3, and #4 is proposed and any new development that could be enabled from future annexation within the Consensus Alternative would be limited to a few single rural residential lots. The effects from this on groundwater recharge would be minimal.

Future development of the six potential development areas would be subject to the City's review and regulation and would be evaluated when development plans are submitted, and/or application(s) filed. It also is anticipated that any new development in these areas would be sufficiently sized to require the incorporation of LIDs. LIDs would use biofiltration and stormwater retention methods such as vegetated swales, water retention and detention basins, and other landscaped drainage features. These drainage features capture and treat water on-site and provide an opportunity for the water to infiltrate and recharge groundwater instead of being immediately conducted to downstream receiving waters.

Lastly, as potable water services are extended, the existing residences and other land uses that are currently using water wells to obtain water, could have the opportunity to switch and use NID supplied water. NID receives the majority of its water supply from surface water that is runoff from the Sierra Nevada Mountains. If existing well users switch to NID supplied water, this would have the effect of reducing groundwater use in these areas. Because of these reasons, adoption of the Consensus Alternative could result in an overall reduction of groundwater use and would not result in indirect impacts to groundwater and groundwater recharge. Therefore, the Consensus Alternative would not result in groundwater overdraft, substantially deplete local groundwater levels, or substantially redirect storm water such that natural basin recharge would be precluded. These impacts would be less than significant, and no mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact HYD-3:** *c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*i) Result in substantial erosion or siltation on- or off-site?*

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing land use or zoning designations. In this regard, direct impacts to drainage patterns including through the alteration of a stream or river, or addition off impervious surfaces resulting in substantial runoff would not occur. No mitigation would be required.

Indirectly, the Consensus Alternative has the potential to induce growth and result in alteration of the course of a stream or river resulting in downstream erosion from subsequent development. No additional development within Priority Annexation Areas #1, #2, and #4 is proposed and any new development that could occur after annexation would be limited to a few rural residential lots. The effects from the potential changes to these sites is anticipated to be minimal and would not change the course of a stream or river.



As discussed in Chapter 4.3 Biological Resources, City Code Chapter 17.80.120 contains regulations regarding the prohibition of development within riparian and adjacent to stream zones. The City prohibits building closer than 100 feet from a perennial stream and closer than 25 feet from seasonal water (unless a variance is granted). In addition, sections 401 and 404 prohibit the release of dredge or fill materials into waters of the U.S. These requirements also would ensure that the easternmost portion of Annexation Areas #3 (APN# 036-310-039), which is within or adjacent to a FEMA flood zone would not be constructed in a location that would substantially alter the existing drainage pattern, or create impervious surfaces such that substantial siltation or erosion occur.

Regarding the six potential development areas, these sites would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. Although the specific footprint and site conditions and areas of disturbance are unknown, these projects, if they occur, would be subject to the same codes and laws related to limitation on construction activities within a stream or river. These projects all are greater than one acre in size and would be required to prepare a SWPPP in accordance with an NPDES permit as discussed in Impact HYD-1, above.

Lastly, as discussed in the Impacts Discussion Overview, all annexation projects would be subject to a City lead CEQA review which would require projects comply with all applicable water quality standards. Therefore, conformance with applicable, standards, laws, and regulations pertaining to water quality would ensure these impacts are less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts to drainage patterns including through the creation of impervious surfaces such that on or off-site flooding would not occur.

The project would not alter precipitation amounts or intensities, nor is it anticipated to require any additional water to be imported to serve the future project sites. Some additional run-off would occur from new impervious surfaces if construction occurs; however, the overall increased surface area would be minimal and the potential for on-site or off-site run-off would be minimal. No additional development within Priority Annexation Areas #1, and #2, is proposed and no additional run-off is anticipated. Indirectly adoption of the SOI Plan update could result in new development in Priority Annexation areas #3 and #4. This has the potential to create additional impervious surfaces if new structures are built. Construction on these sites; however, would be within a rural landscape, increased run-off would be minimal, and would be required to comply with all applicable RWQCB, CVRWQCB, and City requirements related to water runoff and control.

City Municipal Code Chapter 13.20.101 Statutory Authorization would apply to future annexations and projects that could occur in the Consensus Alternative area if they are within flood zones. In part, the purposes of this chapter are to protect human life and health; minimize damage and reduce the effects on uses in flood zones. More specifically, section 13.20.050 sets forth provisions for flood hazard reduction including anchoring, use of construction materials resistant to flooding, and a requirement that in a zone A, the lowest floor be elevated at least one foot above the base flood elevation. Other requirements such as structure design and certification by a registered professional engineer or architect are required.

As discussed in Impact HYD-1 abHYD-2, future development of the six potential development areas would be subject to the City's review and regulation, and they would be required to obtain an NPDES Construction General Permit and implement a SWPPP and associated BMPs. Depending on the size and types of future projects, projects would be required to incorporate LIDs which would help retain stormwater on-site, control downstream erosion and sedimentation, prior to release of water to downstream areas. Lastly, all projects subject to annexation would require subsequent CEQA review, which would require an evaluation of impacts to hydrology and water quality. As part of the review process, the City would require future projects to incorporate conditions of approval or mitigation measures as needed to protect water quality. These required elements associated with project approval would reduce impacts to less than significant. No mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

**iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts to drainage patterns such that it would contribute runoff in exceedance of the existing or planned stormwater drainage systems would not occur.

As discussed in Impacts HYD-1, HYD-3, and HYD-4, depending on the location, size, and nature of annexation areas and future projects, some projects would be required to obtain a Construction General Permit. The Construction General permit requires implementation of a SWPPP, which would include BMPs to minimize the erosion caused by storm water runoff and protect downstream receiving waters. Preparation, implementation of all required NPDES permits, including implementation of SWPPPs and associated BMPs, would reduce the potential for storm water flows from carrying potential contaminants off-site during construction. This would reduce the potential for future annexation and subsequent development to create or contribute substantial amounts of pollutants to runoff. These impacts would be less than significant.

Future projects as needed, would incorporate LIDs and biofiltration and stormwater retention areas such as swales and water retention and detention basins. These stormwater treatment measures would be designed according to the anticipated flows to capture, store, and treat stormwater runoff, before releasing the water downstream. These measures would reduce potential impacts to less than significant.

All annexations would require subsequent CEQA review, which would require an evaluation of impacts to hydrology and water quality and the inclusion of conditions of approval and mitigation measures as needed. In addition, this evaluation would include verification of conformance to NPDES and all other standards and requirements to project water quality. This would reduce impacts to less than significant. No mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact HYD-4:           d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?**

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts associated with a flood hazard, tsunami, or seiche would not occur.

The SOI Plan Update area is greater than 100 miles from the Pacific Ocean and inundation from a tsunami would not impact the proposed project. Within the Consensus Alternative area there are FEMA mapped flood zones within and adjacent to Deer Creek and three small lakes/pond south of Red Dog Road, Charles Marsh Pond in Coyote Diggins' Park, and Hirschman's pond south of Indian Flat Road. None of the Priority Annexation Areas are within an area that would be affected by a seiche, but priority Annexation Area #3 is adjacent to Deer Creek (APN# 036-310-039) within or adjacent to a FEMA flood zone designated AE.

Any future annexation request and development application related to this lot or regarding the six potential development areas, would be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. Additionally, all project subject to annexation would require subsequent CEQA review, which would require an evaluation of impacts to flooding. This would include a formal evaluation of the FEMA quality and incorporation of conditions of approval and mitigation measures as needed. This would reduce impacts to less than significant.

It is unknown the exact footprint of the six potential development areas and impacts associated with flooding would be determined upon subsequent plan review by the City. In addition, all future annexation projects would undergo site-specific CEQA review at which time the potential for impacts from flooding and seiche, if applicable, would be analyzed and conditions of approval and mitigation proposed if needed. This is anticipated to reduce impacts to less than significant. No mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact HYD-5: *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

The Consensus Alternative does not propose any development within the SOI Plan Update area. If approved, the Consensus Alternative would not result in any entitlements for development or change existing NCGP Land Use or zoning designations. In this regard, direct impacts associated with obstruction of a water quality control plan would not occur.

As part of all future annexations, the City would evaluate annexations and the project conformance with RWQCB plans and policies, City guidelines, and for CEQA compliance. Projects would be evaluated for with NPDES permits, and incorporation of SWPPP's, BMP's, and other requirements of the Basin Plan, including permitting for septic systems (should they be proposed), and on-site water retention required by MS4 permits. This would ensure that all future projects do not in conflict with a water quality control plan. In regard to a sustainable ground water management plan, the Consensus Alternative would likely result in extension of water lines into unincorporated areas. This would have the likely effect of reducing reliance on ground water wells. NID would be the likely water supplier. Use of NID would reduce demands on ground water withdrawal as most NID water is supplied from surface water from the Sierra Nevada Mountains. Thus, impacts in this regard would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

## 4.7.5 CONCLUSION

As discussed above, the Consensus Alternative would not result in any direct impacts on hydrology and water quality because approval of the project would not authorize any development or issue any development entitlements. Impacts in this regard would not occur.

All future proposed annexations would be subject to plan and design review by the City. This include site-specific CEQA analysis as required by City Municipal Code. All sites would be evaluated for their potential to result in impacts to hydrology and water quality. If required, all drainage improvements planned for future projects would be designed to satisfy the RWQCB's MRP requirements, and all other applicable requirements and standards such as obtained NPDES permits and implementing SWPPP's with BMP's. In addition, long term water quality standards are anticipated to be improved or maintained through implementation of LIDs on future projects. Such design features would help ensure that operational impacts associated with water quality standards and wastewater discharge requirements would be less than significant. The City does not use groundwater; thus, the project would not result in impacts to local groundwater. Existing drainage areas also would be protected through conformance with all RWQCB's requirements and all other applicable standards and that drainage patterns leading to substantial on-site or off-site erosion does not occur. The Consensus Alternative area is not susceptible to tsunamis, and although it is unlikely, would be evaluated to determine susceptibility to seiches and flooding on Deer Creek and other waterways. Furthermore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan would be less than significant.

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### 4.7.6 CUMULATIVE IMPACTS

Cumulative impacts to hydrology and water quality could occur as new development, redevelopment, and existing uses are ongoing within the watershed and within the Consensus Alternative area. Parts of the watershed, largely within Nevada City, are already urbanized, but surrounding areas are predominantly rural residential uses with some scattered industrial and commercial uses. Growth on the boundaries of the City is anticipated to consist of slightly more dense development and areas further into the SOI area are anticipated to be consistent with existing land use patterns. New development projects would result in some increases in impervious surfaces, and thus could generate increased runoff from the affected project sites. Future developments in the watershed would be required to comply with the SWRCB and CVRWQCB. Depending on the size of future projects, they would be required to obtain and comply with all required water quality permits and the Water Quality Control Plan, as needed and prepare and implement SWPPPS, implement BMPs, including LID BMPs to minimize runoff, erosion, and storm water pollution, and MS4. As part of these requirements, projects, depending on size and locations, would be required to implement and maintain source controls, and treatment measures to minimize polluted discharge and prevent increases in runoff flows that could substantially decrease water quality. Conformance to these measures would minimize runoff from those sites and reduce contamination of runoff with pollutants. Therefore, related projects are not expected to cause substantial increases in storm water pollution. With compliance with State and local mandates, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

***Mitigation Measures:*** No Mitigation Measures are Required.

## 4.8 LAND USE

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting for land use and planning on the proposed project site. It also describes the impacts on land use and planning that would result from implementation of the proposed project, including an evaluation of consistency with relevant plans and programs that have jurisdiction within the project area and those related to the Sphere of Influence (SOI). The evaluation includes a discussion of the proposed project compatibility with surrounding land uses, and provides mitigation measures that would reduce these impacts, as appropriate. The following analysis of the potential environmental impacts related to land use and planning is derived primarily from the following sources and agencies:

- Nevada City Housing Element
- Nevada City 2017 Annexation Plan
- Nevada City Zoning Ordinance
- Nevada County General Plan
- Nevada County LAFCo Policies

The following section discusses the existing land uses on the project site, in the vicinity surrounding the proposed project area, and as applicable within the region as a whole. The discussion includes a description of the land use conditions, such as type of use and the densities of development that could influence land use compatibility and result in land use conflicts.

### 4.8.1 ENVIRONMENTAL SETTING

#### Regional Location

The City of Nevada City (City) is the County seat of Nevada County (County) and is in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, CA. Nevada County is bounded by the Middle Fork of the Yuba River and Sierra County on the north, the state of Nevada to the east, the Bear River and Placer County to the south, and Yuba County to the west. Nevada County's total land area is approximately 978 square miles and has an estimated total population of 99,155 people of which 66,207 people live in unincorporated areas and 32,948 people live in the three incorporated cities. The three incorporated cities include Grass Valley with 13,041 people, Truckee with 16,681 people, and Nevada City with 3,226 people [California Department of Finance (CDOF), 2018]. *Figure 3-1: Regional Location Map*, shows the position of the Nevada City in the County and northern California and in relation to the surrounding counties. *Figure 3-2: Vicinity Map* shows Nevada City in relation to other cities, towns, and major roadways in the vicinity of the project area. Urbanization within the County is primarily located within these three City centers and consists of residential, commercial, industrial, and other uses typical of small cities. The majority of land uses and housing outside the incorporated cities generally consists of low density and rural residential, open space, undeveloped land, agricultural uses and intermittently located commercial and industrial uses.

The major transportation routes that provide regional connectivity through the City is the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49) which through the City are joined. SR-20 and SR 49 are the major connectors through the City and to points east. SR-49 provides access to the northwesterly areas of the City and SOI west from the SR-20/SR-49/Uren Street Intersection. SR-20\49 connects Nevada City to the City of Grass Valley approximately four miles to the southwest.

## Local Vicinity

Nevada City was founded in 1850 and incorporated on April 19, 1856. Nevada City started as a gold-mining community one hundred and fifty (150) years ago and is now characterized as a modern city but still with modest cottages and Victorian houses and classic brick buildings. The City is located within a basin on the western slope of the Sierra Nevada and has a unique topography with hills and valleys and aesthetic and scenic quality. The town is located in a natural “bowl” giving the impression that the historic mining town is compact as it is surrounded by hills and trees (Nevada City, 2017). Nevada City is focused on maintaining its identity as an entertainment, cultural, social, and recreational center based on its history and surrounding environment.

Residential development within the City boundaries is predominantly single-family and exists within an approximate 30-acre area on the westerly side of SR 20 that takes primary access from Broad Street. The City boundaries are generally surrounded by rural residential development and undeveloped coniferous forest. These areas extend from the City boundary in all directions and are included in the proposed City SOI. These unincorporated lands are primarily designated and developed for residential uses and are discussed in additional detail under the *Project Site*, heading immediately below.

## Project Site

The SOI Plan update area encircles the City. The City’s jurisdictional boundaries include approximately 1,470 incorporated acres (2018 Nevada County GIS data) and the current SOI (exclusive of the incorporated area) includes approximately 2,702 acres. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, police, fire protection, and recreation and park services. Based on the existing roadways and landscape, the surrounding uses are described in four general directions including southeast, northeast, northwest, and southwest. With the exception of the City of Grass Valley to the south, land in all directions consists of unincorporated county land. The land uses patterns within the SOI are discussed in additional detail below. Land uses are separated into quadrants delineated by major roadways and landmarks. Due to the lack of completely uniform development these areas are generalized and shown on *Figure 3-3: Generalized Land Use Areas*.

**Southeast** – This portion of the proposed SOI area is located to the east of SR 20\49 and community of Town Talk. This area is primarily accessed via Pittsburg Road, Granholm Lane, Gracie Road, and Banning Way as well as local and neighborhood roads that provide access to the interior rural residential uses. The moderately hilly landscape provides some distant views and is thickly vegetated by tall trees and dominated by species of evergreen. Commercial development in this area is limited and largely adjacent

to SR-20 and consists of a nursery, child development center, and construction yard. Within the northeastern portion of this quadrant is a self-storage facility and Nevada County Sportsmen's Club.

***Northeast*** – This portion of the proposed SOI area is located east of the existing City boundary and southeast of northerly portion of SR-20. This area is primarily accessed via Red Dog Road, Willow Valley Road, as well as local and neighborhood roads that provide access to interior land uses areas. Similar to the southeastern quadrant, land uses typically consisting of low density rural residential, which are situated in hilly tree-covered terrain. Commercial development in this area is minimal. Due to the variation in elevation, some distant views are afforded through breaks in the tree and vegetative canopy.

***North and Northwest*** – This portion of the proposed SOI area is located west of SR-20\49 and northerly of SR-49. From this intersection SR-49 trends westerly through the City into the proposed SOI area and unincorporated County Land. This area is primarily accessed via Coyote Street, North Bloomfield Road, Wethill Road/Indian Flat Road, and Cement Hill Road, as well as local and neighborhood roads that provide access to interior areas. Residential land uses in this portion of the proposed SOI consist of predominantly low density residential and rural residential uses with limited commercial and industrial uses. Within this area is the Nevada County Consolidated Fire District, and the topography is more varied lower valleys including a small lake, to the approximate 3,070 Sugarloaf Mountain and the hill leading to the "Old Airport Property" at a height of 3,100 feet.

***Southwest*** – This portion of the SOI area is located south of SR-49, west of the City boundary and northwesterly from SR-20 and Town Talk. This area is primarily accessed via, Champion Mine Road on the north and Ridge Road on the south. The central portion of this area is strongly characterized by Deer Creek which flows in a meandering westerly direction and the Deer Creek Tribute Trail which provides for some recreational opportunities. Residential areas consist of rural residential uses, and other areas are undeveloped, heavily forested and have elevation changes of a few hundred feet which provides for some distant views through breaks in the vegetation.

## Project Background

Over the last two years, the City and LAFCo have worked together and developed the LAFCo/City Preferred Consensus Alternative (Consensus Alternative). This annexation strategy was prepared as a compromise proposal for the 2017 City Annexation Plan. This Consensus Alternative has been designated as the Preferred Project Alternative for the purposes of this EIR. Therefore, while the proposed project is the SOI Plan update, the EIR describes and evaluates how the Consensus Alternative differs from the 2017 City Annexation plan in that it would remove some of the lands included in the 2008 SOI boundary also reflected in the 2017 City Annexation Plan. However, the Consensus Alternative does include four areas designated for priority annexation. The priority annexation areas are termed Annexation Area #1, Annexation Area #2, Annexation area #3, and Annexation Area #4.

### ***Priority Annexation Areas***

***Annexation Area 1*** - is located just south of the City adjacent to SR 20. Annexation Area #1 consists of a northerly and southerly area separated by approximately 500 feet. In sum, the areas total 16.63 acres.



The northerly location is a triangular-shaped parcel approximately 5.29 acres in size and is generally bound by SR 20 to the west, Gold Flat Road to the north, and is accessed by Granholm Lane to the south. The second parcel is approximately 11.34 acres in size and is bound by SR 20 to the west and undeveloped lands to the north, east, and south. Existing land uses on this site includes the California Department of Transportation facility (currently connected to City sewer), the Prospector's Nursery, and the Little Friends Child Development Center, along Gold Flat Road.

The following Tables, *Table 4.8-1* through *Table 4.8-4*, lists the Annexation Areas and associated parcel numbers, Nevada County General Plan designation, zoning designations, and acres.

**Table 4.8-1: Annexation Area #1 Parcel Data and Land Use Designation**

APN number:	Address	County General Plan	County Zoning	Acres
035-230-033	10114 Granholm Lane	PUB	P	1.5
035-230-035	10057 Gold Flat Road	PUB	P	8.03
035-230-036	10266 Granholm Lane	PUB	P	1.1
035-230-037	10310 Granholm Lane	CC	C2	0.71
035-240-009	10003 Granholm Lane	CC	C2 and OS-SP	5.29
<b>Total:</b>				<b>16.63</b>
Abbreviations: General Plan: PUB = Public, CC= Community Commercial, Zoning Districts: P=Public, C2= Community Commercial, OS-SP= Open Space, RA-3-PD = Residential Agriculture				

**Annexation Area #2** - is located in the northwestern part of the City adjacent California State Route 49 (SR 49). Annexation Area #2 is approximately 86 acres in size and is generally bound by SR 49 on the north, the existing City Boundary to the east, American Hill Road to the south, and Constitution Court to the west. Annexation Area #2 consists of three parcels and the land uses includes the County Juvenile Hall (currently connected to City sewer), and two adjacent and vacant County-owned properties, located south of Hwy 49.

**Table 4.8-2: Annexation Area #2 Parcel Data and Land Use Designations**

Parcel	Address	County General Plan	County Zoning	Acres
005-050-032	15405 Kahele Court	EST	RA-3 -PD	21.7
005-050-028	15380 Kahele Court	EST	RA-3 -PD	1.56
005-050-015	15434 State Highway 49	EST	P	10.09
<b>Total:</b>				<b>33.35</b>
Abbreviations: General Plan: EST = Estate Zoning Districts: P=Public, RA-3-PD = Residential Agriculture				

**Annexation Area #3** - is located in the northeastern part of the City and is approximately 33 acres in size. Annexation Area #3 is generally bound by Willow Valley Road to the north, undeveloped land to the east and south, and the existing City Boundary to the west. Annexation Area #3 consists of 20 parcels, but does not include the former County Health Education and Welfare (H.E.W.) Building (now privately owned and currently connected to City sewer) and the Nevada Cemetery District offices along Willow Valley Road. The parcels are privately owned and three of which are connected to the City sewer system.

**Table 4.8-3: Annexation Area #3 Parcel Data and Land Use Designation**

Parcel	Address	County General Plan	County Zoning	Acres
036-310-008	10369 Willow Valley Road	EST	RA-3	0.27
036-310-044	14700 Harter Place	EST	RA-3	1.15
036-310-046	14649 Harter Place	EST	RA-3	1.02
036-310-045	14648 Harter Place	EST	RA-3	1.12
036-310-012	14597 Harter Place	EST	RA-3	1.26
	14599 Harter Place			
036-310-011	14594 Harter Place	EST	RA-3	0.6
036-310-010	14612 Harter Place	EST	RA-3	0.4
	14514 Harter Place			
036-310-036	10349 Willow Valley Road	EST	RA-3	0.63
036-310-055	10317 Willow Valley Road	EST	RA-3	0.9
036-310-056	14715 Pear Tree Lane	EST	RA-3	1.0
036-310-064	14663 Pear Tree Lane	EST	RA-3	1.49
036-310-058	14607 Pear Tree Lane	EST	RA-3	2.0
036-310-066	14648 Pear Tree Lane	EST	RA-3	1.61
036-310-072	10297 Willow Valley Road	EST	RA-3	0.44
036-310-071	10285 Willow Valley Road	EST	RA-3	0.36
036301047	10364 WILLOW VALLEY RD	EST		0.73
036301046	10340 WILLOW VALLEY ROAD	EST		0.62
036301045	10322 WILLOW VALLEY ROAD	EST		0.60
036301044	10304 WILLOW VALLEY ROAD	EST		0.56
<b>Total:</b>				<b>16.76</b>
Abbreviations: General Plan: PUB = Public, EST= Estate Zoning Districts: P=Public, RA-3 = Residential Agriculture				

**Annexation Area #4** - is located in the northeastern part of the City and is approximately 23 areas in size. Annexation Area #4 is generally bound by Red Dog Road on the north, Park Avenue on the east and south, and the City boundary to the west. Annexation Area #4 contains 22 parcels and land uses include a cemetery that fronts on Boulder Street and Park Avenue Extension and 18 intervening privately owned properties.

**Table 4.8-4: Annexation Area #4 Parcel Data and Land Use Designation**

Parcel	Address	County General Plan	County Zoning	Acres
036-330-010	10585 Boulder Street	PUB	P	0.2
036-330-011	10577 Boulder Street	PUB	P	0.32
036-330-009	10546 Red Dog Road	PUB	P	1.85
036-330-013	10580 Red Dog Road	PUB	P	0.99
036-360-025	10563 Red Dog Road	PUB	P	6.11
036-360-026	10563 Red Dog Road	PUB	P	2.23
036-360-024	10529 Boulder Street	EST	RA-5	0.5
036-360-022	10519 Boulder Street	EST	RA-5	0.5
036-360-023	10523 Boulder Street	EST	RA-5	1.01
036-360-016	10338 Park Avenue Extension	EST	RA-5	1.0
036-360-015	10314 Park Avenue Extension	EST	RA-5	0.3
036-360-010	10465 Boulder Street	EST	RA-5	1.92

**Table 4.8-4: Annexation Area #4 Parcel Data and Land Use Designation**

Parcel	Address	County General Plan	County Zoning	Acres
036-360-007	10455 Boulder Street	EST	RA-5	0.2
036-360-006	10443 Boulder Street	EST	RA-5	0.3
036-360-005	10433 Boulder Street	EST	RA-5	0.13
036-360-004	10417 Boulder Street	EST	RA-5	0.43
036-360-003	10407 Reef Point	EST	RA-5	0.1
	10409 Reed Point			0.1
036-360-011	11405 Reef Point	EST	RA-5	0.12
036-360-012	11055 Reed Point	EST	RA-5	0.19
036-360-014	10338 Park Avenue Extension	EST	RA-5	0.92
036-360-013	10246 Park Avenue Extension	EST	RA-5	2.18
036-360-008	10491 BOULDER STREET	EST		0.78
<b>Total:</b>				<b>22.38</b>
Abbreviations: General Plan: PUB = Public, EST= Estate, Zoning Districts: P=Public, RA-5 = Residential Agriculture				

### Exclusion Areas

In addition to the Priority Annexation areas, through consultation with the City, the Consensus Alternative includes five exclusion areas. The exclusion areas would occur in five pockets surrounding the City and are recommended for removed from the SOI. The area encompassed by the exclusion areas is included by the current SOI and are discussed as part of City Recommendation Alternative. The exclusion areas are described in *Table 4.7-5 – Summary of Exclusion Areas*:

**Table 4.8-5: Summary of Exclusion Areas**

Area	Location	Parcels	Characteristics
Airport/Cement Hill Road	West of the Airport property (a non-contiguous portion of the City). These parcels are located off Cement Hill Road	7	All parcels are designated Estate. Four are developed.
N. Bloomfield Road	Intersection of N. Bloomfield and Lake Vera Roads	34	All parcels are designated Estate. Only one is undeveloped.
Red Dog Road	East of current City boundary, including lands north and south of Willow Valley Road and north of Red Dog Road	63	All parcels designated for residential use, including Estate and Residential General Plan designations. 56 parcels are developed and 7 are undeveloped.
DS Canal/Pittsburgh Road	South of the current City boundary. These parcels are located south of the DS Canal and north of Pittsburgh Road.	111	Most parcels designated Residential, several are designated Estate and 2 are designated for open space. 87 parcels are developed and the remaining 24 are unimproved. At least 3 are owned by the federal government (including the two Open Space properties).

**Table 4.8-5: Summary of Exclusion Areas**

Area	Location	Parcels	Characteristics
Eden Ranch	West of current city boundaries and south of State Route 49 near Old Downieville Road.	80	Most parcels designated for residential use (one is designated O.S.). Includes a small residential development project with public sewer service provided by the County Sanitation District. 58 parcels are developed, and the remaining 22 are undeveloped.

## Land Uses and Services

### ***Federal Lands***

The BLM Administrative Unit Field Office Boundary: Mother Lode Field – The BLM Mother Lode Field Office manages over 230,000 acres of public land in Central California. These lands are scattered within Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, Sacramento, Stanislaus, Tuolumne and Yuba counties.

Within Nevada County and the SOI Plan update area, there are six general areas under BLM jurisdiction. *Table 4.7-6 – Federal Land Parcel Information*, provides a summary of these areas.

**Table 4.8-6: Federal and State Land Parcel Information**

Parcel	Agency	Address	County General Plan	County Zoning	Acres
<b>Two Parcels Between Palisade Drive and Pinewood Road</b>					
037-070-010	BLM	12555 Palisade Drive	E	E	4.62
037-070-011	BLM	12670 Pinewoods Road	E	E	12.88
				<b>Sub-Total:</b>	<b>17.5</b>
<b><i>Vicinity of Gracie Road and Banner Mountain Trail<sup>1</sup></i></b>					
037-080-008	BLM	14108 Gracie Road	OS	OS	2.7
037-080-007	BLM	14107 Gracie Road	OS	OS	0.74
037-080-009	BLM	14034 Gracie Road	OS	OS	5.88
037-080-002	BLM	13804 Gracie Road	OS	OS	13.64
037-080-054	BLM	11297 Banner Mountain Trail	OS	OS	34.68
037-010-012	BLM	11130 Banner Mountain Trail	OS	OS	23.75
037-090-017	BLM	11485 Banner Mountain Trail	OS	OS	48.68
				<b>Subtotal</b>	<b>130.07</b>
<b><i>Vicinity of Red Hill Canal Road</i></b>					
004-060-015	BLM	10625 Cement Hill Road	OS	OS	13.37
004-060-086	BLM	10626 Cement Hill Road	OS	OS	11.57
004-060-016	BLM	None	OS	OS	2.64
				<b>Subtotal</b>	<b>27.58</b>

**Table 4.8-6: Federal and State Land Parcel Information**

Parcel	Agency	Address	County General Plan	County Zoning	Acres
<i>Adjacent to Downieville Highway</i>					
005-100-094	Other Federal Land	16010 American Hill Road	Rural	Rural	4.88
005-100-034	Other Federal Land	15867 Old Downieville Highway	OS	OS	2.99
004-151-057	Other Federal Land	16411 Champion Road	OS	OS	5.94
				<b>Subtotal</b>	<b>13.81</b>
<i>Granholt Lane and Gold Flat Road</i>					
035-230-035	CalTrans Site	10057 Gold Flat Road	P	P	8.03
035-230-036	CalTrans Site	10266 Granholt Lane	P	P	1.1
035-230-037	CalTrans Site	10310 Granholt Lane	P	P	0.71
				<b>Subtotal</b>	<b>9.84</b>
<i>Providence Mine Road</i>					
035-210-069	Division of Forestry	102 Ridge Road	P	P	4.93
035-210-068	Division of Forestry	None	P	P	0.64
005-220-014	Division of Forestry	400 P Street Ste 3110	P	P	2.48
				<b>Subtotal</b>	<b>8.05</b>
				<b>TOTAL</b>	<b>206.85</b>
<sup>1</sup> Two additional BLM parcels are attached but are located outside the existing SOI area (037-280-002 14471 Gracie Road 41 acres, and 037-280-004 14456 Gracie Road 8.5 acres). Abbreviations: General Plan: EST = Estate Zoning Districts: P=Public, RA-3-PD = Residential Agriculture Source: Nevada County My Neighborhood GIS, 2019.					

## 4.8.2 REGULATORY SETTING

The following discussion provides an overview of the Federal, State, and local regulatory and policy documents that are applicable to the proposed project.

### Federal

There are no federal regulations related specifically to land use issues associated with the SOI Plan update. Certain federal regulations that are applicable to the proposed project, such as for air quality, biological resources and cultural resources, are discussed in the respective Chapters of the EIR.

### State

#### *California Environmental Quality Act*

CEQA establishes that a significant effect on the environment involves an adverse change to the physical environment. Pursuant to the State *CEQA Guidelines*, a project's impact related to land use planning is evaluated in terms of physically dividing an established community, compatibility with existing land uses

and consistency with local plans and other local land use controls (i.e., general plans, zoning codes, specific plans, etc.) such that if conflicts do exist, would the conflict result in a significant environmental impact. This is discussed in additional detail in the methodology and impacts section below.

### ***California Government Code Section 6586021***

California Government Code Section 6586021 requires zoning to be consistent with an agencies' general plan. Consistency with the general plan is possible only if the local government, in this case the City of Nevada City uses the General Plan 1980-2000 Nevada City, California. The land uses authorized in the City's Municipal Code must then be compatible with the objectives, policies, general land uses, and programs specified in the General Plan. Both the General Plan and Municipal Code are discussed in detail in the Local regulatory setting below.

### ***Cortese Knox Hertzberg Local Government Reorganization Act***

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKHA) of 2000 establishes procedures for the establishment, updating, or amendments to a SOI. The Nevada County LAFCo is responsible for implementing the CKHA at the County level and is the agency responsible for the approval of the proposed SOI Plan update. In part, the CKHA is intended to discourage urban sprawl and encourage orderly development through use of the LAFCo agencies to ensure annexations are sensitive to local conditions, future needs and demands of the jurisdictions, and environmental considerations.

## **Local**

The SOI Plan update is subject to several local planning documents and programs that have varying degrees of regulation over use of developments within the City, and SOI Plan update area. This includes the Nevada County General Plan for unincorporated areas and the City General Plan and Nevada City Zoning Ordinance, which would be applicable to areas as they are annexed and related to annexation procedures. Lastly, LAFCo has certain policies and laws it must conform to related to the regulation of orderly annexations. The pertinent policies and guidance contained in these documents is discussed in additional detail below.

## **Nevada City General Plan**

California Government Code Section 65300 requires every city and county in California to adopt a comprehensive, long-term General Plan for the physical development of the jurisdiction. A General Plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a General Plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content.

Nevada City General Plan (NCGP) was adopted March 24<sup>th</sup>, 1986 and later updated to incorporate resolution 2009-49 (land use element) and Sphere of Influence boundaries map dated October 8, 2008 and the 2019-2027 Housing Element adopted December 2019. The overall purpose, as stated in the NCGP, is to preserve the existing essential character of Nevada City. Using policies to guide land uses and

City actions, the General Plan directs land uses based on four major principles that include: 1) Preserve the Sense of Wooded Enclosure; 2) Enhance the Historic Core; 3) Reinforce Existing Commercial Concentrations; and 4) Create Opportunities for Employment and Revenue Generators.

To organize development, the General Plan includes a total of 14 land use designations that are currently applicable to the lands within the City boundaries. The City has also applied some of these land use designations to areas within the existing 2008 General Plan land use map. Because the areas are not formerly incorporated to the City, the City does not have direct approval over what occurs in these County lands. The designations; however, do provide a vision for future development should they be annexed to the City as development applications and project approvals are made.

*AF – Agriculture Forestry* – Farmland, timberland, and other areas suitable for only very rural uses (5-acre minimum lot size)

*R – Rural* – Areas outside of projected public service boundaries that should remain very low-density agriculture and/or residential use. (Maximum 1 dwelling unit/1-5 acres)

*E – Estate* – Areas outside of projected public service boundaries that should remain very low density or agriculture and/or residential use. (Maximum 1 dwelling unit/1-3 acres).

*SF – Single Family* – Historic or other sensitive single-family neighborhoods inappropriate for increased densities (Maximum 4 dwelling units/acre).

*UHD – Urban high-density Multiple family* – The UHD land use designation is intended to accommodate up to 16 units per acre. UHD is intended to accommodate town house style units, apartment and condominiums without distinction as to owner or renter occupancy. The primary purpose of the UHD land use designation is to fulfill the Housing Element needs to provide adequate sites to accommodate the City’s regional housing requirements.

*MF – Mixed Residential* – Areas suitable for increased housing density by such means as smaller lot sizes, planned unit development, townhouse, or garden apartment site plans (Maximum 8 dwelling units/acre).

*GC – General Commercial* – Business and service-oriented to community-wide or tourist needs, within the inclusion of mixed residential uses, and while complementing the nature and scale of Nevada City’s central business district.

*SL – Service Lodging* – Existing hotels, motels, and lodging facilities location outside of service areas suited for future lodging facilities. Based on future zoning ordinance implementation, this designation could include use permit or other provisions for conference or convention facilities and/or other visitor supported land uses.

*EC – Employment Commercial* – Light commercial or light industrial development concentrations which address the city’s need for jobs and revenue, but which do not harm the essential visual character of “historic town surrounded by open forest,” and which remain sensitive to established neighborhoods.

This designation is intended to include existing light industrial development and future development opportunities. Future zoning and development under this designation should fall within the following different categories, based on zoning and/or site plan review considering the nature of the neighborhood and surrounding areas<sup>1</sup>.

*PD – Planned Development* – Large ownerships or other special opportunities for clustering or mixed-use development. PD classifications allow more creative solutions to provision of open space and amenities than to the standard setback, coverage, and height requirements<sup>2</sup>.

*OP – Office & Professional* -Professional offices, general business office and research and development facilities not oriented toward general retail sales located in area of transition between residential and more intensive land uses and/or where traffic access and circulation is good, but not sufficient for retail commercial. The OP land use designation is also ideal for mixed use residential uses to provide both short and long-term employee housing while advancing the residential-office transition.

*SC – Service Commercial* – Shops and services catering to the day-to-day needs of nearby residents. Mixed residential uses are also encouraged (analogous to Local Business Zoning Classification).

*P/R – Public/Recreation* - Areas for public use, providing recreational facilities by public entities.

*P – Public* – Sites or facilities intended to remain in long-term public use.

*OS – Open Space Preserve* – land of high scenic, recreational, and/or resource value in an essentially unimproved state.

### ***Implementation of the General Plan***

The NCGP provides Long range comprehensive policy guidance for the development of Nevada City and its eventual extensions. To help ensure development within the City is orderly and occurs contiguously, the NCGP includes a description of the development approval process which notes that development applications should include the following:

- Proposed Land uses, quantity and/or density;
- Outline of needed sewer, water, drainage, and circulation infrastructure both on-site and offsite;
- Demand for other community facilities; and
- Estimated cost of the services and facilities.

The NCGP notes that the environmental review process, mandated by the state, can be a good means for the City to achieve goals, especially if it is begun early in the planning process. It is noted that potential

<sup>1</sup> Subcategories of the EC designation is available in the General Plan.

<https://www.nevadacityca.gov/pview.aspx?id=20707&catid=0>

<sup>2</sup> Additional detail regarding PD designations is available in the General Plan.

<https://www.nevadacityca.gov/pview.aspx?id=20707&catid=0>



harmful effects of a project should be identified as early as possible in order to allow for avoidance or mitigation. Other tools used by the City in accordance with the NCGP include design review, specific plans, and an annexation program.

To guide development, the NCGP also has numerous objectives and policies. Those related to development and annexation are as follows:

#### Objectives

- Foster a compact rather than scattered development pattern in order to preserve the existing impression of a tightly clustered, fine-grained core with tree-covered, rural surroundings, to prevent “strip” development along the highways, and reduce the extent and cost of public services.
- Determine appropriate use for land in Nevada City on the basis of the following criteria:
  - o Physical characteristics (slope, soils, vegetation, visual sensitivity, accessibility, etc.)
  - o Priority level (first priority for annexation are areas already on public services; second are areas within planned extensions of public services)
  - o Special resource or landmark significance implying consideration for open space or public use (e.g., Sugar Load Reservoir and Bowl, Old Seven Hills School properties).

#### Policies

- Do not permit urban density uses beyond the SOI boundary as shown on the land use plan.
- Encourage urban-type development to occur as infill within the City. Urban-type development in county territory in most cases is inconsistent.
- Designate additional urban land only when it is clearly demonstrated that the supply in a particular area is insufficient to permit a reasonable choice of sites for new development of desired uses, and that scattered development will not occur.
- Change specific land use designations only after it has been determined that the change enhances eventual achievement of the objectives, policies, and the plans of the General Plan, and that it will serve a public purpose in making such a change.
- Land Use- Establish General Plan classifications of adequate variety and specificity to guide further elaboration by means of zoning and other implementation methods.

## **Nevada City Zoning Ordinance**

The Nevada City Zoning Ordinance is Title 17 – Zoning of the Nevada City Municipal Code of 2007. As described in Section (§) 17.04.010, the zoning ordinance for the City is a precise and detailed plan for the uses of land based on the NCGP for the City and enacted in order to promote the public health, safety, comfort and general welfare throughout the City. The Zoning Ordinance establishes various zone districts, which specifies among other things, where it is allowable to construct, alter or maintain certain buildings, use certain lands and consists of appropriate regulations to be enforced in the applicable zones. According

to the NCGP, the zoning ordinance is the single most useful tool for carrying out the General Plan. The Zoning ordinance includes specification related to development including allowable uses, parcel size, structure height, coverage, and setbacks. The Zoning ordinance describes the intent and evaluation criteria for projects. By state law, zoning must be consistent with the General Plan.

Chapter 17.100- Annexations discusses the City requirements regarding the annexation process. This includes a requirement to prezone the land with certain exceptions related to size, if the land is already developed, if the annexation of the subject area was previously analyzed in an EIR and mitigation proposed, or if the annexation is needed to protect public safety. Related to environmental review, Chapter 17.100.030 specifically requires that all annexations, including exceptions, undergo environmental review in accordance with current procedures of the City and to meet CEQA requirements.

The Zoning Ordinance established base zoning districts and combining districts are discussed below.

### ***Base Zoning District***

*AF – Agriculture Forestry* - The purpose of the AF zone is to preserve in agricultural and forestry use in the urban fringe, land suited to eventual development in other uses, pending proper timing for the economical provision of utilities, major streets and other facilities, so that compact, orderly development will occur. Change of zoning from AF to any other zone shall only be made in general accord with the Nevada City General Plan. This zone is consistent with all residential general plan designations.

*RR- Rural Residential* - The purpose of the RR zone is to stabilize and protect the residential characteristics of district and to promote and encourage a suitable environment for family. The rural residential zone is intended to be used only for single-family and services appurtenant thereto. This zoning district is consistent with residential General Plan designations, except agriculture/forestry and rural.

*R1 – Single Family Residential*- The purpose of the R1 zone is to stabilize and protect the residential characteristics of district and to promote and encourage a suitable environment for family. The R1 zone is intended to be used only for single-family homes and service appurtenant thereto. This zoning district is consistent with the single-family and mixed residential General Plan designations.

*R2 – Multiple Family Residential*- The purpose of the R2 multiple-family residential zone is to stabilize and protect the residential characteristics of a district where a compatible mingling of single-family dwellings and multi-family dwellings is likely to occur, and to promote and encourage a suitable environment for family life. The R2 zone is intended for residence and the community services appurtenant thereto. This zoning district is consistent with the mixed residential general plan designations.

*R3- High Density Multiple Family Residential* - The purpose of the R3 high density multiple-family residential zone is to implement the general plan urban high-density land use designation. The primary purposes are to provide lands where greater density to accommodate affordable housing sites as required by the housing element. Suitable lands shall contain public sewer service, a public water supply, dry utilities, and have frontage on an improved city street with adequate capacity. To the extent possible, selected sites should be within walking distance of schools, shopping, parks and located on or in close

proximity to a public transit route. Having access to such city services and facilities will minimize development costs and daily living expenses.

*OP – Office and Professional* - The OP zoning district is established to accommodate the need for the development of office space and mixed-use residential uses. The inclusion of mixed use residential land uses in commercial areas is encouraged to increase the area's population and pedestrian activity while reducing air pollution, energy consumption and transportation costs. Normally this zoning will serve as a transition between commercial areas and residential areas and it is intended that the development permitted by this zoning shall be designed and landscaped so as to be in harmony with adjacent residential uses. This zoning district is consistent with the Office and Professional, General Commercial, and Service Commercial land use designations of the General Plan.

*LB – Local Business* - The purpose of the LB zone is to provide a neighborhood shopping zone where retail business or service establishments supply commodities or perform services to the daily needs of the residential neighborhoods or to meet the unique commercial demands placed upon Nevada City. This district is intended to allow most uses which are primarily involved in conducting retail sales and can accommodate mixed use residential uses. The inclusion of mixed use residential land uses in commercial areas is encouraged to increase the area's population and pedestrian activity while reducing air pollution, energy consumption and transportation costs. This district is consistent with the Service Commercial General Plan designation.

*GB – General Business* - The purpose of the GB zone is to provide a location for the sale of commodities, performance of services, repair facilities, tourist-oriented sales, and other types of general enterprise. The GB zone can also accommodate mixed use residential uses. The inclusion of mixed-use residential land uses in commercial areas is encouraged to increase the area's population and pedestrian activity while reducing air pollution, energy consumption and transportation costs.

*EC – Employment Center* - The purpose of the EC zone is to encourage the development of light assembly, manufacturing, and research and development uses, which are compatible with surrounding neighborhoods and environment. Permitted uses shall be primarily employment oriented, with incidental retail sales permitted with approved uses. This zone shall be consistent with the Employment Center designation of the General Plan.

*LI- Light Industrial* -The purpose of the LI zone is to encourage sound industrial development of the non-nuisance type by providing and protecting an area for such development, which area in turn shall be compatible with adjoining nonindustrial uses. This zoning district is consistent with the Employment Center General Plan designation.

*SL – Service Lodging* - The purpose of the SL zoning district is to provide for and encourage the continuation, enhancement, and development of hotels, motels, and bed and breakfast facilities, together with incidental uses to these facilities. This zoning district is consistent with the Service Lodging, Service Commercial, General Commercial, and Employment Center designations of the General Plan.

OS – Open Space - The purpose of the OS zoning district is to provide for and encourage the creation and permanent maintenance of open space, both natural and landscaped, for the purposes of maintaining and enhancing aesthetics, recreational opportunities, resource management, public health and safety, and mitigation of development. This zoning district is consistent with all General Plan designations.

P – Public - The purpose of the P zoning district is to provide zoning for areas occupied by federal, state, county and city government uses, along with recreation areas and parks, cemeteries. This district is also intended to accommodate quasi-public and public utility uses, along with uses incidental to public services. This zoning district is consistent with all General Plan land use designations.

PR – Public/Recreation - Public/recreation zoning provides for public use with development limited to providing recreational facilities by public entities for the use of the general public. Up to twenty-five percent of such property including parking areas of such property may be utilized for compatible public uses such as a school, fire station, library, community center or other similar public service uses.

SC – Scenic Corridor - The SC scenic corridor district classification is intended to be applied to land areas which are adjacent to roads and highways which are indicated on the General Plan with the symbol for scenic corridors, and as may be designated by the city council from time to time. These roadways are generally entryways to Nevada City which were recognized in the General Plan as being particularly important to protect the existing essential character of Nevada City, namely that of a small, compact historical town surrounded by green, wooded hills, by hiding development from view from the highways and preserving the existing tree cover to the greatest extent possible and assuring visually pleasing corridors through design control.

### ***Combining Districts***

The Zoning Ordinance also include combining districts which incorporate characteristics of more than one zone. The purpose of the combining district regulations is to provide additional development standards for selected special cases to achieve the desired level of development standards and land use application processing. Combining districts that would be applicable to the proposed project include the following:

PD – Planned Development - The purpose of the PD planned development combining district is to provide for greater flexibility in the design of integrated development in context with the general character of the city which would not be otherwise possible through strict interpretation or application of district regulations. It is the intent of this section to encourage the design of well-planned facilities which offer a variety of housing or other land uses through creative and imaginative planning, which may be reviewed under the conditional use permit process. The standards and regulations of this combining district may be utilized in reviewing the proposed development of any property having the "-PD" combining district attached to the base zoning district. When shown on the Zone District Map, the regulations herein are encouraged to be utilized during the development of vacant lands.

AN – Annexation - The AN Annexation combining district is intended to be attached to the base zoning districts of parcels annexed after April 24, 1985. The district is administrative in nature and the city staff is authorized to attach the combining district to any such annexed lands. The purpose of the combining

district is to identify lands which are affected by ordinances requiring payment of development fees or other mitigation measures, so that such fees or conditions may be required at the time of site plan, conditional use permit, or land division approval. Such fees shall be payable prior to the issuance of a building permit or prior to the recording of the final or parcel map, whichever occurs first.

### ***Nevada County General Plan***

Nevada County's General Plan is the long-term policy guide for the physical development of the County. The County views the General Plan as its constitution for the physical use of the County's resources and the foundation upon which all land use decisions are made. The General Plan expresses the community's development goals and embodies public policy relative to the distribution of future public and private land use. In addition to providing overall guidance for County development, the Nevada County General Plan also makes allowances for annexations and includes the following:

- Policy 1.8.4*** - For all discretionary projects within a City's/Town's sphere, the County shall first request that the City/Town determine whether or not it desires to annex the project. If the City/Town does desire annexation, the applicant will be directed to the City/Town. If the City/Town does not desire annexation, the application will be referred to the City/Town for review and comment.
- Policy 1.8.9*** Provide for a comprehensive and equitable distribution of revenues for all annexations; and
- Policy 1.8.10*** The County will actively pursue formal arrangements and share annexation revenues with the Cities/Town based upon the cost of providing facilities and services in the annexation area.

Nevada County Land Use designations within the SOI Plan update area include the following:

***Estate, EST*** – is intended to provide for low-density residential development at a minimum lot size of 3 acres per dwelling unit in areas which are essentially rural in character but are adjacent to Community boundaries or near Community Regions and therefore are more accessible to shopping, employment and services. In keeping with the rural character, agricultural operations and natural resource-related uses, including the production of timber, are also appropriate in this designation.

***Open Space, OS*** – is intended to provide for land, primarily in public ownership, which is dedicated to recreation, resource and habitat preservation, and protection of environmental resources, and which typically allows only recreation or very low-intensity limited uses, such as, but not limited to, visual corridor preservation, interconnecting wildlife corridors, slope protection, preservation of ditches, railroad rights-of-way, historic trails, agriculture, and timber production. This designation shall also provide for the designation of land in private ownership which is permanently devoted to open space through clustering or other open space requirements.

***Residential, RES*** – is intended to provide for lower density single-family residential uses at densities at a minimum lot size of 1.5 acres per dwelling unit in locations within or adjacent to Community Regions where limited services such as either public water and sewer (but not both) are available; or to reflect existing development patterns or where provision of transition from more intensive urban uses to less

intensive rural uses is desirable. In keeping with the rural character, agricultural operations and natural resource-related uses, including the production of timber, are also appropriate in this designation.

*Public, Pub* – is intended to provide for land in public or quasi-public ownership, including cemeteries, schools and other public and quasi-public buildings and uses in locations which are necessary to provide services to Community Regions and Rural Regions.

*Planned Development, PD* – is intended to designate planned developments in locations where a mix of uses is desirable. The "PD" designation may allow a variety of land uses, including single-family and multi-family, residential, continuing care retirement communities, commercial, industrial, open space, and/or other land uses consistent with the capability and constraints of the land. Primary emphasis shall be placed on clustering intensive land uses to minimize impact on various natural and manmade resources, minimize public health concerns, and minimize aesthetic concerns.

*Recreation, REC* – is intended to provide for a wide range of recreation uses and supporting services. Such uses may include destination resorts, including country clubs; ski resorts; golf clubs and golf courses; marinas; campgrounds providing a full range of services; and other similar uses. Because such uses are likely to attract significant vehicular trips, such uses should be in close proximity to a major highway or arterial road, but with controlled or indirect access. Also, such uses may have significant impact on environmental resources and require careful site design and development. Therefore, a comprehensive master plan for the entire site shall be required prior to approval of development.

*Industrial, IND* – Industrial (IND) is intended to provide for areas in which goods are produced, distributed and warehoused, along with supporting business and service uses. Locations within this designation should be able to provide buffering from adjacent land uses to minimize incompatibility, and should have convenient, controlled access to arterial or major collector roads without passing through residential areas.

*Community Commercial, CC* – is intended to provide a wide variety of commercial uses, and limited mixed-use employment opportunities, to serve large geographic areas with a wider range of goods and services than are available in Neighborhood Commercial areas. Community Commercial designations shall be located within Community Regions although they may serve areas outside the Community Region. This designation shall contain 10 acres or more of land area with development grouped as a contiguous center to preclude strip development, with convenient, controlled access to arterial or major collector, roads (Nevada County, 2016).

## **LAFCo**

LAFCo is charged with applying the policies and provisions of the Cortese-Knox Hertzberg Act to its decisions regarding annexations, incorporations, reorganizations, and other changes of government. LAFCo is required to adopt written policies and procedures and to exercise its powers in a manner consistent with those policies and procedures and with the policy directives of the Act. On April 28, 1994 and as amended on July 19, 2018, LAFCo adopted formal a formal guidance document listing the policies

to which LAFCo would adhere in performance of their responsibilities and duties. The purpose of the policies is to do the following: 1) provide information; 2) set criteria; 3) ensure greater consistency; 4) Facilitate Communication; 5) Minimize Adverse Impacts; and 6) Provide for Planned, Well-ordered, and efficient urban development patterns. Accordingly, LAFCo's were created by state legislation to ensure that changes in governmental organizations occur in a matter which provides efficient and quality services and preserves open space and land resources.

One way in which LAFCo's accomplish the above is through the use of their specific authority to review and approve or disapprove certain actions undertaken by cities and the County. In regard to the proposed project and future actions that may result from implementation of the SOI, LAFCo has the following specific authorities:

- Annexations to, or detachments from cities or districts;
- Consolidation or reorganization of cities or districts;
- The development of, and amendments to, Spheres of Influence;
- Extension of service beyond an agency's jurisdictional boundaries; and
- Pursuant to Section 56434, the Commission may review and approve proposals that extend service into previously unserved territory in unincorporated areas (LAFCo, 2015).

In order to carry out the legislative policies identified above, LAFCo has the power to approve, conditionally approve or deny applications. However, while LAFCo is required to consider the impacts of land use in its determination, it is specifically prohibited from directing specific land use or zoning actions. LAFCo can deny an application where the land use that would result violates the statutory policy of Cortese-Knox-Herzberg.

In addition, LAFCo maintains general policies and standards that apply to LAFCo consideration of any type of proposal. The policies relate to administrative requirements as well as some topics related to environmental protection. The general policies that are most pertinent to this environmental analysis address Urban Development; Urban Sprawl, Environmental Consequences (CEQA); Balancing Jobs and Housing; Compact Urban Form and Infill Development; Adequate Services; Community Impacts; Conformance with General and Specific Plans; Boundaries; Agricultural and Open Space Land Conservation; Need for Services. LAFCo notes, that in certain situations, the application of one policy may conflict with the application of another; and in that case LAFCo will exercise its discretion to balance policies in a manner consistent with the Cortese-Knox-Hertzberg Act and other LAFCo standards.

### 4.8.3 STANDARDS OF SIGNIFICANCE

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project.

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to land use and planning, if it would:

- Physically Divide and established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; or

CEQA requires that an EIR consider whether a proposed project may conflict with any applicable land use plan, policy, or regulation (including, but not limited to a general plan, specific plan, or zoning ordinance) that was adopted for the purpose of avoiding or mitigating an environmental effect (refer to Appendix G to the State CEQA Guidelines). This environmental determination differs from the larger policy determination of whether a proposed project is consistent with a jurisdiction's general plan. The broader General Plan consistency determination considers all evidence in the record about the project characteristics, its desirability, as well as its economic, social, and other non-environmental effects. Regarding plan or policy consistency, the SOI Plan update is evaluated in terms of whether its approval would substantially impede implementation of an adopted plan or policy such that a significant environmental impact would result. The mere fact that any project may be inconsistent in some manner with certain policies in a general plan or zoning ordinance does not, per se, amount to a significant environmental effect. In the context of land use, significant impacts occur when a conflict with an applicable land use plan, policy or regulation of an agency with jurisdiction over the project results in an adverse physical environmental impact.

Evaluation of the potential impacts of the SOI Plan update on land use and planning was based on a review of the City General Plan and Zoning Ordinance. As discussed, general plan consistency does not require strict conformity of a project with each and every general plan goal, objective, policy, or action item. Rather, a project is consistent if, taken in view of the whole of the action, it is in agreement or harmony with the general plan. In other words, a project does not have to strictly or substantially conform to every applicable general plan policy.

Based on these standards, the effects of the SOI Plan update have been categorized as either a "less than significant" impact or a "potentially significant" impact. Mitigation measures, where applicable, are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a "significant and unavoidable" impact.

#### **4.8.4 PROJECT IMPACTS AND MITIGATION**

This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 6.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts



are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

## Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative development potential, assumptions for provision of services, and includes City and environmental review requirements. The discussion immediately following is applicable to both Impact LU-1 and LU-2, below, but is provided here to avoid repetitive discussion.

Adoption of the Consensus Alternative would result an update the SOI Plan area but future development under the authority of the City would only occur in conjunction with annexation to the City. With the exception of the six potential development areas identified by the City and discussed throughout this document, the lands within the SOI contains properties that are anticipated to be built out over time in accordance with existing City planning documents. Land uses in these areas are anticipated to maintain similar land use patterns to the surrounding areas and be based on the existing land use designations of the properties.

Within the Consensus Alternative boundaries there are four priority annexation areas (Annexation Area #1, #2, #3, and #4). In general, these areas are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. Due to their locations contiguous with City lands and service areas, these areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries.

The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with some areas designated for planned development, employment centers, public uses, or service commercial.

All future development within the Consensus Alternative area, including the six potential development areas identified by the City and described above would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City to ensure consistency with the surrounding area. Additionally, the City has the authority to and would specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents to maintain the integrity and consistency of land uses. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to environmental issue that could be affected by changes to land use.

The proposed project also includes five exclusion areas that would not be included in the Consensus Alternative. The distance of the exclusion areas from existing utility services and the lack of need and demand for City services reduces the feasibility of annexation. Additionally, these areas are separated from the City by County land and without a substantial amount of other areas being annexed, annexation of or in these areas would result in the creation of City islands. This is consistent with LAFCo policies related to the creation of logical boundaries and the elimination of previously existing islands, island

corridors, or illogical boundaries. For these reasons, these areas have been removed from consideration but is noted in this Land Use section because their removal increases consistency with existing policies and reduced the potential for unconnected growth, lengthy utility service extensions, and their removal would help maintain a contiguous growth pattern for the City. Removal of the exclusion areas would eliminate the environmental effects of utility extensions and the secondary growth inducement it could cause.

***Impact LU-1: Physically divide and established community?***

Approval of the proposed Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. The Consensus Alternative does not propose any new development and would not directly result in the physical division of an established community.

As areas within the SOI are annexed to the City the areas would maintain or would be likely to have similar land use designations as shown on the City General Plan land use map. Priority Annexation Area #1 contains the existing Caltrans facility and no further development is planned. Priority Annexation Area #2 contains the County Juvenile Hall, is currently connected to the City's wastewater system, and no further development is proposed. Annexation of these areas would not indirectly induce growth such that a physical division of an established community would occur.

Priority Annexation Area #3 contains 19 parcels, three of which are connected to the City sewer system and two are undeveloped. Extension of services could result in service to the two undeveloped parcels and other developed sites. Priority Annexation Area #4 contains 22 parcels including a cemetery and 18 intervening privately owned properties, some of which are developed with rural residential homes. Annexation of these areas could result in extension of services to existing developed and undeveloped areas. If services are extended to developed sites it could induce construction at other locations but due to limited available area, growth would not be substantial. Additionally, while extension of services could result in development of some undeveloped sites, the development is anticipated to be consistent with the land use designations anticipated by the City. Lastly, all future development plans in these areas would be subject to the design review process to ensure consistency with relevant planning documents and regulations.

The Consensus Alternative creates a logical boundary for the SOI and does not create neighborhood or community islands. The Consensus Alternative boundary includes areas that could be logically served and uses natural and man-made features to define boundaries when feasible and appropriate. The Consensus Alternative would not indirectly result in a division of an established community and would not result in the physical division of community, commercial district, or other area that has a unique social or economic identity. Prior to any annexation and subsequent development, all projects would be reviewed by the City, requires to obtain City approval, and be approved by LAFCo. LAFCo has a robust policy document related to approvals of annexations and would follow these requirements to ensure approval of future City annexations within the Consensus Alternative would not physically divide a community. Additionally, if an annexation is proposed and LAFCo determines it would violate the statutory policies of CKHA or the boundaries could not be suitably adjusted to meet the criteria, the application could be denied. Thus,

conformance with this standard methodology would help ensure that future indirect impacts are reduced or eliminated.

Lastly, all future projects or entitlements for development or annexation into the City, would undergo a subsequent CEQA analysis per the requirement of City Municipal Code 17.100.030 – Environmental Review. As part of the development review process site-specific development approvals would be made on a project by project basis, and the potential for a project to have direct and indirect impacts related to the property, surrounding properties, and the resulting physical division of a community would be evaluated. These evaluations would identify, if any, conflicts with existing land uses and the City development code that could result in divisions within the community. It is anticipated, that modifications to a future proposed project, the project boundaries, or project scope and scale could be made to reduce the impact. Thus, the Consensus Alternative is consistent with applicable policies to not physically divide an established community and impacts would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact LU-2:** ***Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

The Consensus Alternative would be consistent with applicable land use and planning documents. The SOI Update area consists of unincorporated Nevada County and adoption of the Consensus Alternative would not directly change any existing land uses or result in any development. This would ensure that direct environmental impacts from land use conflicts do not occur.

Inclusion in SOI would enable those areas to be annexed to the City. Upon annexation, the area(s) would be subject to the NCGP and City Zoning Code, and these documents would guide any potential future development. The City also reserves the right to prezone areas. This tool is anticipated to reduce land use conflicts by allowing the City to plan for future uses and maintain consistency between planning documents and land use needs. Accordingly, prior to any annexation, the City would work with Nevada County to ensure the annexation would be consistent with policy guidance in place to minimize land use conflicts. This would be done through the design review processes and annexation agreements.

Priority Annexation areas #1, #2, #3, and #4 are already largely developed. Priority Annexation Areas #1 consists of an existing Caltrans facility, Priority Annexation Area #2 consists of the County Juvenile Hall, and Priority Annexation Areas #3, and #4 consists of a cemetery, existing rural residential uses and a few undeveloped parcels. Future annexation of these parcels would enable services to these areas, but is not anticipated to change existing uses or designations and would not conflict with land use planning documents. Regarding the six potential development areas, there are no development applications or existing entitlements for development of these sites. If these sites are annexed and eventually built, all development is anticipated to be planned in accordance with the existing land use designations conflicts arising in environmental impacts are not expected.

It is important to note that LAFCo has a specific policy related to environmental consequences. This policy states that LAFCo shall operate in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000. LAFCo shall assess the environmental consequences of its actions and decisions and take actions to avoid or minimize a project's adverse environmental impacts, if feasible, or may approve a project despite significant effects because it finds overriding considerations exist. To comply with CEQA, the Commission has adopted the State CEQA Guidelines for the Implementation of the California Environmental Quality Act (California Code of Regulations, Title 14, Chapter 3, Sections 15000 et seq.) to ensure the Commission's policies are consistent with the most current version and interpretation of the law. While this attention has been given to the Consensus Alternative, the same considerations would be given to future annexation proposals and similarly reduce the potential for environmental impacts associated with inconsistencies with land use and planning documents.

Incorporation to the City also would not result in conflicts with land use planning or policy documents in place with the purpose to avoid or mitigate environmental impacts. As areas are annexed to the City, all applicable plans, policies and permitting requirements aimed at protection of environmental resources would be applied to the areas for which development and use is proposed. Accordingly, the City would be required to, in accordance with Chapter 17.100.030 – Environmental Review of the Code of Ordinances subject every annexation, even listed exceptions (projects not subject to prezone) and states they shall undergo the environmental review procedures of the City and of CEQA. Therefore, impacts in this regard are less than significant, and mitigation is not required.

***Mitigation Measures:*** No Mitigation Measures are Required.

## 4.8.5 CONCLUSION

The proposed project consists of an update to the SOI Plan. As discussed above, the Consensus Alternative would not directly result in land use impacts by authorizing or providing for any land use entitlements for the project area. Future development projects that are annexed to the City would be subject to the City's land use authority and would undergo CEQA review for all projects as set forth City zoning ordinance. The Consensus Alternative would be consistent with the existing NCGP land use designations, and upon annexation all applicable policies and guidance would be applied to the new City areas. Accordingly, as the lead agency for these projects, the City would require mitigation or conditions be implemented to reduce land use conflicts that could result in significant impacts to the environment.

The SOI Plan update area encompassing approximately 2,702 acres of existing County land. Future annexations into the City from this area; however, are not anticipated to conflict with any existing NCGP goals, policies, objectives relative to the protection of environmental resources. As part of the annexation process, the City would be required to work with the County and ensure a smooth transition of to the new land use authority. Accordingly, the City would be required to ensure future in annexation areas do not conflict with the City Zoning Code. All future projects that may be entitled within the Consensus Alternative area would be required to undergo the City development and review process and implement measures to reduce impacts. Therefore, the indirect impacts that could result from adoption of the Consensus Alternative would not constitute a significant impact in this regard.

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## 4.8.6 CUMULATIVE IMPACTS

Adoption of the Consensus Alternative and future development undertaken in accordance with the City's General Plan upon annexation from to the City would not result in any direct changes to existing land uses. The adoption; however, could result in indirect future changes to the land use patterns and associated environment in which development would be enabled. As development occurs within areas annexed to the City, this could result in changes to the environment and could result in longer term environmental effects. The significance of these potential changes can be difficult to determine especially under a project such as this SOI update, because no project is proposed and the likelihood of future development resulting from inclusion or exclusion from the SOI is uncertain.

The lands within the Consensus Alternative area are currently developed with predominantly rural and estate residential uses, separated by open tracts of undeveloped land. Under the Consensus Alternative, while no direct impacts would occur, there is the potential for the area to experience growth as the future projects are approved. Future projects; however, are anticipated to be designed to be sensitive to and implement the goals, policies and objectives of the NCGP and be designed and developed in accordance with requirements of the Municipal Code. This would be the same for past, current, and future projects which have been and would also be subject to the City's design and review process on a project-by-project basis. If full buildout occurs in conformance with the NCGP and all the areas are annexed into the City, it could result in a substantial increase in development within the new City boundaries.

The cumulative nature of projects in the SOI Plan Update area would contribute to physical changes to the environment resulting in potentially significant environmental impacts. With the exception of a few locations designated for planned development, open space, and employment commercial, the majority the Consensus Alternative area, if full buildout is reached, it is anticipated to be developed with residential units at similar densities.

From a land use standpoint, future development within the Consensus Alternative area and surrounding locations would alter the physical environment. As discussed above, the proposed project itself would not result in any development and does not include any entitlements for development. The project itself is an adjustment and update to the SOI Plan area and the Consensus Alternative does not propose any physical development. Lastly, all future projects annexed to the City would be required to undergo individual CEQA review and be evaluated by the City for consistency with existing land use planning policy document and for conformance with environmental protection measures. As such, the cumulative nature of impacts from implementation of the Consensus Alternative are less than significant and mitigation in this regard is not required.

***Mitigation Measures:*** No Mitigation Measures are Required.

## 4.9 PUBLIC SERVICES

This section describes the affected environment and regulatory setting for public services that would be provided to the SOI Plan Update area as properties are annexed into the City jurisdiction. It also describes the impacts on existing public services that would result from implementation of the SOI Plan update and mitigation measures, if applicable, that would reduce these impacts. The following analysis of the potential environmental impacts related to utilities and service systems is also derived from the following sources:

- Available literature and other publicly available information from affected agencies.
- City of Nevada City General Plan.
- City of Nevada City Code of Ordinances.
- Correspondence with affected Public Services districts.

This section provides baseline information on and evaluates potential impacts on public services and policies related to the proposed project. Environmental and regulatory settings and mitigation measures to reduce significant impacts, where applicable, are provided.

### 4.9.1 ENVIRONMENTAL SETTING

The City of Nevada City (City) is the County seat of Nevada County (County) and is in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, CA. The City is located within a basin on the western slope of the Sierra Nevada granting it a unique topography with hills and valleys and visually appealing aesthetic and scenic views. The town is located in a natural “bowl” giving the impression that the historic mining town is compact as it is surrounded by hills and trees (Nevada City, 2017).

The majority of land uses and housing outside the incorporated City boundary generally consists of low density and rural residential, open space, undeveloped land, agricultural uses and intermittently located commercial and industrial uses. The major transportation routes that provide regional connectivity through the City is the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49) which through the City are joined. *Figure 3-2: Vicinity Map* shows Nevada City in relation to other cities, towns, and major roadways in the vicinity of the project area. Urbanization within the County is primarily located within these three City centers and consists of residential, commercial, industrial, and other uses typical of small cities.

Within the City, emergency services are provided by the City of Nevada City Fire Department (NCFD) and Nevada City Police Department (NCPD). School services are provided by the Nevada City School District, and library services to City residents are provided by the Nevada County Community Library (NCCL). Within unincorporated County area including the existing SOI Plan update area, law enforcement is provided by the Nevada County Sheriff Department (NCSD) and Nevada County Consolidated Fire

Department (NCCFD). A more detailed description of each of these services, where applicable, including locations, service areas and service ratios, response times, and other information is provided below.

## **Nevada City Fire Department**

The NCFD provides emergency services to all residents and occupants of the City and responds to structure fires, emergency and medical incidents, rescues, hazardous materials incidents, automobile fires, wildfires, etc. The NCFD personnel includes a Fire Chief, two Fire Captains, and three firefighters. Personnel respond to approximately 1,000 calls for service a year. NCFD operates from a station located at 201 Providence Mine Rd. and provides 24-hour, year-round service. For operations NCFD uses a 2005 Type I Engine, a 2011 Type III Brush Engine, and three Utility Vehicles. NCFD maintains Mutual Aid and Auto Aid Agreements with the Nevada County Consolidated Fire District (NCCFD) and other fire districts in western Nevada County, so responses to other jurisdictions also occur and includes responses with the US Forest Service, the California Department of Forestry and the Office of Emergency Services (NCFD, 2019).

## **Nevada County Consolidated Fire Department**

Nevada County Consolidated Fire District (NCCFD) operates four of its own station (station 84, 86, 88, and 89) and two stations (Station 1 and 2) and an Administration building. Stations 1 and 2 are jointly operated with Grass Valley and Station 54 is jointly operated with Nevada City (NCCFD, 2018a). Fire suppression equipment includes type 1 and type 2 engines, swift water rescued, water tender, reserve type 2 engines, an OES water tender, a type 6 engine, command vehicles, and repair vehicles (NCCFD, 2018b).

*Station 84 – 10135 Coyote Street* – Operates on three shifts, A, B and C Shift has with one Captain and one Firefighter/Operator during each shift. Equipment includes one Type 1 Engine and one Type 1 Water tender.

*Station 54 – 201 Providence Mine Road* – Operations on three shifts, A, B, and C Shifts has one NCFD Captain and one NCFD Firefighter. Equipment includes one Type 1 Engine.

*Station 2 – 213 Sierra College Drive* – Operates on three shifts. A Shift and B Shift have one GVFD Captain, one GVFD Engineer, and one GVFD Firefighter, and C Shift has one GVFD Captain and three GVFD Firefighters.

*Station 86 – 12337 Banner Lava Cap Road* – Operates on three shifts. A Shift has one Captain and one Firefighter/Operator. Shift B and C has one Lieutenant and one Firefighter/Operator. Equipment includes one Type 1 Engine and one Squad Vehicle.

*Station 1 – 472 Brighton Street* – Operates on three shifts. Shift A has one Battalion Chief, one GVFD Captain, one NCCFD Lieutenant, and one GVFD firefighter. Shift B has one Battalion Chief, one GVFD Captain, and one NCCFD Lieutenant, and C Shift has one Battalion Chief, one GVFD Engineer, and one NCCFD Captain. Equipment includes one Type one Engine.

*Station 88 – 14400 Golden Star Road* – Operates on three shifts with one Captain and one Firefighter/Operator during each shift. Equipment includes one Type 1 Engine, one Type 1 water tender, and one Repair Vehicle.

Station 89 – 11833 Tammy Way – Operates on three shifts Shift A and C have one Lieutenant and one Firefighter/Operator and Shift B has one Captain and one Firefighter/Operator. Equipment includes one Type 1 Engine, one Type III Engine, one OES Water Tender, and one golf cart.

Administration- 11329 McCourtney Road.

## **Nevada City Police Department**

The NCPD provides law enforcement services to the community of Nevada City. The NCPD currently consists of 10 sworn members. Overall, personnel consist of a Chief of Police, one lieutenant, six full-time Officers, one part-time Officer, one part-time Community Services Officer, six Reserve Officers, one Records Supervisor, and two Chaplains. NCPD utilizes the Grass Valley Police Department (GVPD) for K-9 services when needed. In addition to responding to calls for service, the department performs criminal investigations, traffic/parking enforcement, building code enforcement, Alcohol and Beverage Control license compliance, evidence management, special event coordination, quality of life outreach and enforcement, coordinate / track POST required training, liaison with schools and students including active involvement with a Police Explorer Post, recruitment and retention of Reserve Officers, Interns and volunteers, and coordinate Neighborhood Watch activities.

## **Nevada County Sheriff Department**

The Nevada County Sheriff's Department (NCSD) provides law enforcement to all the unincorporated areas of Nevada County. Sheriff's services include patrol, dispatch, investigations, search and rescue, boat patrol, correctional facilities, coroner, and court security services. Law enforcement services are provided to the SOI Plan update area out of the sheriff's office in Nevada City at 950 Maidu Avenue.

The NCSD has four divisions including the Administrative Support Division, the Corrections Division, Finance Units, and Operations Division. The Administrative Support division provides support services in units including, civil, communications/dispatch, evidence, personnel/training, and records. The Corrections Division manages the operations and services within the County Jail, and the Finance Unit oversees contract management, grant funding, budget development and reports, and public administration (Nevada County, 2018).

## **California Highway Patrol**

The California Highway Patrol (CHP) was created in 1929 to provide uniform traffic law enforcement throughout the state. The primary purpose of CHP is to assure the safe, convenient and efficient transportation of people and goods on our highway system. CHP operates numerous programs throughout the state in various divisions based on regional locations. The programs include, cargo theft interdiction, a certified business advocate program, commercial vehicles section, impaired driver enforcement program, school bus program, and youth programs. Within Nevada County, CHP has two offices: 1) 11363 McCourtney Road in Grass Valley, and 2) 10077 State Route 89 South in Truckee. CHP also maintains an office at 1) 50 Canyon Creek in Gold Run in Placer County in Gold Run along I-80 (CHP, 2018).



## Nevada County Superintendent of Schools

The Nevada County Superintendent of School (NCSS) oversees the County's nine school districts and charter schools. The NCSS helps in providing educational, financial, and student support programs for almost 12,000 students in Nevada County throughout the different districts. In sum, the NCSS oversees eight elementary school districts, one comprehensive high school district, and eight independent charter schools.

## Nevada City School District

The Nevada City School District (NCSD) operates Deer Creek Elementary School and Seven Hills Middle School which are discussed in more detail below.

Deer Creek Elementary School - is located at 805 Lindley Avenue and houses transitional kindergarten through fourth-grade students. The elementary school provides services for a total of 384 students. In 2018 there were 95 Kindergarten, 65 students in first grade; 72 students in second grade; 70 students in third grade; and 82 students in fourth grade. The school is currently comprised of 19 classrooms, a main office, library, STEAM room, computer lab, music room, a fitness center, staff lounge, cafeteria/multi-purpose room, a workroom, psychologist's office, speech /language room, three outdoor play areas, two outdoor classrooms, and a field area which is also used by local community sports groups. The average class size in 2018 for kindergarten was 24 students, 23 students for first and second grade; 26 students for third grade; and 29 students for fourth grade.

Seven Hills Middle School - is located at 700 Hoover Lane and is home to grades fifth-eighth. The middle school provides services for a total of 350 students. In 2018 there were 90 students in fifth grade; 82 students in sixth grade, 86 students in seventh grade, and 82 students in eighth grade. The middle school is comprised of 27 classrooms (including portables), a library, a computer lab, three science labs, one athletic field, one paved area for sports, a theater/cafeteria/multi-purpose room, a band room, a fitness room, the bicycle recycling facility, and the main office. The average class size in 2018 was 29 students.

Nevada City did have a third school, Nevada City Charter School but the charter was removed in 2019. The school provided services for 72 total students in first grade through eighth grade. These students will be absorbed by Deer Creek Elementary and Seven Hills Middle School.

## Nevada Joint Union School District

The SOI Plan update area is within the Nevada Joint Union School District (NJUSD). The NJUSD provides high school-aged students services at Bear River High School, an Adult Education school, North Point Academy, Nevada Union High School (NUHS), Nevada Union Tech High School, and Silver Springs High School. High School aged students from the SOI Plan update area would most likely attend NUHS.

NUHS is located at 11761 Ridge Road in Grass Valley approximately 1.25 miles southwest of the Nevada City boundary. According to the Nevada County Superintendent of Schools for the 2018-2019 school year, total enrollment at NJUSD was 1,531 students with 426 students in ninth grade, 372 students in tenth grade, 380 students in eleventh grade, and 353 students in twelfth grade (NCSS, 2016).

## Parks

### ***Nevada City***

The Nevada City Parks & Recreation Department (NCPR) manages the system of parks, trails, recreational facilities, programs and services within the City. NCPR facilities include parks, open space, trails, a swimming pool, summer programs, and they also provide recreational classes and other programs and services for residents of the City. The Department employs one full-time employee year-round and approximately 35 seasonal staff during the summer months. City parks include Pioneer Park, and Callanan Park located at Broad Street and Union Street in the downtown area. Pioneer Park provides amenities including, baseball and softball fields, a large grassy field, picnic & bbq areas, horseshoe pits, bocce ball court, petanque court, outdoor amphitheater, a smaller amphitheater, tennis courts, basketball courts, the seaman's lodge, memorial grove, a playground, and swimming pool.

In addition to the above, the City owns approximately 300 acres of open space properties, many of which include trails so the public can enjoy the outdoor environment. Park of this area includes the Deer Creek Tribute Trail System, encompassing approximately 40 acres of land along Deer Creek. The Tribute Trail extends along both sides of the creek on these properties. The trail on this property incorporates the Nisenan Bridge Section of the Deer Creek Tribute Trail System and is called the Nisenan Trail. Other trails and areas include Hirschman's Pond and Diggins and Hirschman Trail, Miner's Trail, Prospect Stairs, Stiles Mill, Tribulation Trail, and Sugarloaf Mountain which is further detailed in the Sugarloaf Mountain Master Plan.

### ***Nevada County***

Nevada County has three recreational and parks districts that would be usable by residents of the City and within the SOI Plan Update Area, the closest of which to the City is the and Western Gateway Recreation and Park Districts in western Nevada County. Western Gateway operates the Western Gateway Park, a large park offering a variety of recreational facilities, and the Bear River District currently operates the Magnolia Sports Complex in conjunction with the Pleasant Ridge School District.

## Libraries

Nevada City does not provide library services to community members. Library services are provided by the Nevada County Community Library System (NCCLS). The NCCLS consists of six library locations. Five of the branches are circulating branches, two of which are station libraries, and one is a historical reference library. Additional detail on each branch are provided immediately below:

***Bear River Library*** – The Bear River Library is located at 11130 Magnolia Road in Grass Valley on the Bear River High School Campus and is in joint use with the high school. The library has 22 public internet terminals and has a large collection of adult and children's books.

***Doris Foley Library for Historical Research*** – The Doris Foley Library for Historical Research is located at 211 N. Pine Street in Nevada City. The library contains research materials regarding Nevada County history and materials are for use on-site only.

**Grass Valley Library - Royce Branch** – This library is located at 111 Mill Street in Grass Valley and is a historic Carnegie library listed in the National Register of Historic Places. The library is two stories and provides a full range of library resources and services.

**Madelyn Helling Library** – The Madelyn Helling Library is located at 980 Helling Way in Nevada City and is the main branch of the Nevada County Library System. The library has a collaborative technology center, community room, study rooms, and amphitheater.

**Penn Valley Library** – The Penn Valley Library is located at 11336 Pleasant Valley Road in Penn Valley and is the newest branch of the Nevada County Library System. It is located across from the main entrance to Lake Wildwood.

**Truckee Library** – The Truckee Library is located at 10031 Levon Avenue in Truckee services Eastern Nevada County through a unique facility and an extensive collection of materials including audio-visual materials, a children’s room, and adult non-fiction collections.

## Health Services

Nevada City is served by Nevada County Health and Human Services as well as local providers. Through Nevada County, the Healthy Community Program includes alcohol & Drug Use prevention, emergency preparedness & Planning, Nutrition Education & obesity prevention, tobacco use prevention, WIC, and prediabetes. In addition, the County provides mental health crisis services. Services are provided at a number of facilities including Western Nevada County Public Health at 500 Crown Pointe Circle in Grass Valley, Eastern Nevada County Public Health at 10075 Levon Avenue in Truckee, Women, Infants & Children at 988 McCourtney Road in Grass Valley, and the Medical Therapy Program at 400 Hoover Lane in Nevada City. Other smaller localized offices and health care providers are located throughout the area.

Within and near Nevada City there are 8 free and income based clinics that include the Western Sierra Medical Clinic at 844 Old Tunnel Road in Grass Valley; Minders Family Health Center at 1345 Whispering Pines Lane in Grass Valley; Western Sierra Medical Clinic at 10544 Spenceville Road in Penn Valley; Western Sierra Medical Clinic at 12183 Locksley Lane in Auburn; Placer County Human Services at 11519 B Avenue in Auburn; Western Sierra Medical Clinic at 209 Nevada Street in Downieville; Chapa-De Indian Health Program at 11670 Atwood Road in Auburn; and Divide Wellness Center at 6065 State Hwy 193 in Georgetown.

## Museums

Nevada City has a rich history, and this is reflected in the museums within the City. Museums within Nevada City include Firehouse #1 Museum, Malakoff Diggins State Historic Park, Miners Foundry Cultural Center, Nevada County Narrow Gauge Railroad Museum, and Searls Historical Library. Museums close by in Grass Valley include the Empire Mine State Historic Park, Grass Valley Museum, and the Northstar Mining Museum.

## 4.9.2 REGULATORY SETTING

### Federal

No federal laws, regulations, or programs were identified related to public services and the SOI Plan update.

### State

#### ***California Building Code***

The State of California provides a minimum standard for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The California Building Code is based on the International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

#### ***California Fire Code***

The California Fire Code (CFC) incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official Fire Code for the State and all political subdivisions. It is located in Part 9 of Title 24 of the California Code of Regulations. The CFC is revised and published every three years by the California Building Standards Commission.

#### ***California Health and Safety Code and Uniform Building Code***

The California Health and Safety Code provides regulations pertaining to the abatement of fire-related hazards. This Code also requires that local jurisdictions, including the City, enforce the Uniform Building Code, which provides standards for fire-resistant building and roofing materials and other fire-related construction methods.

#### ***California Senate Bill 50 and California Government Code (Section 65995(b)) and Education Code (Section 17620)***

California Senate Bill (SB) 50 places limitations on the power of local governments to require mitigation of school facilities by developers. Under the provisions of SB 50, school districts can collect fees to offset the cost of expanding school capacity, which becomes necessary as development occurs. These fees are determined based on the square footage of proposed uses. As a part of this Bill, school districts must base their long-term facilities needs and costs on long-term population growth in order to qualify for this source of funding. Payment of statutory school fees is deemed to be adequate mitigation of school impacts under CEQA. Prior to SB 50, case law allowed cities to consider and impose conditions to mitigate impacts of new development on school facilities.

SB 50 amended California Government Code Section 65995, which contains limitations on Education Code Section 17620, the statute that authorizes school districts to assess development fees within school district boundaries. Government Code Section 65995(b)(3) requires the maximum square footage assessment for development to be increased every two years, according to inflation adjustments. Currently, the maximum impact fees allowed by SB 50 are as follows:

- In the case of residential construction, two dollars and ninety-seven cents (\$3.79) per square foot of assessable space.
- In the case of any commercial or industrial construction, thirty-three cents (\$0.61) per square foot of chargeable covered and enclosed space. (Gov. Code §65995, subd. (b)).

According to California Government Code Section 65995(3)(h), the payment of statutory fees is “deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...on the provision of adequate school facilities.” The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

### ***Mitigation Fee Act (California Government Code (Sections 66000 through 66008))***

Enacted as Assembly Bill (AB) 1600, the Mitigation Fee Act requires a local agency, such as the City of Vallejo, establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose of the fee and the use to which the fee is to be put. The agency must also demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development project on which it is to be levied. This Act became enforceable on January 1, 1989 (California Legislative Information, 2019).

### ***California State Assembly Bill 97 (AB 97)***

Approved in July 2013, AB 97 revises existing regulations related to financing for public schools, by requiring State funding for county superintendents and charter schools that previously received a general-purpose entitlement. The bill authorizes local educational agencies to spend, for any local educational purpose, the funds previously required to be spent for specified categorical education programs, including, among others, programs for teacher training and class size reduction.

### ***The Mello-Roos Communities Facilities Act of 1982***

The Act allows any county, city, special district, school district or joint powers authority to establish a Mello-Roos Community Facilities District (a “CFD”) which allows for financing of public improvements and services. The services and improvements that Mello-Roos CFDs can finance include streets, sewer systems and other basic infrastructure, police protection, fire protection, ambulance services, schools, parks, libraries, museums, and other cultural facilities. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt (Californiataxdata.com, 2019).

## Local Regulations

### ***Nevada City General Plan***

The Nevada City General Plan Public Safety element addresses fire hazards and health and emergency facilities. Fire hazards are generally discussed in terms of wildland fires, which is discussed in additional detail in *Chapter 4.11 – Wildfires*. The General Plan also discusses health and emergency facilities including the Sierra Nevada Memorial Hospital and Miners Hospital in the Nevada City. In addition, the Nevada County Office of Emergency Services would coordinate with other agencies in times of disaster. The General Plan provides the following objectives and policies related to the provision of public services.

#### *Fire Hazard*

##### Objective

- Ensure Safety for life and property in both wildlands and developed areas

##### Policy

- The Nevada City Fire Department, in cooperation with the California Department of Forestry and relevant Fire Districts, shall maintain high fire protection levels by requiring adequate access and water flow, based on established standards.

### ***Nevada City Municipal Code***

Title 15 Buildings and Construction of the NCMC provides minimum standards to safeguard life or limb, health, property, and public welfare. This section regulates and controls the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, regulated equipment, grading and construction activities that result in a land disturbance on private property within this jurisdiction in conformity with the 2019 edition of the California Building Standards and consistent with and complementary to standards adopted by the County of Nevada.

Section 15.08.015 California Fire Code and county amendments adopted – This section adopts 2016 California Fire Code and County amendments into this section and Section 15.04020.

Section 15.08.020 – Responsibility for enforcement and review - This section clarifies that except as otherwise required compliance with fires safety laws and regulations will be enforced by the City fire chief or authorized representative. In addition, this section clarifies the fire chief or authorized deputy shall have final authority and review for compliance. The reviewer also is granted the authority to comment and include, as required, appropriate mitigation measures and/or conditions of approval to assure compliance with applicable fire safety laws, and standards and regulations.

## **4.9.3 STANDARDS OF SIGNIFICANCE**

This section describes the methodology used in conducting the impact analysis for public services, the thresholds of significance used, and the assessment of the level of impact on public services. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts, where applicable, accompany each impact discussion.

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on public services if it would:

Result in substantial physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire Protection?
- Sheriff Protection?
- Schools?; or
- Other Public Facilities?

#### 4.9.4 PROJECT IMPACTS AND MITIGATION

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 5.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

##### Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to Public Services This discussion is applicable to each impact, Impact PS-1a through Impact PS-1e, below, but is provided here to avoid repetitive discussion.

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related to public services. This discussion is applicable to each impact to Fire, Police, Schools, Parks, Libraries, and Other Public Facilities, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service

commercial. Development in these areas is anticipated to be consistent with the existing City designations.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for built out would occur over an unknown period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas. In general, these areas are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries.

All future City development after annexation within the Consensus Alternative area, including the six potential development areas would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to provision of public services. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to public services.

***Impact PS-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***a) Fire Protection***

Fire service to the existing SOI Plan area is provided by Nevada County Consolidated Fire District (NCCFD). Adoption of the Consensus Alternative would not result in any development and does not include any entitlements that would result in new projects. The Consensus Alternative would not increase demand for fire protection services and would not alter the primary responsibility of fire response to these areas. NCCFD would still provide services to these areas and changes to service boundaries necessitating new stations would not change. Therefore, direct impacts to fire protection services would not occur.

As areas are annexed into and become part of the City the primary responsibility for fire protection would shift to the Nevada City Fire Department and increase the demand on fire service provided by the City. Therefore, indirectly, the Consensus Alternative has the potential to result in impacts. Annexation of Priority Annexation Areas #1, #2, #3, and #4 are not anticipated to substantially increase demand for fire



services. Two of these areas [Annexation Areas #1 (Caltrans facility) and #2 (juvenile hall)] are not planned for any expansion and an increase demand for services would not occur. Priority Annexation Areas #3 and #4 consist of a cemetery and rural residential development and a few vacant lots. If services are extended to these areas, it could induce development on the vacant lots and some adjacent areas. Although such expansion is anticipated to be small, it would increase the demand for the provision of services but impacts in this regard would be insignificant.

The Consensus alternative does include the six potential development areas described above, however, future development of these areas will be subject to the City's review and regulation when development plans are submitted, and application(s) filed.

Typically, the environmental analysis of impacts to public services for new projects involves an evaluation of whether a project would result in the need for expansion of existing facilities or construction of new facilities. It is possible that as annexations occur the Nevada City Fire Department may need to expand stations or construct new stations. Currently, the Nevada City Fire Department and NCCFD operation under the Joint Operational Area (JOA) agreement which is dependent on equity of responses from jurisdiction and equity in resources provided by each JOA partner. Fire resources are paid for, in part, by a tax share agreement Nevada City and NCCFD. To account for the increased responsibility of Nevada City Fire Department, as areas are annexed out of the County, it may be necessary to evaluate revisions to the tax share agreement so that Nevada City Fire Department would have more funding available to ensure proper services and responses are maintained. Although such an agreement is typically outside the scope of a CEQA document, changes to the agreement could result in expansion of existing facilities or construction of new fire protection service site.

All future annexation projects would undergo individual CEQA review. The project by project review also would include a City led CEQA analysis and as applicable would determine the need for fire protection services. Although the annexation of the four priority annexation areas would not result in a substantial new demand for services, in conjunction with future annexations, impacts could occur. Future project may be required to include project-specific mitigation measures or binding conditions of approval to help pay for a fair share contribution to the provision of these services. Development impact fees would be assessed during the project application and review process and would be considered a fair share contribution to the provision of services.

Lastly, if existing facilities require expansion or new fire facilities are needed as a result of long-term increased demand, the City also would conduct project-related CEQA review for these needs. It is anticipated that due to the anticipated scope and scale of such projects that impacts would be less than significant or mitigated to less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required.

#### ***b) Police Protection***

Police protection within the existing SOI Plan area is provided by the Nevada County Sheriff Office. Adoption of the Consensus Alternative would not result in any development and does not include any

entitlements that would result in new projects. The Consensus Alternative would not increase demand for police protection services from the Sheriff's Department and would not alter the primary responsibility for provision of services to these areas unless an annexation occurs. The Sheriff's Department would still provide services to these areas and changes to service boundaries and new stations would not be needed. Therefore, direct impacts to police services would not occur.

As areas are annexed into and become part of the City the primary responsibility of police protection would be provided by the NCPD. This would result in an increased demand on police protection provided by the City. Therefore, indirectly, the Consensus Alternative has the potential to result in impacts to the provision of these services. Annexation of Priority Annexation Areas #1, #2, #3, and #4, are not anticipated to substantially increase demand for police services. Priority Annexation area #1 and the Caltrans facility, and Priority Annexation area #2, the County Juvenile Hall, are not planned for any expansion an increased demand for services would not occur. Additionally, the primary security services at Juvenile Hall would remain with the County. Priority Annexation Areas #3 and #4 consist of a cemetery and rural residential development and a few vacant lots. If services are extended to these areas it could induce development on the remaining vacant lots and some adjacent areas. Although this expansion is anticipated to be small, it would increase the demand for police services if calls from these locations are made.

The Consensus Alternative does include six potential development areas described above. However, future development of these areas is unknown as no formal development applications have been submitted and no entitlements to develop have been granted. These projects, should they occur, would be subject to the City's review and regulation when development plans are submitted, and application(s) filed.

All future annexation projects would undergo individual CEQA review. The project by project review also would include a City led CEQA analysis and as applicable would determine the new demand for police protection services and facilities. Future projects may be required to include project-specific mitigation measures or binding conditions of approval to help pay for a fair share contribution to the provision of these services. Lastly, although police protection is anticipated to be provided out of the existing stations, if, as a result of long-term increased demand, police facilities require expansion or new police facilities are needed as, the City would conduct project-specific CEQA review for these needs. It is anticipated that through the development review process the City would receive appropriate development impact fees to adequately serve existing as well as future residents. Additionally, if demand would increase such that new facilities would be needed, each facility would undergo separate CEQA review and it is anticipated impacts would be less than significant or less than significant with mitigation.

***Mitigation Measures:*** No Mitigation Measures are Required.

### ***c) Schools***

School services within the existing SOI Plan area is provided by the Nevada County School District. Adoption of the Consensus Alternative would not result in any development and does not include any entitlements that would result in new projects that would increase attendance to area schools. Adoption of the Consensus Alternative would not alter the primary responsibility for provision of school services to

these areas and services would continue to be provided by both the County and City depending on grade levels. Therefore, direct impacts to schools would not occur.

As areas are annexed into and become part of the City the primary responsibility of school services would remain with the current district, but annexation could induce development through the provision of services and increased the demand on school services. Therefore, indirectly, the Consensus Alternative had the potential to result in impacts to the provision of these services. Annexation of Priority Annexation Areas #1, #2, #3, and #4; however, are not anticipated to substantially increase demand for schools. Two of these areas [Annexation Areas #1 (Caltrans facility) and #2 (juvenile hall)] are not planned for any expansion and increased demand for services would not occur. Priority Annexation Areas #3 and #4 consist of a cemetery and rural residential development and a few vacant lots. In sum, these areas account for approximately 41 residential parcels (developed or undeveloped). Based on the existing school district and attendance boundaries, as discussed above, should the SOI change in these locations, the students would attend the same schools.

Because the NCSD does not provide services for High School students, students from these locations, and elsewhere within the Consensus Alternative area would still attend NUHS. In this regard, adoption of the Consensus Alternative and potential future annexations would not change high school attendance and impacts would be less than significant.

The Consensus Alternative does include the six potential development areas described above. However, future development of these areas is unknown as no formal development applications have been submitted and no entitlements to development have been granted.

All future annexation projects would undergo individual CEQA review. The project by project review also would include a City led CEQA analysis and as applicable would determine the new demand for school services. These project areas are undeveloped and would be required to pay school mitigation fees should they occur. These projects would be subject to the City's review and regulation when development plans are submitted, and application(s) filed. As properties are annexed, including those with existing uses as well as potential future development, property taxes and development impacts fee's as applicable, would help pay for a fair share contribution to the provision of school services. Development impact fees would be assessed during the project application and review process and would be considered a fair share contribution to the provision of school services.

It should be noted that there are two existing vacant schools within the City that could be used if demand for new facilities occurs through growth in the City and County. While existing schools are anticipated to provide adequate services, if expansion of a particular school is needed, the expansion would likely occur within the existing school site on previously disturbed areas where impacts would be minimized. Lastly, if schools are expanded, or new schools are needed, the City would be required to conduct a site-specific project-related CEQA review. It is anticipated impacts would be less than significant or less than significant with mitigation.

***Mitigation Measures:*** No Mitigation Measures are Required.

**d) Parks**

Adoption of the Consensus Alternative would not result in any development and does not include any entitlements that would result in new projects that would increase demand for the use of parks. Adoption of the Consensus Alternative would not alter the primary responsibility for provision of parks to the SOI area or within the City. Therefore, direct impacts to parks would not occur.

As areas are annexed into and become part of the City it is not anticipated that existing residents would use different parks. Both County managed and City managed recreational areas would still be available to these residents. Annexation of Priority Annexation Areas #1, #2, do not include the potential for residential development and no increased demands would occur. Priority annexation areas #3, and #4 include a cemetery, existing rural residential uses, and a few vacant parcels on which new single-family residences may be constructed. New construction of these homes could result in a slight increased demand on recreational facilities. However, based on the existing recreational resources throughout the County, this increased demand and potential to result in the demand for new parks or expansion of existing parks would be less than significant.

The Consensus alternative does include the six potential development areas however, future development of these areas is unknown as no formal development applications have been submitted and no entitlements to development have been granted. These projects, should they occur, will be subject to the City's review and regulation related to provision of park services. Future developments are anticipated to provide recreational resources for future residents as part of those projects as required in the City Municipal Code. This requirement is discussed in Article XI- Dedications, Reservation and Development Impacts Measures of the City Municipal Code. More specifically, Chapter 16.04.760 - Park and recreation purposes, states that the city council may require the dedication of land, the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition of the approval of a final map or parcel map and the amount of any fee to be paid in lieu thereof, and shall comply with all of the provisions of Section 66477 of the Subdivision Map Act.

Therefore, as developments that are enabled by the adoption of the Consensus Alternative are proposed and potentially developed, they would require permitting and their own environmental review in accordance with CEQA. These areas would likely either include parks and other recreational resources or would pay fees for construction of resources on separate sites. All parks proposed as part of these projects occurring within the existing development footprint would be included and analyzed for potential impacts and would be accounted for in the respective project CEQA document as part of the annexation process. Any off-site provision of recreational resources would require CEQA review and disclosure of any potential environmental impacts and mitigation as needed. Substantial environmental effects are not anticipated and impacts in this regard are less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

### ***e) Other Public Facilities***

Adoption of the Consensus Alternative would not result in any development and does not include any entitlements that would result in new projects that would increase demand for the use of other public facilities. Therefore, direct impacts on other public facilities would not occur upon adoption of Consensus Alternative.

As areas are annexed into and become part of the City it is not anticipated that existing residents would substantially change their use of public facilities and travel patterns simply because the jurisdiction in which they live changed. Both County managed and City managed public facilities would still be available to these residents. Annexation of Priority Annexation Areas #1, #2, do not include the potential for residential development and no increased demands would occur. Priority annexation areas #3, and #4 include a cemetery, existing rural residential uses, and a few vacant parcels on which new single-family residences may be constructed. New construction of these homes could result in a slight increased demand on other public facilities. However, based on the existing recreational resources available within the County, the increased demand and potential to result in the demand for new public facilities or expansion of existing facilities would be less than significant.

The Consensus alternative includes six potential development areas described above. Future development of these areas is unknown as no formal development applications have been submitted and no entitlements to development have been granted. These projects, should they occur, will be subject to the City's review and regulation related to provision of public services. As developments that are enabled by adoption of the Consensus Alternative are proposed and potentially developed, they would require permitting and their own environmental review in accordance with CEQA which would include an evaluation of potential impacts to other public facilities. If new public facilities would be required, they would be accounted for in a subsequent respective CEQA document and disclosure of any potential environmental impacts and mitigated as needed. Substantial environmental effects are not anticipated and impacts in this regard are less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required.

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## **4.9.5 CONCLUSION**

Implementation of the Consensus Alternative would not result in any direct impacts or changes to the provision of public services. Indirectly, annexations and future development from within the SOI would change the service provider and could increase demand on existing resources and require the expansion of construction of new facilities. Considering the existing uses and development potential of the priority annexation areas, as well as most other areas within the SOI that are designated and are anticipated to remain rural, increased demand for services is anticipated to be small such that expansions would not be required.

Considering the six potential development areas, the density of development could be greater such that new or expanded facilities could be required. All of these developments, should they occur, would be required to pay all applicable fees to provide for its fair share of increased demand for fire protection, law

enforcement, school services, park resources, and other public facilities (if applicable). Through the payment of fees and required subsequent CEQA analysis, should off-site improvements be proposed would reduce impacts to these resources and other resources at off-site locations to less than significant.

#### 4.9.6 CUMULATIVE IMPACTS

This draft EIR considers growth under the Consensus Alternative in terms of direct and indirect impacts. A significant cumulative impact would result if the Consensus Alternative, with other projects exceed the ability of the NCFD to adequately provide service, thereby requiring construction of new facilities or modification of existing facilities.

As described above, the Consensus Alternative area is currently served by the Nevada County Fire Department that operations under a JOA with the NCFD. Upon annexation of existing areas within the County to the City, primary responsibility for provision of services would shift to the NCFD. The NCFD has indicated that in order to maintain adequate fire services, adjustments to the tax structures and funding received would need to be evaluated. The addition of priority Annexation Areas #1, #2, #3, and #4, are not anticipated to result in substantial increases in demand for fire services and other development enabled by the proposed project would be required to pay appropriate fees to enable provision of fire services. It is anticipated, therefore, that growth under the proposed project could be served either by existing stations and that if new stations of facilities are needed, it would not result in a substantial cumulatively considerable because those services would be provided such that residents are placed at risk. In addition, all future development within the NCFD service areas would be required to comply with State and local regulations, including CBC and CFC requirements, and be reviewed by the NCFD to ensure risks associated with fire hazards be minimized. Therefore, the cumulative impact would be less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required.

#### Police Protection

As described above, the Consensus Alternative area is currently served by the Nevada County Sheriff's Department and upon annexation of properties within the Consensus Alternative responsibility would shift to the NCPD. All future project constructed after annexation, would pay required development impact fees and future residents would pay property taxes to account for and offset the increased demand for law enforcement services. In of itself, the Consensus Alternative would not result in direct demand such that new or expanded law enforcement facilities would be needed. Taken in sum with other past, present, and future projects, and projects that could be enabled by adoption of the Consensus Alternative, a cumulative impact could result if a new facility or expansion of existing police facilities was needed and such that the expansion resulted in impacts to the environment. Any future individual projects related to expansion of law enforcement services conducted by the City, would be required to go through the planning and review process, at which time, it would be determined if a site-specific CEQA review was needed. This would identify potential environmental impacts and mitigation measures as needed. Therefore, the cumulative impact would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

## Schools

The students within the Consensus Alternative area currently reside within County boundaries but are served by the same schools as those who reside within the City. As areas are annexed and projects are developed, they would be required to pay all applicable development impacts fees Under Section 65995 of the California Government Code and is deemed to fully mitigate the impacts of new development on school facilities. During the last decade, school enrollment from students generated from within Nevada City and the surrounding areas had fallen. During this time and in preceding years, two schools had been constructed but are now vacant and offer opportunities for reuse should they be needed if a large influx of students occurs. Additionally, if existing schools need additional capacity, this is anticipated to occur through the use of portable classrooms that would be placed within the existing campus on areas that were previously disturbed. Therefore, it is anticipated that existing facilities are adequate to accommodate the increased number of students that could occur with potential growth. Lastly, if new school sites are required, these sites would be subject to site-specific CEQA review and mitigation to reduce impacts would be included. Therefore, cumulative impacts related to school facilities would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

## Recreation

The proposed project would not result in a cumulative impact to park resources. As discussed above, the parks available to existing residents would not change. If existing residential areas are annexed, this would not increase the demand on recreational sites. Some currently undeveloped areas; however, could be annexed to the City and development of residential uses that would increase demand on recreational facilities could occur. As discussed above, these potential future developments are would be required to provide recreational resources for future residents or pay an in lieu of park-fees or a combination of both for the provision of park and recreational resources. If park resources are provided as part of future projects, it is anticipated the new resource(s) would be provided within the proposed project footprint and hence would be evaluated for potential impacts in the required CEQA document. If off-site recreational resources are proposed, these sites would be required to undergo site-specific CEQA review and include mitigation for any impacts that may be considered potentially significant. It is anticipated these impacts would be reduced and not be cumulatively considerable.

**Mitigation Measures:** No Mitigation Measures are Required

## Other Facilities

Other public facilities in the City include libraries, hospitals, and cultural centers such as museums. Similar to other services discussed above, inclusion of existing uses within the Consensus Alternative area would not increase demand for other public facilities and this would not create a significant demand for governmental services beyond those already provided within the City. New construction associated with

future annexations would occur over an unknown period of time and it is anticipated that as the population increases, new facilities, public and private, would be expanded or constructed to satisfy the potential increased demand. Like all other projects within the City, they would be subject to design and review and approval and would need CEQA review depending on their location and intended uses. As part of the CEQA review, it is anticipated that impacts from expansion or construction of public facilities such as libraries, hospitals, cultural center, or other public facilities are anticipated to be would be less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required



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## 4.10 TRANSPORTATION AND TRAFFIC

This section of the Draft Environmental Impact Report (EIR) evaluates the potential impacts of the SOI Plan update for Nevada City (proposed project or proposed SOI Plan update) in terms of traffic and circulation on City of Nevada City (City) and County roadways within the SOI Plan update area and other local roadways and intersections. This section also describes the environmental and regulatory settings. This section describes the applicable federal, state, and local regulations and policies related to transportation and circulation; discusses the existing roadway network and transportation facilities in the City and county; describes existing transportation and circulation conditions within the City and county; and analyzes the potential impacts from project activities on transportation and circulation. While the SOI Plan update area would only apply to existing unincorporated County lands, the traffic generated by the project would travel on highways and roadways maintained by the City and California Department of Transportation (Caltrans), County of Nevada (County), Nevada City, and City of Grass Valley as well as some private roads. Mitigation measures that would reduce impacts, where applicable, are also discussed, if feasible. The following analysis of the potential environmental impacts related to transportation and traffic is derived from the following sources and agencies:

- California Department of Transportation
- Nevada County –
  - Nevada County Regional Transportation Plan
- Nevada City

### 4.10.1 ENVIRONMENTAL SETTING

The proposed project is in a 2,702-acre area encircling the City in unincorporated County land. SOI Plan update area is within Nevada County, which encompasses 978 square miles in the eastern region of California and is generally rural in nature with the exception of its three major cities, the City of Nevada City (City), the City of Grass Valley, and Town of Truckee. The City is within the western half of the County situated in the foothills of the Sierra Nevada Mountains. The existing major roadways in near the proposed project include State Route-20 and State Route-49. Interstate 80 (I-80) which provides a travel route between San Francisco on the west to Salt Lake City on the east is approximately nine miles south of the SOI Plan update area. Transportation in the SOI Plan update area and the County is via automobile traffic and the circulation system in these locations is made up of a combination of state highways, county roadways, city-maintained roadways, and privately maintained roadways; however, some mass transit and alternative transit options are available. This section discusses the existing conditions related to transportation and traffic in the SOI Plan update area, the City, and the County.

#### Existing Major Arterials and Roadways

The major transportation routes that provide regional connectivity through the City is the generally east-west trending State Route 20 (SR-20) and north-south trending State Route 49 (SR-49) which through the

City are joined. SR-20 and SR 49 are the major connectors through the City and to points east. SR-49 provides access to the northwesterly areas of the City and SOI west from the SR-20/SR-49/Uren Street Intersection. SR-20\49 connects Nevada City to the City of Grass Valley approximately four miles to the southwest. Major collector roads starting in the southeast portion of the SOI include Banner Lava Cap Road, Gracie Road, and Red Dog Road. In the northerly area major roadways include Willow Valley Road, Lewis Road, North Bloomfield Road, Cement Hill Road/Wet Hill Road/Indian Flat Road. In the westerly and southwesterly area major roadways include Old Downieville Hwy and Champion Mine Road, Ridge Road, and Nevada City Highway. Within all these areas there are numerous local roads as well as private roads that provide access to the various uses within the SOI area.

These and other County roads that provide access within the City and SOI Plan Update area are discussed in additional detail below.

## State Routes

State Route 20 (SR 20) connects the City of Grass Valley with Yuba County to the west of Grass Valley and continues north of Nevada City, connecting to I-80. The highway portion between SR 20 to the west of Grass Valley and SR 20 north to Nevada City is signed as shared SR 49/20, and is a principal arterial. This shared route is named the "Golden Center Freeway" between Route 49 south of Grass Valley and SR 20 north of Nevada City (RTP, 2015).

State Route 49 (SR 49) runs north/south and is a principal arterial for Nevada County, connecting the cities of Grass Valley and Nevada City with I-80 in Auburn (Placer County) to the south. SR 20 and SR 49 also serve as an emergency detour route for I-80. SR 49 is the lifeline for much of Nevada County's freight and lumber traffic and also provides access to recreational and tourist attractions. To the west of Nevada City, this route continues in a northerly direction to the Nevada/Yuba County line (RTP, 2015).

## County Roads

The SOI Plan Update area contains a diverse number of local roads within Nevada County. The County maintains approximately 562 miles of roadways some of which occurs in the SOI Plan update area. County roadways provide intermediate and localized access to rural areas of the county, as well as to the more populated cities such as Nevada City. County Roadways fall into six classes and include Interstate Highways and Freeways, Principal Arterials, Minor Arterials, Collectors (Major and Minor), Locals, Regional Emergency Access. Most roads are two lanes. *Table 4.10-1: Nevada County Streets and Roads in the SOI Plan update area by Functional Class*, provides a more listing of major roadways as well as major and minor collectors in the vicinity of the proposed project.

**Table 4.10-1: Nevada County Streets and Roads in the SOI Plan Update Area by Functional Classification**

Full Name	Functional Classification	Start	End
State Highway 20	Principal Arterial	Yuba Co. Line	Grass Valley
State Highway 49	Principal Arterial	Placer Co. Line	Grass Valley
State Highway 49/20	Principal Arterial	Nevada City	Grass Valley

**Table 4.10-1: Nevada County Streets and Roads in the SOI Plan Update Area by Functional Classification**

Full Name	Functional Classification	Start	End
Nevada City Hwy	Minor Arterial	Nevada City	Grass Valley
State Highway 49	Minor Arterial	Yuba County	Placer Co. Line
Alta St.	Major Collector	Grass Valley City Limits	Ridge Rd.
Loma Rica Dr.	Major Collector	Brunswick Rd.	End of Co. Maintained
Magnolia Rd.	Major Collector	Combie Rd.	Red Dog Rd.
Old Tunnel Rd.	Major Collector	Banner Lava Cap Rd.	Town Talk Rd.
Ridge Rd.	Major Collector	Rough and Ready Hwy	Nevada City City Limits
Boulder St.	Minor Collector	Nevada City City Limits	Red Dog Rd.
Cement Hill Rd.	Minor Collector	Nevada City City Limits	End of Co. Maintained
Combie Rd.	Minor Collector	Magnolia Rd.	Darkhorse Dr.
Gracie Rd.	Minor Collector	Nevada City Limits	Banner Lava Cap Rd.
Idaho Maryland Rd.	Minor Collector	Brunswick Rd.	Banner Lava Cap Rd.
Lake Vera Purdon Rd.	Minor Collector	Purdon Rd.	N. Bloomfield Graniteville Rd.
N. Bloomfield Graniteville Rd.	Minor Collector	State Highway 49	Grizzly Hill Rd.
Newtown Rd.	Minor Collector	Pleasant Valley Rd.	State Highway 49
Purdon Rd.	Minor Collector	Oak Tree Rd.	Lake Vera Purdon Rd.
Quaker Hill Cross Rd.	Minor Collector	Red Dog Rd.	Banner Quaker Hill Rd.
Red Dog Cross Rd.	Minor Collector	Banner Lava Cap Rd.	Red Dog Rd.
Red Dog Rd.	Minor Collector	Boulder St.	You Bet Rd.
Scotts Flat Rd.	Minor Collector	State Highway 20	Alpine Meadows Camp
Scotts Valley Rd.	Minor Collector	Willow Valley Rd.	Scotts Flat Rd.
Soda Springs Rd.	Minor Collector	Donner Pass Rd.	End of Co. Maintained
Willow Valley Rd.	Minor Collector	Nevada City City Limits	State Highway 20

Source: Nevada County General Plan Circulation Element, 2010.

\* Note: The functional classification uses different terminology for roadway segments than the Regional Transportation Plan (RTP) as shown in Table 4.15- Table 4.15-4: Existing LOS for County Highway Segments, below. The designation are shown this way in the tables to maintain consistency with the source document.

## Existing Roadway Traffic Volumes

Caltrans' published data for 2016 provides peak hour traffic volumes for all State highways within the County. *Table 4.10-2: Existing LOS for County Highway Segments*, provides a summary of the two-way peak hour volumes and LOS achieved on State highway facilities for existing conditions within those highways included to the study that are within the SOI Plan Update area. It should be noted that these traffic volumes include cannabis operations that were in existence in 2016.

**Table 4.10-2: Existing LOS for County Highway Segments**

Highway	Segment	Roadway Classification	Roadway Type	Maximum Peak Hour Service Volume to Satisfy LOS Threshold <sup>1</sup>	Existing (2006)	
					Two-Way Peak Hour Volume	Minimum LOS Achieved?
SR 20	Brunswick Rd to Nevada City, East Junction SR 49	Four-Lane Arterial, Divided	Rural	3,219	3,050	Yes
SR 49	Nevada City, Junction SR 20 to Newtown/Indian Flat Rd	Two-Lane Arterial	Rural	1,539	1,200	Yes

Notes: <sup>1</sup> Based on 2016 Nevada County Regional Transportation Plan

## County Roadway Level of Service

The level of service (LOS) of major roadways is a measure of the operating efficiency of a transportation facility. Letter designations from A (best) to F (worst) are assigned to a road or intersection to describe how well it functions. Levels of service below C occur mainly in the more urbanized areas such as in Nevada City. Although the level of service provides a general indication of the capacity of a roadway, the actual volume of traffic that can be accommodated at each level of service depends on several factors including: number of lanes, width of lanes, width of shoulder, topography, design speed, and vehicle mix (percent auto, truck, etc.). *Table 4.10-3: Two Lane Conventions Highway Level of Service* – provides a description of LOS major roadways and *Table 4.10-4: Two and Four Lane Freeways/Expressways Level of Service* provides a description of the LOS of higher volume roadways.

**Table 4.10-3: Two-Lane Conventional Highways Level of Service Description**

LOS	Demand/Capacity Ratio	Traffic Description
A	<0.34	Free flow, light
B	<0.45	Free flow to stable flow, moderate
C	0.46-0.65	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	0.66-0.85	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.86-1.00	Extremely unstable flow, maneuverability and psychological comfort extremely poor
F	>1.00	Forced delay measured in average flow travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.

Source: Transportation Research Board 2010

**Table 4.10-4: Two and Four Lane Freeways/Expressways Level of Service**

LOS	Demand/Capacity Ratio	Traffic Description
A	<0.34	Free flow
B	0.35-0.52	Free to stable flow, light to moderate volumes
C	0.53-0.69	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	0.70-0.92	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.93-1.00	Extremely unstable flow, maneuverability and psychological comfort extremely poor
F0	1.01-1.25	Forced flow, heavy congestion, long queues from behind breakdown points, stop and go
F1	1.26-1.35	Very heavy congestion, very long queues
F2	1.36-1.45	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods
F3	>1.46	Gridlock

Source: Transportation Research Board 2010

The current and estimated future traffic conditions for significant western Nevada County Road and Highways was provided in the 2015-2035 Nevada County Regional transportation Plan (RTP). The purpose and requirements of the RTP are discussed in the subsequent section of this chapter. The existing LOS of segments of roadway within and adjacent to the SOI Plan update area are provided in *Table 4.10-5 Estimated Future Traffic Conditions for Significant Western Nevada County Roads and Highways*, below. As shown in the table, none of these listed roadways operate at less than an “LOS” D. There are two of the 26 segments that operate at “LOS D,” 10 that operate at “LOS C,” and 14 that operate and “LOS B.”

**Table 4.10-5: Estimated Future Traffic Conditions  
for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Gold Flat Rd Hawke Ln to Hollow Wy	Two-Lane Arterial	240	C
Gold Flat Rd S. of Gracie Rd	Two-Lane Arterial	240	C
Nevada City Hwy NE. of Brunswick Rd	Two-Lane Arterial	1,370	D
Nevada City Hwy S. of Ridge Rd (Nc Corp Limit)	Two-Lane Arterial	510	C
Nevada City Hwy SW of Banner Lava Cap Rd	Two-Lane Arterial	470	C
Old Tunnel Rd S. of Banner Lava Cap Rd	Two-Lane Arterial	340	C
Old Tunnel Rd N. of Brunswick Rd	Two-Lane Arterial	430	C
Ridge Rd W. of Nevada City Hwy (Nc Corp)	Two-Lane Arterial	590	C
Sutton Wy Solar Dr to Golden Gate Terrace	Two-Lane Arterial	810	C
SR 49 SR 20 to Coyote Street	Two-Lane Arterial	1,160	D
SR 49 W. Broad St/Cement Hill Rd to Elks Lodge Entrance	Two-Lane Arterial	640	C
SR 20/49 W. Empire St to S. Auburn St (Northbound)	Two Freeway Lanes and Auxiliary Lane	1,710	B

**Table 4.10-5: Estimated Future Traffic Conditions  
for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
SR 20/49 W. Empire St to S. Auburn St (Southbound)	Two Freeway Lanes and Auxiliary Lane	1,880	B
SR 20/49 South Auburn St to E. Bennett St (Northbound)	Two Freeway Lanes	1,560	B
SR 20/49 South Auburn St to E. Bennett St (Southbound)	Two Freeway Lanes	1,730	B
SR 20, South of Idaho-Maryland (Northbound)	Two Freeway Lanes and Auxiliary Lane	2,140	B
SR 20, South of Idaho-Maryland (Southbound)	Two Freeway Lanes and Auxiliary Lane	2,480	B
SR 20/49 Idaho Maryland Rd to Brunswick Rd (Northbound)	Two Freeway Lanes and Auxiliary Lane	1,600	B
SR 20/49 Idaho Maryland Rd to Brunswick Rd (Southbound)	Two Freeway Lanes and Auxiliary Lane	1,950	B
SR 20/49 Brunswick Rd to Gold Flat Rd (Northbound)	Two Freeway Lanes	1,530	B
SR 20/49 Brunswick Rd to Gold Flat Rd (Southbound)	Two Freeway Lanes	1,440	B
SR 20/49 Gold Flat Rd to Sacramento St (Northbound)	Two Freeway Lanes	1,320	B
SR 20/49 Gold Flat Rd to Sacramento St (Southbound)	Two Freeway Lanes	1,110	B
SR 20, Mill Street to Sr-49 (Eastbound)	Two Freeway Lanes and Auxiliary Lane	550	B
SR 20, Mill Street to Sr-49 (Westbound)	Two Freeway Lanes and Auxiliary Lane	890	B
SR 20 SR 49 to Nevada Street/Manzanita Diggins Dr	Major Two-Lane Highway	390	C
Source: Fehr & Peers, 2016.			

## Nevada County Regional Transportation Plan (RTP)

The adopted Nevada County Regional Transportation Plan (RTP) is meant to guide transportation investments in Nevada County through 2035. The RTP is a cooperative effort between the Nevada County Transportation Commission (NCTC), the County of Nevada, the incorporated cities within the County, Caltrans, and the residents of Nevada and was adopted in 2017. Additionally, the RTP is consistent with the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP) and includes involvement and outreach to the general public as well as the Native American tribes within the County (NCTC 2016).

The RTP also identifies a range of improvements to address existing and future transportation deficiencies including: level-of service improvements; improvements that better balance roadway use between motorized vehicles, transit, bicycles, and pedestrians; and safety improvements. Within the SOI Plan Update area or in close proximity within existing City jurisdiction, there are three long term project improvements listed in the RTP that can reasonably be expected to be funded and constructed between 2025 and 2035. There is project listed as unconstrained. Unconstrained projects are that that are

unfunded but that may be constructed prior to the year 2035 if additional revenues are realized or funded by future development. The RTP does not show any short-term projects for the project or adjacent areas. The three long-term projects and one unconstrained are shown listed below.

### Long-Term Project(s):

SR 20/49 at Uren St.- includes intersection improvements. This improvement would be funded by local RTMF funds and would occur at a date to be determined.

SR 49 at Coyote St.- includes intersection improvements. This improvement would be funded by local RTMF funds and would occur at a date to be determined.

SR 20/49 SB Off Ramp at Ridge Rd./Gold Flat Rd – includes widening southbound off ramp and addition of a right turn lane. This improvement would be funded by local RTMF funds and would occur at a date to be determined.

### Unconstrained Project(s):

Nevada City Hwy./ Banner Lava Cap Rd. – this project is a regionally significant project and includes intersection improvements. The funding source is to be determined and would occur at a date to be determined.

### *Existing Pedestrian and Bicycle Facilities*

In the incorporated jurisdictions in Nevada County, pedestrian facilities most often consist of sidewalks and shared bicycle facilities, while in the unincorporated more rural areas such as those in the SOI Plan Update area, if trails are available, they are typically unpaved and are still used for shared use by cyclists and pedestrians. Outside of the developed areas, walking is less common due to the distance between origins and destinations, lack of sidewalks, and automobile-oriented development. To increase the number of people who walk for utilitarian and recreational purposes, the NCTC adopted a Pedestrian Improvement Plan in March 2011 which was subsequently amended in May 2012 and July 2014 to add two projects neither of which are located in the City or SOI Plan Update area.

The RTP Identified 15 segments of bicycle improvements including one Class I bike path, 13 Class III bike paths, and one Bicycle Detection project. The bike paths also could be used by for pedestrian activities. For areas within the Nevada County, the RTP identified a total of 50 improvements. Of the 50 bike paths, there are approximately 10 within the SOI Plan Update area and includes the following:

**Table 4.10-6 – Bikeway Improvements Summary**

Improvement	Segment	Distance
Class I bike Path along Combie Road	SR-49 to existing Class I	0.75 miles
Class II bike lanes on Nevada City Highway	Nevada City city limits to Grass Valley City limits	0.09
Class II bike lanes on Old Tunnel Road	Banner Lava Cap Road to Grass Valley city limits	0.09 miles
Class II bike lanes on Ridge Road	Pear Orchard Road to Nevada City city limits	0.54 miles
Class II bike lanes on Ridge Road	Grass Valley city limits to Pear Orchard Road	0.91 miles
Class III bike route on Banner Lava Cap Road.	Idaho Maryland Road to Red Dog Road	2.50 miles
Class III bike route on Old Downieville Highway	SR-49 to Nevada City city limits	1.52 miles



**Table 4.10-6 – Bikeway Improvements Summary**

Improvement	Segment	Distance
Class II bike route on Willow Valley Road	Scotts Flat Road to SR-20	0.29
Class III with multi-use shoulder on Red Dog Road	Nevada City limits to Quaker Hill Cross	2.45 miles
Class III with multi-use should on Willow Valley Road	Nevada City city limits to Scotts Valley Road	1.50
Source: RTP		

## TRANSIT SERVICES AND FACILITIES

Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County. The two systems are the Gold County Stage (GCS) Fixed Route transit service, and the Gold Country LIFT Demand Response Paratransit Service. (NCTC RTP 2018).

Gold County Stage Fixed Route Transit Service consists of a fixed route transit system that connects population, commercial, and employment centers throughout western Nevada County. GCS operates six routes that serve the Nevada City/Grass Valley area and the unincorporated area of western Nevada County, and also provides regional connections to Placer County.

### 4.10.2 REGULATORY SETTING

Traffic analysis in California is guided by policies and standards set at the state level by Caltrans and at the local level by the applicable jurisdictions. At the Federal level, for the SOI Plan update, regulation would be related to the Nevada County Airport located south of Banner Lava Cap Road. Each level of regulation and the associated agencies are discussed below.

#### Federal

There are no federal laws or regulations pertaining to transportation and circulation that are relevant to the proposed project. However, as explained in Section 3.2: Regulatory History and Background, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and are subject to the prosecutorial discretion of the federal government.

#### ***Federal Aviation Administration (FAA)***

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace. According to 49 Code of Federal Regulations Part 77.13, any person/organization who intends to sponsor any of the following construction or alterations must complete FAA form 7460 for FAA approval of:

- Any construction or alteration exceeding 200 feet above ground level.

- Any construction or alteration:
  - Within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway;
  - Within 10,000 feet of a public use or military airport, which exceeds a 50:1 surface from any point on the runway; and
  - Within 5,000 feet of a public use heliport, which exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above-noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

## State

### ***California Department of Transportation***

#### *California Department of Transportation Statewide Transportation Improvement Program*

The Caltrans Statewide Transportation Improvement Program (STIP) is a multi-year, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, and metropolitan plans. Caltrans prepares the STIP in cooperation with the Metropolitan Planning Organizations and Regional Transportation Planning Agencies. The STIP contains all capital and non-capital transportation projects or identified phases of transportation projects for funding under the Federal Transit Act and Title 23 of the U.S. Code.

#### *California Department of Transportation Interregional Transportation Improvement Program*

Caltrans' five-year ITIP is prepared pursuant to Government Code 14526, Streets and Highways Code Section 164, and the California Transportation Commission's STIP Guidelines. Regional agencies work with Caltrans to identify projects that will address improvements to the interregional transportation system and improve the movement of people, vehicles, and goods between regions.

### ***State Scenic Highways***

California's Scenic Highway Program was created by the Legislature in 1963. The purpose of the program is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of the lands adjacent to highways. A highway may be designated scenic depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view.

In Nevada County, SR 20 from Skillman Flat Campground (14 miles east of Nevada City) to one-half mile east of Lowell Hill Road is an officially designated state scenic highway. Additionally, most other highways within the county have been identified as eligible state scenic highways but have not been officially designated. These highways include much of SR 20 and SR 49. The status of a State Scenic Highway

changes from eligible to officially designated when the local jurisdiction adopts a scenic corridor protection program that is approved by Caltrans.

### ***California Department of Transportation Concept Records***

Caltrans is responsible for the planning, design, construction, operation, and maintenance of all state-owned roadways, including SR-20 and SR-49. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for State funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans. The Caltrans Guide for the Preparation of Traffic Impact Studies provides general guidance regarding the preparation of traffic impact studies for projects that may have an impact on the State Highway System. The Caltrans Highway Design Manual (HDM) establishes uniform policies and procedures for State highway designs.

TCRs have been completed by Caltrans for the state highway system serving the County. TCRs are Caltrans long-range (20-year) planning documents for each state highway route that describe the conceptual improvement options for each given transportation route or corridor. The TCRs identify existing and forecasted travel data, route maps, and a list of planned, programmed, and needed projects for each highway over the next 20 years. TCRs identify how a highway will be developed and managed in order to deliver a targeted level of service (Concept LOS) that is feasible to attain over a 20-year planning horizon. Concept LOS represents the minimum acceptable service conditions over the next 20 years. TCRs for the State highways in the County and their respective Concept LOS are listed below.

#### ***SR 20 Transportation Concept Report (Caltrans 2013)***

- Concept LOS D on all expressways
- Concept LOS E on 2-lane conventional highways
- Concept LOS E on 4-lane freeways

#### ***SR 49 Transportation Concept Report (Caltrans 2017)***

- Concept LOS D on all segments

### ***Nevada County Regional Transportation Plan 2016 Update***

The NCTC which is the designated Regional Transportation Planning Agency for Nevada County, is required by California law to prepare, adopt, and submit an updated RTP to Caltrans and the CTC every five years. The 2016 RTP documents Nevada County's regional transportation needs for the next 20 years and establishes a cost-feasible action plan to meet those needs. The RTP includes policies and guidelines for use of federal, state, and local funding. Development of updates to the RTP is a cooperative effort between NCTC, Caltrans, and other stakeholders, including but not limited to Native American tribes, local transit authorities, local service providers, and the general public (NCTC RTP 2018).

The 2016 RTP demonstrates close ties to the RTIP, ITIP, STIP, the Federal Transportation Improvement Program (FTIP), the California Transportation Plan, and the California Strategic Highway Safety Plan (NCTC 2016).

The purpose of the Regional Transportation Plan (RTP) is to establish transportation policy and to document the short-term (2015-2025) and long-term (2025-2035) regional transportation needs covering the RTP horizon and to set forth an effective, cost-feasible Action Plan to meet these needs. The 2016 RTP guides transportation investments in the region, with the goal of creating and maintaining a comprehensive, multimodal, safe and efficient transportation system. The plan outlines projects for roadway and transit networks, bicycle and pedestrian facilities, aviation, railroad facilities, goods movement, intelligent transportation systems, transportation system management, air quality, and transportation safety to provide an integrated, multimodal transportation system.

### ***Regional Transportation Mitigation Fee Program***

The Regional Transportation Mitigation Fee (RTMF) Program was adopted in 2016 and established a mitigation fee schedule to finance improvements to the regional network of street and roads that are needed to for the increased traffic that would result from new development in western Nevada County. The fee program has been adopted by Grass Valley, Nevada City, and the Nevada County and is administered by the Nevada County Transportation Commission (MCTC) through agreements with those agencies. Fees are collected based on the land use and number of trips that would be generated. Residential is assessed a fee of \$396.00 per trip and non-residential uses are assessed a fee of \$70.00 per trip.

Within the SOI Plan Update area or immediately adjacent areas, there are three capital improvements programs. This includes the SR-20 and SR-49 southbound ramps at Ridge Road and Goldflat Road, SR-20 and SR-49 at Uren Street, and SR-49 at Coyote Street.

## **Local**

### ***Nevada County Airport Land Use Compatibility Plan (ALUCP)***

The Nevada County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Nevada County Airport Land Use Commission (ALUC) on September 21, 2011. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to land owners in the design of new development. The influence area extends 1.7 miles from the airport's runway. The plan is used by the ALUC staff to define compatibility for noise, safety, airspace protection, and overflight as it pertains to newly proposed projects in the vicinity of the Airport.

### ***Nevada City General Plan***

Government Code 665302 (b)(1) establishes the requirements for General Plan Circulation Elements. The code requires that a Circulation Element shall consist of “the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan. The

circulation element is intended to address circulation and capacity needs, safety and emergency access, and non-motorized transportation. In addition, the circulation element is supposed to identify the functional classification of roads and level-of-service requirements.

The Nevada City General Plan (NCGP) is the guiding document related to development within the City but recognizes that the RTP (discussed above) should be the basis for the City Circulation Element. At the same time the NCGP notes that the single most important purpose of the NCGP is to preserve the existing essential character of the City, which can be seen in the discussion of transportation. The NCGP notes that the City has numerous twisting and dead-end streets that add to the eccentricities that add to the unique character of the town and should be preserved. The street patterns; however, creates the potential for congestion and safety issues even though the traffic volumes are relatively low. Nevada City maintains the goal of preserving the City character in terms of circulation and doing so by diverting traffic to the highways separated from development by wooded greenbelts. The NCGP has circulation related objectives and policies further describing the desired roadway network and while also keeping in mind the regional objectives and policies outlined in the RTP.

According to the RTP, Nevada City does not have a LOS policy, but instead seeks to maintain “reasonable traffic levels.”

#### Objectives

- Cooperate with the county in fulfilling the aims of the current RTP.

#### Policy

- Use the County RTP as the basis for the Nevada City Circulation Element subject to adoption of the current version by the City Council.
- All circulation improvements shall be consistent with the circulation plan Map and classifications.

#### *Local Circulation*

#### Objectives

- Limit Road widening and other major change to the characteristic street pattern. Rather, use these eccentricities as traffic capacity constraints, and encourage added traffic to be diverted as directly as possible to the highways.
- Improve the access to the few freeway interchange points, since they are to receive a large portion of future added traffic.

#### Policies

- Maintain reasonable traffic levels on local streets to protect residents from the harmful effects of noise, fumes, and safety hazards.
- Limit development served by traffic capacity constraints

- Require proposed development served by the Gold Flat interchange to contribute to coordinated evaluation and implementation of needed traffic improvements in the area, as determined by RTP proposals and cost estimated, or else an independent evaluation prepared for Nevada City.
- Encourage construction of pedestrian and bicycle pathways where appropriate to provide safe alternatives to vehicular traffic.

### ***Nevada City Zoning Ordinance***

The Nevada City Zoning Ordinance uses a development fee structure established at the time of issuance of all building permits to help cover some of the cost of new and improved roadways. Section 16.08.010 notes a finding that new development within areas to be annexed create a burden on the circulation system as defined in the RTP. Accordingly, new development will pay fees in accordance with the RTP until such time the new circulation element of the NCGP is adopted. The development fees are to be saved in a separate account used to construct road improvements identified in the RTP and specifically the Western Nevada County RTP Mitigation Fee Administrative Plan. The fees are to be used to improve those areas of the circulation system within the urban area as defined in the RTP which are most impacted by the new development for which a building permit or conditional use permit is being sought.

### ***Nevada County Transportation Commission***

The Mission of the Nevada County Transportation Commission (NCTC) is to Plan, Communicate and Coordinate with the citizens and decision-makers of Nevada County, Grass Valley, Nevada City, Truckee, and Caltrans to create a balanced regional transportation system. The NCTC initiates design concepts, engineering feasibility studies, environmental studies, and proposes funding sources to construct transportation improvements. Once these tasks are completed, projects are turned over to Caltrans or to a local jurisdiction for construction (NCTC, 2019).

## **4.10.3 STANDARDS OF SIGNIFICANCE**

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to land use and planning, if it would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

Evaluation of the potential impacts of the SOI Plan update on transportation was based on a review of the NCGP, Zoning Ordinance, regional transportation plans, and other applicable and related policy documents. It should be noted that a project does not necessarily result in a significant impact absent perfect compliance with these documents, rather a project is consistent if, taken in view of the whole of the action, it is in overall agreement in the implementation of the plans. In other words, a project does not have to strictly or substantially conform to every applicable general policy.

Based on these standards, the effects of the SOI Plan update have been categorized as either a, “less than significant” impact or a, “potentially significant” impact. Mitigation measures, where applicable, are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as, “significant and unavoidable”

### ***Methodology***

The evaluation of potential impacts related to transportation is based on a review of existing transportation facilities and conditions, and transportation-related plans and policies relevant to the proposed project. Due to the scope of the implementation of the SOI Plan update, and because specific land uses and projects that could occur within future annexation areas are not known at this time, the analysis is not able to quantitatively evaluate changes to the levels of service of intersections and segments of roadway. In addition, because much of the SOI Plan Update is currently built with uses, in many areas, substantial new development is not anticipated. Unless denser development is proposed as part of future actions an increase in traffic-related impacts is not anticipated. Therefore, this analysis addresses general expectations of traffic within the SOI Plan Update area and adjacent areas and the potential indirect environmental effects of the proposed project.

The California Environmental Quality Act (CEQA) guidelines recently underwent revisions that will take effect in July 1, 2020. As part of the revision, transportation impacts are to be evaluated using vehicle miles traveled (VMT) instead of the traditional Level LOS. VMT is a measure of the actual miles that an individual in their vehicle travel as opposed to LOS which measures the relative flow of vehicles as determined by potential delays and the time it requires to travel from one point to the next. As part of the CEQA update, Jurisdiction were given until the July 1, 2020 date to implement new thresholds of significance based on the guidance to use VMT and specifically thresholds guidelines are shown in State CEQA § 15064.3 Determining the Significance of Transportation Impacts. At this time neither the City nor LAFCo have adopted thresholds or standards of significance that include an analysis of VMT. Therefore, within this section of the document, when appropriate, LOS is used to describe traffic conditions; however, a qualitative analysis of VMT is used when possible and appropriate and in conjunction with the availability of transit or other alternative means of travel that may reduce the overall vehicle trips and total miles traveled.

## **4.10.4 PROJECT IMPACTS AND MITIGATION**

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred

Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 6.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

## **Impact**

### ***Impacts Discussion Overview***

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative development potential, assumptions for provision of services, and includes City and environmental review requirements. The discussion immediately following is applicable to both Impact TR-1 through TR-4, below, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects within the area under the authority of the City would only occur in conjunction with annexation to the City. The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. Development in these areas is anticipated to be consistent with the existing City designations.

The six potential development areas identified by the City are discussed throughout this document. These sites do not yet have development approval and the specific project footprints are unknown. The anticipated timeline for built out would occur over a period of years and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas, Priority Annexation Area #1, #2, #3, and #4. These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. The sites consist of an existing Caltrans facility, the County Juvenile Hall, a cemetery and rural residential development. There are no development plans for these areas; however, a few vacant lots exist with the potential to be used for rural residential uses. Land uses consistent with existing designation on these sites would contribute a low volume of traffic and would not result in substantial trips resulting in a significant impact.



All future development within the Consensus Alternative area, including the six potential development areas identified by the City and described above would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City to ensure consistency with the surrounding area. Additionally, the City has the authority to and would specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents including the RTP and required mitigation fees that would help maintain the integrity and consistency of land uses. The project by project review also would include a City led CEQA analysis and as applicable, would require additional project specific mitigation measures or binding conditions of approval to reduce impacts related to environmental issue that could be affected by changes to land use.

***Impacts TR-1: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

A potentially significant impact to traffic and circulation would occur if the Consensus Alternative would conflict with or obstruct implementation of the applicable plans, policies, or ordinances related to transportation, circulations, and transit. The Consensus Alternative does not include any proposal for new development and would not entitle any projects that would directly result in any construction activities. The proposed project; therefore, would not result in any direct increases of traffic or use of the circulation system or result in any physical changes to the circulation system that would alter its patterns of use.

The Consensus Alternative would not result in any direct changes to any existing land uses or change any land use regulations or designations. Such changes could occur upon the initiation of a new project or if a modification to land uses are proposed as part of a future annexation. The Consensus Alternative does not include any amendments but does suggest future pre-zoning of parcels consistent with other planning efforts. The Consensus Alternative would not result in any direct impacts to any roadways or other element of the circulation system. Development of the six potential development areas described above; however, will be subject to the City's review and regulation when development plans are submitted, and/or application(s) filed. At this time the City would determine if projects are consistent with applicable transportation programs, plans, ordinances, or policies and require changes to project design if needed.

As discussed above, it is anticipated conformance with all the listed City and environmental regulatory requirements would ensure future projects within the Consensus Alternative area are consistent with the City standards and implementation of the RTP. The City would use the regional traffic model and capital improvements plan as part of analysis of future planning actions and development of mitigation. Development of mitigation in this way would substantially assist in the development of measures that would reduce the traffic impacts of future development in the SOI. Accordingly, all future annexation projects enabled by the Consensus Alternative would be required to implement applicable mitigation already contained in the RTP. All future projects would be required to pay appropriate City fees to help pay for needed roadway, bicycle, transit and other improvements and to meet transportation goals.

Lastly, all future project would be required to undergo separate CEQA analysis. This analysis would ensure analysis of the projects conformance with applicable programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. As part of this analysis, the City also would coordinate with Caltrans as needed for project support and to ensure projects within the Consensus Alternative area are consistent related policy documents and roadway, transit, and alternative transportation design. All projects would be required to pay appropriate City fees and it is anticipated the projects would make necessary project specific improvements to transportation facilities as required by the City. These improvements combined with required environmental resource protections would ensure conflicts remain less than significant and mitigation is not required.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact TR-2:                    *Would the project conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)?***

As discussed above CEQA guidelines recently underwent revisions that will take effect in July 1, 2020 and jurisdictions were given until this date to implement new thresholds of significance. At this time neither the City nor LAFCo have adopted thresholds or standards of significance that include an analysis of VMT. According to the revised guidelines, a qualitative analysis of VMT can be used when possible and appropriate and in conjunction with the availability of transit or other alternative means of travel that may reduce the overall vehicle trips and total miles traveled.

The project does not propose, nor would it directly result in any construction or development within the Consensus Alternative area. Implementation of the Consensus Alternative would not have any direct impacts to travel within the City increase the VMT, or result in a reduction in the LOS of area roadways. The proposed project would not authorize any development and there are no specific development plans proposed. The proposed project is limited to an adjustment to the SOI boundary to enable future annexations.

Indirect impacts and increases to VMT and decreases in LOS if areas are annexed and future projects occur could, depending on the density of future development and existing capacity of surrounding roadways, affect the efficiency of roadways. Due to the anticipated timing of future actions it is anticipated that thresholds used to evaluate traffic impacts of projects that would be enabled by the Consensus Alternative would be evaluated by the City using VMT in accordance with the listed CEQA guideline.

The Consensus alternative does include the six potential development areas, future development of these areas would be subject to the City's review and regulation when development plans are submitted, and application(s) are filed. Potential future annexation and/or development of these properties would generate an unknown number of vehicle trips on area roadways. To account for these trips, additional analysis will be required at the time formal development applications are made and when the nature of the final projects are known.

Regarding the four priority annexation areas, most of the area Priority Annexation Area #1 is located adjacent to the terminus of the southern boundary of the City SCCD at Gold Flat Road and adjacent to SR-

20. There are no plans for further development of this area. It has been designated as a priority annexation area in consideration of the fact that the City has extended sewer service to the existing CalTrans facility within this area. Priority Annexation Area #2 abuts the southern right-of-way of SR-49 in the western portion of the Consensus Alternative update area. This area is not proposed for any new development but contains the County Juvenile Hall and is currently connected to the City's wastewater system. The new VMT generated from these areas is anticipated to be very low or not increase due to an annexation because expansion is not proposed.

Priority Annexation Area #3 contains 19 parcels, three of which are connected to the City sewer system and two are undeveloped. Extension of services could result in service to the two undeveloped parcels and other developed sites. Priority Annexation Area #4 contains 22 parcels including a cemetery and 18 intervening privately owned properties, some of which are developed with rural residential homes. Annexation of these areas could result in extension of services to existing developed and undeveloped areas. If services are extended to developed sites it would not induce additional construction. Although extension of services could result in development of undeveloped sites, the development is anticipated to be consistent with the land use designations and the City would pre-zone these parcels and hence, existing development. All future development plans in these areas would be subject to the design review process to ensure consistency with applicable planning regulations. VMT generated from these areas also is anticipated to be very low because they are already substantially developed.

In addition to the above listed areas, extension of services that would be enabled by the Consensus Alternative could result in additional annexations of other properties within the SOI. All future development plans in these areas would be subject future CEQA review. Although the scale of the development is anticipated to be small, VMT would be calculated to account for the overall distance of automobile travel attributable to future projects. Other considerations that would be evaluated as part of the subsequent CEQA review would include a determination of a project's locations within a half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor. In these instances, projects would be presumed to cause a less than significant transportation impact based on revised CEQA guidance. Projects that decrease vehicle miles traveled in a project area compared to existing conditions also would be presumed to have a less than significant transportation impact.

Although the Consensus Alternative does not propose any transportation projects, fees and mitigation imposed by the City as part of the future annexation process could indirectly fund such projects within the City and County. For these types of projects, it is presumed that no impact on vehicle miles traveled would occur and they would be presumed to cause a less than significant impact. For roadway capacity projects that development fees may be applied toward, such as project listed and previously analyzed in the EIR for the RTP, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. Therefore, impacts in this regard would be less than significant, and mitigation as part of this project is not required.

***Mitigation Measures:*** No Mitigation Measures are Required.

***Impact TR-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

The City boundaries and the SOI area includes hilly and mountainous terrain with some narrow and winding roadways with limited sight radius and limited nighttime lighting. These conditions can increase the potential for accidents and other vehicle collisions.

The project does not propose, nor would it directly result in any construction or development within the Consensus Alternative area. Implementation of the Consensus Alternative would not directly result in any road development that would increase a hazard due to design features or incompatible uses.

Indirectly, the annexation of areas within the Consensus Alternative area could result in new roadway development needed to serve the future projects. All of the existing Priority Annexation areas, six potential development areas, and other areas within the SOI largely adjacent to local roadways which provide access to existing major roadways. If new development is proposed in these areas it is anticipated that the new development would not require substantial new roadway development and that new driveways or short new local roadways would connect with existing roads.

The City Zoning Ordinance contains Article X – Design Standards. More specifically, Chapters 16.04.590 - Access Requirements; 16.04.600 – Alignment of Streets, 16.04.610 – Resubdivision, 16.04.620 – Intersections, 16.04.630 Street Requirements, and 16.04.640- Alleys. These sections of code set forth the design standards that must be met for the listed as determined by the City Engineer. In addition, Chapter 10.12 Traffic Control Devices discusses the installation authority given to the Chief of Police for traffic control devices for the purposed of guiding and warning traffic and to protect life or property from exceptional hazards.

Annexations would be needed to enable future projects approved by the City and would be evaluated on a project by project basis. This would include an evaluation of conformance with the listed City development regulations, any Caltrans roadways design requirements, and approval by the City Engineer. Any roadway improvements made as part of a future annexation would be required to meet all roadway design standards. Review would include a site-specific evaluation and considered CEQA to determine if the proposed project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). If a determination is made, the engineer would require modifications to the plan or implementation of mitigation such as placement of signage, speed restrictions, or lighting to reduce the impacts. Therefore, indirect impacts in this regard would be less than significant. No mitigation is required.

***Mitigation Measures:*** No Mitigation Measures are Required.

***Impact TR-4: Result in inadequate emergency access?***

The project does not propose the development, construction, or improvement of any roadways as part of the SOI update. Because no specific land use plan is defined, apart from establishing the updated SOI boundary, existing land uses are anticipated to remain largely unchanged and would not be directly

affected by the proposed project. As areas containing roadways that are currently County maintained area annexed, depending on the location and connectivity of the roadway, the City and County would determine if the roadway would remain under county control or if the City would assume responsibilities. The SOI update would not directly cause any additional or immediate demand for emergency access within or adjacent to existing roadway infrastructure.

Indirectly; however, it is reasonable to anticipate that due to future annexations and associated land development additional roadways and roadway capacity would be needed in some areas to accommodate emergency access. This is anticipated to increase the demand for circulation and roadway services. As discussed in Impacts TRANS-3, above, all new roadways and connections to existing roadways would be reviewed by the City Engineer to ensure that all safety standards are met. This would include an evaluation of turning radius, roadway width, weight capacity, and inclusion of emergency vehicle turn-arounds, etc., are included to all future project designs. Therefore, conformance with all the listed code requirements and City review and approval, indirect impacts of future projects would be less than significant. No mitigation is required.

**Mitigation Measures:** No Mitigation Measures are Required.

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#### 4.10.5 CONCLUSION

The Consensus Alternative would not result in any direct impacts associated with adoption of the revised SOI Plan update. The proposed project does not include any new development or any entitlements that would directly impact roadways, VMT, LOS, roadway safety or emergency access.

Indirectly, annexation would likely lead to new development within newly annexed areas of the City. New development and construction of new roadways, could, if the projects and roadways not properly designed, conflict with an applicable policy or transportation planning document, or result in a new or exacerbated hazard or inadequate emergency access. Additionally, new projects would increase the VMT within the City and region. As discussed above, all future projects would undergo additional design review and CEQA evaluation. This is anticipated to reduce impacts to TRANS-1, TRANS-3, and TRANS-4, to less than significant.

Regarding the potential for future projects to result in the addition of substantial VMT as discussed in TRANS-2, above, the City has not yet adopted thresholds for the CEQA analysis of VMT. The deadline for the adoption and use is July 1, 2020. As discussed, due to the location and nature of the existing and likely development within the Consensus Alternative area substantial new developments that generate large volumes of VMT are not anticipated. However, all such projects would undergo separate CEQA analysis at the time of annexation. At this time, the City would be able to require design changes, impose mitigation, or require certain project elements to reduce the additional vehicle trips to less than the thresholds adopted. Therefore, in regard to the proposed project, both direct and indirect impacts are less than significant.

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## 4.10.6 CUMULATIVE IMPACTS

The adoption of the Consensus Alternative would not directly result in any vehicle trips to the local or regional roadway system. The proposed project would adjust the SOI boundary including four priority annexation areas to enable the extension of public services to areas that could logically be served by the City. Within these areas, as well as adjacent areas into which cumulative growth could be induced land uses are anticipated to be similar with low-density residential uses resulting in a low overall number of trips generated and distributed to the local and regional roadway network. Existing roadways within the SOI Plan Update Area generally have above a “LOS C.” Although not all roadways segments are classified in the RTP, a substantial number are shown in *Table 4.10-5*, none of these roadways and roadway segments are below a “LOS D.” Additionally, as shown in the RTP for all western Nevada County roads a substantial majority operate at “LOS C” or better with seven roadways or roadway segments operating at “LOS E” or “LOS F.”

Other projects that may occur in the future, such as the six potential development areas identified by the City are part of the cumulative analysis and, if constructed, would contribute vehicles to the area roadways and increase the overall VMT within the City and County. The six potential development areas would result in an estimated development potential of 170-622 total units. These properties are within one mile of Nevada City and within approximately five miles of Grass Valley. Nevada City and Grass Valley are the nearest major trip attractors and are anticipated to account for local trips for shopping and other routine needs. This account is a proxy for potential trips and VMT for these future projects and it is fully anticipated some future residents would make longer daily trips to more distant locals. To account for these trips, additional analysis will be required at the time formal development applications are made and when the nature of the final projects is known.

Each future project that occurs within the City or is annexed into the City from SOI, would be required to pay the City’s traffic impact mitigation fees. The fees would be required to be paid at permit issuance based on the City’s current fee schedule. It is anticipated that some of the fees would go toward projects improving the availability of mass-transit within the City as well as improvements to pedestrian and bicycle facilities to encourage alternative travel. Thus, the Consensus Alternative contribution to cumulative traffic operation impacts would not be cumulatively considerable.

The potential for inadequate emergency access is a site-specific issue. Emergency access to future project sites would be provided primarily via existing public and private roadways, and access driveways that would be required to meet the City’s road standard (or access design that has the same practical effect) and the City’s access standards. Thus, the project’s contribution to cumulative emergency access impacts would not be cumulatively considerable.

***Mitigation Measures:*** No Mitigation Measures are Required.

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## 4.11 UTILITIES AND SERVICE SYSTEMS

This section of the Environmental Impact Report (EIR) addresses the proposed project's potential impacts on certain utilities and services including water, wastewater, stormwater, and solid waste. The analysis in this section has been prepared in accordance with §15064.5 of the State CEQA Guidelines, which considers the potential impacts on water, wastewater, stormwater, and solid waste disposal resource. This section describes the demand and availability of these resources within the project study area, and the applicable regulations that govern those resources. The following analysis of the potential environmental impacts related to utilities and service systems is derived from the following sources and agencies.

- City of Nevada City General Plan;
- City of Nevada City Zoning Ordinance;
- Nevada Irrigation District;
- City of Nevada City Wastewater; and
- Correspondence with service providers and agencies.

### 4.11.1 ENVIRONMENTAL SETTING

The climate of the Nevada City (City) and the SOI Plan update area generally is dry and mild but with hot summers and relatively wet winters. In the higher elevations around the City, snow levels are usually above 5,000 ft. The proposed SOI Plan update area is in the eastern portion of the service area and encircles the City. In this area, the City's jurisdictional boundaries include approximately 1,470 incorporated acres (2018, Nevada County GIS data) and the current SOI (exclusive of the incorporated area) includes approximately 2,702 acres. Within its boundaries, the City provides a full portfolio of municipal services, including treated water, public sewer, and solid waste. These services, providers, and characteristics of their resources are provided in additional detail below.

#### Water

The City and SOI Plan update area receive water from treated surface water and groundwater. Public water supply to areas within the City is provided by City sources and Nevada Irrigation District (NID). Much of the SOI Plan update area is within the NID service area boundary. In these areas NID provides treated water service to some developed properties. Properties not served by NID and without access to public water service use private wells. NID's service area and boundaries overlap with City boundaries with only the original City area of one square mile being outside NID's boundaries. The City has service agreements with NID that allows service to be provided depending on proximity and eligibility of existing infrastructure (Nevada City, 2017). While NID serves most properties within the SOI Plan update area, there are several properties that are already served by City water. There are also some areas in the SOI Plan update area that are adjacent to existing City water line facilities. The NID Service Area Boundaries within the Consensus Alternative area and nearby unincorporated County in proximity to Nevada City are designated served by the Elizabeth George (E. George) water system. According to the NID 2015 Urban Water



Management Plan, the E. George water system serves the City and some locations in the SOI Plan update area. The E. George water treatment facility located off Banner Lava Cap Road serves 6,007 connections and has capacity for approximately 18 million gallons per day.

### ***City Water***

The Nevada City water system serves a population of approximately 3,010 people and has approximately 1,252 service connections. The City has its own water supply (via Little Deer Creek), but this supply is supplemented by NID each year as needed under the service agreement. According to the NID Urban Water Management Plan (UWMP), in 2015 approximately 400-acre feet (ac-ft/yr) of water was sold, transferred, or exchanged to Nevada City. The City water supply is derived from surface water in Little Deer Creek watershed, and by the Nevada Irrigation District's (NID) DS Canal. A surface water source assessment was completed for the Little Deer Creek watershed in February 2012. Prior to being dispersed to customers, City water is treated at the City's water treatment plant which has capacity for 2 million gallons per day (mgd) and currently treats a maximum daily demand of 1.5 mgd (Nevada City, 2017). The surface water is considered vulnerable to climatic effects of precipitation within the Little Deer Creek Watershed. City water rights are pre-1914 and are considered a 'statement of water diversion' which is a claim without a specific amount. The City diverts water from Little Deer Creek to the City's storage reservoir 54 ac. Ft. capacity. Little Deer Creek typically meets the needs for the City's water supply 9 months of the year. In the summer months, when there is insufficient surface water available from Little Deer Creek, the City purchases raw water from NID. The City has purchased water from various water companies since the mid 19th century including South Yuba Canal Co., Excelsior Ditch Co., Snow Mountain, Cascade and PG&E Company. These companies were subsequently dissolved or absorbed during the formation of NID in 1920's.

### ***Nevada Irrigation District***

NID was organized in 1921 under the California Irrigation District Act of 1897 as a nonprofit water agency and operated under Division 11 of the State Water Code. NID is on the western slope of the Sierra Nevada Mountain Range and encompasses 287,000 acres, mainly in Nevada and Placer Counties. NID's mountain watersheds cover 70,000 acres and include the upper portions of the Middle Yuba River above Milton Diversion, Canyon Creek above Bowman Reservoir, and Deer Creek. NID stores water in ten reservoirs that have a storage capacity of approximately 280,380 acre-feet and operates seven water treatment plants (WTPs) that supply approximately three billion gallons, or approximately 9,000 acre-feet, of treated drinking water per year.

NID has water rights to the vast majority of its water supply, with approximately three percent coming from outside sources. These include water contract purchases from PG&E and recycled water obtained from municipal wastewater treatment plants: Auburn, and Placer County at Joeger Road (NID, 2015).

Based on NIDs adopted Urban Water Management Plan (UWMP), NID anticipates that it will have approximately 477,000 acre-feet of water available in normal years and approximately 359,000 acre-feet available in dry years for its wholesale, retail, and raw water deliveries. NID estimates that approximately 200,711 acre-feet available in dry years for its wholesale, retail, and raw water deliveries. *Table 4.10-1:*

*NID Available Water Supplies* summarizes NID’s normal year, single dry year, and multiple dry year supply reliability forecast. As shown Multiple Dry Years 2, 3, and 4 would have supply of approximately 231,325 AFY, 251,258 AFY, and 200,711 AFY, respectively.

**Table 4.11-1: NID Available Water Supplies**

Supply	Average/Normal	Single Dry	Multiple Dry Water Years			
	Year	Year	Year 1	Year 2	Year 3	Year 4
	AFY	AFY	AFY	AFY	AFY	AFY
Watershed Runoff	221,500	77,378	223,069	89,763	120,041	77,378
Reservoir – Carryover Storage	129,400	107,330	140,310	137,195	117,500	107,330
PG&E Contract	8,000	16,003	2,882	4,367	13,744	16,003
<b>Total</b>	<b>358,900</b>	<b>200,711</b>	<b>366,261</b>	<b>231,325</b>	<b>251,258</b>	<b>200,711</b>

### ***Gallons Per Capita Per Day***

Gallons Per Capita Per Day (GPCD) is the calculation of average daily water use per person per day. This is total water use within a service area including commercial, industrial, and irrigation uses, minus allowable exclusions, divided by population and measured in gallons. This is different from the R-GPCD used in drought reporting to the State Water Resources Control Board. RGPCD is residential water use in a service area divided by population. The residential water use includes single-family and multi-family residential water uses.

To calculate GPCD over time, NID used both a five year and ten-year period to determine water use. The 10-year baseline period per capita water used for the 2015 UWMP is 246 GPCD. This volume is slightly less than the 2010 UWMP analysis which used a baseline average per capita use of 254 GPCD. The updated 5-year base period for the 2015 UWMP per capita use is 227 GPCD, which is less than the 2010 5-year base per capita use of 245 GPCD. NID accounts for the historical GPCD decrease for the District since the 2010 UWMP analysis because the baseline population has somewhat increased (NID, 2015).

When considering residential customers only, average daily water use declines. Approximately 61% of water consumption in the NID service area is from residential uses. Of this volume, approximately 40-50% is used outdoors for things such as gardening and landscaping. During August 2017, one of the more water use intensive months, the average number of daily gallons used per residential customer was 72.70 (SCPR, 2017).

### ***Groundwater***

Several key properties help determine whether the subsurface environment will provide a significant, usable groundwater resource. Most of California’s groundwater occurs in material deposited by streams, called alluvium. Water infiltrates deep into the layers of sand and gravel, and silts and clays and coalesce into thin lenses and beds that contain water and are termed aquifers. California’s groundwater basins usually include one or a series of alluvial aquifers with intermingled aquitards. Although alluvial aquifers are most common in California, other groundwater development occurs in fractured crystalline rocks, fractured volcanic, and limestones. This is the case in Nevada County where the majority of groundwater in the western portion of the County occurs in fractures of the hard rocks between 200 and 215 feet below

ground. There is little groundwater found to occur in the alluvium and colluvium of the area. The ground water in the Sierra Nevada foothills that is found is sourced from these reservoirs in fractured rock and that are recharged slowly over time and generally well confined.

### **Surface Water**

The NID 2018 Annual Water Quality Report states that NID treated and distributed 3.1 billion gallons of surface water in 2017. The water originates from 70,000 acres of mountain watersheds for which NID holds water rights. This means that NID does not have to purchase water from other agencies. The five watersheds from which the water is derived are in the Sierra Nevada mountains and fed by snowpack. The watersheds include the Middle and South Yuba River watersheds, Bear River watershed, North Fork American River watershed, and the Deer Creek watershed. Water is initially collected in seven reservoirs in the mountain division before flowing downstream via the Bowman-Spaulding Canal, through Fuller Lake, to PG&E's Lake Spaulding. Water is then transported to NID's water treatment plants via a canal system operated by NID and the Pacific Gas and Electric Company. NID uses over 400 miles of canals and another 300 miles of pipeline to transport water to customers. (NID, 2018). NID Reservoirs, are within the Mountain Division or the Foothill Division, and are shown in *Table 4.10-2 NID Reservoirs*, below.

**Table 4.11-2: NID Reservoirs**

Mountain Division		Foothill Division	
Reservoir	Storage (Acre-Feet)	Reservoir	Storage (Acre-Feet)
Jackson Meadows	69,205 AF	Rollins	65,988 AF
Bowman	68,510 AF	Scotts Flat	48,547 AF
French Lake	13,940 AF	Combie	5,555 AF
Faucherie	3,980 AF		
Sawmill	3,030 AF		
Jackson Lake	1,330 AF		
Milton	295 AF		
<b>Subtotal:</b>	160,290 AF	<b>Subtotal:</b>	120,090 AF
<b>Total:</b>	<b>280,380 AF</b>		

### **Wastewater**

#### **City**

The wastewater system serves almost everyone in the City, although there are a few scattered lots that still utilize septic tanks. Service is sometimes provided outside the City boundary, provided certain conditions are met. Wastewater services currently provided include collection, treatment and disposal of treated effluent and repairs and maintenance of wastewater facilities and associated infrastructure. The City does not currently provide sewer service for any industrial facilities. Although the City has industrial zoning, the enterprises located there do not create industrial waste due to the type of operations (Nevada City, 2015 – Wastewater MSR).

The Nevada City Wastewater Treatment Plant WWTP is located at 650 Jordan Street just southwest of downtown, along Deer Creek. This location encompasses 5.54 acres in size and is at an elevation of 2,496 feet above sea level. The plant went through a multi-million-dollar upgrade which was completed in 2007. The treatment plant uses a tertiary activated sludge system and after treatment the plant discharged the water to Deer Creek (NID, 2015). The system presently serves approximately 1,380 connections (460 for businesses and institutions, 920 for residences) (Nevada City, 2015 – Wastewater MSR). The City's Wastewater Treatment Plant has capacity for 0.69 million gallons per day (mgd). According to the City, the current average dry weather flow is approximately 0.39 mgd, or approximately 56.5% of capacity. This leaves a remaining capacity of approximately 0.3 mgd (Nevada City, 2017).

### ***Nevada County***

The County does not comprehensively provide wastewater collection and treatment to all areas of the County. Much of Nevada County, including areas within the SOI Plan update area, is served by on-site sewage disposal/septic systems. With the exception of the Eden Ranch neighborhood, the County does not provide wastewater collection and treatment to properties within the vicinity of Nevada City.

Eden Ranch is a residential neighborhood which receives wastewater service from the County Sanitation District. This existing developed area is located adjacent to the southern right-of-way of SR-49 and is access via Eden Ranch Road off of Old Downieville Highway. The Eden Ranch System is a Septic Tank Effluent Gravity (STEG) gravity collection system where individual house septic tanks flow to a community pump station and is discharged to the leach field. Compliance with Sanitation Code is checked during building permit design review and the district provides inspection of the sewer lateral and septic tank during construction. There are no known capacity restrictions in the collection system (Nevada County, 2012).

### **Solid Waste**

Solid waste disposal service is provided to the City using Waste Management. Waste Management provides both residential and business services and collects trash, recycling, and green waste. Refuse collected by Waste Management and self-hauled refuse are collected at the McCourtney Road Transfer Station and Recycling Center located at 14741 Wolf Mountain Road in Grass Valley.

Nevada County does not have an active solid waste landfill; all solid waste refuse is hauled to out-of-County landfills under the contract with Waste Management of Nevada County. Solid waste, including green waste, generated in the County is taken to the McCourtney Road Transfer Station & Recycling Center in Grass Valley. Green waste, also referred to as organic waste, is hauled off to out-of-County landfills by Waste Management of Nevada County. Effective January 1, 2019 any business that generates four or more cubic yards of solid waste per week must recycle its organic waste. (CalRecycle, 2019).

### **Electricity and Natural Gas**

Electric and natural gas facilities are provided in Nevada County (County) by Pacific Gas & Electric Company (PG&E). There are 5 PG&E substations within the County. Four of these substations have

distribution voltages of 12kV and one substation has a distribution voltage of 21kV. Three of the substations are served via 60kV transmission lines and two substations are served via 115kV transmission lines. The transmission lines are networked and generation for these transmission lines comes from generators located throughout the state. The transmission lines are operated by California Independent System Operators, CALISO. In 2017, according to the California Energy Commission (CEC), total energy usage for Nevada County was 750.441659 Million of kWh (GWh) (CEC, 2017), which was an increase of approximately percent from 2016 when total energy consumption was 661.054476 (CEC, 2016).

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## **4.11.2 REGULATORY SETTING**

### **Federal**

#### ***Federal Safe Drinking Water Act***

The Safe Drinking Water Act, the principal federal law intended to ensure safe drinking water to the public, was enacted in 1974 and has been amended several times since it came into law. The Act authorizes the U.S. Environmental Protection Agency (EPA) to set national standards for drinking water, called the National Primary Drinking Water Regulations (NPDWR), to protect against both naturally occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Water Resources Control Board conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

### **State Regulations**

#### ***California Porter-Cologne Water Quality Control Act***

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This Act divided the state into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. The City is overseen by the Central Valley RWQCB.

#### ***California Urban Water Management Planning Act***

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet<sup>1</sup> of water annually. The Act is intended to support conservation and efficient use of urban water supplies. The Act requires that total project water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single and multiple dry water years, and that plans include a water recycling analysis that incorporates a

description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses.

### ***Sustainable Groundwater Management Act (2014)***

The Sustainable Groundwater Management Act of 2014 (SGMA) consists of three legislative bills, Senate Bill (SB) 1168 (Pavley), AB 1739 (Dickinson), and SB 1319 (Pavley). The legislation provides a framework for long-term sustainable groundwater management across California. Under the roadmap laid out by the legislation, local and regional authorities in medium and high priority groundwater basins will form Groundwater Sustainability Agencies that oversee the preparation and implementation of a local Groundwater Sustainability Plan. Local stakeholders have until 2017 to organize themselves in Groundwater Sustainability Agencies. Groundwater Sustainability Plans will have to be in place and implementation will begin sometime between 2020 and 2022. Groundwater Sustainability Agencies will have until 2040 to achieve groundwater sustainability.

### ***California Senate Bills 610 and 221***

SB 610 and SB 221 amended State law to (1) ensure better coordination between local water supply and land use decisions and (2) confirm that there is an adequate water supply for new development. Both statutes require City and County decision-makers to receive detailed information regarding water availability prior to approval of large development projects. SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain types of projects subject to the California Environmental Quality Act (CEQA). Projects that would be required to prepare a WSA include but are not limited to residential development of more than 500 dwelling units and shopping center or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor area.

### ***Water Conservation in Landscaping Act of 2006 (AB 1881)***

The Water Conservation in Landscaping Act of 2006 (AB 1881) required the State Department of Water Resources to update the State Model Water Efficient Landscape Ordinance (WELO) by 2009. The State's model ordinance was issued on October 8, 2009. Under AB 1881, Cities and Counties are required to adopt a State updated model landscape water conservation ordinance by January 31, 2010, or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). In accordance with AB 1881.

### ***2015 Update of the State Model Water Efficient Landscape Ordinance (per Governor's Executive Order B-29-15)***

To improve water savings in the landscaping sector, the California Department of Water Resources (DWR), 2015) updated the Model Ordinance (in accordance with Executive Order B-29-15. The Model Ordinance promotes efficient landscapes in new developments and retrofitted landscapes. The Executive Order calls for revising the Model Ordinance to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. This applies to

residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review.

### ***CALGreen Building Code***

The CalGreen Building Code requires residential and non-residential water efficiency and conservation measures for new buildings and structures. Local agencies had until December 1, 2015 to adopt the ordinance or adopt their own ordinance, which must meet or exceed effectiveness. Section 15.04.015 - California Codes Adopted of Title 15 – Buildings and Construction of the City Municipal Code, notes numerous California codes related to building standards that were adopted by the City. This includes the 2016 edition of the California Building Standards Code, known as the California Code of Regulations, Title 24, Part 11 (California Green Building Standards Code), the whole thereof with State amendments.

### ***California Integrated Waste Management Act***

California's Integrated Waste Management Act of 1989, AB 939 (Sher), subsequently amended by SB 1016 (Wiggins), set a requirement for cities and counties throughout the State to divert 50 percent of all solid waste from landfills by January 1, 2000 through source reduction, recycling, and composting. To help achieve this, the Act required that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity.

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. The California Integrated Waste Management Board was replaced by the California Department of Resources Recycling and Recovery (CalRecycle) in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate. In 2014, the statewide residential per capita disposal rate was 4.5 pounds per resident per day, and the statewide employee per capita disposal rate was 10.6 pounds per employee per day.

## **Nevada City General Plan**

The purpose of the Nevada City General Plan (NCGP) is to be a long-term comprehensive guide to address all aspects of future growth, development, and conservation within the City. As part of the NCGP there are certain elements that provide guidance for further planning efforts such as zoning amendments and environmental review. Among the elements is guidance for providing public services and infrastructure to facilitate and ensure logical growth within the City and into the SOI.

### ***Public Service/Fiscal***

#### **Objectives**

- Encourage a rate of growth which does not exceed the City's ability to provide necessary public services or the ability of the local economy to support such growth.

### Policies

- Encourage commercial and employment-generating uses which provide tax revenues and employment to help support planned residential growth, including auxiliary public facilities and services.
- Develop a program of growth phasing, wherein only those lands where public facilities and services are available at a given time will be able to develop at urban densities and standards at that time.
- Initiate planning for incremental expansion of the city sewer and water systems. Specifically, verify the existing excess capacity, alternative means to increase capacity, and comparative costs to those alternatives.
- Enact measures requiring new development to contribute to costs of necessary improvements, by such means as mitigation fees, or sewer impact fees proportional to the quantity of new space.
- Identify areas with capacity constraints, and place appropriate policy restrictions on those areas. For example, limit growth in the area served by Boulder Street, because of traffic constraints.

## **Nevada City Municipal Code**

The Nevada City Municipal Code (NCMC) provides the requirements and regulations related to development and overall operations within the City. The NCMC also provides specific guidance related to some of the elements related to hydrology and water quality. More specifically, Title 13 of the Nevada City Municipal Code (NCMC) discusses public services including the water system, the sewer system, underground utility districts, and floodplain management.

**Section 13.04.190 A.** This Section discusses water main extensions and submissions of the proposal must be made by the superintendent of public works for review and approval by the city council. Section 13.04.190 B provides that all such main extensions shall be of such size as will properly serve all of the properties shown on the map, as well as any additional properties within the city which may in the future be served by the further extension of such main.

**Section 13.08.050 A.** This section describes the process for sewer main extensions and installations and states that the proposal must be made to the superintendent of public works including service map for review and approval by the city council. Section 1308.050 B provides that all such sewer main extensions shall be of such size as will properly serve all of the properties shown on the map, as well as any additional properties within the city which may in the future be served by the further extension of such main.

**Section 13.08.110.** This section provides guidance on new construction design. This section requires all new sewer extensions and service connections to be properly designed and constructed and that they meet all design requirements of the city, as determined by review of the city manager with no new construction without city approval.



### 4.11.3 STANDARDS OF SIGNIFICANCE

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact on utilities and service systems, if it would:

- a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects.
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant" impact or a "potentially significant" impact. Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a "significant and unavoidable" impact.

### 4.11.4 PROJECT IMPACTS AND MITIGATION

Potential impacts on Utilities and Service Systems were evaluated by looking at the potential for the SOI Plan update area to result in changes to the provision of utility services and the capacity of existing service providers. This impacts discussion compares the baseline conditions to the anticipated service extensions after adoption of the Consensus Alternative and the potential for implementation of future proposed project activities. Direct and indirect impacts on utilities and service systems were assessed based on the types of lands that could be disturbed and construction activities that could occur indirectly, after adoption of the SOI Plan and future annexation of properties.

## Impacts Discussion Overview

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of utility services, and City and environmental review requirements related to the protection of environmental resources and the quality of those resources. This discussion is applicable to each impact, Impact 4.10-1 through 4.10-4, below, but is provided here to avoid repetitive discussion.

The Consensus Alternative would update the SOI Plan area, and future development projects under City jurisdiction would occur only after being annexed to the City. The majority of these undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. The lands that would be annexed are anticipated to be built out over time and development in these areas is anticipated to be consistent with the existing designations and planning documents.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for built out would occur over an unknown period of time and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

Within the Consensus Alternative boundaries there are four priority annexation areas. These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. Given that most of these areas would not require the extension of services such as public sewer or water, disturbance would be low, and given the sites have exiting uses, the pressure to increase development density is low. The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with minor areas designated for planned development, employment centers, public uses, or service commercial. These areas would be developed as demand arises, but at this time, the City has no applications for annexation or development applications, and hence, analysis of potential development and associated impacts is not discussed in this EIR.

All future development within the Consensus Alternative area, including the six potential development areas identified by the City, would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines. The City also has authority to prezone all future annexations to Nevada City. For all annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to the provision of utility services and protection of resources. The project by project City review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval to reduce impacts related to the provision of utilities and services and potential for indirect impacts.

***Impact UT-1: Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?***

The Consensus Alternative would not require or result in the relocation or construction of any new water, wastewater, storm drainage, power, natural gas, or telecommunication service lines or facilities. The Consensus Alternative would adjust the SOI boundary which does not include any improvements, or implement any development proposals, new construction, or new entitlements to develop. Additionally, the Consensus Alternative would not change any existing land use designations in any area. The Consensus Alternative would not result in any direct impacts to utilities or services.

### ***Wastewater Treatment***

Within the Consensus Alternative area, a large percentage of properties use private on-site-wastewater-treatment systems (OWTS) such as septic tanks and leach fields. Throughout most of the Consensus Alternative area there is a lack of sewer infrastructure and it is not anticipated that the City would need to provide wastewater services to developed parcels within the SOI even upon annexation. Under the Consensus Alternative there would be no direct expansion or extension of any sewer lines or wastewater treatment plant, or any other associated facilities.

The Consensus Alternative includes Priority Annexation Areas #1, #2, #3, and #4, and it should be noted that the City already provides wastewater services outside its jurisdictional boundaries to properties located within Priority Annexation Areas #1 (a CalTrans facility), #2 (the County Juvenile Hall), and #3 (a residential neighborhood). Priority Annexation Area #4 consists of uses including a cemetery and rural residential parcels and vacant parcels that could be developed with residential units at similar densities. Indirectly, the Consensus Alternative would enable extension of sewer services to other properties near these sites in the context of future annexation applications, resulting in a minor increase in demand for service.

Regarding the six potential development areas, future development of these areas is not certain and there are no defined project boundaries or development footprints, proposals, plans, or applications. Therefore, the specific nature of these developments is unknown and future demand on wastewater treatment is unknown. If applications for these sites are received, the future development of these areas would be subject to the City's review and regulation when applications and plans are submitted.

As areas are annexed and if wastewater services are extended to these or other future annexation sites, the wastewater would be treated at the Nevada City WWTP. The WWTP has capacity for 0.69 million gallons per day (mgd) and has an average daily remaining capacity of approximately 0.3 mgd (Nevada City, 2017). The Waterboard estimates that a conservative estimate for wastewater generation from a conventional residential use is approximately 92.5 gallons per day (gpd). The City; however, uses the City of Grass Valley standard estimates of 191 gpd. Considering the remaining capacity of the WWTP, using the much more conservative Grass Valley generation rate a total of approximately 1,571 homes could be

provided service. It should be noted that the septic systems of other uses in the Consensus Alternative area could fail. As sewer service lines are extended, this could induce residents to request service as opposed to repairing or replacing leach fields. It is unknown and not possible to know the status of all the existing systems and the rate at which this may occur. Nonetheless, some additional demand on the WWTP may occur from such or similar conditions.

Growth within the City has been slow over the last two decades. Between census years 2000 to 2010, the City's population grew by 71 people, which equates to a 0.26 percent annual growth rate. As of January 1, 2014, the population in Nevada City was estimated by the California Department of Finance at 3,016 persons. This represents a decline of 1.7 percent since the 2010 U.S. Census (LAFCo, 2015). More recently, according to the California Department of Finance (CDOF), the 2018 population of Nevada County was 3,226, which was a decrease of six people from 2017 which was reported to have a population of 3,232 (CDOF, 2018). Although some additional growth has occurred in the last two years, the trend of the slow growth is not anticipated to change substantially. Based on the anticipated growth rate, the remaining capacity to treat approximately 1,570 residences, There is adequate capacity at the WWTP to treat potential annexation areas.

Finally, as discussed in the Impacts Discussion Overview, all annexation projects would be subject to a city lead CEQA review which would require projects to show all wastewater improvements and ensure adequate capacity exists. If expansion of the WWTP or other facilities would be needed, these improvements also would be subject to CEQA review. These facts and requirements for additional review would ensure these impacts are less than significant.

### ***Water Service***

Within the Consensus Alternative area, a large percentage of properties use water wells for domestic water needs. Throughout most of the Consensus Alternative area, some treated water service is provided by Nevada Irrigation District and it is not anticipated that the City would provide potable services to most of the SOI even upon annexation. Under the Consensus Alternative there would be no direct expansion or extension of any water lines or treatment plant, or any other associated facilities. The Consensus Alternative does include Priority Annexation Areas #1, #2, #3, and #4, however, most of the developed properties in these areas are already connected to NID's treated water system.

Regarding the six potential development areas, future development of these areas is not certain and there are no defined project boundaries or development footprints, plans, or applications. Therefore, the specific nature of these developments is unknown and future demand for water resources is unknown. If applications for these sites are received, the future development of these areas would be subject to the City's review and regulation when development applications and plans are submitted.

As areas are annexed if water services are extended to these or other future annexation sites, the water would likely be supplied by NID. While the City currently supplies some water to customers, the City relied on NID surplus water to fulfill all service demands. NIDs anticipates that it will have approximately 477,000 acre-feet of water available in normal years, approximately 359,000 acre-feet (AFY) available in dry years and approximately 231,325 AFY, 251,258 AFY, and 200,711 AFY, in multiple dry years 2, 3, and

4, respectively. Currently, NID produces approximately 9,000 AF of drinking water per year from their existing water supply and would have adequate water to serve the relatively small increase that could be indirectly created from the Consensus Alternative and other growth as discussed in wastewater impacts above.

All annexation projects would be subject to a city lead CEQA review which would require projects to show all wastewater improvements and ensure adequate capacity exists. If, through future planned environmental review, expansion of the NID facilities would be needed, these improvements also would be subject to CEQA review. These facts and requirements for additional review would ensure these impacts are less than significant.

### ***Stormwater***

The Consensus Alternative area encompasses a portion of unincorporated County land that is largely rural in nature with numerous undeveloped tracts of land. These locations are not characteristic of more densely developed areas where stormwater runoff becomes more focused due to the large number of impervious surfaces. Because the Consensus Alternative is largely undeveloped, and a robust stormwater drainage system has not been incorporated, a large volume of rainwater and stormwater is able to infiltrate. The majority of stormwater either infiltrates through the existing undeveloped areas or flows overland or as subsurface flow. Water that does fall on impervious surfaces such as roads and homes is typically conducted to by manmade roadside ditches or vegetated and natural drainages. The Consensus Alternative would not result in a direct expansion or extension of any stormwater infrastructure or any other associated drainage facilities.

The Consensus Alternative does include Priority Annexation Areas #1, #2, #3, and #4 but extension of services or expansion of uses of these sites would not be directly authorized by adoption of the Consensus Alternative. Priority Annexation Areas #1 and #2 consist of an existing Caltrans facility and a Juvenile Hall. Priority Annexation Areas #3, and #4 consist of a cemetery and rural residential parcels with a few parcels that could be developed with residential units at similar densities. Indirectly, the Consensus Alternative would enable extension of City managed stormwater drainage facilities to these sites if they are annexed. Densities are anticipated to remain similar and substantial expansion or demand for new facilities is not anticipated.

Regarding the six potential development areas, future development of these areas is not certain and there are no defined project boundaries or development footprints, plans, or applications. Therefore, the specific nature of these developments is unknown and future demand for stormwater facilities is unknown. However, as discussed in *Chapter 3.6 Hydrology and Water Quality*, these projects would be subject to NPDES permits due to their size being greater than one acre and SWPPP incorporating BMP's would be required. Additionally, due to their anticipated size, a formal stormwater drainage system would likely be required, and LID's would likely be incorporated.

As part of any future annexation process, these projects and all other projects would be subject to a City lead CEQA review. This would require projects to show all wastewater improvements and ensure adequate capacity exists. If, it is determined that expansion of stormwater drainage facilities would be

needed environmental review would be required and subject to CEQA. These facts and requirements for additional review would ensure these impacts are less than significant.

### ***Electricity, Natural Gas, and Telecommunications***

The area within the Consensus Alternative would continue to be served by PG&E for electric and natural gas services. Numerous small to large phone companies, such as AT&T, provide phone service to the unincorporated areas. Under the Consensus Alternative there would be no direct expansion or extension of any of these services or extension of lines.

The Consensus Alternative does include Priority Annexation Areas #1, #2, #3, and #4 but extension of services or expansion of uses to these sites would not be authorized by adoption of the Consensus Alternative. Priority Annexation Areas #1 and #2 consist of an existing Caltrans facility and the County Juvenile Hall. Priority Annexation Areas #3, and #4 consist of a cemetery and rural residential parcels with a few parcels that could be developed with residential units at similar densities. Indirectly, the Consensus Alternative would enable annexation of these existing County lands and indirectly enable extension of City services, as well as electricity, natural gas, and telecommunications. This also would occur in conjunction with annexation and approval of any of the six potential development areas. However, future development of these areas is not certain and there are no defined project boundaries or development footprints, plans, or applications. Therefore, the specific nature of these developments is unknown and future demand for these services is unknown.

Finally, the listed projects and all other project proposed for o annexation would be subject to a City lead CEQA review. As part of that review, an evaluation of availability of these services, and potential impacts associated with extension would be required. If needed, mitigation or a plan to reduce impacts would be developed. These facts and requirements for additional review would ensure these impacts are less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required.

***Impact UT-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

Water supply is discussed in Impacts UT-1, above. No direct impacts to water supply would occur. Indirectly, inclusion in the Consensus Alternative could result in future annexation and need for water service by NID. NID would have adequate supplies to serve anticipated future demand in the Consensus Alternative area. Additionally, subsequent CEQA review would be required. This impact would be less than significant.

***Mitigation Measures:*** No Mitigation Measures are Required.

**Impact UT-3:** *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Wastewater treatment capacity is discussed in Impacts UT-1, above. No direct impacts associated with wastewater would occur. Indirectly, inclusion in the Consensus Alternative could result in future annexation and need for wastewater treatment service at the City WWTP. The WWTP would have adequate supplies to serve anticipated future demand in the Consensus Alternative area. Additionally, subsequent CEQA review would be required. This impact would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact UT-4:** *Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The Consensus Alternative would be served by Waste Management which provides both residential and business services and collects trash, recycling, and green waste. As discussed above, under the Consensus Alternative there would be no direct development and there are no applications for projects or development entitlements. Thus, no direct impacts associated with solid waste generation would occur.

The Consensus Alternative does include Priority Annexation Areas #1, #2, #3, and #4 but extension of services or expansion of uses of these sites would not be authorized by adoption of the Consensus Alternative. Priority Annexation Areas #1 and #2 consist of an existing Caltrans facility and a Juvenile Hall. Priority Annexation Areas #3, and #4 consist of a cemetery and rural residential parcels with a few parcels that could be developed with residential units at similar densities. Indirectly, the Consensus Alternative would enable annexation of existing County lands and indirectly enable extension of City services. These areas; however, already contain development that would already be served by Waste Management or they would already self-haul waste to the McCourtney landfill. Waste generated by potential future development would be minimal.

Regarding the six potential development areas, if these areas are annexed and future development of these areas does occur, they would require new waste management services. Because it is not certain and there are no defined project boundaries or development footprints, plans, or applications, it is unknown what the demand would be. Therefore, the specific nature of these developments is unknown and future demand for these services is unknown.

Lastly, as part of the annexation and development review process, all future annexations would be subsequent CEQA review. This would include an evaluation of conformance with applicable waste reduction laws such as AB 939. This impact would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

**Impact UT-5: *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

The Consensus Alternative would not result in any direct conflicts with any federal, state, or local rule, regulation, or law related to solid waste. The Consensus Alternative does not include any development or entitlement for development. Indirectly, the Consensus Alternative could induce additional development or result in the annexation of previously developed areas. As part of the annexation and development review process, all future annexations would be subsequent CEQA review. This would include an evaluation of conformance with applicable waste reduction laws such as AB 939. This impact would be less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

## 4.11.5 CONCLUSION

As discussed above, the Consensus Alternative would not result in any direct impacts on utilities because approval of the project would not authorize any development or issue any development entitlements. Impacts in this regard would not occur.

All future proposed annexations would be subject to plan and design review by the City. This include site-specific CEQA analysis as required by City Municipal Code. All sites would be evaluated for their potential to result in impacts to the provision of utility services or the need for any off-site improvements that could result in impacts to the environment. Due to the rural nature of the Consensus Alternative area, not all potential annexation areas are served by existing water, wastewater, or substantial stormwater infrastructure. Most of these areas; however, are in proximity to electricity, natural gas, and telecommunications lines. If required, as part of the annexation process, all improvements planned any site within the Consensus Alternative area would be required to undergo the City development and review process and subsequent CEQA analysis. This would reduce impacts to less than significant.

## 4.11.6 CUMULATIVE IMPACTS

Adoption of the Consensus Alternative would not directly generate additional wastewater flows, require additional water or storm drainage facility, and would not directly require the extension of any electrical, natural gas, or telecommunication line, or the expansion of waste management services. Thus, the Consensus Alternative would not make a direct contribution to cumulatively impacts in this regard.

The cumulative context for water supplies and infrastructure needs is the service area of the NID which supplies public water to most of western Nevada County and supplies the City with surplus water. Other ground water sources in the unincorporated area of the County would come from groundwater wells. Existing development and future development that would indirectly be served or indirectly occur upon annexation could result in increased water demand from NID that could exceed supply and related infrastructure. Based on existing supply and demand, it is anticipated that NID would have adequate



supply to provide water to future annexation areas and other location in their service area to which they have existing lines. This impact would be less than significant and not cumulatively considerable.

The cumulative context for wastewater service and infrastructure needs is the City and areas that would be annexed from the Consensus Alternative areas and linked to existing wastewater lines. As discussed above, the City WWTP has remaining capacity of approximately 0.3 mgd. Based on existing and project growth rates of the City, including annexations, service capacity is anticipated to be adequate. This impact would be less than significant and not cumulatively considerable.

The cumulative context for stormwater service includes areas in unincorporated County lands and areas that would be annexed from the Consensus Alternative. A cumulative impact could result if the runoff from these areas is greater than the capacity of the existing stormwater system. As discussed above, the majority of the Consensus Alternative area is rural in nature and does not generate substantial and concentrated stormwater runoff due to the overall lack of impervious surfaces. The cumulative effects from these areas would be less than significant and not cumulatively considerable. Annexation of areas that would contribute to the storm water system in the more urbanized areas would be subject to the City design review process and would require a drainage plan included LIDs. This would help ensure that drainage patterns and the timing of runoff remains similar and does not overwhelm the storm drainage system. This impact would be less than significant and not cumulatively considerable.

The cumulative context for electricity, natural gas, and telecommunications infrastructure is the City and areas that would be annexed from the Consensus Alternative area and connected to existing service providers. As discussed above, PG&E provides electricity and natural gas and various other providers provide telecommunication services. Based on existing and project growth rates of the City, including annexations, service capacity is anticipated to be adequate. Additionally, any annexations would be subject to CEQA review. This impact would be less than significant and not cumulatively considerable.

The cumulative context for stormwater service includes areas in unincorporated County lands and areas that would be annexed from the Consensus Alternative. Solid waste would be collected and handled by Waste Management Systems, Inc. A cumulative impact could result if the runoff from these areas is greater than the capacity of the existing waste management system. The Consensus Alternative in combination with the other cumulative projects in the predominantly low-density areas is not anticipated to substantially increase the amount of solid waste such that it would require new or expanded solid waste disposal facilities or a use substantial portion the remaining capacity at either facility. Therefore, the combined effects of the proposed project and cumulatively considered projects on capacity of solid waste facilities would not be cumulatively considerable.

***Mitigation Measures:*** No Mitigation Measures are Required.

## 4.12 WILDFIRE

The purpose of this section is to identify, to the extent feasible, the potential for wildland fires in connection with the SOI Plan update and the Consensus Alternative to identify potential risks to human health, including future residents surrounding the site, users of the future annexation areas and future workers and construction workers. This section describes the impacts that could occur from wildfire or exacerbation of hazards related to wildfire that could result from implementation of the SOI Plan update. This section, if required, includes mitigation measures that would reduce these impacts. The following analysis of the potential environmental impacts related to utilities and service systems is also derived from the following sources:

- Available literature and other publicly available information from affected agencies;
- California Department of Forestry and Fire Protection (Calfire);
- City of Nevada City General Plan;
- City of Nevada City Code of Ordinances;
- Correspondence with affected Public Services districts.

### 4.12.1 ENVIRONMENTAL SETTING

Fire has shaped the environment in California and occurs across most vegetation and ecosystem types. Wildland fire activity is closely connected to the California climate and continues to be an endemic part of natural systems of much of the state. Past fire suppression efforts and historic disruption of fire regimes in addition to climate change and widening development footprints has created an environment in which wildland fire impacts to ecology, economies, and people has increased. In the 1990's approximately 75,000 acres of forest land burned each year. That amount more than doubled to approximately 175,000 acres in the 2000's, and from 2010-2017 the acres of burned forest land rose again to approximately 215,000 acres per year (State Board of Forestry and Fire Protection, 2018).

The City is characterized by some urbanized areas but contains a substantial amount of rural development interspersed within a forest environment, especially on the boundary with the SOI Plan update area. The entire City has been categorized as a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2008). The SOI Plan update area, contains mostly rural low-density residential development, with some undeveloped properties, and limited commercial and industrial development. Due to the nature of the vegetation and terrain of the SOI Plan update area, most of the project area is categorized as a Very High Fire Hazard Severity Zone (VHFHSZ) by CALFIRE. Only in the northwesterly portion of the SOI Plan update area are locations that are designated as High Fire Hazard Severity Zone (HFHSZ).

The SOI Plan update area is located within a heavily forested area of unincorporated Nevada County. Most of the SOI Plan update area consists of dense coniferous forest in the western foothills of the Sierra Nevada Mountains. The topography consists of gently and moderately sloping hills and valleys with areas

of very steep terrain. These factors result in most of the SOI Plan update areas being located in the wildland urban interface, which is considered to increase the risk of wildland fires.

Non-federal land in the unincorporated county are within the State Responsibility Area (SRA) for fire protection. CAL FIRE has a legal responsibility to provide fire protection on all State Responsibility Area (SRA) lands, which are defined based on land ownership, population density and land use. The isolated pockets of federal lands that within the SOI Plan update area are within Federal Responsibility Areas (FRA) and do not have a specific fire hazard severity rating. However, due to similar topography and vegetation patterns, and proximity to very high and high fire hazard severity zones, these areas would experience similar levels of risk from wildfires. CALFIRE does not have responsibility for lands administered by the federal government.

Areas within Nevada City are designated as Local Responsibility Areas (LRA). Local responsibility areas include incorporated cities, cultivated agriculture lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government. It should be noted, that while areas within City and SOI Plan update area are designated as SRA, LRA, and FRA, in some emergency situations, fires services would cross these boundary lines and provide fire protection services as needed, such as in disasters, requests for mutual aid, or forest fires.

### ***Wildland- Urban Interface***

Generally, the fire season extends from early spring to late fall. Fire conditions arise from a combination of hot weather, an accumulation of vegetation, and low moisture content in the air. When combined, these conditions with high winds and drought, or dry conditions, increase the potential for wildfire to occur. The wildfire risk and danger to human, health, safety, and property is predominantly associated with Wildland-Urban Interface (WUI) areas. WUI is a general term that applies to developed areas that are interspersed with, or adjacent to landscapes and vegetative patterns that are more susceptible to wildland fires. WUI areas have been a major focus of CALFIRE fire management strategy since at least 1972. A fire within the WUI can result in major losses of property and structures, and human life. In addition, wildfire can harm other environmental resources including access to natural and cultural resources, and assets such as timber, range and cropland, and recreational opportunities are directly affected. Secondary effects from the loss of the vegetated areas can result in a decrease in the quality of water because of increased erosion and lack of groundwater because the capacity for recharge is reduced.

### ***Emergency and Fire Protection***

Fire Departments provide a variety of services in addition to active fire suppression. These services include but are not limited to providing emergency medical services, responding to hazardous material incidents, vehicle accidents, as well as rescues in wildland, urban, and water environments. Fire department responsibilities may also include transporting patients to hospitals and treatment centers. Fire services within the County are determined based on State Fire protection in LRAs is provided by the County, a city, or a designated fire protection district. Within SRAs, fire protection is provided by CalFire.

In the area adjacent to the City and SOI Plan update area, fire protection is provided by Nevada County Consolidated Fire (NCCFD) and CALFIRE in the unincorporated areas.

Within the City, emergency services are provided by the City of Nevada City Fire Department (NCFD) and Nevada City Police Department (NCPD). School services are provided by the Nevada City School District, and library services to City residents are provided by the Nevada County Community Library (NCCL). Within unincorporated County area including the existing SOI Plan update area, law enforcement is provided by the Nevada County Sheriff Department (NCSO) and Nevada County Consolidated Fire Department (NCCFD). A more detailed description of each of these services, where applicable, including locations, service areas and service ratios, response times, and other information is provided below.

### ***Nevada City Fire Department***

The NCFD provides emergency services to all residents and occupants of the City and responds to structure fires, emergency and medical incidents, rescues, hazardous materials incidents, automobile fires, wildfires, etc. The NCFD personnel includes a Division Chief, two Fire Captains, and three firefighters. Personnel respond to approximately 1,000 calls for service a year. NCFD operates from Station 5 located at 201 Providence Mine Rd. and provides 24-hour, year-round service. For operations, NCFD uses a 2020 Type I Engine, 2005 Type I Engine, a 2011 Type III Brush Engine, and three Utility Vehicles. NCFD maintains Mutual Aid and Auto Aid Agreements with Grass Valley Fire Department (GVFD) and the Nevada County Consolidated Fire District (NCCFD) and other fire districts in western Nevada County, so responses to other jurisdictions also occur and includes responses with the US Forest Service, the California Department of Forestry and the Office of Emergency Services (NCFD, 2019).

Station 54 – 201 Providence Mine Road- Operations on three shifts, A, B, and C Shifts has one NCFD Captain and one NCFD Firefighter. Equipment includes one Type 1 Engine.

### ***Grass Valley Fire Department***

Grass Valley Fire Department operates two stations (Station 1 and 2) fire suppression equipment includes four Type I engines, one Type II Engine and a Truck. Nevada County Consolidated Fire District operates four stations (station 84, 86, 88, and 89) and an Administration building. Fire suppression equipment includes type 1 and type 2 engines, swift water rescued, water tender, reserve type 2 engines, an OES water tender, a type 6 engine, command vehicles, and repair vehicles.

Station 1 – 472 Brighton Street – Operates on three shifts. Shift A has one Battalion Chief, one GVFD Captain, one NCCFD Lieutenant, and one GVFD firefighter. Shift B has one Battalion Chief, one GVFD Captain, and one NCCFD Lieutenant, and C Shift has one Battalion Chief, one GVFD Engineer, and one NCCFD Captain. Equipment includes one Type one Engine.

Station 2 – 213 Sierra College Drive- Operates on three shifts. A Shift and B Shift have one GVFD Captain, one GVFD Engineer, and one GVFD Firefighter, and C Shift has one GVFD Captain and three GVFD Firefighters.

### ***Nevada County Consolidated Fire District***

Nevada County Consolidated Fire District (NCCFD) operates four stations (station 84, 86, 88, and 89) and an Administration building. Stations 1 and 2 are jointly operated with Grass Valley and Station 54 is jointly operated with Nevada City (NCCFD, 2018a). Fire suppression equipment includes type 1 and type 2 engines, swift water rescued, water tender, reserve type 2 engines, an OES water tender, a type 6 engine, command vehicles, and repair vehicles (NCCFD, 2018b). The administration office is located at 11329 McCourtney Road. The other stations and associated addresses are listed below.

Station 84 – 10135 Coyote Street –Operates on three shifts, A, B and C Shift has with one Captain and one Firefighter/Operator during each shift. Equipment includes one Type 1 Engine and one Type 1 Water Tender.

Station 86 – 12337 Banner Lava Cap Road – Operates on three shifts. A Shift has one Captain and one Firefighter/Operator. Shift B and C has one Lieutenant and one Firefighter/Operator. Equipment includes one Type 1 Engine and one Squad Vehicle.

Station 88 – 14400 Golden Star Road- Operates on three shifts with one Captain and one Firefighter/Operator during each shift. Equipment includes one Type 1 Engine, one Type 1 water tender, and one Repair Vehicle.

Station 89 – 11833 Tammy Way – Operates on three shifts Shift A and C have one Lieutenant and one Firefighter/Operator and Shift B has one Captain and one Firefighter/Operator. Equipment includes one Type 1 Engine, one Type III Engine, one OES Water Tender, and one golf cart.

Administration- 10135 Coyote Street

### **Joint Operational Agreement**

Fire services within the City, immediately surrounding unincorporated areas, and the City of Grass Valley are provided through a Joint Operational Agreement (JOA) for area departments. The JOA applies to the Grass Valley Fire Department (GVFD), Nevada City Fire Department (NCFD), and Nevada County Consolidated Fire Department (NCCFD) to operate under a Boundary Drop/Closest Resource response plan, under which the emergency resources located closest fire engine to an incident will be dispatched or multiple engines can be dispatched for larger incidents, regardless of jurisdiction. The three agencies are the only departments in the county operating under this agreement and over time have evolved into a very codependent system. While the JOA satisfies the everyday operational needs of the three agencies, for significant incidents such as wildfires, the JOA still depends on automatic or mutual aid from other agencies in the area and reciprocates by assisting those agencies when requested.

## 4.12.2 REGULATORY SETTING

### Federal

#### ***National Weather Service (NWS)***

Under extreme fire weather conditions, the NWS issues Red Flag Warnings for all affected areas. A Red Flag Warning means warm temperatures, very low humidity, and stronger winds are expected to combine to produce an increased risk of fire danger (NWS, 2018). The National Weather Service issues Red Flag Warnings & Fire Weather Watches to alert fire departments of the onset, or possible onset, of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity.

A Red Flag Warning is issued for weather events which may result in extreme fire behavior that will occur within 24 hours. A Fire Weather Watch is issued when weather conditions could exist in the next 12-72 hours. A Red Flag Warning is the highest alert. During these times extreme caution is urged by all residents, because a simple spark can cause a major wildfire. A Fire Weather Watch is one level below a warning, but fire danger is still high (CAL FIRE, 2012).

### State

#### ***Senate Bill 1241***

Senate Bill 1241 requires the legislative body of a city or county to adopt a comprehensive, long-term general plan that includes various elements, including a safety element for the protection of the community from unreasonable risks associated with among other things, wildland and urban fires. The safety element requires for state responsibility areas (SRA), as defined, and very high fire hazard severity zones (FHSZ) as defined in California Government Code (CGC) §51177 & 51178 that is not a SRA, to be updated as necessary to address the risk of fire in these areas pursuant to CGC §65302(g)(3).

#### ***California Environmental Quality Act***

CEQA, PRC §21000, et seq., was amended in 2018 to address numerous legislative changes to CEQA, to clarify certain portions of existing CEQA Guidelines, and to update the CEQA Guidelines to be consistent with recent court decisions.

Impacts of wildfire to development and a development's contribution to the potential creation of wildfire risk at the Wildland-Urban Interface (WUI) are now addressed as a separate "Environmental Factor" to be addressed in the initial study checklist in Appendix G. The Natural Resources Agency expanded the requirements of SB 1241 to also include development projects "near" the SRA and Very High FHSZs.

#### ***Executive Order N-05-16***

On March 22, 2019, Governor Newsom proclaimed a state of emergency involving forest conditions near vulnerable communities under Executive Order N-05-19. Executive Order N-05-19 suspends State environmental Statutes, rules, regulations, and requirements to the extent necessary to complete priority fuel management projects started in the 2019 calendar year, upon the request of the Secretary for the

California Environmental Protection Agency or Natural Resources Agency, as appropriate. The proposed activities are required to be determined eligible to be conducted under the suspension. CAL FIRE subsequently requested the suspension of Division 13 [commencing with Section 21000 of Public Resources Code (PRC)].

### ***California Building Standards Codes***

The State of California provides minimum standards for building design through the California Building Code (CBC). The CBC is based on the International Building Code (IBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified to address particular California concerns. The primary codes with respect to development in or near the WUI include the California Building Code, Chapter 7A “Materials and Construction Methods for Exterior Wildfire Exposure” and the California Fire Code, Chapter 49 “Requirements for Wildland-Urban Interface Fire Areas.” These codes require what materials are required to be used for construction for any Building Permit submitted after January 1, 2009 within the geographical areas with FHSZs designated as Very High, High, or Moderate in SRA’s and Very High within Local Response Areas (LRA). Maps of these areas were developed in 2007 for California and each county.

### ***State Board of Forestry and Fire Protection 2018 Strategic Fire Plan***

The State Board of Forestry and Fire Protection (SBFFP) 2018 This 2018 Strategic Fire Plan (SFP) reflects CAL FIRE’s focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and natural resource management to maintain the state’s forests as a resilient carbon sink to meet California’s climate change goals and to serve as important habitat for adaptation and mitigation. The plan also encourages collaboration among local, state, federal, tribal, and private partners remains to effectively manage the wildland urban interface and natural environment focusing on small efforts such as creating fuel break to large efforts administering the statewide, multiagency California Fire Management Agreement.

The goals of the SFP revolve around fire prevention, natural resource management, and fire suppression efforts and the major components include:

- Improve the availability and use of consistent, shared information on hazard and risk assessment;
- Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities;
- Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans (CWPP);
- Increase awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management;
- Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers;

- Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression, and related services; and
- Implement needed assessments and actions for post-fire protection and recovery.

### ***Government Code 51175-89***

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within LRA'. Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of, potential fuels over a 30-50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are updated from time to time based on improved science, mapping techniques, and data (CALFIRE, 2008).

### ***Public Resources Code 4201-4204***

Public Resources Code 4201-4202 directs CALFIRE to map fire hazard within SRA's, based on relevant factors such as fuels, terrain, and weather. These statutes were passed after significant wildland-urban interface fires; consequently, these hazards are described according to their potential for causing ignitions to buildings. These zones referred to as Fire Hazard Severity Zones (FHSZ), provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the wildland-urban interface zones (CALFIRE, 2007).

## **Local**

### ***Ready Nevada County – 2019 Wildfire Preparedness Action Plan***

The 2019 Nevada County Wildfire Preparedness Action Plan (WPAP) outlines specific action items that can be taken by Nevada County to reduce the risks and effects of wildland fires. The WPAP was prepared in response to escalation of the nature, frequency, and increased number of wildfires over the past decade. The WPAP is intended to support and implement specific actions outlined by the State, Nevada-Yuba-Placer Unit Fire Management Plan (NEU Regional Plan), and local Community Wildfire Protection Plans (CWPP). The various fire plans contain detailed approaches, projects, and recommendations of how local municipalities should address and prepare for wildfire hazards in their communities. The WPAP empowers the County to act as a facilitator to bring local and regional wildfire stakeholders together to collaborate and coordinate on tactical actions that provide the most significant impact locally. The plan is managed by the County Office of Emergency Services (OES) and provides a direct response to the need for increased community education, communication, preparedness, and action in anticipation of future wildfire(s) (Nevada County, 2019).

### ***Grass Valley, Nevada City, and CAL FIRE Mutual Threat Agreement***

In September of 2019, the City of Grass Valley, City of Nevada City, and CAL FIRE agreed to a Mutual Threat Agreement (MTA). The MTA was signed to increase the ability of the local jurisdictions to respond to vegetation fires and reduce the potential for wildfire. The MTA recognizes that the listed communities



are in fire-prone mountainous foothills terrain and many of the existing roadways, water system, and structures were built with under old codes. Under these conditions a wildfire could overwhelm the local response. With this understanding the MTA will enable CAL FIRE to respond to all reported vegetation fires in the two cities.

### ***Nevada County Draft Safety Element***

Nevada County is in the process of updating the Safety Element of the County General Plan. While the County Safety element would be directly applicable to Nevada County, due to the close working relationship between the City and County, and other agencies related to wildfire protection and prevention, many of the components of this element would be applicable to, affected by, or would potentially influence the decision making process of the City. For this reason, the County Safety Element, specifically related to wildfire and evacuation is discussed here and relevant goals and policies are included below.

The purpose of the Safety Element is to reduce short and long-term loss of life, injuries, and damage resulting from natural and human cause hazards including fire. As part of the Safety Element, hazards from wildfire are discussed in Fire Hazards and Protection. The Draft Safety Element notes that wildfire risk is predominantly associated with wildland urban interface areas and can result in major losses of human life, property, structures and improvements, timber, cropland, recreational opportunities culminating in substantial economic loss. Secondary losses from landslides and flooding due to the loss of vegetative cover can be common.

The Safety Element notes that roads are critical to support for suppressing wildfire and are needed to support the roles of emergency services and recognizes they serve as ingress and egress routes to and from wildfires, staging areas, safety zones, coordinating locations, anchor points for fire suppression activities, and evacuation routes. Goals and Policies within the Safety Element that relate to wildfire and safety are discussed below:

**Goal EP-10.1** – Provide a coordinated approach to hazard and disaster response preparedness.

*Policy EP-10.1.1:* Ensure a coordinated, interagency program for disaster preparedness that will facilitate Federal and State disaster assistance by planning for the reduction of the effects of natural hazards and training for disaster management. (also see; Local Hazard Mitigation Plan 5.4 Mitigation and Action Plan).

*Policy EP-10.1.2:* The Local Hazard Mitigation Plan, adopted by the County and periodically reviewed and updated in accordance with the Federal Disaster Mitigation Act of 2000 and Government Code 65302.6, shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County.

The Local Hazard Mitigation Plan, which is incorporated into this Safety Element by reference and includes mitigation strategies for wildland fire hazards, shall be reviewed, along with the County's mutual aid agreements and existing wildland fire-related codes and ordinances to address the hazards of development in the wildland urban interface annually, or as necessary, to ensure

compliance with the Federal Disaster Mitigation Act of 2000 and State Fire Code, as it exists or as may be amended.

*Policy EP-10.1.4:* Provide for adequate evacuation routes in areas of high fire hazard, high potential for dam failure, earthquake, seiches, avalanches, flooding or other natural disaster.

*Policy EP-10.1.5:-* Sustain the continued efforts in building public awareness of the Nevada County Operational Area Emergency Operations Plan, and Community Emergency Preparedness and Evacuation Guides, through the local Office of Emergency Services, as the focus for planning for emergency evacuation of threatened populations.

*Policy EP-10.1.6-* Transportation routes that are designated on the General Plan Land Use Maps as interstates, freeways, highways, and other principal arterial routes shall be considered primary evacuation routes on a Countywide basis. Such routes provide the highest levels of capacity and continuity and serve as the primary means for egress from the County.

The routes designated on the General Plan Land Use Maps as minor arterial or major collector routes shall be considered secondary evacuation routes on a Countywide basis. These routes supplement the primary evacuation routes, and provide egress from local neighborhood and communities.

*Policy EP-10.1.7:* Prioritize the creation and maintenance of private road districts on existing private roads to ensure emergency ingress and egress meets Nevada County and Cal Fire road and driveway standards and maintains these standards. Private road districts shall include the assurance that emergency ingress and egress will be maintained.

Policy EP-10.1.8: Support the development and maintenance of Countywide and local emergency evacuation plans.

*Policy EP-10.1.9:* Support the development of Community Emergency Preparedness and Evacuation Guides by local community members in collaboration with the County Office of Emergency Services.

*Policy EP-10.1.11:* Mitigate development in areas of High and Very High Fire Hazard Severity Zones by incorporating into conditions of approval the most current data in order to assure appropriate fuel modification around the development and emergency ingress and egress for residents, visitors and emergency services.

*Policy EP-10.1.12:* Continue to work with Cal Fire, California Office of Emergency Services and Nevada County Office of Emergency Services to adopt by ordinance the most current Fire Hazard Severity Zones Map, adopt the most appropriate fire-resistant building material standards and fuel modification/vegetation management requirements for each zone as a basis for project review in accordance with Federal, State and local standards.

*Policy EP-10.1.13:* Nevada County shall develop policies and provide updates, as appropriate, that address recovery and redevelopment after a large fire with the intent to address the reduction of

future vulnerabilities to fire hazard risks through site preparation, redevelopment layout design, fire resistant landscape planning, and fire retarding building design and materials.

**Goal FP-10.7** Enhance fire safety and improve fire protection effectiveness through infrastructure and service improvements.

*Policy FP-10.7.1:* Ensure County-maintained roads meet design standards for current or anticipated uses, as designated on the General Plan Land Use Map. Maintain and update Nevada County road standards for both public and private roads to adequately address emergency ingress and egress.

*Policy FP-10.7.2:* As a condition of development, require long-term maintenance of private roads to meet current standards, including roadside vegetation management, as part of a formal private road association or similar entity.

*Policy FP-10.7.3:* Projects requiring a traffic study shall include in such study an assessment of the current emergency evacuation capacity of the public and/or private roads that serve the proposed project, and recommended mitigation that will increase the evacuation capacity, if needed.

### ***Nevada City General Plan***

The Nevada City General Plan (NCGP) discusses fire safety in the Public Safety Element. The NCGP discusses fire in two categories, fire in developed areas, and wildland fire. Fire services related to fire protection in developed area is discussed in more detail in Chapter 4.12 – Public Services of this EIR. Regarding wildfire, the 1986 NCGP notes are the responsibility of the California Department of Forestry [now referred to the California Department of Forestry and Fire Protection (CALFIRE)] and National Forest Service.

Regarding fire hazard the NCGP sets for the following objectives and policies.

#### *Objective:*

- Ensure Safety for life and property in both wildlands and developed areas

#### *Policy:*

- The Nevada City Fire Department, in cooperation with the California Department of Forestry and relevant Fire Districts, shall maintain high fire protection levels by requiring adequate access and water flow, based on established standards.

### **Nevada City Zoning Ordinance**

The Nevada City Zoning Ordinance (NCZO) is, by state law required to be consistent with the NCGP and is a precise and detailed plan for the uses of land based on the NCGP for the City and enacted in order to promote the public health, safety, comfort and general welfare throughout the City. As part of these prescriptions, the zoning ordinance sets forth requirements related for fire protection. The following sections and requirements of the zoning ordinance would be applicable to the areas within the SOI Plan update as properties are annexed into the City.

**15.08.015 – California Fire Code and County amendments adopted.** This section states the CFC and Nevada County Code have been incorporated to the Municipal Code of the City of Nevada City.

**15.08.020 – Responsibility for Enforcement and Review.** This section notes that except where otherwise required by state law, the fire chief shall be responsible for review and enforcement of projects for compliance with fire safety laws and standards and regulations for the incorporated area of the City. Additionally, whenever an application is made to the City for issuance of any discretionary land use permit or other land use entitlement, the City fire chief or authorized deputy shall have the final authority and responsibility for review of such application for compliance with the requirements of the related requirements in the zoning ordinance. This section specifically states,

*“the review shall include the preparation of comments and appropriate mitigation measures and/or conditions of approval to assure compliance with all applicable fire safety laws, standards and regulations. To facilitate such review, copies of all such applications shall be promptly provided to the City fire chief or authorized deputy.”*

### **Chapter 8.10 – Vegetation Management, Debris Removal and Abatement**

The purpose of this chapter is to adopt regulations in addition to those already in effect in Title 15 to further increase protection from fire of residents and their property within the City of Nevada City and cooperates with on fire responses. This Chapter is intended to include additional fire control regulations and not to amend any existing fire safety regulations in Title 15. As part of this Chapter, it is the responsibility of every property owner to abate fire hazards including weeds, flammable vegetation and other combustible materials that constitute a fire hazard through the fire season. This Chapter requires vegetation to be trimmed, mowed, or cut at specific distances from structures and property lines to help ensure defensible space. Additionally, this chapter also addresses access and vegetation treatments are made to ensure emergency vehicles are able to enter and move about the sites on public and private roadways.

### **City of Nevada City Disaster Plan**

The purpose of the City of Nevada City Disaster Plan (NCDP) is to establish a framework through which the City may prevent or mitigate the impacts of, prepare for, respond to, and recover from disasters. The NCDP outlines incident management that would include the coordinated efforts of multiple departments and agencies beyond the scope of typical City operations. The scope of the NCDP describes the types of emergencies that could occur; defines roles and responsibilities; creates a framework for deployment of resources; identifies actions needed to obtain and implement relief assistance at the state and federal level; define assistance available to individuals, businesses, and governments; and it creates a framework for pre- and pose disaster hazard mitigation efforts.

Related to wildfire the NCDP, recognizes that due to the terrain, climate, rainfall and forest land/urban mix, and past fire suppression techniques and accumulation of large fuel loads, it is a certainty that significant wildland fires are going to continue as a threat.

### 4.12.3 STANDARDS OF SIGNIFICANCE

The potential impacts associated with the SOI Plan update are evaluated on a qualitative basis through a comparison of existing conditions within the SOI Plan update area and the anticipated direct and indirect effects. The potential for impacts from wildfires would occur if the effect described under the criteria below occurs. The evaluation of impacts is based on professional judgment, analysis of the Nevada County Consolidated Fire District Strategic Plan and other documentation, and the significance criteria established by Appendix G of the State CEQA Guidelines, which the City has determined to be appropriate criteria for this Draft EIR. Such an impact would occur if the proposed project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The analysis of the existing environment and the impact analysis indicate that the SOI Plan update could result in a significant environmental impact if it would result in impacts from wildfires that would, if not mitigated, adversely affect the public health and safety of future residents, surrounding residents and workers.

### 4.12.4 PROJECT IMPACTS AND MITIGATION

The proposed project consists of an update to the SOI Plan for the City (proposed project). This EIR evaluates four project alternatives. The following impact evaluation focuses on the LAFCo/City Preferred Consensus Alternative (Consensus Alternative) which has been identified as the Preferred Alternative in accordance with CEQA requirements. Impacts for the other alternatives are discussed in Chapter 5.0 Alternatives. In some instances; however, impacts related to the overall SOI Plan update may be presented when applicable and to help illustrate the environmental effects in the framework of the overall SOI Plan update. The impacts are discussed in terms of direct and indirect impacts. Direct impacts are those that occur immediately upon initiation of a project such as ground disturbance or demolition of existing structure(s). Indirect impacts occur when a project would induce growth into areas such as through the extension of infrastructure and that extension could facilitate new development or result in an annexation that could enable future development.

#### ***Impacts Discussion Overview***

The Impacts Discussion Overview describes the characteristics of the Consensus Alternative, development potential, assumptions for provision of services, and City and environmental review requirements related

to wildfire. This discussion is applicable to each impact, Impact WLD-1 through Impact WLD-4, below, but is provided here to avoid repetitive discussion.

Wildland fire is a serious concern to the City and surrounding areas of unincorporated county land in the Consensus Alternative area. These areas have a generally high potential for high-intensity wildland fires that can result wide-scale damage and threats to human health and safety and loss of property. The Consensus Alternative area generally consists of thick timber and woodlands, with some of the areas having heavy underbrush, as well as some areas with grasslands. The thick fuel loads and characteristics of vegetation make the increase the potential that wildland fires become uncontrolled. The area also contains places with moderate mountain slopes and some areas with very steep slopes. In addition, the area is characterized by summers with little precipitation and low relative humidity that dries out vegetation and increases the fuel susceptible to burning. All of these conditions contribute to the SOI update areas being subject to the uncontrolled spread of wildfire.

Within the Consensus Alternative boundaries there are four priority annexation areas (Annexation Areas #1, #2, #3, and #4). These areas in general are already developed, are in close proximity to, or are already being served by existing water or wastewater lines. These areas are in logical locations for extension of City municipal services and represent a logical progression of City boundaries. Given that most of these areas would not require the extension of services such as public sewer or water, disturbance would be low, and given the sites have exiting uses, the pressure to increase development density is low. Associated improvements are not anticipated to induce substantial growth resulting in indirect impacts.

In addition, the six potential development areas identified by the City are discussed throughout this document. These sites do not yet have any development approval and the specific project footprints are unknown. Annexation and the anticipated timeline for built out would occur over a period of years and is anticipated to be at similar densities as to what is shown in the project description and in accordance with existing City planning documents.

The majority of the remaining undeveloped areas within the Consensus Alternative area are designated for estate residential, rural residential, or open space with some areas designated for planned development, employment centers, public uses, or service commercial.

All future development within the Consensus Alternative area, including the six potential development areas identified by the City would be subject to City design and review as part of City's project review process. All projects would be evaluated for consistency with the NCGP, Nevada City Municipal Code, and Nevada City Design Guidelines related to wildfire. The City also has authority to prezone all future annexations to Nevada City, and for annexations that include new development, the City would be able to specify conditions to ensure that future projects would incorporate all required elements of the listed development guidance documents related to fire protection. The project by project review also would include a City led CEQA analysis and as applicable, would require project-specific mitigation measures or binding conditions of approval (COAs) to threats related to wildfire.

***Impact WLD-1: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project?***

***a) Substantially impair an adopted emergency response plan or emergency evacuation plan?***

The proposed project includes lands adjacent to the City within the unincorporated area. The Consensus Alternative does include lands that are currently identified within a SRA. In addition, the Consensus Alternative contains areas that are designated as both high and very high fire hazard severity zones. The Consensus Alternative would not directly implement any development proposals, new construction, new entitlements or improvements, and it would not change any existing land use designations. While the proposed project would result in an adjustment to the Nevada City SOI, it does not include any immediate changes to the availability of any emergency services or changes to any emergency plans. As such, the Consensus Alternative could result in indirect impacts to and physically impair an adopted emergency response plan or emergency evacuation plan.

All future projects annexed to the City from the SOI would be located within a VHFHSZ and would be subject to the City's review and regulation. All projects would have to show conformance to fire access requirements and as areas are annexed, the City and the County would work together regarding the provision of emergency services and help ensure emergency responses remains cohesive. Development in all of these areas would be required to comply with all IBC and CBC requirements, the State Board of Forestry and Fire Protection 2018 Strategic Fire Plan, goals and policies of the NCGP, development standards of the City Zoning Ordinance, City of Nevada City Disaster Plan, as well as CALFIRE defensible space demands. All areas within the Consensus Alternative would maintain the benefit of being served by fire stations within the JOA, through the MTA with CAL FIRE, as well as surrounding and regional fire departments should a wildfire occur.

Priority Annexation Areas #1, #2, #3, and #4, are largely built out and contain a Caltrans facility, County Juvenile Hall, a cemetery, rural residential development and a few vacant lots designated for rural residential uses. The Consensus Alternative would enable the annexation of these areas; however, there are no known plans for expansion and no substantial changes are anticipated. If new construction did occur within Priority Annexation Areas #3 or #4, all development would be required to conform to fire access requirements. If an evacuation is necessary, residents would have direct access to either Red Dog Road or Willow Valley Road. Although future development of these parcels would place new residents in a VHFHZ, the overall increase in units and density would be minimal. Therefore, development of these areas is not anticipated to substantially change routine emergency ingress or egress and impacts in this regard would be less than significant.

The Consensus Alternative does include six potential development areas which could result in indirect impacts to or physically impair an adopted emergency response plan or emergency evacuation plan. If any of these six areas are developed, it could result in an impairment of evacuation during a wildfire due to an increase in the number of vehicles using designated and undesignated evacuation routes. These areas would be served by the various County designated primary evacuation routes, including Hwy-20, Hwy-49, and Nevada City Highway, and other principle arterials. In addition, local roadways designated as minor arterials or major collectors serving these potential development sites could be impaired due to

the additional vehicle trips. These roadways include but are not limited to Providence Mine Road, Ridge Road, Deer Creek Tribute Trail, Champion Mine Road, Willow Valley Road, Coyote Street, Gold Flat Road, and Gracie Road. If development occurs, the listed roadways and others may not have adequate capacity to facilitate the number of vehicle evacuating project areas as well as other local communities and existing development. This could compromise the ability of residents to evacuate in an case of a wildfire or other emergency situation.

As part of future design and review as part of the annexation process, the City would be required to ensure that all projects would conform to all requirements and standards regarding fire evacuation routes. The City, County, CAL FIRE and other agencies have plans and policies, and agreements related to fire safety and evacuation. As more detail related to the potential development projects specific design is know, the City, County and other concerned agencies would evaluate the ability of new residents, existing residents, and other community members to safety evacuate these and other areas. For example, the Office of Emergency Services in coordination with local, County, State, Federal and nonprofit partners have the responsibility to also prepare the Wildfire Hazard Reduction and Preparedness Plan, to help prepare for wildfire and minimize the loss of lives and property. None the less, given the fact that wildfire is the single biggest natural hazard in the Consensus Area alternative, evacuation planning for a wildfire is needed to help ensure the health and safety of residents, property, and other resources.

Similar to County Policy FP-10.7.3, mitigation has been included that will apply to all future annexation projects within the wildland urban interface. Mitigation will require the preparation of an assessment of the current emergency evacuation capacity of the pubic and/or private roads that would serve future projects. If needed, projects will be required to make a fair share contribution to roadway capacity expansion. To reduce impacts, MM WLD-1 would require the Consensus Alternative and proposed project as a whole to contribute to evacuation and emergency planning efforts. With this mitigation, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation. Impacts in this regard would be less than significant.

### ***Mitigation Measures:***

**MM WILD -1:** Prior to LAFCo approval of an annexation involving new, non-ministerial development and construction of habitable structures, The City shall require project applicants for projects within the wildland urban interface to submit for review and approval, an evacuation plan to the City. The evacuation plan shall be consistent with any comprehensive plan adopted by the City, and shall consider the increased demand the project would place on existing development, roadways, and the available capacity of resources to accommodate evacuees from the new project should a wildfire occur. If required, the City shall require new developments to include an evacuation improvement plan that will include measures such as roadway widening or installation of traffic control measures that would facilitate evacuation of the project site. Future applicants will be required to make a fair share contribution to the necessary improvements.

***Level of Impact After Mitigation:*** Impacts Would Remain Significant and Unavoidable.



***b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

Nevada County is in an area that is susceptible to the threat from the increasing prevalence and intensity of wildfires. Much of the City and areas within the SOI Plan update area have steep slopes, are prone to strong winds, and have vegetation patterns making them prone to wildfires. While the Consensus Alternative would not directly increase the risk of starting a wildfire, development within the four priority annexation areas and six potential development areas would indirectly exacerbate these risks and expose residents to the uncontrollable spread of wildfire. Some of the new development is anticipated to be clustered which would enable the creation of concentrated defensible space and enable focused fire-fighting efforts. As discussed in the impacts discussion overview and Impact WLD-1a, all future development projects would be required to conform to all listed State, regional, and City requirements related to wildfire and environmental protections. These measures are required and would be verified to be included to projects as part of the existing planning and review process. While this may lessen effects from wildfire to a degree, much of the area in which the City of Nevada City is located is designated a Severe Wildfire Risk Zone by CalFire.

As evidenced by recent severe wildfires in Santa Rosa, Redding and Paradise, these events have demonstrated that protective measures and massive efforts to control such fires may have only limited success. While the SOI Plan update would not directly aggravate that risk, it would indirectly facilitate further growth in the area. This would expose more people to the existing significant health and safety danger of wildfires. Compliance with all applicable fire-safe regulations, and Mitigation Measure WLD-1, above, and site by site CEQA evaluation as required by the City municipal code for all annexations, would help reduce the risk.

All projects would be required to reduce fuel loads and maintain 100-feet of defensible space; use of fire-resistant building materials (a type of building material that resists ignition of sustained flaming combustion) and those from the State Fire Marshall's Building Materials Listing Program; comply with ignition resistant codes of CBC Chapter 7A (CBC, 2016), eave and attic ventilation; etc. Nonetheless, conformance to all fire-safe regulations would not eliminate or substantially reduce the potential for catastrophic loss from wildfire. Impacts would not be reduced to less than significant.

Therefore, due to the nature of the environment within the SOI Update area and potential for uncontrolled spread of wildfire, even with conformance to all fire-safe regulations and implementation of WLD-1, impacts related to exposure of residents to pollutant concentrations and danger of an uncontrolled wildfire are significant. There is no mitigation available that can prescribe more stringent requirements than existing codes and regulations. The existing codes and regulations are already in place to enhance fire safety and lessen the severity of this impact. Therefore, while measures help to reduce the potential effects from wildfire that can be exacerbated by the listed conditions, impacts are considered significant and unavoidable.

***Mitigation Measures:*** No Mitigation is Available.

**Level of Impact with Mitigation:** No Mitigation is Available. Impacts Would be Significant and Unavoidable.

***c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

The Consensus Alternative would not directly require additional maintenance of any infrastructure including roads, fuel breaks, emergency water sources, power lines or other utilities that could exacerbate fire risks or result in any other temporary impacts to the environment. As discussed, there are no proposals for any development and no applications for entitlement. Impacts in this regard would not occur.

Approval of the Consensus Alternative could indirectly induce growth through annexations and extension of City services and extension of natural gas and electricity. Natural gas and electric improvements would be constructed only after planning and coordination with PG&E to ensure that services could be efficiently, and safely delivered. For example, the CBC places strict guidance on activities such as welding or hot-work; limitation on the use of machines or torches in wildfire risk areas and requires permits from the fire code official (CBC, 2016). California PRC § 4291 In some areas, water service could be extended and roadway improvements and new roadways may be needed to ensure adequate traffic service is maintained. While, the installation of and maintenance of roads, fuel breaks, water sources, and utilities needed to serve future projects could result in an exacerbation of fire risk, all associated work from installation and maintenance would be required to implement all applicable safety measures, and the increased risk is not anticipated to be substantial.

It should be noted that all future projects that would require utility and roadway extension would be evaluated to determine conformance to City development regulations and site-specific CEQA review. It is anticipated conformance with all the listed State, regional, and City requirements related to wildfire and environmental protections would ensure future projects within the Consensus Alternative area are consistent with applicable resource protection requirements. Further, the Nevada City Fire Department, as part of the City's environmental review process, will review all plans to ensure they contain adequate fire suppression, fire access, and emergency evacuation. Thus, impacts in this regard are less than significant.

**Mitigation Measures:** No Mitigation Measures are Required.

***d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

Existing development within the Consensus Alternative area is generally low density and occurs within some areas characterized with moderate slopes on small hills and the valley. The Consensus Alternative; however, does not propose any development within the SOI Plan Update area. If approved, the SOI update would not result in any entitlements for development or change existing NCGP Land Use or zoning

designations. In this regard, direct impacts from the placement or authorization of construction of structures susceptible to downslope or downstream hazards as a result of instability caused by wildfire.

Priority Annexation Areas #1, #2, #3, and #4, are largely built out and contain a Caltrans facility, County Juvenile Hall, a cemetery, rural residential development and a few vacant lots designated for rural residential uses. The Consensus Alternative could result in annexation of these areas; however, because the areas are almost completely built out and there are no plans for expansion, no substantial changes to land use are anticipated. Thus construction of new residences would not result and a substantial number of new residents being exposed to these risks would not occur. Impacts in this regard would be less than significant.

Development within the six potential development areas could result in a substantial number of residents being located in areas with a significant risk of downslope or downstream flooding, landslides, or instability caused by runoff from fires on slopes or drainage changes. Future projects would be evaluated against this CEQA criteria on a project by project basis. This would include an evaluation of conformance to City development regulations and site-specific CEQA review as detailed in impacts discussion overview, and Impact WLD-1a-c, above. If not properly accounted for, these indirect impacts would be significant. While it is anticipated that conformance with all the listed State, regional, and City requirements would be adequate to ensure future projects are not affected, impacts could be substantial. Because the path of potential future wildfires are unknown and could occur in areas upslope of new development, short of disallowing development in these areas, there is no mitigation available to reduce this impact to less than significant. While all future projects would be required to implement all applicable IBC and CBC requirements, the State Board of Forestry and Fire Protection 2018 Strategic Fire Plan, goals and policies of the NCGP, development standards of the City Zoning Ordinance, City of Nevada City Disaster Plan, as well as CALFIRE defensible space demands, impacts would remain significant. Therefore, impacts are significant and unavoidable.

**Mitigation Measures:** Implement MM-WILD-1

**Level of Impact with Mitigation:** Impacts Would be Significant and Unavoidable.

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## 4.12.5 CONCLUSION

Wildfire impacts can be particularly acute in areas with steep terrain, dense vegetation, and dry summer conditions. In such instances it is important that emergency access be maintained and that developments in such areas conform to and do not impair an adopted emergency response plan or emergency evacuation plan. The Consensus Alternative would result in an update to the Nevada City SOI but would not result in any construction or entitlements for development. Indirectly; however, the Consensus Alternative would likely result in future development that would be within areas that could expose future homes and businesses to pollutant concentrations from a wildfire, the uncontrolled spread of a wildlife, or other dangers such as landslides after an area has burned. Additionally, although none are proposed, future annexations under the Consensus Alternative could require the installation of roadways and other utilities that could increase the risk of fire. Indirectly, the Consensus Alternative may result in future

development that could exacerbate the after-effects of a wildfire. Conformance to all applicable fire-safe regulations, CALFIRE defensible space review, and site by site CEQA evaluation as required by the City municipal code for all annexations, would reduce impacts but not to less than significant.

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## 4.12.6 CUMULATIVE IMPACTS

The incremental effects of the SOI Update related to wildfire and all future effects would be site-specific depending on the pattern and nature of future annexations. Compliance with Federal, State, and local regulations would help ensure that impacts from wildfires are minimized. The entire City is located in the CAL FIRE designated VHFHZ and the surrounding areas of the County are in a similarly designated area or in a HFHSZ. Because future development that would be enabled by adoption of the Consensus Alternative would result in an incremental increase of the impacts from wildfire, taken in sum with past, present, and future projects, impacts from wildfire would be compounded and would be substantially increased when considered together with similar effects from other projects. All future projects that occur under the Consensus Alternative as well as cumulative projects would be required to implement all applicable IBC and CBC requirements, the State Board of Forestry and Fire Protection 2018 Strategic Fire Plan, goals and policies of the NCGP, development standards of the City Zoning Ordinance, City of Nevada City Disaster Plan, as well as CALFIRE defensible space demand. Nonetheless, due to the existing landscape, vegetative environment, climate, and susceptibility to wildfires, impacts associated with the increased risk of wildfire, interference with an emergency plan or emergency evacuation plan, and risk of flooding, landslides, or downstream effects would be significant and unavoidable.

Similar to the project, the cumulative impacts from the installation, or maintenance of infrastructure and potential to exacerbate fire risk or result in temporary ongoing impacts would be less than significant. It is anticipated that these impacts would be minimized through use of standard construction safety measures. These impacts would be less than significant.

**Mitigation Measures:** Implement MM-WILD-1

**Level of Impact with Mitigation:** Impacts Would be Significant and Unavoidable.

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## 5.0 OTHER CEQA

This chapter analyzes the potential environmental consequences of the foreseeable growth and development that could be induced by implementation of the proposed project, effects found not to be significant, and significant unavoidable impacts. A discussion of each of these elements is required by CEQA. The corresponding CEQA guidelines and additional detail is provided under the headings below.

### 5.1 GROWTH INDUCING IMPACTS

Growth facilitated by inclusion in the City sphere is the primary generator of environmental impacts which this EIR analyzes. Section 15126(d) of the State CEQA Guidelines requires that the growth-inducing effects of a proposed project be addressed in an EIR. The evaluation of whether a project would result in growth-inducing effects focuses on the consideration of factors outlined in §15126.2(d) of the State CEQA Guidelines.

Sections 15126(d) and 15126.2(d) of the State CEQA Guidelines require that an EIR analyze growth-inducing impacts and state that an EIR should discuss the ways in which the project could foster economic or population growth or construction of additional housing, either directly or indirectly, in the surrounding environment. This section examines ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. An assessment of other projects that could affect the environment, individually or cumulatively, is also required. To address this issue, potential growth-inducing effects were examined through analysis of the following questions:

- Would the project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project foster population growth (e.g., construction of additional housing), either directly or indirectly?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would this project promote the development of or encroachment on an isolated or adjacent area of open space (being distinct from an in-fill project)?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

State CEQA Guidelines require an EIR to "discuss the ways" a project could be growth-inducing and to "discuss the characteristics of some projects that may encourage...activities that could significantly affect the environment."

Growth-inducing effects are not to be assumed to be necessarily beneficial, detrimental, or of little significance to the environment (State CEQA Guidelines, Section 15126.2(d)). This issue is presented to provide additional information on ways in which the proposed project could contribute to significant changes in the environment beyond the direct consequences of developing the proposed land uses as described in earlier sections of this Draft EIR.

## **Variables Affecting Growth**

Numerous variables can affect the growth within a city, town, county or region as a whole. These variables can include regional economic trends, market demand for residential and nonresidential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions.

## **Removal of a Barrier to Growth**

Approval of the SOI Plan update and inclusion of undeveloped or underdeveloped land within the sphere would allow the City of Nevada City (City) and other service providers to plan for future urbanization of the SOI area designated in the Nevada City General Plan (NCGP) and Nevada City Zoning Map for certain land uses. Most significantly, inclusion in the SOI denotes territory that would be eligible to receive City services, such as public sewer service and other municipal services such as police and fire protection, if the City submits an annexation proposal or application for extension of those services and that proposal or application is approved by LAFCo. This action would remove an obstacle to future annexation and development within the SOI Plan update area.

It should be noted, that even though lands may be included within a SOI, this does not guarantee that the lands will be annexed and development projects will be constructed. Inclusion in the updated sphere does not change or modify land uses or zoning, and does not eliminate the need to obtain other discretionary entitlements for development.

There is always the potential for the City to modify its land use planning to allow greater intensity of development than what is currently proposed within the SOI. However, this EIR will presume that future site development will be in accordance with the existing designations and zoning. It is simply too speculative to try to anticipate what future changes the City might make to its land use plan and try to evaluate such possible changes.

LAFCo and the City have identified four priority annexation areas (Annexation Area #1, #2, #3, and #4) that are intended for annexation in the very near future. These four areas are generally developed, and three of the areas include parcels that have already been connected to the City's sewer system. Annexation of these four areas is unlikely to increase existing development levels.

Additionally, six Potential Development Areas (Providence Mine East, Hurst Ranch, HEW Building, Manzanita Diggings, Highway 49 Planned Development Area and Gracie/Gold Flat) have been identified, and are included in each project alternative (with the exception of the 'No Project Alternative.' These six areas have the potential for annexation and further development using sewer service from the City. Inclusion of these Potential Development Areas in the SOI would indirectly induce growth by facilitating annexation or enabling extension of public services to both developed and undeveloped properties within these areas.

Section 5.4 Population Growth below discusses the level of growth anticipated to occur as a result of the removal of barriers under the SOI Plan update and specifically the Consensus Alternative. Historic limited growth of the City suggests that growth within these annexation areas will be spread over time. It is not anticipated that indirect growth would result in a substantial demand for new facilities or result in substantial unplanned new construction. Although some barriers to growth would be removed, through the required environmental review process with each annexation, it is not anticipated that new facilities or other areas would be developed such that significant impacts to the environment would occur.

## **Economic Growth**

The SOI Plan update would result in an updated boundary for the SOI for the City, but as previously noted throughout this EIR, would not directly result in new construction or approval of projects to be constructed.

The SOI Plan update; however, could indirectly result in the facilitation of new development and increased economic activity as a result of that new development. This is considered an indirect growth-inducing effect. Potential secondary effects of future growth could include environmental consequences, such as conversion of vacant land to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat.

This Draft EIR considers the economic growth that could result from future development within the SOI Plan Update area. The economic growth potential is evaluated at a high level because the SOI Plan Update does not propose any specific developments and the specific nature of future growth patterns is not known. The adoption of the proposed SOI Plan Update; however, does consider the potential to induce or encourage population growth that could occur as a result of future annexation requests.

All future annexation requests would be required to undergo a formal review process with both LAFCo and the City. These reviews would consider the specific elements of a project once they are known. LAFCo and the City would evaluate the project and consider the potential growth effects. The City also would consider future projects for consistency with growth policies during the City's design and review process. This would include necessary CEQA and other environmental review processes.

As discussed in 5.4 Population Growth below, the SOI Plan update is not anticipated to induce substantial population growth. Population growth is very closely correlated to economic growth and vice versa and



each can help predict changes in the other. Accordingly, while the SOI Plan would result in a change to the SOI plan boundary and would enable annexations of certain areas with planned growth, in the context of the overall City and County growth, the increase is well within that previously planned for in the City's *2017 Annexation Plan and Strategy*, and would be served by relatively minor public service improvements. Therefore, potential economic increases would not result in substantial secondary effects on the environment and these impacts would be less than significant.

## Population Growth

Implementation of the SOI Plan update and specifically the Consensus Alternative would not directly increase population within the City or SOI area. The SOI Plan update does not propose any new development or entitle any development that would increase population. The SOI Plan update; however, could facilitate new development through annexations or extension of public services.

Population growth within the City has been historically low. According to the City Housing element, population in 1980 was 2,431 and was 3,068 in 2010. This is a 30-year increase of approximately 26%. Notably, in year 2000 the population was 3,001 and 3,068 in 2010, an increase in 67 people or approximately two percent (Nevada City, 2014) over those ten years. More recently, according to the California Department of Finance (CDOF), the 2018 population of Nevada City was 3,226, which was a decrease of six people from 2017 when the City was reported to have a population of 3,232 (CDOF, 2018). The January 2019 population estimate from CDOF is 3,122 people, a decrease of 110 people, approximately three percent (CDOF, 2019).

The City's *2017 Annexation Plan and Strategy* provides an estimate of population growth over the Near-, Mid-, and Long-term and corresponds to the average household population of 2.09 people per household. This information is provided in *Table 5-1 – City Estimated Population Growth*. In 2017 the City estimated the population was 3,060, and the projected population in 2039 would be 9,384, which represents a tripling in population and an approximate increase of approximately 6,324 people or 200%.

**Table 5-1 – City Estimated Population Growth**

Horizon	Population
2017 Population	3,060
Near-term <sup>1</sup>	3,762 to 4,264
Mid-term <sup>2</sup>	4,314 to 6,601
Long-term <sup>3</sup>	5,125 to 9,384
Notes: <sup>1</sup> near-term = 2017-2022, <sup>2</sup> Mid-term = 2023-2028, <sup>3</sup> Long-term = 2029-2038 Source: Nevada City, 2017	

The CDOF provides population forecasts for the Counties in the state. CDOF estimates the population of Nevada County in 2038 would be approximately 109,791 people. Considering the 2017 population was 98,554 (CDOF, 2019) this would be a thirty-year increase of approximately 11,237, or eleven percent. If This eleven percent, or 561 people per year over a twenty-year horizon county wide and is not considered substantial. If the eleven percent growth is applied to Nevada City over the 20-year horizon this would account for a population increase of approximately 336 people, or 28 people per year.

The 2015 Wastewater Municipal Services Review (MSR) also provided population estimates for the City. The MSR utilizes the CDOF projections at the County level and did note that making projections for future population growth for a small city such as Nevada City is problematic due to a variety of unknown factors associated with the annexation rate. The 2008 Update of the City's SOI assumed a 0.52 percent annual growth rate and this rate proved to be too high. The City's 2014 Housing Element estimated population for the year 2019 at 3,124 persons. Using this value, the projected average annual growth rate is calculated at 0.0089 percent (less than one percent) (Wastewater MSR, 2015). These values are shown in *Table 5-2 - Wastewater MSR Projected Population Growth (2014–2030)*, below.

**Table 5-2: Wastewater MSR Projected Population Growth (2014–2030)**

	2014	2015	2020	2025	2030
City of Nevada City	3,016	3,043	3,295	3,295	3,445
Assumes an annual growth rate of 0.0089 percent within the City.					

The slower rate of projected growth may be due to:

- remaining slow economic growth and development as an after effect of the U.S. recession from December 2007 through June 2009;
- future long-term effects of SARS-CoV-2 (Covid-19) could affect growth in the City;
- hilly terrain which is more expensive to develop, and which surrounds the City;
- General Plan policies to protect the environment established by City leaders and residents and a tendency to proceed more cautiously with new developments (Wastewater MSR, 2015);
- National Demographic trends favoring population growth in major urban areas over rural areas

It should be noted, that while annexation of existing residential areas would increase the population of the City, this is not new population or growth. While annexation of existing populated areas would increase the population of the City, this is not organic growth but through an adjustment to the City boundaries take existing population from County lands and shift them to within City limits.

Looking at long term overall population projections however may not accurately reflect the potential impacts of the SOI Plan. In particular, the SOI Plan calls for inclusion of six potential development areas (Providence Mine East, Hurst Ranch, HEW Building, Manzanita Diggins' Highway 49 Planned Development Area, and Gracie/Gold Flat). These areas are planned for substantial development. If they are annexed and developed as the City intends, they will generate additional development and additional population and economic growth.

The growth potential of these areas has been estimated by the City of Nevada City and is set forth in Table 3-1 in the Project Description. From this information, reasonable estimates of the number of residential units and hotel units were generated and the consequent growth in population and economic activity evaluated. Based on the Multiple Family Residential designation of (R2) there would be up to 319 units. It is undetermined how many hotel units would be allowed but in either case the site would be developed based on constraints including topography, access, sensitive resources, etc.

Given current modest historical regional growth trends discussed above, it is unlikely that all of the proposed development in the Annexation Areas will occur in the near term. It is far more likely that it will develop gradually over an extended period of time. This will allow more time for any necessary infrastructure and service improvements to be made and for the impacts of the development to be accommodated. There are other considerations in terms of population growth. In consideration of the past growth trends, the anticipated development horizon, and lack of formal development applications for the priority annexation areas. Therefore, although the project would enable development and annexation of undeveloped areas into the City would result in population growth, it is unlikely that significant growth would result as a result of the Consensus Alternative. In addition, the project includes areas for annexation that are already developed. Although annexation of these developed areas would result in an increase of City population, the development has already occurred and impacts on the environment would be limited to a few undeveloped parcels in these areas. Therefore, although the project could result in significant growth of the City population enabled by adoption of the Consensus Alternative, due to the listed reasons but growth is not anticipated to create a significant adverse environmental impacts.

### **Establishment of a Precedent Setting Action**

LAFCo is responsible for determining the boundaries of cities and special districts within its area of responsibility and jurisdiction. Along with its own locally adopted policies, the Nevada County LAFCo operates under the Cortese-Knox-Hertzberg (CKH) Local Government Reorganization Act of 2000, located at Section 56000 and following in the Government Code. The proposed project consists of a SOI Plan update to the current City SOI. LAFCo is required to adopt a SOI plan for each city and district in its jurisdiction, and to review each SOI plan and update as necessary every five years. Nevada City's SOI was first adopted by LAFCo in 1983 with no environmental review. The SOI was affirmed by LAFCo in 2008 with a negative declaration. LAFCo is now in the process of updating the SOI Plan for the City again as required by CKH.

The SOI Plan update to the City of Nevada City would update the existing SOI. The proposed project is consistent with existing legal and planning requirements set forth in the CKH, as well as City and LAFCo guiding documents. The SOI Plan update does not propose any other elements, or require any special considerations, and it does not propose any precedent-setting actions.

### **Encroachment On Open Space**

The SOI Plan update does not propose or authorize any specific development or entitlement that would result in direct impacts or modify any land uses including designations of open space. The SOI Plan update would not result in a direct encroachment to open space. Indirectly, it may facilitate development of currently undeveloped lands. However, all of these lands are privately held and designated by the City for such future development. In addition, it is not anticipated that any annexation would be proposed that would change an existing open space designation such that development that is inconsistent with applicable planning and policy documents would occur.

## 5.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with the California Environmental Quality Act (CEQA) Guidelines §15128, this section briefly describes the potential impacts found to be less than significant that do not require mitigation. In the course of this evaluation, certain impacts of the proposed project were found to be less than significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the Draft Environmental Impact Report (EIR).

### Agriculture and Forestry Resources

Would the project?

- AG-a) Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- AG-b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?
- AG-c) Conflict with existing zoning for, or cause rezoning for, forest land (as defined in Public Resources code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?
- AG-d) Result in the loss of forest land or conversion of forest land to a non-forest use?
- AG-e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to a non-agricultural use or conversion of forest land to a non-forest use?

**Less than Significant Impact.** The Consensus Alternative area has not been historically used for agricultural purposes such as growing crops or grazing. The Consensus Alternative area does not possess prime classified soils for agricultural production, and the site is not located within an area of Prime, Unique, or Statewide Importance Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program.

No properties within the Consensus Alternative Area are under a current Williamson Act contract. Therefore, project implementation would not result in conflicts with existing agricultural zoning or Williamson Act contracts.

The proposed project would not change the existing zoning for parcels that are zoned for Agricultural or production of forestry materials within the Consensus Alternative area. There are no parcels that are zoned for Timberland Production.

Pub. Resources Code, § 12220 (g) defines "Forest land" as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality,

recreation, and other public benefits." Pub. Resources Code, § 4526 defines timberland as follows: "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

The City of Nevada City is located in the midst of an area that would meet the above definition of "forest lands" and "timberlands." Consequently, any development on undeveloped land within the proposed Consensus SOI would result in the conversion of "forest lands" as so defined to urban uses. However, the forest land surrounding Nevada City is mostly in parcels too small and adjacent to conflicting residential uses to warrant use for timber production. These areas also have been planned for development, not for commercial timberland or open space. All of these factors make it unsuitable for management as commercial timberland or forest preserve. Consequently, the impact of such conversion is deemed less than significant.

## Energy

Would the project:

ENG-a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

ENG-b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The adoption of the proposed Consensus Alternative, itself, would not directly result in an impact to energy resources. It is estimated that the Consensus Alternative could result in an increase of up to a maximum 622 residential units, which would result in additional energy consumption. The increased energy use will foreseeably be reduced by imposition of energy-saving requirements on specific projects as required by already adopted State and local policies and regulations. Future housing development proposals would be subject to project-specific environmental review to ensure that the project would be compliant with local and regional standards and procedures for minimizing short-term and long-term impacts related to wasteful, inefficient or unnecessary consumption of energy resources. As proposed, all future development projects would be required to obtain appropriate Building Permits and would be required to meet all current building standards including but not limited to the California Building Code, California Electrical Code, California Energy Code (Title 24) as well as the Nevada County Land Use and Development Code. Therefore, the indirect energy consumption impacts of the proposed Consensus Alternative development will be reduced to less than significant through conformance with applicable regulations and existing energy reduction measures.

## Hazards and Hazardous Materials

Would the project:

HAZ-a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

- HAZ-b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- HAZ-c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- HAZ-d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- HAZ-e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- HAZ-f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- HAZ-g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**No Impact.** The proposed consensus alternative is not anticipated to result in an impact to the creation of potential hazards or hazardous materials for the citizens of Nevada City. The proposed SOI Plan Update provides direction on certain boundary proposals submitted by Nevada City and special districts. It is estimated that the Consensus Alternative could result in an increase of up to a maximum 622 residential units, yet this update does not provide any entitlements for the construction of these units. The Consensus Alternative does not contain any Goals, Policies or Programs which are anticipated to impact hazardous materials. Future development of projects will be subject to both local and regional hazard and hazardous materials regulation and will also be required to meet all Nevada City requirements including all adopted local and State Fire Safety Standards as well be compatible with both the Nevada County Land Use Compatibility Plans. All potential hazards will be reviewed at the time when a site-specific development project is made. Therefore, the proposed project would have no impact on hazards or hazardous materials.

## Mineral Resources

Would the project:

- MR-a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?
- MR-b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?

**No Impact.** A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. The designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses. The Consensus Alternative would not result in the loss of availability of a known mineral resource that would be of value to the region and

the residents of the State since no mineral resources are either identified to exist by the City's General Plan, or located within any "Critical Mineral Resource Overlay" area, on or near the proposed project site.

Additionally, the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a City's General Plan, specific plan or other land use plan. No impact has been identified.

## Noise

Would the project:

- NOI-a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- NOI-b) Generation of excessive groundborne vibration or groundborne noise levels?
- NOI-c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**No Impact.** The adoption of the proposed Consensus Alternative would not result in the generation of substantial noise throughout the County. The proposed sphere of influence plan update provides direction on certain boundary proposals submitted by Nevada City and special districts. It is estimated that the Consensus Alternative could result in an increase of up to a maximum 622 residential units, yet this update does not provide any entitlements for the construction of these units. All future housing development projects will be considered a project under the California Environmental Quality Act and will be subject to site-specific review for potential noise generation. Additionally, these future projects are required to adhere to City Noise Standards.

Therefore, the proposed Consensus Alternative would have no impact on temporary or permanent increases in ambient noise levels or ground borne vibrations or noise levels nor expose people residing or working within the vicinity of a private airstrip or public or private airport.

## Population and Housing

Would the project:

- POP-a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- POP-b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**Less Than Significant Impact.** The proposed project does not include any physical improvements or construction of structures within the Consensus Alternative area. The proposed Nevada City SOI update

would not result in the addition or removal of any existing homes. It is estimated that the Consensus Alternative could result in an increase of up to a maximum 622 residential units. Under the County zoning and general plan land uses, buildout in the area of the six potential development areas would result in approximately 166 total units. Although the Consensus Alternative would generate additional units, if demand exists for its eventual buildout, this development has been anticipated by the City and will be consistent with the City General Plan. Additionally, construction and built out would occur over a period of time and phased in based as need for residential units grows. The Consensus Alternative will not produce any unplanned growth, nor will it displace any existing residential areas, homes, or people. In addition, all future projects proposed for annexation from the SOI update area would be considered projects pursuant to CEQA and would require project-specific environmental review. This would account for potential impacts associated with population growth. Additionally, all future development projects would be reviewed for compliance with the General Plan, Land Use and Development Code and specific ordinances, including design review where applicable.

## Recreation

Would the project:

- REC-a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- REC-b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed Consensus Alternative could result in an increase of up to a maximum 622 residential units which would increase the demand for recreational services. However, such impact will likely occur over an extended time and is foreseeably going to be reduced by conformance with existing regulations and policies that would apply to such future development. All future development within the City would be subject to the payment of fees as defined in Chapter 17.116.040 – Fee designated (Nevada City, 1987), which would assist in minimizing potential impacts. These fees would be applied at the appropriate timeframe when future development is being built. Additionally, all future projects would be subject to site-specific environmental review and must comply with all applicable City policies and regulations in regard to recreational services. Therefore, while the development of the Consensus Alternative properties could have a significant impact on recreational services within the City, that impact will be reduced to less than significant by the application of existing policies.

## 5.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth "in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented." Accordingly, this section provides a summary of significant environmental impacts of the project that cannot be mitigated to a less-than-significant level.



Sections 4.1 through 4.12 of this Draft EIR describe the potential environmental impacts of the project and recommends various mitigation measures to reduce impacts, to the extent feasible. At the end of the impacts discussion for each resource there is a Conclusion and Cumulative Impacts discussion. The Conclusion provides a brief summary of the previous discussion and the Cumulative discussion determines whether the incremental effects of the proposed project are significant when viewed in connection with the effects of past, present, or reasonably foreseeable projects. After implementation of the recommended mitigation measures, when needed and when feasible, all of the impacts associated with implementation of the SOI Plan update would be reduced to a less than significant level with the exception of Wildfire. Based on that, the following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project's impacts to a less than significant level.

## **Wildfire**

**Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildlife?**

**Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

The proposed project would conform to all applicable regulations relative to fire safety set forth by the International Building Code (IBC) and California Building Code (CBC) requirements, the State Board of Forestry and Fire Protection 2018 Strategic Fire Plan, goals and policies of the Nevada County General Plan (NCGP), development standards of the City Zoning Ordinance, City of Nevada City Disaster Plan, as well as CALFIRE defensible space demands. Prior to approval of any projects, future applicants would be required to show conformance to the applicable standards prior to project approval. The proposed project also includes a mitigation measure requiring all future non-ministerial development to submit evacuation plans and if required by the City require an evacuation improvement plan or make a fair share contribution to needed improvements. Nonetheless, due to the unpredictable nature of wildfire as evidenced Santa Rosa, Redding and Paradise, protective measures and massive efforts to control such fires may have only limited success. The proposed project would not directly aggravate the risk, but could indirectly induce growth and more people to the existing significant health and safety danger of wildfires. Even with compliance to regulations and MM WLD-1, in conjunction with site by site CEQA evaluation as required by the City municipal code for all annexations, impacts would not be reduced to less than significant.

## 6.0 ALTERNATIVES TO THE PROPOSED PROJECT

An EIR must compare and evaluate the environmental effects and comparative merits of the alternatives. This section describes alternatives considered but eliminated from further consideration, including the reasons for elimination, and compares the environmental impacts of several alternatives retained with those of the proposed project.

### 6.1 INTRODUCTION

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the proposed project or to the location of the project site that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the proposed project's basic objectives. The EIR is not required to consider every conceivable alternative to a project but is guided by a rule of reason. An EIR is not required to consider alternatives which are infeasible but should include alternatives that foster informed decision making. The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. This section describes four Alternatives to the SOI Plan update Consensus Alternative as proposed. These alternatives include the Original LAFCo Staff Recommendation Alternative; City Recommendation Alternative, and "No Project" (coterminous Sphere Alternative. The three alternatives present a reasonable range and are discussed in more detail below.

The key provisions of CEQA Section 15126.6, which pertain to the discussion and analysis of alternatives are summarized as follows:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be costlier.
- The No Project Alternative shall be evaluated, along with its impacts. The no project analysis shall discuss the existing conditions at the time the notice of preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason;" therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives

shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.

- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The lead agency is responsible for selecting this range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. This Chapter describes four Alternatives to the proposed project. These alternatives include the No Project Alternative, Existing Zoning Alternative, All Housing Alternative, and Wetland Preservation Alternative. The four alternatives are discussed in more detail below.

The purpose of the No Project Alternative is to describe, analyze, and disclose to decision-makers the comparison of the proposed project versus what would occur if the proposed project were not to occur. Pursuant to State CEQA Guideline 15126.6(e)(1), “the no project alternative is not the baseline for determining whether the proposed projects environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish the baseline (in accordance with Section 15125).” In the case of the No Project, this alternative includes the adoption of a coterminous SOI, meaning the City’s SOI would only include the existing territory within the City’s jurisdictional boundary. Therefore, this EIR does not use as a baseline the level of development allowed under the existing NCGP or the Nevada County General Plan (County General Plan) nor does it speculate as to impact of possible rezoning to higher density.

It should be noted that State CEQA Guideline 15126.6(3)(A) discusses that when the project is the revision of an existing land use plan or regulatory plan, policy or ongoing operation, the ‘no project’ alternative will be the continuation of the existing plan, policy or operation into the future. Typically, this is a situation unlike the proposed SOI Plan update, where other projects initiated under the existing plan will continue while the new plan is developed. In these instances, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

If; however, as discussed above the proposed project (Consensus Alternative) or the Original LAFCo Staff Recommendation Alternative or City Recommendation Alternative, the SOI would revert to a coterminous sphere. Therefore, in the case of the SOI Plan update, the Coterminous Sphere also is the baseline for evaluation of impacts.

Therefore, this EIR’s use of the no project alternative as the baseline is appropriate because of the unusual aspects of the SOI Plan update and reversion to a coterminous sphere should this project other alternative not be approved. This baseline will serve to fully inform the public, stakeholder, and decision-makers, where a comparison to the current SOI would not provide a sufficient basis of analysis for comparison. This would substantially decrease the EIR’s effectiveness as an informational document. Thus, the analysis

methodology of this EIR will fully inform the public, is within the allowable discretion of the lead agency, and is the most practical way to conform to CEQA requirements.

Alternatives were developed based on: information provided by the LAFCo and the City of Nevada City (City), and input received by the City from community members during development of the 2017 Annexation Plan and Strategy. Once a group of alternatives to the project were identified and after an initial review, the alternative was either retained for further analysis or discarded. Among the factors that may be taken into account when addressing the feasibility of alternatives, as described in Section 15126.6(f)(1) of the CEQA Guidelines include environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, and that would not achieve the basic project objectives. The alternatives that were selected for additional consideration were done so in accordance with the above-listed CEQA Guidelines, represent a reasonable range, are feasible, and were selected to encourage discussion in a manner to foster meaningful public participation and informed decision making.

## 6.2 ALTERNATIVES TO THE PROPOSED PROJECT

As discussed above, one of the evaluation criteria for the alternative discussion is the ability of a specific alternative to attain most of the basic project objectives. The basic project objectives as listed in Chapter 3.0, Project Description are as follows:

- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 by updating the SOI Plan of Nevada City to accommodate orderly and sustainable growth without encouraging premature conversion of agricultural or open space lands;
- Adopt a plan that delineates clearly defined areas that the City can reasonably serve with existing and planned public services;
- Establish a logical SOI boundary for Nevada City to ensure protection of environmental resources;
- Include sufficient areas to provide for development meets reasonable growth needs and ensures a sustainable jobs-housing balance;
- Be consistent with the applicable goals and policies of LAFCo, and to the extent they do not conflict, those of City of Nevada City as well.

## 6.3 PROPOSED PROJECT

The SOI Plan update consists of an update to the Nevada City SOI. The existing SOI surrounds the City in a roughly spherical shape and is shown in *Figure 3-9 Nevada City Sphere of Influence Map*. The current SOI surrounding the City boundary occupies approximately 2,702 acres (2018 Nevada County GIS data) and as discussed above, with the City occupying approximately 1,470 acres, the total area approximately 4,172 acres. The SOI Plan update would occur within the area defined by the existing SOI and does not include any lands within the existing City boundaries.

The annexation of areas by the City would allow for the extension of City services to the newly annexed areas but the SOI Plan update itself does not include any physical alterations or improvements to any area. Under the SOI Plan update, no other actions including associated infrastructure extensions and improvements, new residential, commercial, industrial or other developments are being sought. Additionally, the SOI Plan update does not include any changes to existing land uses, land use designations, or zoning. However; while the SOI Plan update would not directly result in any physical change in the environment, the annexation of these areas may indirectly facilitate development within these areas. Inclusion in the sphere is the first step towards annexation of the territory, and annexation allows access to municipal services that facilitate development within the context of the underlying General Plan land use designation. Consequently, this EIR examines at a general program level the indirect environmental impacts of the proposed project resulting from such potential development.

The portions of the SOI that are recommended for exclusion would be designated as an “Areas of Interest” in order to ensure the City is notified of development proposals and other projects that may have potential for impacting the City. The Commission’s policies define an “Area of Interest” as a geographic area beyond the sphere of influence in which land use decisions or other governmental actions of one local agency may impact directly or indirectly on another local agency. LAFCo policy stipulates that the Commission will notify “interested agencies” of known proposals within the Area of Interest, and give great weight to the comments of the “interested agency

## 6.4 COMPARISON OF PROJECT ALTERNATIVES

Per the State CEQA Guidelines §15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the preferred Consensus Alternative. For each alternative, the analysis below describes each alternative, analyzes the impacts of the alternative as compared to the Consensus Alternative, identifies significant impacts of the Consensus Alternative that would be avoided or lessened by the alternative, assesses the alternative’s ability to meet most of the Project Objectives, and evaluates the comparative merits of the alternative and the Consensus Alternative. The following sections provide a comparison of the environmental impacts associated with each of the SOI Plan updates alternatives, as well as an evaluation of each alternative to meet the project objectives.

- Original LAFCo Staff Recommendation Alternative: Consists of the original LAFCO recommended SOI boundary and includes approximately 1,650 acres.
- City Recommendation Alternative: Consists of the original City proposed SOI and would include the lands contained within the 2008 SOI; and
- No Project Alternative: This alternative includes the adoption of a coterminous SOI, meaning the City’s SOI would only include the existing territory within the City’s jurisdictional boundary.

## 6.5 ALTERNATIVE 1 - ORIGINAL LAFCO STAFF RECOMMENDATION ALTERNATIVE

The Original LAFCo Staff Recommendation Alternative was prepared by LAFCo staff as an update to the City SOI Plan and is shown on *Figure 2-2 Original LAFCo Staff Recommendation Alternative*. This alternative would retain the area within the four priority annexation areas, but they would not be “prioritized” for annexation. This alternative also would retain the six Planned Development areas (Providence Mine East, Manzanita Diggins’, Gold Flat/Gracie Road, Highway 49 planned Development Area, Hurst Ranch, and the HEW Building).

While this plan would retain the above areas, this plan includes five exclusion areas that are within from the outermost boundary of the current SOI. These areas have been proposed for exclusion from the SOI because the areas are either already developed and unlikely to require the City’s services within the timeframe of the sphere plan, or the provision of City services to the area is likely to be infeasible. The exclusion areas are described as follows:

The exclusion areas under this alternative also include the same five pockets surrounding the City as discussed in the Consensus Alternative, but overall under this Alternative the areas are larger. This would reduce the overall area of the SOI. To avoid repeating area designations, these exclusion areas are numbered 1-5 and the additional areas to be excluded are shown on *Figure 2-2: Original LAFCo Staff Recommendation Alternative*.

Exclusion Area 1 - This southeastern exclusion area would still be delineated by Banner Lava Cap Road on the south but would extend northerly to Pittsburg Road, Gold Flat Road, Pinewoods Road, and low-density residential parcels on the north. This exclusion area contains additional more land than the Area of Interest DS Canal/Pittsburg Road of the Consensus Alternative.

Exclusion Area 2- The eastern exclusion area would be expanded compared to the Consensus Alternative area within Area of Interest Red Dog Road. This Exclusion Area would extend south of Red Dog Road to Banner Mountain Trail on the south. This include a block of properties south of Banner Mountain Trail bound by Stillwater Creek Road on the west and Big Blue Road on the east. The westerly boundary of Exclusion Area 2 also would be expanded approximately 1,000 feet west to include undeveloped and rural parcels. In addition, the northerly boundary would extend to Highway 49.

Exclusion Area 3- The northern exclusion area would be similar in size to Area of Interest North Bloomfield Road but would be expanded easterly to include approximately 10 properties. The westerly boundary would become the incorporated City island property known as the Old Airport Property.

Exclusion Area 4- The northwesterly exclusion area would increase in size from the Area of Interest Airport/Cement Hill Road would be expanded easterly. The boundary would include approximately nine additional properties and be and be bound by the Old Airport Property and Cement Hill Road on the east.

Exclusion Area 5 – The westerly exclusion area would be substantially the same as *Area of Interest Eden Ranch* but would be contracted westerly. This would slightly increase the area in the SOI to include four additional properties.

## **Impacts Compared to the Project Impacts**

An evaluation of the potential environmental impacts of the No Project Alternative, as compared to those of the proposed project, is provided below. Under the Original LAFCo Staff Recommendation Alternative direct impacts would not occur as this alternative does not propose any construction or include any development entitlements. This is true of all resource areas listed below and the impacts discussion focusses on the indirect impacts that would occur as a result of implementation of the alternative.

### ***Aesthetics***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended and these areas would largely continue to use private sewer and private wells. This would indirectly reduce impacts to views and other sensitive visual and aesthetic resources because it would be less likely for development to extend into unserved areas. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts from development would be minimal. Therefore, potential changes to the overall visual environment, scenic vistas, the existing visual character, and light and glare would be slightly reduced and under this alternative. Impacts to resources within a state scenic highway would be roughly equivalent because development in areas adjacent to these resource areas would not be anticipated to change. Therefore, impacts to aesthetics would be less under this alternative.

### ***Air Quality***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. These areas would largely continue to use private sewer and private wells. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses to be developed and increase demand for city services. Although the priority annexation areas would be removed, the Priority Annexation areas are largely developed and additional air emissions from development in the areas would be minimal. Overall, this would have the effect of reducing the potential for conflicts with the applicable air quality management plan or adding to violations of air quality standards because the overall development footprint, required grading, and vehicle trips and miles traveled would be reduced. This alternative also would result in a reduction of the potential for offensive odors, or emissions in the vicinity of sensitive receptors. Therefore, the potential impacts to air quality would be less and under this alternative.

### ***Biological Resources***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses to be developed and increase demand for city services. Although the priority annexation areas would be removed, these areas are largely developed

and additional impacts to biological resources from future development would be minimal. Overall, this would have the effect of reducing the potential for impacts on sensitive species, sensitive wildlife, or other sensitive habitats such as waters and wetlands because the overall area that would be disturbed is substantially less. Additionally, this alternative would be less likely to affect wildlife migration corridors or nesting or breeding habitat. Therefore, the potential impacts to biological resources would be less under this alternative.

### ***Cultural and Tribal Resources***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or uses to be developed and result in impacts to cultural and tribal resources. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts to tribal and cultural resources from development would only occur on a few undeveloped rural residential parcels. The potential for impacts in this regard is could be substantial. Overall, the total acres would be the same, but the allowable development densities allowed by the County would be reduced. This is anticipated to reduce the overall areas of disturbance and thereby reduce the potential for damage or destruction of cultural and tribal resources. Therefore, the potential impacts to cultural and tribal resources would be less under this alternative.

### ***Geology and Soils***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses to expand and increase demand for city services. In addition, the allowable development densities based on the county land use designations would be substantially reduced. Overall, this would have the effect of reducing the potential for new residents and commercial or industrial areas to be affected by or to have an effect on geotechnical risks such as liquefaction, subsidence, lateral spreading, collapse, and landslides. Therefore, the potential impacts associated with geology and soils would be less and under this alternative.

### ***Greenhouse Gas***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or uses with greater potential to emit GHGs to expand into unserved areas. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts from GHG emissions from new development would only occur on a few undeveloped rural residential parcels and would be minimal. Overall, this alternative would have a substantial reduction in potential impacts from GHG emissions and associated violation of any plan, policy, or regulation because the allowable development would be reduced by approximately 74%. Therefore, the potential impacts to GHGs would be less and under this alternative.



### ***Hydrology and Water Quality***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. These areas would largely continue to use private sewer and private wells. This alternative would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses to expand and increase demand for city services. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts to hydrology and water quality from new development would only occur on a few undeveloped rural residential parcels and would be minimal. Overall, this would have the effect of slightly reducing the potential violations of water quality standards, and alteration of drainage patterns resulting in erosion and onsite or downstream sedimentation. Because water and sewer services would not be expanded into as many unserved areas, the potential for groundwater depletion from continued well use and water quality issues from septic systems would remain or slightly increase. Nonetheless, overall, the potential impacts to hydrology and water quality would be incrementally less and under this alternative.

### ***Land Use***

This alternative would increase the area that would be excluded from the SOI. This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses that would increase demand for city services. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts to land use from new development would only occur on a few undeveloped rural residential parcels and would be minimal. Because it would be less likely for development to extend into these areas it would be less likely for an existing community to be physically divided and these impacts would be reduced. Similarly, reduced development potential would result in fewer potential conflicts with a land use plan or policy document aimed at reducing environmental impacts. Overall, this would have the effect of reducing the potential for impacts with land use and planning.

### ***Public Services***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other uses that would increase demand for city services. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts to public services from new development would only occur on a few undeveloped rural residential parcels and would be minimal. Because fewer opportunities for annexation would be provided fewer areas would be afforded City services including fire, police, and school and demand in this regard would be reduced. While services would still be provided by the County, overall the demand for these services would be reduced. Regarding impacts to other public services and libraries, the number of potential users would be reduced especially on services provided only to city residents because new residents and businesses in county lands would not be eligible for such services. Therefore, these impacts would be reduced compared to the Consensus Alternative.

### ***Transportation***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial to be developed and require City services. Although the priority annexation areas would be removed, these areas are largely developed, contiguous with the existing City boundaries and new development would only occur on a few undeveloped rural residential parcels. Increased traffic and vehicle trips from these sites would be roughly equivalent. Because it would be less likely for development to extend into areas within the SOI due to the lack of service potential, it would be less likely for additional VMT compared to the Consensus Alternative to occur. Similarly, reduced development potential would result in fewer potential conflicts for roadway safety, vehicle conflicts, and impairment of emergency response. Overall, this would have the effect of reducing the potential for impacts associated with transportation.

### ***Utilities***

This alternative would reduce the area the City could annex and reduce the area into which City services, such as water and sewer would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, industrial, or other that would increase demand for City services. The priority annexation areas also would be removed from consideration for annexation, and this would decrease the potential demand on utilities, especially on water treatment at the Deer Creek Plant. Conversely, fewer properties would be served by water from the City or Nevada Irrigation District and residents would remain reliant on groundwater from wells. This would increase demand on ground water and potentially decrease ground water supplies. Nonetheless, because less area would be open to annexation, fewer areas would be afforded City utility services and impacts in this regard would be reduced. Overall, this would have the effect of eliminating some of the increased demand on utilities that would be created by adoption of the Consensus Alternative.

### ***Wildfire***

This alternative would reduce the area the City could annex and reduce the area into which City services would be extended. This would reduce the development potential of these areas because it would be less likely for residential, commercial, and industrial uses, to expand into these areas thereby increasing the number of structures susceptible to wildfire. Although the priority annexation areas would be removed, these areas are largely developed and additional impacts to wildfire from new development would only occur on a few undeveloped parcels and would be minimal. However, because the overall density would be reduced by approximately 74%, there would be substantially less developed and fewer new structures and residents that would be at risk from wildfire. Overall, this would have the effect of reducing the potential for impacts from wildfire.

## 6.6 ALTERNATIVE 2 CITY RECOMMENDATION ALTERNATIVE

The City has indicated it would prefer to retain all territory included in its current SOI (as initially adopted in 1983 and updated in 2008). The City Recommendation Alternative includes an area of approximately 1,650 acres surrounding the City and is shown in *Figure 2-3 City Recommendation Alternative*. This Alternative would maintain the SOI boundary which extends east approximately 0.75 miles from the current City boundary on the east. On the west, the SOI would extend to as much as one mile and as little as approximately 0.33 miles beyond the existing City limits. To the south, the SOI would extend southerly approximately 0.6 miles to Banner Lava Cap Road, and on the north, the SOI would extend approximately 0.5 miles and connect with the existing island of City land.

This alternative would include the six exclusion areas that are not a part of the LAFCO Staff Recommended Boundary as described above. In addition, the area within the four priority annexation areas would remain, but they would not be “prioritized” for annexation. This alternative does include the six Planned Development areas (Providence Mine East, Manzanita Diggins’, Gold Flat/Gracie Road, Highway 49 planned Development Area, Hurst Ranch, and the HEW Building).

Under the City Recommendation Alternative direct impacts would not occur as this alternative does not propose any construction or include any development entitlements. This is true of all resource areas listed below and the impacts discussion focusses on the indirect impacts that would occur as a result of implementation of the alternative.

### ***Aesthetics***

This alternative would increase the area that would be included within the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase potential impacts to views and other sensitive visual and aesthetic resources because it would be more likely for development to extend into unserved areas. While the priority annexation areas would be removed, these areas could still be annexed, and impacts would be similar to the Consensus Alternative. Therefore, potential changes to the overall visual environment, scenic vistas, the existing visual character, and light and glare would be greater and under this alternative. Impacts to resources within a state scenic highway would be slightly greater because development potential in areas adjacent to these resource areas would be increased. Therefore, impacts to aesthetics would be incrementally greater than under City Recommendation Alternative.

### ***Air Quality***

This alternative would increase the area that would be included within the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase potential impacts to air quality because it would be more likely for development to extend into unserved areas resulting in air emissions and additional vehicle trips. While the priority annexation areas would be removed, these areas could still be annexed, and impacts would

be similar to the Consensus Alternative. Therefore, although not substantial, potential changes to the overall impacts for potential conflicts with air quality management plans, air emissions, generation of odors, and emissions adjacent to sensitive receptor would be slightly greater under the City Recommendation Alternative.

### ***Biological Resources***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand and increase impacts on biological resources. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of slightly increasing the potential for impacts on sensitive species, sensitive wildlife, or other sensitive habitats such as waters and wetlands. Additionally, this alternative would be more likely to affect wildlife migration corridors or nesting or breeding habitat. Therefore, the potential impacts to biological resources would be incrementally greater under this alternative.

### ***Cultural and Tribal Resources***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to increase demand for city services. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of slightly increasing the potential for impacts on cultural, historic, and tribal cultural resources.

### ***Geology and Soils***

This alternative would increase the area that would be included to the SOI and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to increase demand for City services. Overall, this would have the effect of increasing the potential for new residents and commercial or industrial areas to be affected by or to have an effect on geotechnical risks such as liquefaction, subsidence, lateral spreading, collapse, and landslides. Therefore, the potential impacts associated with geology and soils would be greater under this alternative.

### ***Greenhouse Gas***

This alternative would decrease the area that would be excluded from the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential increase emissions of GHGs from expansion into areas where services are extended. While the priority

annexation areas would be removed, services could still be extended and impacts from GHG emissions would be similar. Overall, this would have the effect of slightly increasing the potential for impacts with GHG emissions and associated violation of any plan, policy, or regulation. Therefore, the potential impacts to GHGs would be incrementally greater and under this alternative.

### ***Hydrology and Water Quality***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential to increase impacts on hydrology and water quality. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of slightly increasing the potential for impacts on water quality, erosion, and changes to the drainage pattern of development sites. This alternative; however, could result in reduced dependence on groundwater if water services are extended to areas that would otherwise use water wells. Overall, the potential impacts to hydrology and water quality would be incrementally greater under this alternative.

### ***Land Use***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential to increase impacts on land, division of established communities, and creation of City islands within County land. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of increasing the potential for impacts associated with land use if development does not occur in a contiguous pattern.

### ***Public Services***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential to increase demand for City services and increase the potential for new or expanded facilities. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of increasing the potential for impacts associated with public services.

### ***Transportation and Traffic***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would

indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential to increase traffic-generating development, and development not contiguous with the existing City boundaries resulting in increased VMT. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of increasing the potential for impacts associated with transportation and traffic.

### ***Utilities***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. This has the potential to increase demand for City water and sewer services as the potential for expanded facilities is increased. Under this alternative it is anticipated that wastewater would be treated at the Deer Creek facility. This would increase demand on wastewater treatment and reduce the remaining capacity. On the contrary, this alternative would like result in extension of water services and reduce the reliance on ground water thereby reducing potential impacts in this regard. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, the City Recommendation Alternative would have roughly equivalent impacts as the Consensus Alternative.

### ***Wildfire***

This alternative would increase the area that would be included to the SOI. This alternative would increase the area the City could annex and increase the area into which City services could be extended. This would indirectly increase the development potential of these areas because it would be more likely for residential, commercial, industrial, or other uses to expand into County land. As additional development is extended into the urban wildland interface, more habitable structures and more areas would be susceptible to damage and destruction from wildfire. While the priority annexation areas would be removed, services could still be extended, and impacts would be similar compared to the Consensus Alternative. Overall, this would have the effect of increasing the potential for impacts associated with wildfire.

## **6.7 ALTERNATIVE 3 COTERMINUS SPHERE – NO PROJECT ALTERNATIVE**

The Coterminous Sphere - No Project Alternative includes adoption of a coterminous SOI. Under this alternative, the City's SOI includes only the territory within the City's jurisdictional boundary, as depicted in *Figure 2-4 Coterminous Sphere – No Project Alternative*. Under this alternative, neither the four priority annexation areas, nor the six planned development areas would be eligible for annexation. In essence, all areas outside the existing City boundary would be excluded from potential annexations. CEQA requires that environmental analysis use as its baseline for analysis the existing physical conditions on the ground,

rather than what is proposed in existing planning documents. This alternative assumes no additional expansion of the City and would not extend City services to any unincorporated County land. Under the Coterminous Sphere Alternative direct impacts would not occur as this alternative does not propose any construction or include any development entitlements. This is true of all resource areas listed below and the impacts discussion focusses on the indirect impacts that would occur as a result of implementation of the alternative.

### ***Aesthetics***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to views and other sensitive visual and aesthetic resources because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential changes to the overall visual environment, scenic vistas, the existing visual character, and light and glare would be eliminated under this alternative.

### ***Air Quality***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to air quality because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts associated with air emissions and conflicts with the applicable air quality management plans would be eliminated under this alternative.

### ***Biological Resources***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to biological resources because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, impacts in this regard would be eliminated under this alternative.

### ***Cultural and Tribal Resources***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to cultural resources because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, impacts in this regard would be eliminated under this alternative.

***Geology and Soils***

This alternative removes all the area the City could annex, and City services would not be extended to any areas they do not currently serve. This would eliminate the development potential within these areas because residential, commercial, industrial, or other uses to expand and increase demand for city services. This alternative would not result in any indirect impacts because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts from in this regard would be eliminated under this alternative.

***Greenhouse Gas***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts from in this regard would be eliminated under this alternative.

***Hydrology and Water Quality***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to hydrology and water quality because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.

***Land Use***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to land use because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.

***Public Services***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to public services because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.



### ***Transportation***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to transportation because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.

### ***Utilities***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts to utilities because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.

### ***Wildfire***

This alternative would adopt a sphere that encompasses the same area as the existing City boundary. This alternative would eliminate the area from which the City could annex additional territory and City services would not be extended. This alternative would not result in any indirect impacts associated with wildfires because there would be no potential for annexation and no potential for the expansion of city services to unserved areas outside the City boundaries. Therefore, potential impacts in this regard would be eliminated under this alternative.

## **6.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the summary of information presented in Table 6-1: Comparison of Project Alternatives Environmental Impacts with the Consensus Alternative, the environmentally superior alternative is Alternative 3 Coterminous Sphere – No Project Alternative. This alternative would reduce the overall development footprint and would have fewer impacts than the other alternatives because the six potential development areas and four priority annexations areas would remain within the SOI. Because Alternative 3 would reduce the potential for impacts because the SOI would be reduced this alternative has fewer environmental impacts than the proposed project or any of the other alternatives. Table 6-2: Probable Annexation Area Density Comparison, provides the number of units that may be developed if the six probable development areas are built under each alternative.

Section 15126.6(e)(2) of the State CEQA Guidelines states that if the “No Project” alternative is found to be environmentally superior, “the EIR shall also identify an environmentally superior alternative among the other alternatives. Aside from the No Project Alternative, Alternative 1: Original LAFCo Staff Recommendation Alternative would have the least environmental impacts because it would reduce the area into which services could be extended and resulting in the potential for more future development. This alternative would reduce all identified impacts; including aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hydrology and water quality, public services, transportation, utilities, and wildfire.

The context of an environmentally superior alternative is based on the consideration of several factors including the reduction of environmental impacts to a less than significant level, the project objectives, and an alternative’s ability to fulfill the objectives with minimal impacts to the existing site and surrounding environment. According to Table 6-1, the No Project alternative would be the environmentally superior alternative because it would eliminate all of the potentially significant impacts of the proposed project. However, while the No Project alternative is the environmentally superior alternative, it does not meet any of the basic objectives of the proposed project.

After the No Project alternative, the environmentally superior alternative to the proposed project is the one that would result in the fewest or least significant environmental impacts. Based on the evaluation undertaken, Alternative 1: Original LAFCo Staff Recommendation Alternative is the environmentally superior alternative. This also is an environmentally superior project alternative because it has less intense development and has a reduced development footprint compared to the proposed project.

**Table 6-1: Comparison of Project Alternatives Environmental Impacts with the Proposed Project**

EIR Chapter	Alternatives			
	Proposed Project - Level of Impact After Mitigation	ALTERNATIVE 1 - ORIGINAL LAFCo STAFF RECOMMENDATION ALTERNATIVE	ALTERNATIVE 2 CITY RECOMMENDATION ALTERNATIVE	ALTERNATIVE 3 COTERMINUS SPHERE – NO PROJECT ALTERNATIVE
4.1 – Aesthetics	Less Than Significant	-	+	-
4.2 – Air Quality	Less Than Significant	-	+	-
4.3 – Biological Resources	Less Than Significant	-	+	-
4.4 – Cultural Resources and Tribal Cultural Resources	Less Than Significant	-	+	-
4.5 – Geology and Soils	Less Than Significant	+	+	-
4.6 – Greenhouse Gas Emissions	Less Than Significant	-	+	-
4.7 – Hydrology and Water Quality	Less Than Significant	-	+	-
4.8 – Land Use	Less Than Significant	-	+	-
4.9 – Transportation and Circulation	Less Than Significant	-	+	-
4.10 – Utilities	Less Than Significant	-	=	-
4.11 – Wildfire	Significant and Unavoidable	=	=	-

**Table 6-1: Comparison of Project Alternatives Environmental Impacts with the Proposed Project**

EIR Chapter	Alternatives			
	Proposed Project - Level of Impact After Mitigation	ALTERNATIVE 1 - ORIGINAL LAFCo STAFF RECOMMENDATION ALTERNATIVE	ALTERNATIVE 2 CITY RECOMMENDATION ALTERNATIVE	ALTERNATIVE 3 COTERMINUS SPHERE – NO PROJECT ALTERNATIVE
Attainment of Project Objectives	Meets all of the Project Objectives	Meets some of the Project Objectives	Meets some of the Project Objectives	Meets one of the Project Objectives
Notes: A minus (-) sign means the Project Alternative has reduced impacts than the proposed project. A plus (+) sign means the Project Alternative has increased impacts than the proposed project. An equal sign (=) means the Project Alternative has similar impacts than the proposed project.				

## 6.9 CONCLUSION

### Avoid or Substantially Lessen Project Impacts

The Original LAFCo Staff Recommendation Alternative would reduce impacts related to Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Resources, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use, Transportation and Circulation, and Utilities. Impacts largely would be reduced because this alternative would eliminate much of the area into which the City could expand thereby reducing the potential for expansion of services and increasing development intensity in currently undeveloped or low-density areas. As documented throughout Chapter 4.1 through Chapter 4.9 of this Draft EIR, all impacts of the proposed project would be less than significant or less than significant after mitigation.

### Attainment of Project Objectives

The Original LAFCo Staff Recommendation Alternative fails to meet the following stated objectives for the proposed project as described in Chapter 6.1:

- Implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 by updating the SOI Plan of Nevada City to accommodate orderly and sustainable growth without encouraging premature conversion of agricultural or open space lands;
- Include sufficient areas to provide for development that meets reasonable growth needs and ensures a sustainable jobs-housing balance;
- Be consistent with the applicable goals and policies of LAFCo, and to the extent they do not conflict, those of the City of Nevada as well.

### Comparative Merits

Under the Original LAFCo Staff Recommendation Alternative, the direct impacts of the SOI Plan Update would be the similar to the Consensus Alternative. Neither project proposed any new land uses or would entitle any development. Indirectly, under the Original LAFCo Staff Recommendation Alternative, impacts would be slightly reduced compared to the Consensus Alternative. This would result because there would be less areas into which City services would be extended and this would reduce the areas into which development would be induced. Accordingly, impacts to resources such as Aesthetics, Air Quality,

Biological Resources, Cultural and Tribal Resources, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use, Transportation and Circulation, and Utilities would be incrementally reduced. Although, impacts would be reduced, this alternative would limit the ability of the City to use its discretion related to expansion and could reduce the areas into which clustered development could logically progress. Under the Consensus Alternative, the City would have a larger area in close proximity to existing City boundaries and this would provide the City additional options related to the logical extension of services and continued development. Therefore, the Consensus Alternative strikes a balance between the Original LAFCo Staff Recommendation Alternative and the City Recommendation Alternative.

**Table 6-2 – Probable Annexation Area Density Comparison**

Development Areas	Consensus Alternative	Alternative-1 Original LAFCO Staff Recommendation Alternative			Alternative 2 City Recommendation Alternative			Alternative 3 Coterminous Sphere – No Project Alternative**	
	Maximum Density	Change in Annexation Area? *	County Zoning	Maximum Units	Change in Annexation Area? *	County Zoning	Maximum Units	County Zoning	Maximum Unit
<i>Providence Mine East</i>	126	No-Change from Consensus Alt.	N/A	126 units. -	No-Change from Consensus Alt.	N/A	126 units	RA-3	8
								RA – 1.5 PD	70
<i>Hurst Ranch</i>	89	No-Change from Consensus Alt.	N/A	89 units	No-Change from Consensus Alt.	N/A	89 units	Estate	30
<i>HEW Building</i>	60	No-Change from Consensus Alt.	N/A	60 units	No-Change from Consensus Alt.	N/A	60 units	PUB	N/A
<i>Manzanita Diggins</i>	319	No-Change from Consensus Alt.	N/A	319 units	No-Change from Consensus Alt.	N/A	319 units	OS	N/A
								RA 1.5	26
<i>Highway 49 Planned Development Area</i>	27	No-Change from Consensus Alt.	N/A	27 units	No-Change from Consensus Alt.	N/A	27 units	RA-3	9
<i>Gracie/Gold Flat</i>	181	No-Change from Consensus Alt.	N/A	181 units	No-Change from Consensus Alt.	N/A	181 units	RA-5	23
								IND	N/A
<b>Maximum Units:</b>	<b>622</b>			<b>622</b>			<b>622</b>		<b>166</b>
* The boundary of the Original LAFCO Staff Recommendation and the City Recommendation Alternative include the potential Development Areas.									
**Unit Densities are based on Nevada County General Plan densities (RA densities allow for 1.5 or 3 acre minimum parcel size) (Estate allows for minimum 3 acre parcel size).									

## 7.0 AGENCY CONTACTS AND PREPARERS

### 7.1 LEAD AGENCY

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### 7.2 ENVIRONMENTAL DOCUMENT PREPARERS

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## 8.0 REFERENCES

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## APPENDIX A

### NOP and Comment Letters



# SPHERE OF INFLUCENCE PLAN FOR THE CITY OF NEVADA CITY

## Draft Environmental Impact Report Technical Appendices

STATE CLEARINGHOUSE NO. 2019029150

Nevada County Local Agency Formation Commission  
950 Maidu Avenue  
Nevada City, CA 95959  
Contact: SR Jones

**JUNE 2020**

PREPARED BY:

**Kimley»Horn**





## **TECHNICAL APPENDICES**

### **Appendix A: Notice of Preparation and Comments Received**



# Nevada County Local Agency Formation Commission

LAFCo · 950 Maidu Avenue · Nevada City · CA · 95959 · 530-265-7180

## NOTICE OF PREPARATION

**Date:** February 28, 2019  
**To:** Responsible Agencies, Organizations, and Interested Parties  
**From:** Nevada County Local Agency Formation Commission  
**Contact:** Nevada County Local Agency Formation Commission  
SR Jones, LAFCo Executive Officer  
950 Maidu Avenue,  
Nevada City, CA 95959

**Subject:** **Nevada City Sphere of Influence Update Environmental Impact Report**

In discharging its duties under Section 15020 of the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq.), the Nevada County Local Agency Formation Commission (LAFCo), as lead agency, intends to prepare an Environmental Impact Report (EIR), consistent with the California Environmental Quality Act (CEQA)(Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines, that address the potential physical environmental effects of the Update of the Sphere of Influence (SOI) of the City of Nevada City (SOI update). In accordance with State CEQA Guidelines Section 15082, LAFCo has prepared this Notice of Preparation (NOP) to provide responsible agencies, trustee agencies, involved federal agencies, special districts, Nevada County, adjacent cities, neighboring landowners, agencies with jurisdiction by law, public and private utility providers and other interested parties with sufficient information describing the SOI update and its potential environmental effects in order to provide a meaningful response.

LAFCo has determined that for the environmental analysis for this project, a Program EIR under CEQA will provide the most appropriate level of detail. Section 21166 of the CEQA Statutes, and Sections 15162 and 15168 of the CEQA Guidelines set forth the standards of a Program EIR. A Program EIR is generally used for projects that will result in the issuance of rules and regulations that are likely to result in a series of linked, logical actions. These actions are typically related geographically, likely to have comparable environmental effects, and if needed, are able to be mitigated through the implementation of standard measures. Similar to a Project Level EIR, the Program EIR still evaluates the proposed project and considers the environmental effects, but the Program EIR does so in a way that enables the subsequent use of a tiered CEQA document. The tiered document is prepared when the full detail of future projects is available. Accordingly, at this time, a sufficient level of detail about future potential projects within the SOI update area is not known and a Program EIR is the most appropriate CEQA document for those potential series of actions.

As specified by the State CEQA Guidelines, the NOP will be circulated for a 30-day review period. LAFCo requests and welcomes public input and input from other stakeholders and public agencies during this review. If no response or request for additional time is received from any responsible agency by the end of the review period, the lead agency may presume that responsible agencies have no response.

Documents or files relating to the SOI update are available at:

Nevada County Local Agency Formation Commission  
950 Maidu Avenue, Nevada City, CA 95959

and on the LAFCo website:

<https://www.mynevadacounty.com/907/Local-Agency-Formation-Commission-LAFCo>

Written or email comments in response to this NOP should be directed to, LAFCo at the address below. Comments should be provided to LAFCo at the earliest possible date, but no later than 30 calendar days after receipt of this NOP. This NOP was sent to state agencies and filed with the State Office of Planning and Research on February 28, 2019, posted with the Nevada County Clerk's Office and published in The Union newspaper on February 28, 2019, and mailed or email to interested parties on or before April 1, 2019. Please include "Nevada City Sphere of Influence Update NOP Comments" in the subject line and send or email all comments to:

**SR Jones**  
**LAFCo Executive Officer**  
**Nevada County Local Agency Formation Commission**  
**950 Maidu Avenue, Nevada City, CA 95959**  
**(530) 265-7180**  
[laftco@co.nevada.ca.us](mailto:laftco@co.nevada.ca.us)

The 30 day comment period for this Notice of Preparation closes at 5:00 p.m. on **April 1, 2019**.

Agencies that will need to consider the the Nevada City (City) Sphere of Influence Update Environmental Impact Report when deciding whether to issue permits or other approvals should provide the name of a contact person and email address. Comments provided by email should include "Nevada City Sphere of Influence Update Environmental Impact Report EIR NOP Comments" in the subject line, and the name and mailing address of the commenter in the body of comment.

### **Regional Location**

The City of Nevada City (City) is the County seat of Nevada County (County) in the western foothills of the Sierra Nevada Mountains, approximately 70 miles northeast of Sacramento, CA. Nevada County is bounded by the the Middle Fork of the Yuba River and Sierra County on the north, the state of Nevada to the east, Yuba County to the west, and the Bear River and Placer County to the south. The regional geography of the County transitions from low lying foothills on the edge of the Sacramento Valley to the high mountains of the Sierra Nevada Range and the high plateau beyond. The City is within the western third of the County in a location in the valley of Deer Creek at an altitude of approximately 2500 feet in an area of transition to the the generally steep, granitic terrain of the Sierra Nevada mountains.

The major transportation routes that provides regional connectivity through the City are the north-south trending State Route 49 (SR 49) which through Nevada City is conjoined with east-west trending State Route 20. Hwy 49 connects Nevada City to the south with Placer County and I-80 and to the north to Sierra County. Hwy 20 connects Nevada City to the west to Yuba City and I-5 and to the east to I-80 and Truckee. I-80 is located approximately 25 miles south of the City and is the major connector for the City to Sacramento and the Bay area, and to Reno. **Figure 1: Regional Location Map**, shows the position of the Nevada County in northern California and in relation to the surrounding counties. **Figure 2: Vicinity Map** shows the City in relation to other cities, towns, and major roadways in closer proximity.

### **Project Location**

The City's jurisdictional boundaries include approximately 1,470 incorporated acres (2018 Nevada County GIS data). The city is located within a basin on the western slope of the Sierra Nevada at approximately 2,500 feet above mean sea level (amsl). Deer Creek flows through the center of town. The City is surrounded by rural residential development and forest lands. Lands to the east, north, south and west of the City boundary are included in the City sphere. These unincorporated lands are primarily designated and developed for residential uses.

The residential developments in western Nevada County are predominantly single-family units, with multiple-family development occurring mainly in the two cities Nevada City and City of Grass Valley to the southwest of the project area. The majority of the City area consists of rural residential uses surrounding the approximate 30-acre downtown area on the westerly side of SR 49\20 and with primary access from Broad Street. The City had an estimated population of 3,226 people, and Grass Valley had an estimated population, as of January 2018, of 13,041 people (CDOF, 2018b).

## **Nevada City Sphere of Influence Update**

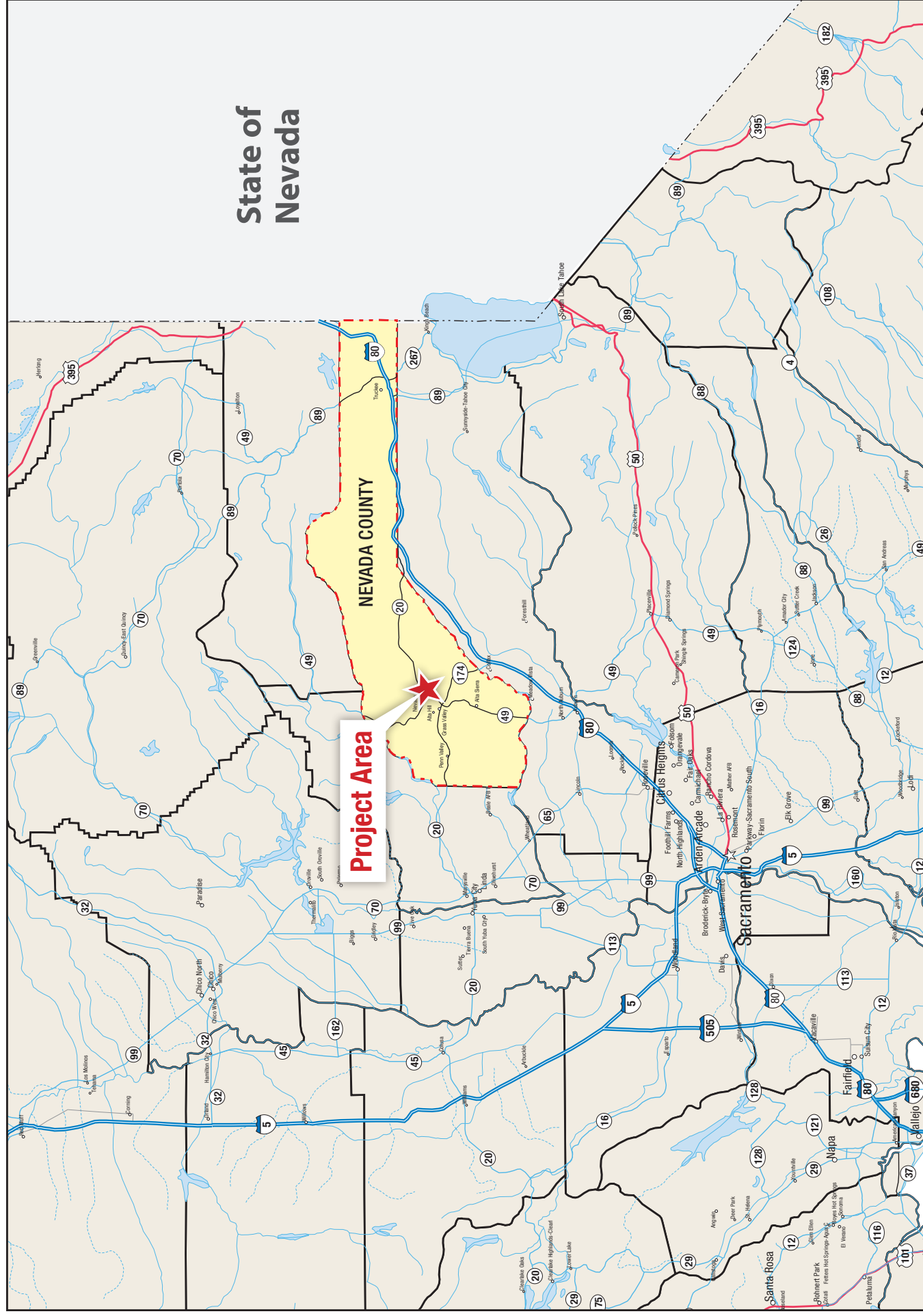
### **Introduction**

Nevada County Local Agency Formation Commission is responsible for determining the boundaries of cities and special districts within its area of responsibility and jurisdiction. Along with its own locally adopted guidelines, the Nevada County LAFCo operates under the Cortese-Knox-Hertzberg Local Government Reorganization Act, located at Section 56000 and following in the Government Code (CKH). Under the provisions of the Act, LAFCo has a mandate of:

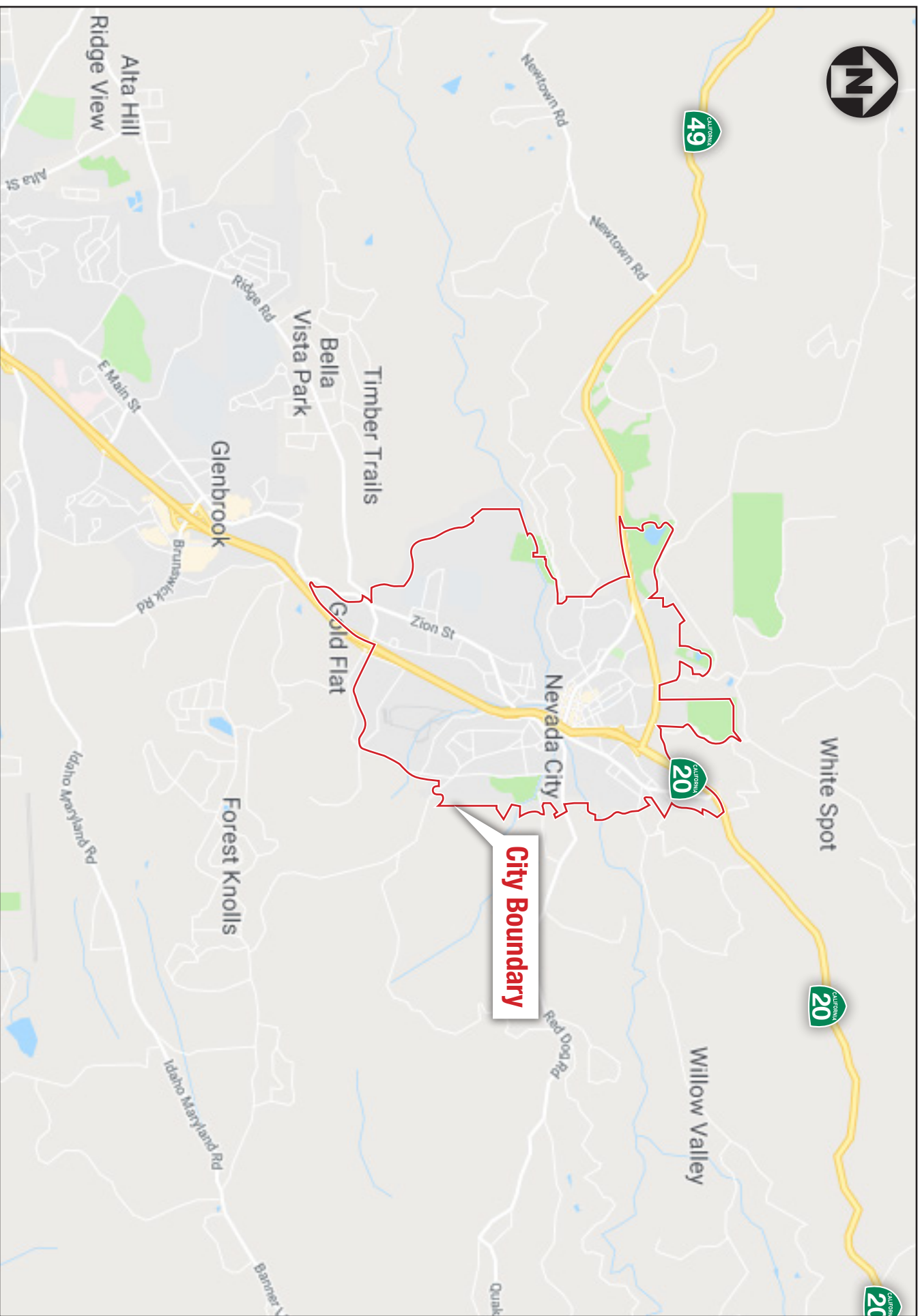
- Discouraging urban sprawl
- Preservation of prime agricultural land and open space
- Assuring provision of efficient local government services
- Encouraging orderly growth and development of local agencies

The tools that enable LAFCo's to accomplish those goals are the Municipal Service Review (MSR), the Sphere of Influence (SOI), and the authority under CKH to control change of the boundaries and organization of public agencies.

MSRs are informational reports that provide information on the provision of public services and the capacity of agencies to provide services. They are prepared either on an individual agency basis or regional basis. This information is then used to prepare a SOI plan for each public agency.



**FIGURE 1: Regional Location Map**  
Nevada City Sphere of Influence Update



**FIGURE 2: Vicinity Map**

Nevada City Sphere of Influence Update



Not to scale



A SOI is defined as a plan for the probable physical boundary and service area of a local agency, as determined by the Local Agency Formation Commission. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 defines the purpose and intent of a SOI as an important tool for "planning and shaping the logical and orderly development and coordination of local agencies so as to advantageously provide for the present and future needs of the county and its communities." Annexations and extensions of service are only allowed within the SOI

The MSR and SOI plan guide LAFCo's determinations with respect to annexations to a city or district. Annexations cannot be approved by LAFCo unless they are consistent with the agency's SOI. Therefore, including property within the city's sphere normally implies annexation within the timeframe of the SOI plan, which Nevada County LAFCo has established as a 20 year timeframe.

### **Project Background**

LAFCo is required to adopt a sphere of influence for each city and district in its jurisdiction, and to review each sphere plan and update as necessary every five years.

The current City SOI was initially approved in 1983 and was reaffirmed in 2008 without change. **Figure 3: Nevada City Boundary and Current Sphere of Influence**, shows the current boundary of the City, which is approximately 1,470 acres, as well as the City SOI, which presently includes approximately 2,702 acres.

In February 2017, LAFCo proposed an update to the SOI that would have reduced the acreage within the sphere boundary by nearly 50%. This was proposed because the history of very limited annexations by the City indicated that it was unlikely that much of land in the existing Sphere would be annexed within the 20 year sphere planning horizon.

The City was strongly opposed to the reduction in its sphere. In March 2017, in response to the LAFCo proposal, the City began preparing an Annexation Plan and Strategy to justify retention of the City's existing sphere. The City's document was completed in September of 2017. It addressed provision of sewer service and other public services including police, and fire protection, and street improvement and maintenance to lands within the city's SOI, including several areas with significant growth potential. It further proposed a more aggressive approach by the City to annexation of lands around the City.

Since that time, the City and LAFCo have developed the LAFCo/City Consensus Preferred Alternative as a compromise proposal. This Consensus Alternative has been designated the Preferred Project Alternative for the purposes of the EIR that will be prepared for this project. This alternative includes a reduction in the lands included in the sphere boundary and also includes expedited annexation of four priority annexation areas (Annexation Area #1, Annexation Area #2, Annexation area #3, and Annexation Area #4), which are shown graphically and discussed in detail further below. The program EIR will focus primarily on the update of the SOI as well as annexation of the lands within the sphere, including the four priority annexation areas.

### **Project Description**

The Project which is the subject of this EIR is the update to the Nevada City SOI. Four project alternatives are being considered for the update and each is proposed to be reviewed as part of the preparation of the Draft EIR. These alternatives, including a Preferred Alternative, are described in greater detail below. All the alternatives are shown graphically in **Figure 4: LAFCo/City Consensus Preferred Alternative**, **Figure 5:**

**Original LAFCo Staff Recommendation Alternative, Figure 6: City Recommendation Alternative, and Figure 7: No Project Alternative – Coterminus Sphere of Influence** further below where each alternative is discussed in additional detail. The following provides a brief description of the Alternatives:

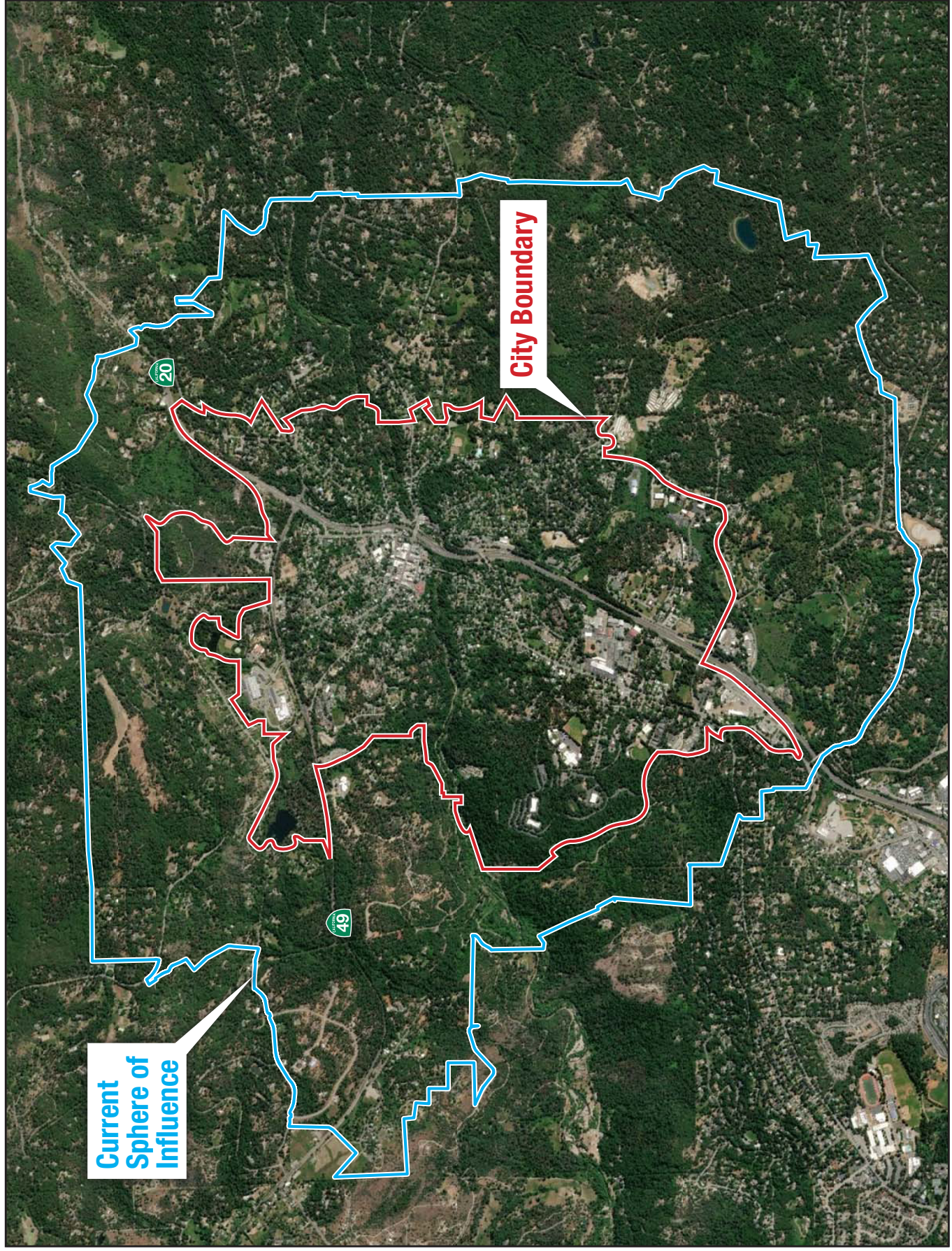
- LAFCo/City Consensus Preferred Alternative (Preferred Alternative): Comprises the consensus boundary of the SOI and also includes the initiation of four specific annexations following the completion of the EIR.
- Original LAFCo Staff Recommendation Alternative: Consists of the original LAFCO recommended SOI boundary and includes approximately 1,650 acres.
- City Recommendation Alternative: Consists of the original City proposed SOI and would include the lands contained within the 2008 SOI; and
- No Project Alternative: This alternative includes adoption of a coterminous SOI, meaning the City's SOI would only include the existing territory within the City's jurisdictional boundary.

The SOI Update consists of an update to the Nevada City SOI. The existing SOI surrounds the City in a roughly spherical shape, and is shown in Figure 3. The current SOI surrounding the City boundary occupies approximately 2,702 acres (2018 Nevada County GIS data) and as discussed above, with the City occupying approximately 1,470 acres, the total area approximately 4,172 acres. The SOI Update would occur within the area defined by the existing SOI and does not include any lands within the existing City boundaries.

The annexation of areas by the City would allow for the extension of City services to the newly annexed areas but the SOI Update itself does not include any physical alterations or improvements to any area. Under the SOI Update, no other actions including associated infrastructure extensions and improvements, new residential, commercial, industrial or other developments are being sought. Additionally, the SOI Update does not include any changes to existing land uses, land use designations, or zoning. However; while the SOI Update would not directly result in any physical change in the environment, the annexation of these areas may indirectly facilitate development within these areas. Inclusion in the sphere is the first step towards annexation of the territory, and annexation allows access to municipal services that facilitate development within the context of the underlying General Plan land use designation. Consequently this EIR will examine at a general program level the indirect environmental impacts of the Project resulting from such potential development .

The portions of the sphere that are recommended for exclusion would be designated as an "Areas of Interest" in order to ensure the City is notified of development proposals and other projects that may have potential for impacting the City. The Commission's policies define an "Area of Interest" as a geographic area beyond the sphere of influence in which land use decisions or other governmental actions of one local agency may impact directly or indirectly on another local agency. LAFCo policy stipulates that the Commission will notify "interested agencies" of known proposals within the Area of Interest, and give great weight to the comments of the "interested agency



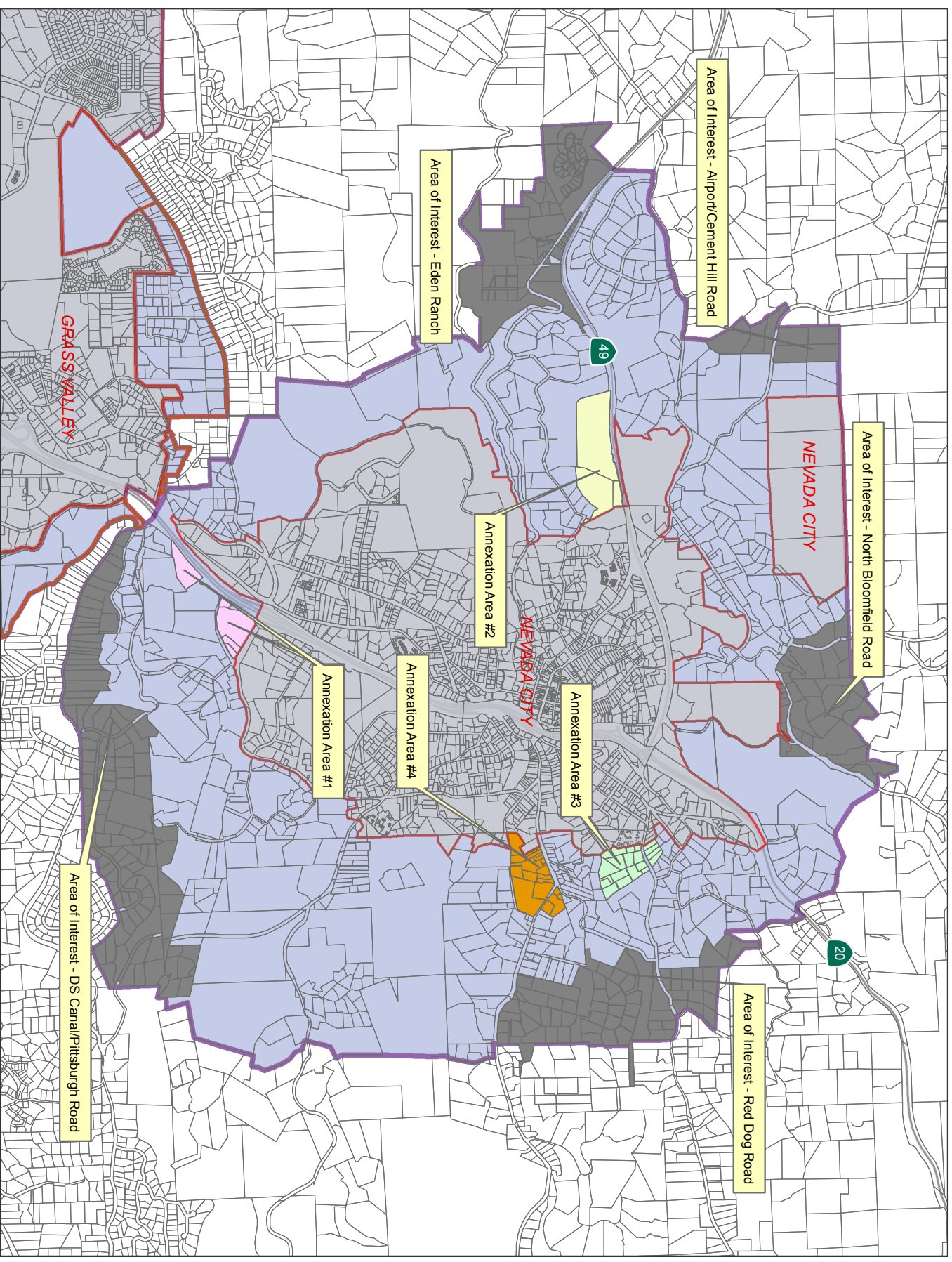


**FIGURE 3: Nevada City Boundary and Current Sphere of Influence**  
Nevada City Sphere of Influence Update

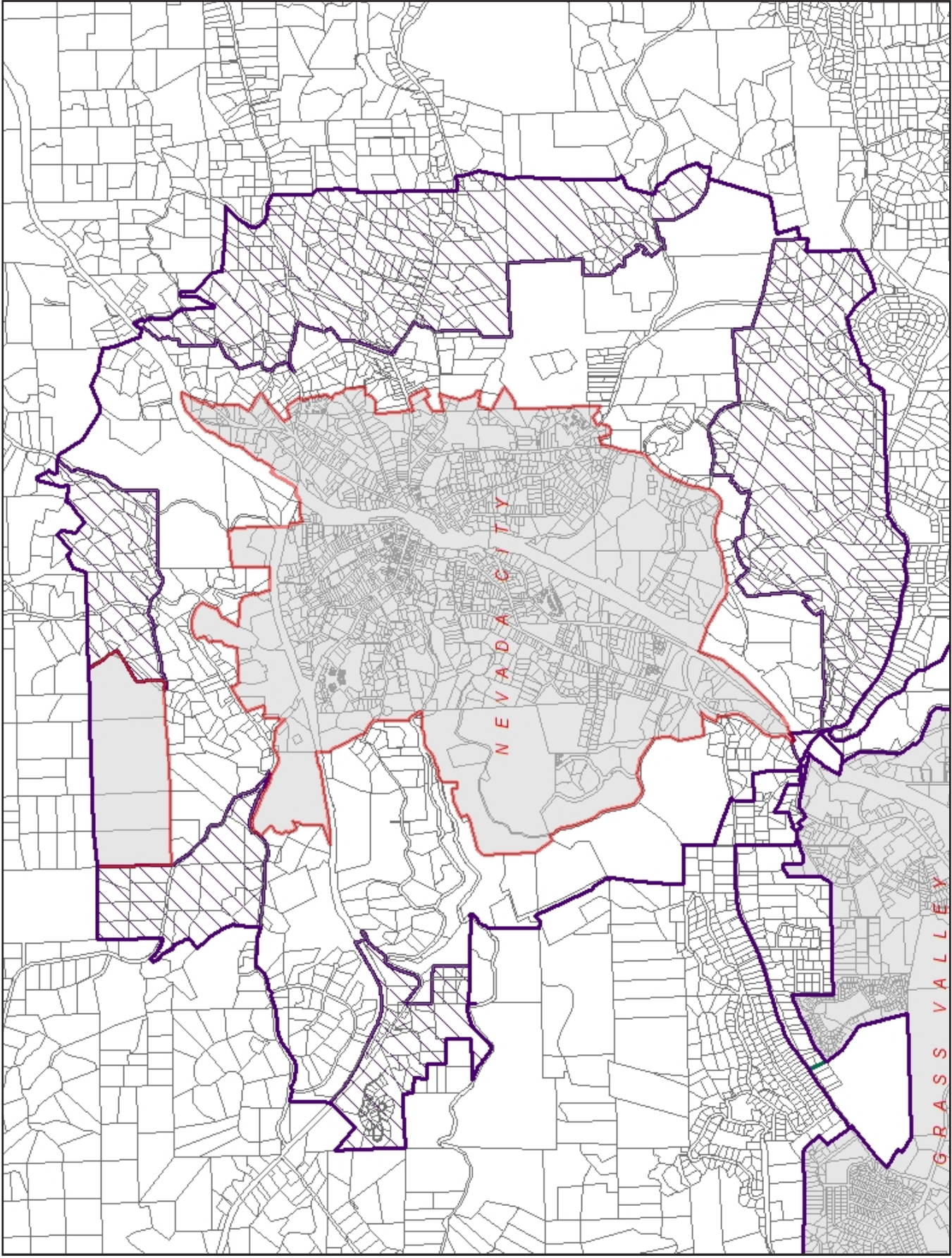


Not to scale





**FIGURE 4: LAFCo/City Consensus - Preferred Alternative**  
Nevada City Sphere of Influence Update

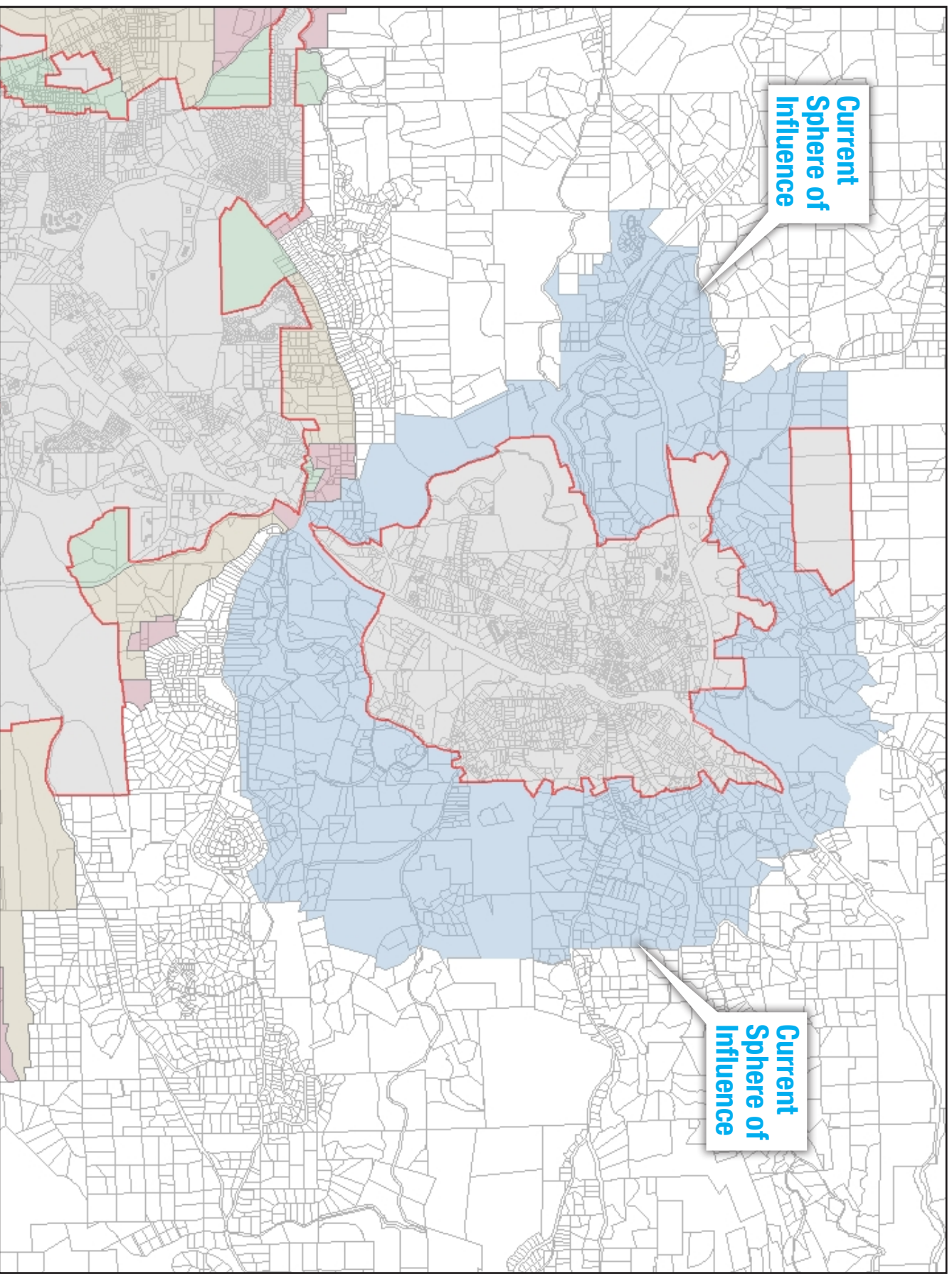


**FIGURE 5: Original LAFCo Staff Recommendation Alternative**  
Nevada City Sphere of Influence Update



Not to scale

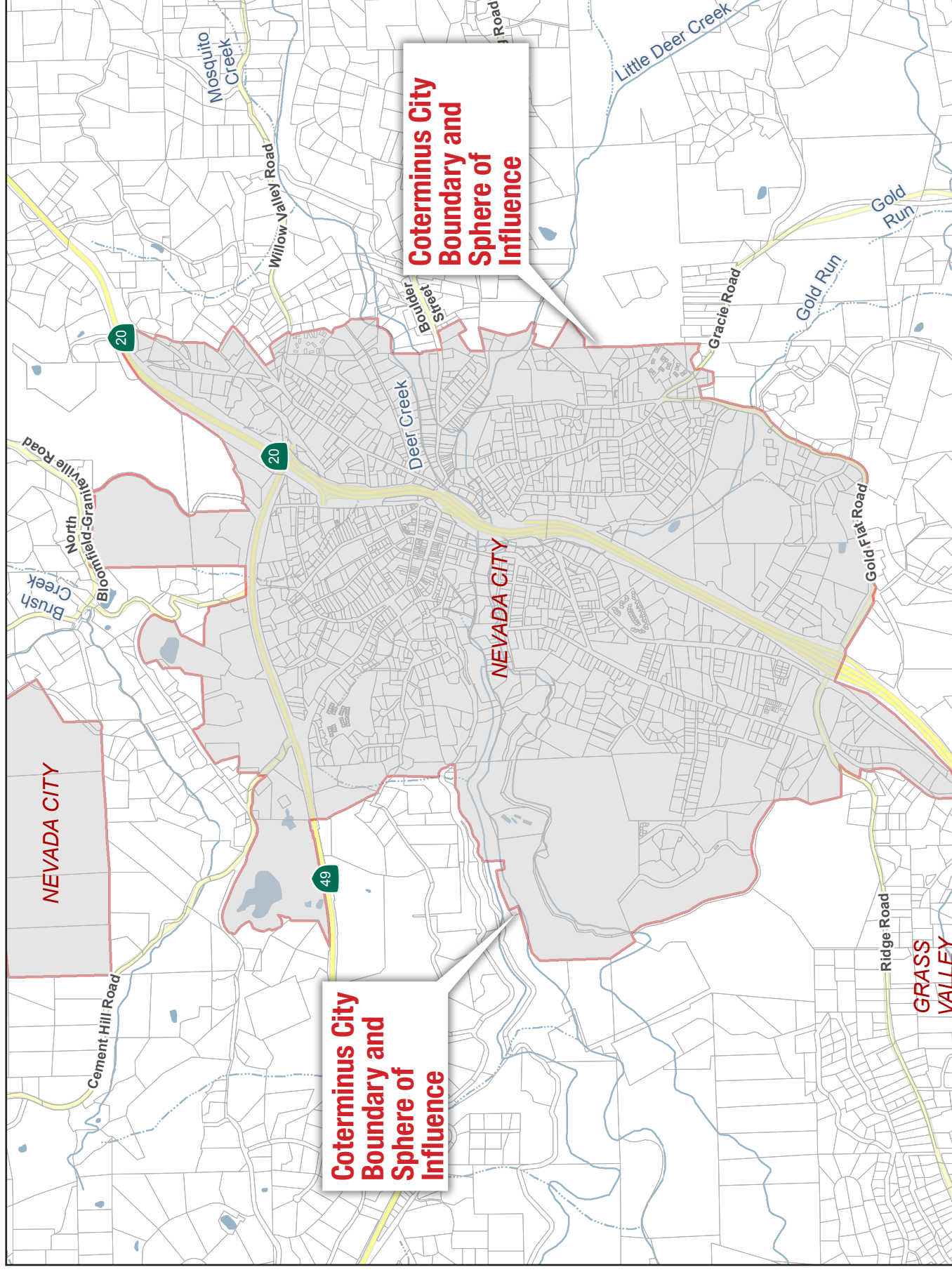




**FIGURE 6: City Recommendation Alternative**  
Nevada City Sphere of Influence Update



Not to scale



**FIGURE 7: No Project Alternative - Coterminus Sphere of Influence**

Nevada City Sphere of Influence Update



Not to scale

For those areas that remain within the SOI and outside the boundaries of the City, jurisdiction for land use matters for all of the land areas would remain with the County. However, the Land Use Element of the County's General Plan under Goal 1.8 on coordinating with cities in land use planning and development within their spheres provides that within a City's sphere of influence, the County General Plan use Maps will generally reflect the City's land use mapping, sometimes less intense, but never significantly more intense (Policy 1.8.3) and provides that for all discretionary projects the County shall first request that the City determine whether it desires to annex the project and, if it does, the applicant will be directed to the City and, if it doesn't the application will be referred to the city for review and comment. The four SOI Alternatives are discussed in additional detail immediately below.

### **LAFCo/City Consensus Preferred Alternative**

The City and LAFCo staff have developed a 'consensus map' that excludes some territory from the City's sphere while retaining some of the lands recommended for exclusion pursuant to the original LAFCo Staff recommendation. Figure 4 depicts the consensus map. This LAFCo/City Consensus Preferred Alternative four Priority Annexation Areas the City would initiate for annexation that are discussed in detail as follows:

*Annexation Area 1* - is located just south of the City adjacent to SR 20. Annexation Area #1 consists of a northerly and southerly area separated by approximately 500 feet. In sum, the areas total 16.63 acres. The northerly location is a triangular shaped parcel approximately 5.29 acres in size and is generally bound by SR 20 to the west, Gold Flat Road to the north, and is accessed by Granholm Lane to the south. The second parcel is approximately 11.34 acres in size and is bound by SR 20 to the west and undeveloped lands to the north, east, and south. Existing land uses on this site includes the California Department of Transportation facility (currently connected to City sewer), the Prospector's Nursery, and the Little Friends Child Development Center, along Gold Flat Road.

*Annexation Area #2* - is located in the northwestern part of the City adjacent California SR 49. Annexation Area #2 is approximately 86 acres in size and is generally bound by SR 49 on the north, the existing City Boundary to the east, American Hill Road to the south, and Constitution Court to the west. Annexation Area #2 consists of three parcels and the land uses includes the County Juvenile Hall (currently connected to City sewer), and two adjacent and vacant County-owned properties, located south of SR 49.

*Annexation Area #3* - is located in the northeastern part of the City and is approximately 17 acres in size. Annexation Area #3 includes parcels on both sides of Willow Valley Road east of the existing City Boundary. Annexation Area #3 consists of 19 parcels. Three parcels are connected to the City sewer system, and two are undeveloped.

*Annexation Area #4* - is located in the northeastern part of the City and is approximately 23 areas in size. Annexation Area #4 is generally bound by Red Dog Road on the north, Park Avenue on the east and south, and the City boundary to the west. Annexation Area #4 contains 22 parcels and land uses include a cemetery that fronts on Boulder Street and Park Avenue Extension and 18 intervening privately owned properties.

As discussed above, the LAFCo/City Consensus Preferred Alternative would also exclude some areas, as described below, and as depicted on Figure 4. In general the exclusion areas would occur in five pockets surrounding the city:



<i>Area</i>	<i>Location</i>	<i>Parcels</i>	<i>Characteristics</i>
Airport/Cement Hill Road	West of the Airport property (a non-contiguous portion of the City). These parcels are located off Cement Hill Road	7	All parcels are designated Estate. Four are developed.
N. Bloomfield Road	Intersection of N. Bloomfield and Lake Vera Roads	34	All parcels are designated Estate. Only one is undeveloped.
Red Dog Road	East of current City boundary, including lands north and south of Willow Valley Road and north of Red Dog Road	63	All parcels designated for residential use, including Estate and Residential General Plan designations. 56 parcels are developed and 7 are undeveloped.
DS Canal/Pittsburgh Road	South of the current City boundary. These parcels are located south of the DS Canal and north of Pittsburgh Road.	111	Most parcels designated Residential, several are designated Estate and 2 are designated for open space. 87 parcels are developed and the remaining 24 are unimproved. At least 3 are owned by the federal government (including the two Open Space properties).
Eden Ranch	West of current city boundaries and south of State Route 49 near Old Downieville Road.	80	Most parcels designated for residential use (one is designated O.S.). Includes a small residential development project with public sewer service provided by the County Sanitation District. 58 parcels are developed, and the remaining 22 are undeveloped.

#### **Original LAFCo Staff Recommendation Alternative**

The Original LAFCo Staff recommendation was prepared by LAFCo staff as an update to the City SOI Plan and is shown on Figure 5. This plan included the exclusion of five areas from within the SOI. These have been proposed for exclusion because the areas are either already developed and unlikely to require the City's

services within the timeframe of the sphere plan, or the provision of City services to the area is likely to be infeasible.

The exclusion areas under this alternative also include the same five pockets surrounding the City discussed in the Preferred Consensus Alternative. This Alternative simply proposes larger areas for exclusion from the sphere. The southeastern exclusion area is generally delineated by Banner Lava Cap Road on the south and Pittsburg Road on the north. The eastern exclusion area is bisected by Red Dog Road. The southern half extends south just past Banner Lava Cap Road and the northern half extends to Highway 49. The remaining three exclusion areas are approximately 30% the size of the above listed areas. The northern exclusion area is generally bound by North Bloomfield Road on the east and the existing city island on the east; the northwestern exclusion area is generally bound by Indian Flat Road on the south and is bisected by Cement Hill Road; the western exclusion area is irregularly shaped, and is partially bound by Champion Mine Road as well as existing residential parcels on the south, east, and west. The northern boundary is delineated by SR 49. Figure 5 shows the specific location of original areas proposed by LAFCo to be removed from the City SOI.

### **City Recommendation Alternative**

The City has indicated it would prefer to retain all territory included in its current SOI (as initially adopted in 1983 and updated in 2008). This Alternative includes an area of approximately 1,650 acres surrounding the City and is shown in Figure 6. This Alternative would maintain the SOI boundary which roughly extends east approximately 0.75 miles from the current City on the east. On the west, the SOI would extend to as much as one mile and as little as approximately 0.33 miles beyond the existing City limits. To the south, the SOI would extend southerly approximately 0.6 miles to Banner Lava Cap Road, and on the north, the SOI would extend approximately 0.5 miles and connect with the existing island of City land generally. In some areas the SOI would not be delineated by a particular physical landmark, most notably the eastern and northern boundaries, though the northern boundary loosely follows the ridgelines of Cement Hill and Sugarloaf Mountain. In these areas the SOI would trend north to south, and east to west, respectively, and cross through mostly undeveloped and rural residential areas. As discussed, the western boundary would be irregularly shaped and also not delineated by a particular physical landmark. The southern boundary would largely be delineated by Banner Lava Cap Road east of SR 20. West of SR 20 the boundary begins to trend in a northwesterly direction trends through undeveloped and rural residential areas

### **No Project Alternative**

The No Project Alternative includes adoption of a coterminous SOI. Under this alternative, the City's SOI includes only the territory within the City's jurisdictional boundary, as depicted in Figure 7. CEQA requires that environmental analysis use as its baseline for analysis the existing physical conditions on the ground, rather than what is proposed in existing planning documents. This alternative of a Coterminous Sphere provides the public and decisionmakers with a baseline analysis, assuming no additional expansion of the City so they may better understand the comparative environmental impacts of the other alternatives that propose various levels of city expansion.

## Required Approvals

LAFCo is considered the Lead Agency under CEQA, and is responsible for reviewing and certifying the adequacy of the EIR to be prepared for the SOI Update. Prior adoption of the SOI changes proposed under this project, a number of discretionary approvals must be obtained from LAFCo and the City, as listed below. It is expected that these two agencies would consider the data and analyses contained in this EIR when making the determinations.

### LAFCo

- Certification by LAFCo that the Final EIR has been completed in compliance with CEQA, and has been reviewed and considered by the decision makers.
- Adoption by LAFCo of the findings regarding any significant impacts and appropriate mitigation.
- Adoption by LAFCo of a statement of overriding considerations for significant and unavoidable impacts, if applicable.
- Adoption by the LAFCo of a mitigation monitoring and reporting program (MMRP).
- Adoption of the Updated Nevada City Sphere of Influence Plan, as well as the required written determinations

### Nevada City (assuming the City proceeds as planned with the Priority Annexation Areas)

- Approval by Nevada City of pre-zoning for the priority annexation areas.
- Approval by Nevada City of a zoning map amendment, if necessary.
- Approval by Nevada City of a General Plan map amendment, if necessary.
- Adoption of Resolutions of Application for annexation of the priority annexations with appropriate environmental documentation

Future required approvals and possible permitting requirements from other public agencies may be required.

## Potential Environmental Effects

The LAFCo has completed a preliminary review, as described in Section 15060 of the State CEQA Guidelines, of the SOI Update, and determined an EIR should be prepared for this project. No Initial Study was prepared, consistent with Section 15063 (a) of the CEQA Guidelines, as LAFCo determined an EIR was required based on preliminary review. The proposed scope of work for the EIR will involve research, analysis, and study of the following environmental topics:

- Aesthetics
- Air Quality

- Biological Resources
- Cultural/Tribal Cultural Resources
- Greenhouse Gas Emissions
- Hydrology/Water Quality
- Land Use/Planning
- Public Services
- Transportation/Traffic
- Utilities

### ***Level of Environmental Review***

The EIR is intended to be for the most part a program level EIR rather than a project level environmental analysis. As such it will look at the broad impacts likely to result from the development of the SOI. It will not examine site specific impacts. However, with respect to the proposed Priority Annexation Areas, the level of analysis will be greater. It is intended to be sufficient to support annexation of these areas with no or limited additional environmental review needed.

The EIR will describe the existing baseline environmental conditions within the areas of the proposed Sphere Alternatives. It will identify the significant environmental effects reasonably anticipated to result from the future annexation of the areas within the SOI into the City. Mitigation measures will be identified for potentially significant environmental impacts, as warranted. The analysis in the EIR will include the following specific categories of environmental impacts and concerns for each of the Four Alternatives, but with a greater depth of analysis for the Preferred Consensus Alternative and its Priority Annexation Areas. Additional subjects may be added at a later date, if new information becomes available.

### ***Aesthetics & Visual Resources***

Land uses within and surrounding the SOI consist primarily of rural residential, commercial, undeveloped land, and public use areas. Residential areas largely consist of single family homes, a variety of commercial uses exist including, a day care facility, nursery, Nevada County Juvenile Hall, Elks Lodge, and cemetery. Analysis of this topic will address the potential change in the visual character resulting from development of the SOI with a more detailed analysis for the Priority Annexation Areas and development that may occur outside the SOI, but still within the City's viewshed. The analysis will assume that vacant parcels and parcels with existing development may be developed and redeveloped over time with new buildings and uses permitted under the City's General Plan.

### ***Air Quality***

The EIR will address the regional air quality conditions in the project area and discuss the SOI Update short term and long term impacts to local and regional air quality based on methodologies established by the Northern Sierra Air Quality Management District (NSAQMD). The EIR will discuss sensitive receptors, particularly in the Priority Annexation Areas and mitigation measures, if found to be required.

### ***Biological Resources***

The SOI contains a mix of uses including rural residential, commercial, and public use areas, as well as undeveloped lands. The potential for future development in the SOI to affect biological resources will be assessed. The California Natural Diversity Database (CNDDDB) along with any other readily available published reports will be reviewed to determine the sensitive plant and animal species known or likely to occur in the area, along with the habitats that support them. For the Priority Annexation Areas, if there is a reasonable potential that threatened or endangered species sites exist with an area, a biological field survey will not be done, but may be recommended prior to future projects.

### ***Cultural and Historic Resources, including Tribal Cultural Resources***

Analysis of this topic will address the potential for future ground disturbing activities in the annexation areas to damage or destroy archaeological, paleontological, historic, or tribal cultural resources. If significant archaeological, paleontological, historic, or tribal cultural resources have been identified in the literature and databases as being found in the SOI Update areas, mitigation measures will be identified. For the Priority Annexation Areas, if there is a reasonable potential that significant archaeological sites exist with an area, an archaeological field survey will not be done, but may be recommended prior to future projects.

### ***Greenhouse Gas Emissions and Energy***

The EIR will evaluate greenhouse gas emissions associated future development and increase in vehicle trips that would be permitted by the City's General Plan and zoning. The EIR will also assess the SOI Updates alignment with local and regional plans and policies pertaining to GHG emissions and climate change.

### ***Hydrology and Water Quality***

Based on Flood Insurance Rate Maps the Priority Annexation Areas #1, #2, and #4 are located in Zone X-an area of minimal flood hazard. The southerly and easterly portions of Annexation Area #3; however, appears to be in a Zone AE and A, a Special Flood Hazard Area, and an area with a 0.2% Annual Chance Flood Hazard, Area of 1% annual change flood with average depth of less than one foot or with drainage areas of less than one square mile. Analysis of this topic will address the possible flooding issues of the Priority Annexation Areas and SOI. It will also assess the capacity and effectiveness of the City's storm drainage system to handle the additional drainage from annexation of the SOI and consistency with the requirements of the Regional Water Quality Control Board (RWQCB). The EIR will also evaluate potential effects to groundwater conditions and sources, and mitigation measures, if found to be required, will be discussed.

### ***Land Use***

The proposed SOI contains and is surrounded by a mix of uses including rural residential, commercial, and public use areas, as well as undeveloped lands. Analysis of this topic will describe the existing land uses adjacent to and within the SOI and the reasonably foreseeable development of the SOI. The EIR will evaluate the likely development with respect to compatibility with existing and proposed land use planning and policy documents. The EIR will evaluate the proposed changes to the SOI with existing land use regulations including the City's and County's General Plan and zoning. Potential land use impacts as a result of the proposed priority annexation areas will be analyzed and mitigation measures will be identified for significant

impacts, if necessary. Recommendations may also be made for areas of the SOI that are not identified in the priority annexation areas for consideration by the City in a future General Plan update.

### ***Noise and Vibration***

The annexations areas are located in areas typified by low density development; however, Annexation Area #1 and Annexation Area #2 are located adjacent to SR 20, and SR 49, respectively, which are major transportation corridors within the City and County. Analysis of this topic will address impacts to annexation areas from existing off-site noise sources. The EIR will also discuss the increase in potential noise sources that could result from implementation of the SOI Update. Noise levels will be evaluated for consistency with applicable standards and guidelines from the City.

### ***Public Services***

The EIR will assess whether annexation of the into the City SOI will increase the demand on public services, including police, fire protection, emergency services, schools, and parks. The EIR will assess potential increases in demand for public services and the availability and capacity of public facilities to maintain acceptable levels of services.

### ***Transportation and Circulation***

The EIR will perform a consistency analysis in order to identify the transportation impacts of the SOI Update Alternatives on the existing local and regional transportation system and the planned long-range transportation network. For the Priority Annexation Areas, additional evaluation will be done of traffic and parking conditions in the immediate vicinity of the annexation areas.

### ***Utilities***

The EIR will assess whether implementation of the SOI Update will result in an increased demand on utilities compared to existing conditions. The EIR will examine the impacts of the SOI Update on wastewater systems, storm drains, water supply, and solid waste management. The EIR will analyze applicable state, regional, and City plans and policies for consistency.

### ***Cumulative Impacts***

The EIR will include a cumulative impacts analysis that will address the potentially significant cumulative impacts of the SOI Update when considered with other past, present, and reasonably foreseeable future projects in the region, including within the City sphere and service area, as well as within the service areas of agencies providing services to lands within the City and City sphere.

In conformance with the CEQA Guidelines, the EIR will also include the following sections: 1) consistency with local and regional plans and policies, 2) growth inducing impacts, 3) significant irreversible environmental changes, 4) areas of known controversy, 5) references, 6) organizations/ persons consulted, 6) EIR author and consultants, and 7) appendices.

### ***Alternatives***

In accordance with Section 15126.6 of the State CEQA Guidelines, an EIR must “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” The LAFCo/City Consensus Preferred Alternative as identified in this NOP will be discussed as the Preferred Alternative in the Draft EIR. As discussed above, and as required by CEQA, the EIR also will evaluate other potential alternatives including the Original LAFCo Staff Recommendation Alternative, City Recommendation Alternative, and a No Project Alternative that may be capable of reducing or avoiding potential environmental effects. While, this NOP identifies three project alternatives to the Preferred Alternative, the listed alternatives may be added to, taken out, or modified based on comments received on this NOP. Once selected, the alternatives will be analyzed in the Draft EIR for comparison against the impacts identified for the Preferred Alternative, consistent with the requirements of CEQA.

2019029150

## Notice of Completion &amp; Environmental Document Transmittal

Mail to: State Clearinghouse P.O. Box 3044, Sacramento CA 95812-3044 (916) 445-0613  
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

## Project Title: Nevada County Sphere of Influence Update

Lead Agency: Nevada County Local Agency Formation Commission

Contact Person: SR Jones

Mailing Address: 950 Maidu Avenue

Phone: (530) 265-7180

City: Nevada City

Zip: 95959

County: Nevada County

Project Location: County: Nevada County

City/Nearest Community: Nevada City

Cross Streets: N/ A Entire Sphere of Influence Area

Zip Code: 95959

Longitude/Latitude (degrees, minutes and seconds): N/A ° N/A 'N/A "N/ N/A ° N/A 'N/A "W Total Acres: 2,702 acres

Assessor's Parcel No.: Entire Sphere of Influence Area

Section: N/ A

Twp.: N/A

Range: N/A

Base: N/ A

Within 2 Miles: State Hwy #: SR- 20, SR- 40, SR-49

Waterways: Deer Creek, Little Deer Creek, Gold Run, Newtowne Car

Airports: Nevada County Airport

Railways: Narrow Gauge Railroad Schools: Nev. City/Cnty. Sch Dist

## Document Type:

CEQA: ☒ NOP☐ Early Cons☐ Neg Dec☐ Mit Neg Dec☐ Draft EIR☐ Supplement/Subsequent EIR

(Prior SCH No.)

Other:

NEPA:

☐ NOI☐ EA☐ Draft EIS☐ FONSIOther: ☐ Final Document☐ Final Document

Other:

## Local Action Type:

☐ General Plan Update☐ General Plan Amendment☐ General Plan Element☐ Community Plan☐ Specific Plan☐ Master Plan☐ Planned Unit Development☐ Site Plan☐ Rezone☐ Prezone☐ Use Permit☐ Land Division (Subdivision etc.)☒ Annexation☐ Redevelopment☐ Coastal Permit☒ Other: Sphere of Influence

## Development Type:

☐ Residential: Units

Acres

☐ Office: Sq. ft.

Acres

Employees

☐ Commercial: Sq. ft.

Acres

Employees

☐ Industrial: Sq. ft.

Acres

Employees

☐ Educational:☐ Recreational:☐ Water Facilities: Type

MGD

☐ Transportation: Type☐ Mining: Mineral☐ Power: Type

MW

☐ Waste Treatment: Type

MGD

☐ Hazardous Waste: Type☒ Other: Sphere of Influence Update

## Project Issues Discussed in Document:

☒ Aesthetic/Visual☐ Agricultural Land☒ Air Quality☒ Archeological/Historical☒ Biological Resources☐ Coastal Zone☒ Drainage/Absorption☐ Economic/Jobs☐ Fiscal☒ Flood Plain/Flooding☐ Forest Land/Fire Hazard☐ Geologic/Seismic☐ Minerals☐ Noise☒ Population/Housing Balance☒ Public Services/Facilities☐ Recreation/Parks☐ Schools/Universities☒ Septic Systems☒ Sewer Capacity☒ Soil Erosion/Compaction/Grading☒ Solid Waste☐ Toxic/Hazardous☒ Traffic/Circulation☒ Vegetation☒ Water Quality☒ Water Supply/Groundwater☒ Wetland/Riparian☒ Growth Inducement☒ Land Use☒ Cumulative Effects☐ Other:

## Present Land Use/Zoning/General Plan Designation:

Zones-Residential (RA-5)(R-1), Commercial (C2), (OS), (P) Ind. (M1), GP (EST), (RUR-5), (RUR-0), (RUR-30)(RES), (OS), (PD), (PUB).

## Project Description: (please use a separate page if necessary)

The Project is an update to the Nevada City Sphere of Influence (SOI) and includes four project alternatives: LAF Co/City Consensus Preferred Alternative, Original LAF Co Staff Recommendation Alternative, City Recommendation Alternative, and the No Project Alternative. The current SOI occupies approximately 2,702 acres and the City occupies approximately 1,470 acres, totaling approximately 4,172 acres. The SOI Update includes no lands within the existing City boundaries. The annexation would allow for extension of City services but does not include any physical alterations or improvements to any area. No infrastructure extensions, new residential, commercial, industrial or other developments are proposed. The SOI update does not include any changes to existing land uses, land use designations, or zoning.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.



## Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".  
If you have already sent your document to the agency please denote that with an "S".

<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Historic Preservation
<input type="checkbox"/> Boating & Waterways, Department of	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> California Emergency Management Agency	<input type="checkbox"/> Parks & Recreation, Department of
<input type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans District # _____	<input type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Division of Aeronautics	<input type="checkbox"/> Regional WQCB # _____
<input type="checkbox"/> Caltrans Planning	<input type="checkbox"/> Resources Agency
<input type="checkbox"/> Central Valley Flood Protection Board	<input type="checkbox"/> Resources Recycling and Recovery, Department of
<input type="checkbox"/> Coachella Valley Mtns. Conservancy	<input type="checkbox"/> S.F. Bay Conservation & Development Comm.
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> San Joaquin River Conservancy
<input type="checkbox"/> Conservation, Department of	<input type="checkbox"/> Santa Monica Mtns. Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Water Rights
<input type="checkbox"/> Fish & Game Region # _____	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> Forestry and Fire Protection, Department of	<input type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> General Services, Department of	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Health Services, Department of	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Housing & Community Development	
<input type="checkbox"/> Native American Heritage Commission	

### Local Public Review Period (to be filled in by lead agency)

Starting Date February 28, 2019 Ending Date April 1, 2019

### Lead Agency (Complete if applicable):

Consulting Firm: _____	Applicant: <u>Nevada County LAFCo</u>
Address: _____	Address: <u>950 Maidu Avenue</u>
City/State/Zip: _____	City/State/Zip: <u>Nevada City, CA 95959</u>
Contact: _____	Phone: <u>(530) 265-7180</u>
Phone: _____	

Signature of Lead Agency Representative: (SR Jones, Exec. Officer) Date: 02/28/2019

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.



# NEVADA IRRIGATION DISTRICT

1036 W. Main Street, Grass Valley, CA 95945-5424  
(530) 273-6185 ~ Fax: (530) 477-2646 ~ [www.nidwater.com](http://www.nidwater.com)

4/1/2019

SR Jones  
LAFCo Executive Officer  
Nevada County Local Agency Formation Commission  
950 Maidu Ave.  
Nevada City, CA 95959

**Re: Nevada City Sphere of Influence Update NOP Comments**

Pursuant to the State of California CEQA guidelines, the Nevada Irrigation District (NID) has reviewed the *Nevada City Sphere of Influence Update Environmental Impact Report* for the Nevada County Local Agency Formation Commission, located in Nevada County.

NID is dedicated to providing a dependable, quality water supply to approx. 25,000 customers in both Nevada and Placer Counties. Our comments will address concerns surrounding water supply.

**Comment #1:**

The NOP contains limited discussion of water availability for the City of Nevada City. NID understands that this adjustment of a coterminous sphere of influence with the city boundary will not change NID's service territory within the City of Nevada City boundary. NID's service territory excludes a large block of properties identified as an "island" within NID's service territory. In terms of water supply to the exclusionary island parcels, the City of Nevada City will continue to be responsible for serving this exclusionary island that is not served by NID.

**Comment #2:**

The City of Nevada City has its own water rights that are insufficient to meet its year-around needs. Nevada City purchases "surplus" water from NID every year for a portion of the year to meet the City's water needs. As a surplus wholesale customer to NID, the City of Nevada City is subject to NID declaring surplus water annually for its water supply.

**Comment #3:**

NID will keep all current and future tax revenues allocated to NID according to the Master Agreement for Apportionment of Property Tax Revenue of May 13<sup>th</sup> 2009 between NID, the County of Nevada and the City of Nevada City.

**Comment #4:**

NID does not have an objection to the City of Nevada City annexing Areas #1 – #4 into NID's existing service area as long as NID continues its agreement to serve these areas. This area does not vacate NID's service area and does not take over the current District service area responsibility.



## NEVADA IRRIGATION DISTRICT

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1036 W. Main Street, Grass Valley, CA 95945-5424  
(530) 273-6185 ~ Fax: (530) 477-2646 ~ [www.nidwater.com](http://www.nidwater.com)

**Comment #5:**

All NID facilities located within the Nevada City boundary will remain the property of the Nevada Irrigation District.

If you have questions regarding these comments, please do not hesitate to contact me at 530-271-6826 or [jonesg@nidwater.com](mailto:jonesg@nidwater.com).

Greg Jones  
Assistant General Manager

Cc: [lafco@co.nevada.ca.us](mailto:lafco@co.nevada.ca.us)

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY 711  
www.dot.ca.gov/dist3



Making Conservation  
a California Way of Life.

March 28, 2019

GTS# 03-NEV-2019-00102  
03-NEV-20/49 PM 16.98  
SCH# 2019029150

S.R. Jones  
Nevada County Local Agency Formation Commission (LAFCO)  
950 Maidu Avenue  
Nevada City, CA 95959

Dear S.R. Jones:

Thank you for including the California Department of Transportation (Caltrans) in the Draft Environmental Impact Report review process. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

This project is an update to the Nevada City Sphere of Influence (SOI) and includes four (4) project alternatives: LAFCO and City Consensus Preferred Alternative; Original LAFCO Staff Recommendation Alternative; City Recommendation Alternative; and the No Project Alternative. The current SOI occupies approximately 2,702 acres and the city occupies approximately 1,470 acres, totaling approximately 4,172 acres. The SOI Update includes no lands within the existing city boundaries. The annexation would allow for extension of City services but does not include any physical alterations or improvements to any area. No infrastructure extensions, new residential, commercial, industrial or other developments are proposed. The SOI update does not include any changes to existing land uses, land use designation, or zoning. The following comments are based on the documents received.

### ***Traffic Highway Operations***

Caltrans has no comments regarding the boundaries of the sphere of influence, and whichever footprint is chosen, Caltrans will continue to work with the City of Nevada City, the City of Grass Valley, and/or Nevada County.



S.R. Jones  
March 28, 2019  
Page 2

Page 2 of the NOP states, "The major transportation routes that provides regional connectivity through the City are the north-south trending State Route 49 (SR 49), which through Nevada City, is conjoined with east-west trending State Route 20." The freeway is actually designated as Route 20 from the Route 20/Route 49/Empire Street interchange in Grass Valley to the Route 20/Route 49/Uren Street intersection, in Nevada City. It's confusing, however both Caltrans and the California Highway Patrol (CHP) use this nomenclature.

Caltrans is pleased to be working with the Nevada County Transportation Commission and the City of Nevada City on the "Nevada City Multimodal Corridor Plan", on Route 49 from the Route 20/Route 49/Uren Street intersection to the Juvenile Hall driveway. Together, we hope to find a solution that will improve safety for all users, while maintaining good traffic operations.

Regarding the Greenhouse Gas Emissions and the Transportation and Circulation portions of the EIR, we recommend construction of mini roundabouts (which have a fully-mountable central island to accommodate trucks) where feasible. This will improve operational efficiency of stop-controlled intersections with no significant change in safety.

In January 2016, Consultant firm Omni-Means prepared an administrative draft "Gold Flat Road Corridor Study" for NCTC. The study indicated the preferred alternative was 6-leg roundabouts on both sides of the freeway, and the project cost was estimated at \$10.6 million. Caltrans does not know whether that study has been updated since, but funding is not available for such an expensive project. Please see attached possible alternatives.

Attachment 1 shows the project concept. Since the cost makes that option infeasible for the foreseeable future, consider one 6-leg roundabout—on the west side of the freeway only—where operations are more complex.

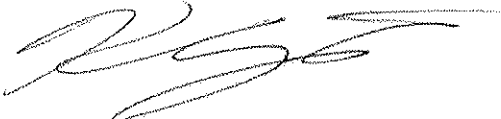
Attachment 2 is a conceptual horse track-shaped roundabout; the footprint is much smaller and the cost much lower. Detailed studies would be required, but a design of approximately this shape and size should accommodate the largest vehicles that traverse this intersection.

We would appreciate the opportunity to review and comment on any changes/updates related to this project.

S.R. Jones  
March 28, 2019  
Page 3

If you have any question regarding these comments or require additional information, please contact Kena Sannar, Intergovernmental Review Coordinator for Nevada County, by phone (530) 634-7613 or via email to [kena.sannar@dot.ca.gov](mailto:kena.sannar@dot.ca.gov).

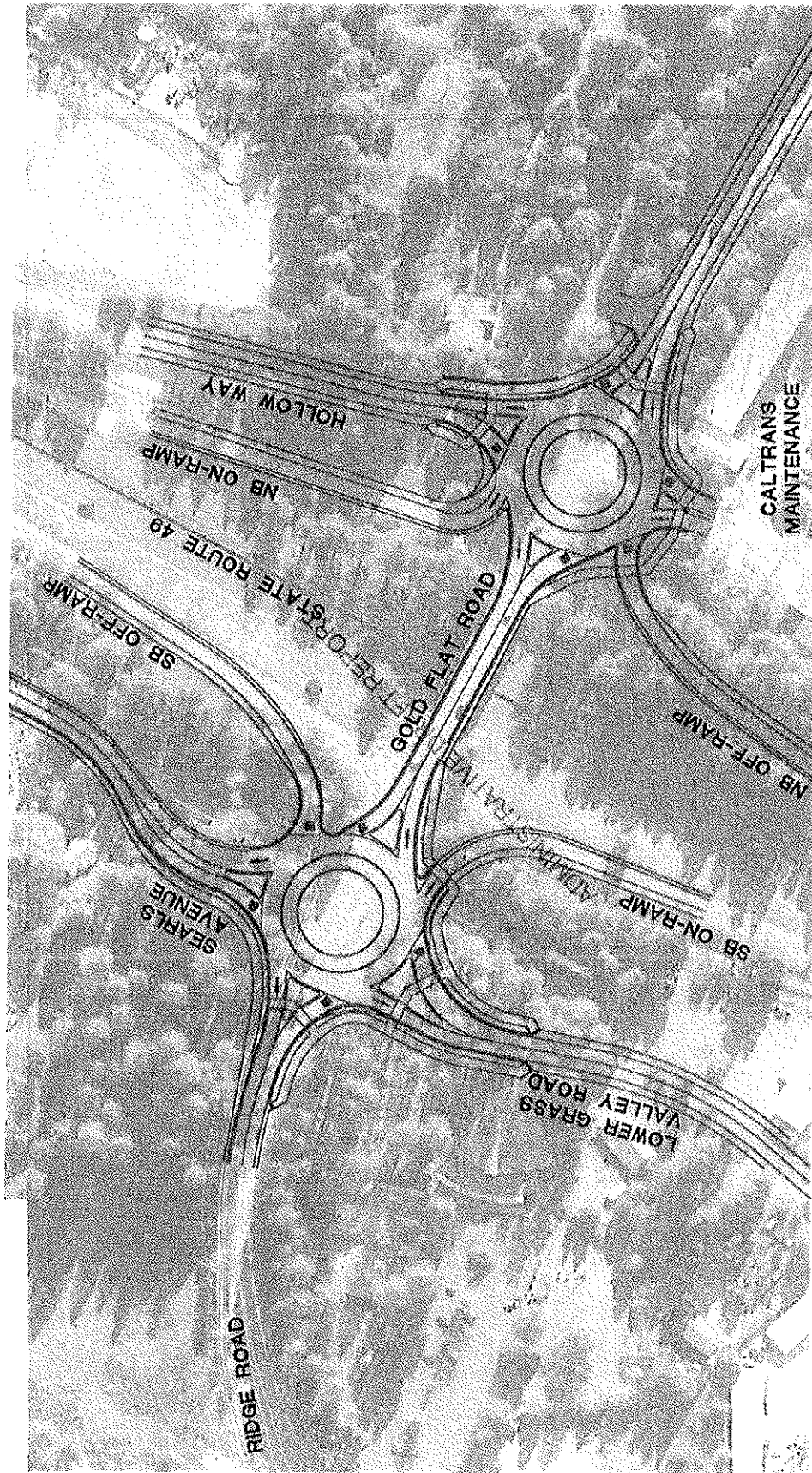
Sincerely,

A handwritten signature in black ink, appearing to read 'KY', with a stylized flourish extending from the end.

KEVIN YOUNT, Branch Chief  
Office of Transportation Planning  
Regional Planning Branch—East

Attachments

Attachment 1



GOLD FLAT ROAD CORRIDOR STUDY

SCALE 1"=100'

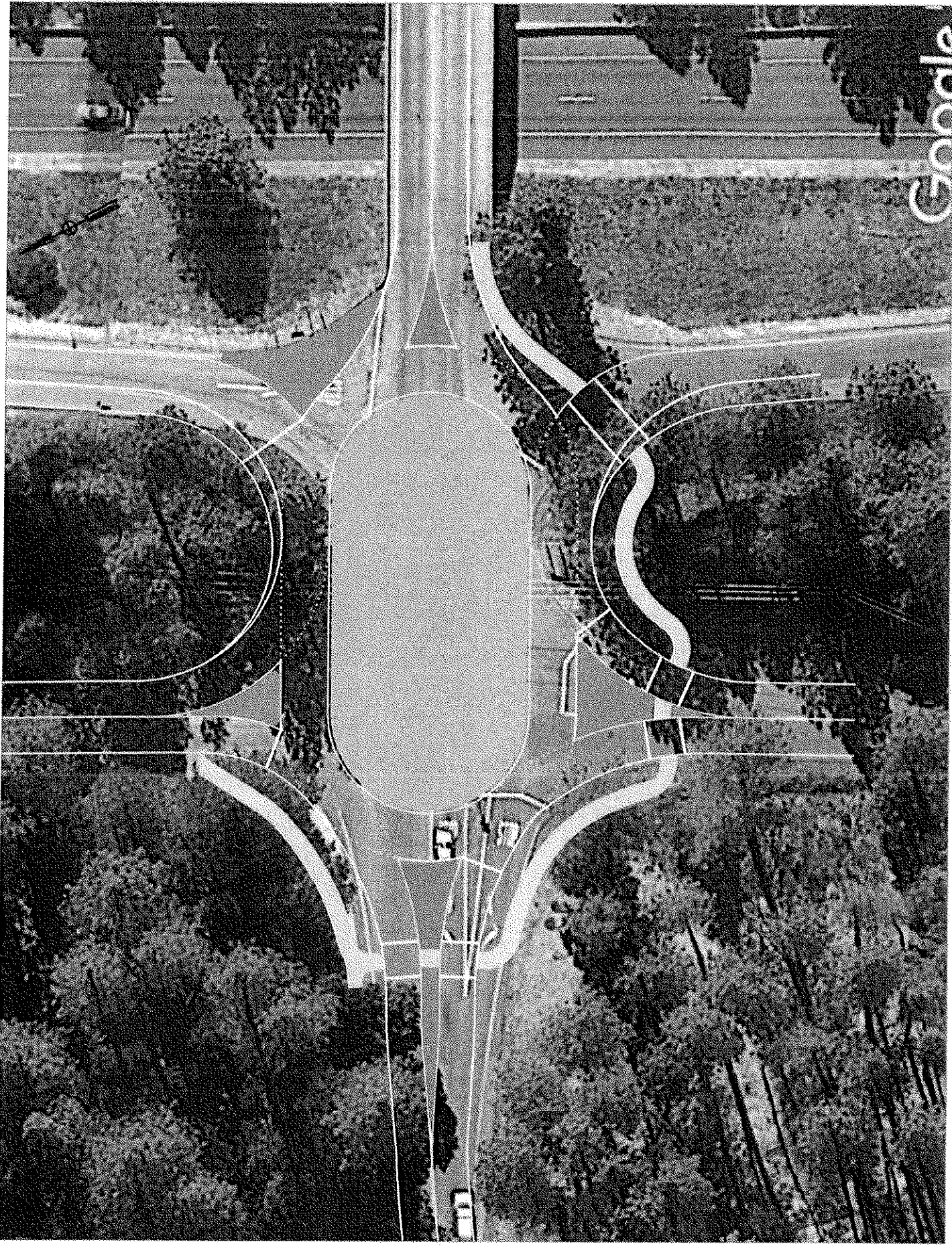
**6-LEG ROUNDABOUT ALTERNATIVE**

**FIGURE B-1**



1/5/2016 8:43 AM \\10.3.250.25\DATA\COMMON\PRJ\2047\2047RAD03.DWG

2047







**COUNTY OF NEVADA**  
**COMMUNITY DEVELOPMENT AGENCY**  
**DEPARTMENT OF PUBLIC WORKS**  
950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1411 FAX (530) 265-9849 [www.mynevadacounty.com](http://www.mynevadacounty.com)

Sean Powers  
Community Development Agency Director

Trisha Tillotson  
Director of Public Works

March 18, 2019

Attn: SR Jones  
Nevada County LAFCo Executive Officer  
950 Maidu Avenue  
Nevada City, CA 95959

Re: Nevada City Sphere of Influence Update – Notice of Preparation of Draft EIR


Dear Ms. Jones:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) of the Draft Environmental Impact Report (EIR) for the Nevada City Sphere of Influence Update. The Department of Public Works has reviewed the NOP and requests that the Draft EIR include the following:

1. Evaluation of impacts and identification of mitigation measures to offset any impacts from future development of the potential annexation areas and other EIR alternatives, related to:
  - o County roads and intersections, including nearby roads and intersections not included in the annexation areas
  - o County sanitation facilities and services
  - o County transit services
  - o County solid waste collection services
2. Clarification in the Draft EIR project description as to whether the proposed annexation areas include County roads on the boundaries of the annexation areas.

If you have any questions, please contact me at (530) 265-1254 or [Jessica.Hankins@co.nevada.ca.us](mailto:Jessica.Hankins@co.nevada.ca.us).

Sincerely,



Jessica Hankins  
Public Works Project Manager





## Central Valley Regional Water Quality Control Board

22 March 2019

SR Jones  
Nevada County Local Agency Formation  
Commission (LAFCO)  
950 Maidu Avenue  
Nevada City, CA 95959

**CERTIFIED MAIL**  
7018 3090 0000 5203 5304

### **COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, NEVADA COUNTY SPHERE OF INFLUENCE UPDATE PROJECT, SCH#2019029150, NEVADA COUNTY**

Pursuant to the State Clearinghouse's 28 February 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Nevada County Sphere of Influence Update Project, located in Nevada County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

#### **I. Regulatory Setting**

##### **Basin Plan**

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | [www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)

Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/)

### **Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr\\_201805.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf)

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

## **II. Permitting Requirements**

### **Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit

requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

#### **Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>**

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/municipal\\_permits/](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/)

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml)

#### **Industrial Storm Water General Permit**

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/industrial\\_general\\_permits/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml)

#### **Clean Water Act Section 404 Permit**

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water

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<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.



drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

**Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

**Waste Discharge Requirements – Discharges to Waters of the State**

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/waste\\_to\\_surface\\_water/](https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/)

**Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf)

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/waivers/r5-2013-0145\\_res.pdf](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf)

#### **Regulatory Compliance for Commercially Irrigated Agriculture**

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: [https://www.waterboards.ca.gov/centralvalley/water\\_issues/irrigated\\_lands/regulatory\\_information/for\\_growers/coalition\\_groups/](https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/) or contact water board staff at (916) 464-4611 or via email at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently \$1,277 + \$8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).

#### **Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:  
[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf)

**NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:  
<https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4812 or [Jordan.Hensley@waterboards.ca.gov](mailto:Jordan.Hensley@waterboards.ca.gov).



Jordan Hensley  
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

## Deborah Gilcrest

---

**From:** Gerald Stapp <ncsurvey@pacbell.net>  
**Sent:** Monday, April 01, 2019 3:02 PM  
**To:** LAFCO  
**Subject:** Nevada City Sphere of Influence NOP Comments

Re: 37-060-82; 12897 Pinewoods Road

Attn: SR Jones  
Lafco Executive Officer

I'm not sure this is the time for property owners to comment on the NOP but I will anyway. A year or so I briefly talked to you regarding my concerns about being forced to annex into the City and also wrote to the city manager expressing the same concerns. I still do not want to annex, primarily because there are no services that the City can provide us that are not available to us now.

Our two lots are accessed via Gold Flat Road (built by the County and given to the City) and Pinewoods Road (County owned and maintained). Treated water is provided by NID. Fire and police protection is provided via a mutual aid agreement. And other than SPD, the City does not offer many retail opportunities. Obviously, one could point to the waste water treatment plant as a benefit. However our plans for the property, other than a place to build our new home, do not require a sewer connection. The property is now zoned RA 5 with a General Plan designation of RA 3. Once we settle in, we will request that the County rezone our property to 3 acre density. Before we closed escrow, we tested the soils in the proposed building area and found that a standard septic system would work fine. As there was a question about mining, we checked the soils in other areas and found sufficient depths for septic systems everywhere.

Since about 1990 Nevada County has required that newly created parcels demonstrate that a septic system repair area is available as well as a primary area. I believe we can provide primary and repair areas on all four lots. In reading the City's justification for an annexation, I noted an emphasis on the effects of hydraulic mining on potential leach field areas. That type of mining was concentrated in about 30% or less of the SOI and I believe is mostly still under BLM control. The biggest problem with leach fields is that when the systems fail there is no repair area available, usually because the lot is too small.

The life span of a leach field is reported to be around 50 years. Our 3 acre lots will provide a repair area, which if the 50 year figure is correct, will provide a 100 year life span. I understand that treatment plants also have a life span of around 30-50 years. It would be helpful to know how many of the old systems within the SOI have failed. Most, if not all, should be over 50 years old.

Cost is also a factor. I will not request an annexation and having talked to some of the neighbors, I doubt they will either. The City's Annual Cost Of Services exhibit contains an error. They have treated an annual fire service tax as a monthly expense which inflates the cost to County residents about \$1800 per lot. The approximate annual cost in the County should be about \$500 per lot, which yields a cost per annexed property of approximately \$1000 over what they would be paying as County residents. Also, the cost of extending a sewer main through our property, according to City numbers, would be about \$300,000, which ultimately would be charged to the area citizens.

Gerald and Kathy Stapp  
16800 Sun Bloom Way  
5302650496  
ncsurvey@pacbell.net



**NATIVE AMERICAN HERITAGE COMMISSION**  
Cultural and Environmental Department

1550 Harbor Blvd., Suite 100

West Sacramento, CA 95691 Phone (916) 373-3710

Email: [nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)Website: <http://www.nahc.ca.gov>

Twitter: @CA\_NAHC



March 28, 2019

SR Jones  
Nevada County Local Agency Formation Commission (LAFCO)  
950 Maidu Avenue  
Nevada City, CA 95959

RE: SCH# 2019029150 Nevada County Sphere of Influence Update, Nevada County

Dear Mr. Jones:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

## AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
  - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf)

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

## NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email

address: Gayle.Totton@nahc.ca.gov.

Sincerely,



for  
Gayle Totton  
Associate Governmental Program Analyst

cc: State Clearinghouse



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March 29, 2019

Via E-Mail

SR Jones, Executive Officer  
Nevada County Local Agency  
Formation Commission  
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Nevada City, CA 95959  
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Re: Nevada City Sphere of Influence Update NOP Comments

Dear Ms. Jones:

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Nevada City Sphere of Influence Update (SOI Update or Project). These comments are being submitted on behalf of Community Environmental Advocates (CEA). The Nevada Street/Willow Valley Area Neighborhood Association joins in these comments.

CEA closely monitors proposed land use changes that have the potential to affect Nevada City and seeks to ensure the protection and preservation of the City's natural resources and built environment. In this regard, we question LAFCo's motivation for initiating the proposed SOI Update. It is the role of cities and counties, not LAFCOs, to manage the development of land within their jurisdictions. Nevada City has extensively described the importance of retaining the SOI boundary as currently mapped to continue its longstanding plans for orderly development within the SOI. *See* City of Nevada City 2017 Annexation Plan and Strategy and City of Nevada City Sphere of Influence recommendation, February 2017. The City has clearly demonstrated that it has the ability to serve its existing and future population, housing, and employment growth. *Id.* The existing SOI discourages sprawl and preserves identified open space lands. *Id.*

Moreover, the existing SOI is already consistent with LAFCo policies and procedures and the State Legislature's policy direction to LAFCo. In short, an SOI update is not needed nor required by Nevada County LAFCo policy. While LAFCo must adopt a SOI for each city and each district in its jurisdiction, and a review of the SOIs should

occur every five years, Nevada County LAFCo's policies recognize that updates to SOIs need only occur "if necessary." Nevada County LAFCo Policy at 18. An update to the City's SOI is not necessary.

Compounding matters, if large sections of land are removed from the SOI, the City will no longer control development patterns in the area, and its well-planned annexation strategy will be jeopardized. Consequently, as currently proposed, the SOI Update would be contrary to the Cortese-Knox-Hertzberg Act, which identifies LAFCo's mandate as discouraging urban sprawl, preserving prime agricultural land and open space, assuring the provision of efficient local government services, and encouraging the orderly growth and development of local agencies.

Accordingly, it is imperative that the DEIR clearly set forth the purpose and objectives of the SOI Update. As part of this effort the DEIR must take into account each of the reasons that Nevada City has delineated for retaining the existing SOI. These include, for example, the ability to regulate and monitor groundwater resources; ongoing wastewater treatment needs in light of the County's hydraulic mining legacy; watershed degradation and its associated impacts on drinking water supply and ecological resources; affordable housing and the requirement that such housing be served by a sewer system as opposed to septic systems; and preservation of the City's viewsheds to preserve the City's sense of history and general character. *See* City of Nevada City 2017 Annexation Plan and Strategy pages 5-8.

Set forth below are specific comments relating to the scope of the EIR.

### **Project Description and Setting Information**

One of the California Environmental Quality Act's (CEQA) fundamental requirements is that an EIR contain an accurate and complete project description. *See County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 18; *see also* 14 Cal. Code Regs. § 15124 ("CEQA Guidelines"). A clear and comprehensive project description is the *sine qua non* for meaningful public review. Without it, the public cannot be assured that the environmental impacts of the entire Project have been considered in the EIR.

The DEIR for the SOI Update must include a stable and consistent project description. As discussed above, a critical component of the DEIR's Project description will be a statement of the objectives sought by LAFCo. Without clear objectives, it is not possible to formulate alternatives to the Project. Here, the objectives are even more important as there is considerable disagreement as to the inherent need for any adjustment to the SOI boundary.

As part of the Project's description, the DEIR must provide sufficient information about the proposed "Annexation Areas" and "Areas of Interest" or "Exclusion Areas" so that locational impacts can be analyzed. This is important because, as the NOP acknowledges, annexation of land may directly facilitate development within these areas. NOP at 6.

It is also imperative that the DEIR include usable maps. The existing SOI boundary was established largely as a result of important city features, topographic considerations, and environmental constraints and resources. For this reason, the DEIR's base map<sup>1</sup> (and all other graphics) must be drafted at a usable scale and must show topographic features such as Sugar Loaf Mountain, ridgelines and canyons; hydrological features such as watersheds and rivers including for example, Deer Creek and Little Deer Creek; all city owned parks and open space, including Old Airport Open Space, and Pioneer Park; and all important City infrastructure and features including, for example, the sewage treatment plant. In addition to including graphics at a reasonable scale, the maps must include major street names so the public understands the location and boundaries of the SOI.<sup>2</sup>

## **Alternatives**

CEQA emphasizes that an EIR must analyze a range of reasonable alternatives to the project. The alternatives must feasibly attain most of the basic project objectives while avoiding or substantially lessening the project's environmental impacts. *See* Public Resources Code § 21100(b)(4); *see also* CEQA Guidelines § 15126.6(a). The CEQA Guidelines state that the selection and discussion of alternatives should foster informed decisionmaking and informed public participation. *See* CEQA Guidelines § 15126(d)(5).

Unfortunately, because there is so little information in the NOP regarding the Project or its objectives, the Project's environmental impacts, or the Project alternatives, informed public comment on the chosen alternatives is not currently possible. What little information the NOP does provide is troubling.

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<sup>1</sup> Due to the size of the SOI, the base map may, in fact, need to be presented as a series of maps so that information is presented at a usable scale.

<sup>2</sup> The following highways and streets should be named on DEIR graphics: Hwy. 49; Hwy. 20; Broad St.; E Broad St.; W. Broad St.; Nevada St.; Willow Valley Rd.; Gracie Rd.; Gold Flat Rd.; Banner Lava Cap Rd.; Ridge Rd.; Old Downieville Hwy.; Indian Flat Rd.; Cement Hill Rd.; N. Bloomfield Rd.; and Boulder St.



First, it seems evident that the DEIR will likely *not* include a reasonable range of alternatives. Other than the proposed Project (the SOI Update) and the No-Project Alternative, the NOP identifies only two alternatives. We can find no indication in the NOP that these two alternatives (“Original LAFCo Recommendation” and “City Recommendation”) were developed with the intent of reducing the proposed Project’s environmental impacts. Rather, it appears they were selected for policy or political reasons. The DEIR should include alternatives that reduce the Project’s environmental impacts.

Second, the NOP errs as it identifies the “Adoption of the Coterminous SOI” Alternative as the No Project Alternative. NOP at 14. Under the “Adoption of the Coterminous SOI” Alternative, the City’s SOI would include only the territory within the City’s jurisdictional boundary. *Id.* The NOP asserts that the purpose of this No Project Alternative is to serve as its baseline for purposes of environmental impact analysis. *Id.* This approach runs counter to CEQA. When a project is the revision of an existing land use plan—which the proposed SOI Update clearly is—the “No Project” Alternative will be the continuation of the existing plan into the future. CEQA Guidelines § 15126.6(e)(3) (a). Consequently, an accurate No Project Alternative would be the City’s current SOI boundary. CEQA is also clear that the No Project Alternative analysis should not constitute the baseline for determining whether the proposed Project’s environmental impacts may be significant (unless it is identical to the existing environmental setting analysis which does establish that baseline). *Id.* at 15126.6 (e) (1). Accordingly, the DEIR must analyze the environmental impacts of the SOI Update against a valid baseline, i.e., conditions as they exist on the ground.

Because the NOP does not identify a reasonable range of alternatives, and does not appear to identify any alternatives that would reduce the environmental impacts that would result from the SOI Update, CEA intends to submit a Project alternative once the DEIR is released. Had the NOP included Project objectives and sufficient detail about the nature of the SOI Update’s environmental impacts, CEA would have been able to identify a Project alternative capable of reducing the Project’s impacts while also achieving the Project’s objectives, and provided it in response to the NOP.

### **Analysis of the Project’s Probable Environmental Effects**

An EIR must provide a degree of analysis and detail about environmental impacts that will enable decisionmakers to make intelligent judgments in light of the environmental consequences of their decisions. CEQA Guidelines §15151; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692. To this end, the lead agency must make a good faith effort at full disclosure of environmental impacts. In order to

accomplish this requirement, it is essential that the project is adequately described and that existing setting information is complete. *See County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199. Both the public and decisionmakers need to fully understand the implications of the choices that are presented related to the project, mitigation measures, and alternatives. *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 6 Cal.4th 1112, 1123 (1988). Here, the NOP explains that the EIR for the proposed SOI Update will be a programmatic document. NOP at 1.

As an initial matter, a program EIR does not justify a lack of detailed analysis. Numerous CEQA provisions clarify that “tiering [e.g., preparing a program EIR followed by a project-level EIR] does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration.” Guidelines §15152(b); *see also id.* §15152(c). Rather, “[t]he degree of specificity required in an EIR must correspond with the degree of specificity of the proposed project. An EIR on a construction project will necessarily be more detailed in the specific effects of the project . . . .” *Id.* §15146. This rule persists regardless of “any semantic label accorded to the EIR.” *Friends of Mammoth v. Town of Mammoth Redevelopment Agency* (2000) 82 Cal.App.4th 511, 534. Given LAFCo’s acknowledgment that the SOI Update includes annexation of areas by Nevada City (at 6), the DEIR is obligated to analyze all foreseeable impacts of development facilitated by these annexations.

The NOP provides inconsistent and illogical information about the level of environmental review for the proposed Priority Annexation Areas. On the one hand, the document asserts that the level of review will be intended to support annexation of these areas with no or limited additional environmental review needed. NOP at 16. Yet, with respect to certain environmental topics, the NOP asserts that detailed environmental review will be deferred to a later date. (*See e.g.*, NOP at 17, stating that if there is a reasonable potential that threatened or endangered species exist within a Priority Annexation Area, a biological survey will *not* be done, but may be recommended prior to future projects (emphasis added)). For the reasons discussed above, the analysis of reasonably foreseeable significant environmental effects of the Project cannot be deferred.

It will also be important that the DEIR include a thorough description of the SOI Update’s environmental setting. An EIR’s description of a project’s environmental setting crucially provides “the baseline physical conditions by which a lead agency determines whether an impact is significant.” CEQA Guidelines § 15125(a). “Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, the EIR cannot provide a meaningful

assessment of the environmental impacts of the proposed project.” *Save Our Peninsula Committee v. Monterey Cnty. Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 119. Here, the NOP fails to include any information about the existing SOI or the reasoning behind the current SOI boundaries.

It will be important for the DEIR to recognize that development patterns within the existing SOI are fairly well established with large-lot rural neighborhoods. Largely due to this pattern of development, the City of Nevada City has well established clustering provisions and environmental protection policies and employs mechanisms, including conditional use permits, to regulate development. In fact, the City makes much more extensive use of CUPs than the County does.

The DEIR must also identify the development potential of the land within the existing SOI boundary relying on realistic assumptions. As discussed below, assumptions about the ability of the existing parcels to subdivide should be made on a parcel by parcel basis rather than gross average divided by units/acre permitted as much of the SOI is largely built out.

#### *Aesthetics and Visual Resources*

The DEIR must analyze the impacts of the proposed SOI Update on aesthetics including scenic vistas and scenic resources. This analysis must include clear graphics showing pre- and post-Project visual conditions.

#### *Air Quality*

The NOP fails to describe existing air quality in Nevada County. If the County is designated as a nonattainment area for any of the state and national ambient air quality standards, it will be important that the DEIR contain a thorough analysis of Project-related and cumulative impacts to air quality. Particular attention must be paid to comprehensively identifying each source of emissions that would be generated by development within the SOI including from motor vehicle traffic, stationary sources, and area sources. Since no or little supplemental environmental review is contemplated for development within the Priority Annexation Areas, this DEIR must identify and analyze construction-related increases in toxic air contaminants and criteria air pollutant emissions.

The City’s low density land use designations and limited development potential in the existing SOI will have a limiting effect on generation of air pollutant emissions. Any

recommendations for an increase in the population holding capacity of the SOI must be evaluated for increased air quality impacts.

### ***Biological Resources***

Unfortunately, the NOP fails to provide any indication as to the extent of impacts to biological resources. A full analysis of the Project-specific and cumulative effects on biological resources impacts will be essential to development of effective mitigation measures to ensure that biological resources' impacts will be fully offset. This detailed analysis must be prepared by a qualified, independent biologist.

The biological resources study must be based on surveys and detailed field studies that are completed at appropriate times of the year for each species potentially in the area. A search of the California Natural Diversity Database (CNDDB) maintained by the Department of Fish & Wildlife is a good starting point, but it is not sufficient to provide the level of detail necessary for the EIR. The DEIR must also include wetland delineations to the extent they have been completed by the U.S. Army Corps of Engineers.

Mitigation measures for impacts to biological resources should be supported by the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, and the U.S. Army Corps of Engineers. Deferral of mitigation measures until specific projects are proposed and federal and state permitting processes have begun is not appropriate.

### ***Cultural Resources***

The NOP proposes the same flawed approach to cultural resources as it does to biological resources. The document explains that if there is a reasonable potential that significant archaeological sites exist within the Priority Annexation Areas, archaeological field survey will *not* be done, but may be recommended prior to future projects. NOP at 17. For the reasons explained above, this approach violates CEQA.

### ***Greenhouse Gas Emissions***

LAFCo must ensure that the DEIR accurately identifies the Project's increase in greenhouse gas (GHG) emissions and adequately analyzes how the increase in emissions would contribute to climate change. This analysis is particularly important because existing conditions are such that we have already exceeded the capacity of the atmosphere to absorb additional GHG emissions without risking catastrophic and irreversible consequences. Therefore, even seemingly small additions of GHG emissions into the atmosphere must be considered cumulatively considerable. *See Communities for*

*a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 120 (“[T]he greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”); *see also Center for Biological Diversity v. National Highway Traffic Safety Administration* (9th Cir. 2007) 508 F.3d 508, 550 (“[W]e cannot afford to ignore even modest contributions to global warming.”).

To this end, the DEIR must also specifically analyze how the project would comply with AB 32, the Global Warming Solutions Act of 2006, which requires the State of California to reduce GHG emissions to 1990 levels no later than 2020. In addition, the DEIR must analyze the project’s consistency with Executive Order (EO) S-3-05 which calls for reducing GHG emissions to 80% below 1990 levels by 2050, and EO B-30-15, signed by the Governor in 2015, which establishes an interim target to reduce GHG emissions by 40 percent below 1990 levels by 2030. It will be critical that the mitigation measures for the Project ensure that GHG emissions are reduced to less than significant levels.

### ***Hydrology and Water Quality***

The EIR must determine whether development facilitated by the SOI Update would result in the violation of any water quality standards, result in substantial new amounts of polluted runoff, deplete groundwater supplies or interfere with groundwater recharge.

Although certain of the Priority Annexation Areas are located in Zones AE and A, (NOP at 17), the NOP does not disclose whether structures would be placed within the floodplain that could impede or redirect flows. Flood risk is a serious site development constraint which must be carefully studied. The DEIR should provide an exhaustive and detailed analysis of the Project’s hydrological and water quality impacts and identify feasible mitigation for any impacts determined to be significant.

It will be important for the DEIR to recognize that the existing SOI boundaries were delineated largely to protect the watershed of Deer Creek.

### ***Land Use***

The EIR’s analysis of land use and planning impacts must be carefully conducted. As the NOP acknowledges, the DEIR must describe the existing land uses adjacent to and within the SOI and the reasonably foreseeable development of the SOI. NOP at 17, 18. As mentioned above, assumptions about the ability of the existing parcels to subdivide in

the future should be made on a parcel by parcel basis rather than gross average divided by units/acre permitted as much of the SOI is largely built out. The DEIR must also evaluate the likely development with respect to compatibility with existing and proposed City and County land use planning and policy documents and land use regulations, and the impacts of removing the protection of County General Plan Goal 1.8

The NOP asserts that the DEIR may also make recommendations for areas of the SOI that are not identified in the Priority Annexation Areas for consideration by the City in a future General Plan update. *It is not an EIR's role to make land use recommendations unless doing so would reduce the environmental effects of the SOI Update.* And it is certainly not the role of LAFCos.

### ***Population, Housing and Growth Inducing Impacts***

The DEIR must assess whether the SOI Update will induce substantial population growth either directly (by construction of new residential units) or indirectly (by extension of infrastructure such as service facilities and roads). The growth inducing analysis in the DEIR must include: (1) an estimate of the amount, location, and time-frame of growth that may occur as a result of the Project and (2) identification of mitigation measures or alternatives to address significant direct and indirect impacts.

It is CEA's view that the growth that will occur in the largely developed SOI will not generate a substantial need for additional affordable housing, employment, or commercial zoning. The DEIR should evaluate the fact that the City of Nevada City has substantial acreage zoned for affordable housing well beyond State requirements for current City limits in its R-3 (16 du/acre), R-2 (8 du/acre), and Local Business, General Business, and Service Lodging zones where R-2 is also permitted by right. The City's affordable housing ordinances address each housing project that is two units or more in size (single family or multi-family), requiring 30% small units under 1500 square feet and 30% of all units to be affordable to moderate income or lower households. Twenty percent of all single family projects must also include second units. In this way, affordable housing is provided as growth occurs.

### ***Public Services, Utilities, Wastewater, Solid Waste, Parks***

The DEIR must analyze the increased demand for all essential public services and utilities resulting from the allowable development under the proposed SOI Update. In addition, the DEIR must analyze the cumulative demand for these services, utilities and facilities.

The DEIR must also provide information about the current capacity of schools, parks, wastewater treatment system(s), and landfills. It must also provide information about current levels of service and response times for fire, police and emergency services. A detailed analysis of project and cumulative development demands must be included in order to determine whether there will be a need for expansion of services. Where expansion of services would have environmental impacts, the DEIR must analyze those impacts as well. We again direct the DEIR authors to the City of Nevada City's 2017 Annexation Plan as it has outlined its ability to serve the area.

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The NOP does not mention whether the DEIR will address wildfire-related impacts. This is an egregious omission. It will be imperative that the DEIR comprehensively address wildland fire impacts including emergency response and evacuation.

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An EIR must discuss the cumulative impacts of a project when the incremental effects of the project are considerable when viewed in connection with the effects of other past, current, and probable future projects. CEQA Guidelines §§ 15130(a), 15065(c). Projects currently under environmental review clearly qualify as reasonably probable future projects to be considered in a cumulative impact analysis. *See San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) 151

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Cal.App.3d 61, 74 n.13. In addition, projects anticipated beyond the near future should be analyzed for their cumulative effect if they are reasonably foreseeable. *See Bozung v. Local Agency Formation Comm'n* (1975) 13 Cal.3d 263, 284.

## Conclusion

In light of the lack of detailed information about the proposed SOI Update, its potential environmental impacts or Project Alternatives, it is difficult for the public to provide constructive comments on the NOP. For this reason, we strongly recommend that LAFCo hold periodic public workshops so that the public has an opportunity to actively participate in LAFCo's planning process.

Thank you again for the opportunity to provide these comments. Please keep this office informed of all notices, hearings, staff reports, briefings, meetings, and other events related to the SOI Update. In addition, please notify us of the release of the DEIR for the SOI Update.

Very truly yours,  
SHUTE, MIHALY & WEINBERGER LLP



Tamara S. Galanter

Very truly yours,  
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Laurel L. Impett, AICP, Urban Planner



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March 29, 2019

**Via E-Mail**

SR Jones, Executive Officer  
Nevada County Local Agency  
Formation Commission  
950 Maidu Avenue  
Nevada City, CA 95959  
[lafoo@co.nevada.ca.us](mailto:lafoo@co.nevada.ca.us)

Re: Nevada City Sphere of Influence Update NOP Comments

Dear Ms. Jones:

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Nevada City Sphere of Influence Update (SOI Update or Project). These comments are being submitted on behalf of Community Environmental Advocates (CEA). The Nevada Street/Willow Valley Area Neighborhood Association joins in these comments.

CEA closely monitors proposed land use changes that have the potential to affect Nevada City and seeks to ensure the protection and preservation of the City's natural resources and built environment. In this regard, we question LAFCo's motivation for initiating the proposed SOI Update. It is the role of cities and counties, not LAFCos, to manage the development of land within their jurisdictions. Nevada City has extensively described the importance of retaining the SOI boundary as currently mapped to continue its longstanding plans for orderly development within the SOI. *See* City of Nevada City 2017 Annexation Plan and Strategy and City of Nevada City Sphere of Influence recommendation, February 2017. The City has clearly demonstrated that it has the ability to serve its existing and future population, housing, and employment growth. *Id.* The existing SOI discourages sprawl and preserves identified open space lands. *Id.*

Moreover, the existing SOI is already consistent with LAFCo policies and procedures and the State Legislature's policy direction to LAFCo. In short, an SOI update is not needed nor required by Nevada County LAFCo policy. While LAFCo must adopt a SOI for each city and each district in its jurisdiction, and a review of the SOIs should

occur every five years, Nevada County LAFCo's policies recognize that updates to SOIs need only occur "if necessary." Nevada County LAFCo Policy at 18. An update to the City's SOI is not necessary.

Compounding matters, if large sections of land are removed from the SOI, the City will no longer control development patterns in the area, and its well-planned annexation strategy will be jeopardized. Consequently, as currently proposed, the SOI Update would be contrary to the Cortese-Knox-Hertzberg Act, which identifies LAFCo's mandate as discouraging urban sprawl, preserving prime agricultural land and open space, assuring the provision of efficient local government services, and encouraging the orderly growth and development of local agencies.

Accordingly, it is imperative that the DEIR clearly set forth the purpose and objectives of the SOI Update. As part of this effort the DEIR must take into account each of the reasons that Nevada City has delineated for retaining the existing SOI. These include, for example, the ability to regulate and monitor groundwater resources; ongoing wastewater treatment needs in light of the County's hydraulic mining legacy; watershed degradation and its associated impacts on drinking water supply and ecological resources; affordable housing and the requirement that such housing be served by a sewer system as opposed to septic systems; and preservation of the City's viewsheds to preserve the City's sense of history and general character. *See* City of Nevada City 2017 Annexation Plan and Strategy pages 5-8.

Set forth below are specific comments relating to the scope of the EIR.

### **Project Description and Setting Information**

One of the California Environmental Quality Act's (CEQA) fundamental requirements is that an EIR contain an accurate and complete project description. *See County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 18; *see also* 14 Cal. Code Regs. § 15124 ("CEQA Guidelines"). A clear and comprehensive project description is the *sine qua non* for meaningful public review. Without it, the public cannot be assured that the environmental impacts of the entire Project have been considered in the EIR.

The DEIR for the SOI Update must include a stable and consistent project description. As discussed above, a critical component of the DEIR's Project description will be a statement of the objectives sought by LAFCo. Without clear objectives, it is not possible to formulate alternatives to the Project. Here, the objectives are even more important as there is considerable disagreement as to the inherent need for any adjustment to the SOI boundary.

As part of the Project's description, the DEIR must provide sufficient information about the proposed "Annexation Areas" and "Areas of Interest" or "Exclusion Areas" so that locational impacts can be analyzed. This is important because, as the NOP acknowledges, annexation of land may directly facilitate development within these areas. NOP at 6.

It is also imperative that the DEIR include usable maps. The existing SOI boundary was established largely as a result of important city features, topographic considerations, and environmental constraints and resources. For this reason, the DEIR's base map<sup>1</sup> (and all other graphics) must be drafted at a usable scale and must show topographic features such as Sugar Loaf Mountain, ridgelines and canyons; hydrological features such as watersheds and rivers including for example, Deer Creek and Little Deer Creek; all city owned parks and open space, including Old Airport Open Space, and Pioneer Park; and all important City infrastructure and features including, for example, the sewage treatment plant. In addition to including graphics at a reasonable scale, the maps must include major street names so the public understands the location and boundaries of the SOI.<sup>2</sup>

## **Alternatives**

CEQA emphasizes that an EIR must analyze a range of reasonable alternatives to the project. The alternatives must feasibly attain most of the basic project objectives while avoiding or substantially lessening the project's environmental impacts. *See* Public Resources Code § 21100(b)(4); *see also* CEQA Guidelines § 15126.6(a). The CEQA Guidelines state that the selection and discussion of alternatives should foster informed decisionmaking and informed public participation. *See* CEQA Guidelines § 15126(d)(5).

Unfortunately, because there is so little information in the NOP regarding the Project or its objectives, the Project's environmental impacts, or the Project alternatives, informed public comment on the chosen alternatives is not currently possible. What little information the NOP does provide is troubling.

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<sup>1</sup> Due to the size of the SOI, the base map may, in fact, need to be presented as a series of maps so that information is presented at a usable scale.

<sup>2</sup> The following highways and streets should be named on DEIR graphics: Hwy. 49; Hwy. 20; Broad St.; E Broad St.; W. Broad St.; Nevada St.; Willow Valley Rd.; Gracie Rd.; Gold Flat Rd.; Banner Lava Cap Rd.; Ridge Rd.; Old Downieville Hwy.; Indian Flat Rd.; Cement Hill Rd.; N. Bloomfield Rd.; and Boulder St.

First, it seems evident that the DEIR will likely *not* include a reasonable range of alternatives. Other than the proposed Project (the SOI Update) and the No-Project Alternative, the NOP identifies only two alternatives. We can find no indication in the NOP that these two alternatives (“Original LAFCo Recommendation” and “City Recommendation”) were developed with the intent of reducing the proposed Project’s environmental impacts. Rather, it appears they were selected for policy or political reasons. The DEIR should include alternatives that reduce the Project’s environmental impacts.

Second, the NOP errs as it identifies the “Adoption of the Coterminous SOI” Alternative as the No Project Alternative. NOP at 14. Under the “Adoption of the Coterminous SOI” Alternative, the City’s SOI would include only the territory within the City’s jurisdictional boundary. *Id.* The NOP asserts that the purpose of this No Project Alternative is to serve as its baseline for purposes of environmental impact analysis. *Id.* This approach runs counter to CEQA. When a project is the revision of an existing land use plan—which the proposed SOI Update clearly is—the “No Project” Alternative will be the continuation of the existing plan into the future. CEQA Guidelines § 15126.6(e)(3)(a). Consequently, an accurate No Project Alternative would be the City’s current SOI boundary. CEQA is also clear that the No Project Alternative analysis should not constitute the baseline for determining whether the proposed Project’s environmental impacts may be significant (unless it is identical to the existing environmental setting analysis which does establish that baseline). *Id.* at 15126.6 (e) (1). Accordingly, the DEIR must analyze the environmental impacts of the SOI Update against a valid baseline, i.e., conditions as they exist on the ground.

Because the NOP does not identify a reasonable range of alternatives, and does not appear to identify any alternatives that would reduce the environmental impacts that would result from the SOI Update, CEA intends to submit a Project alternative once the DEIR is released. Had the NOP included Project objectives and sufficient detail about the nature of the SOI Update’s environmental impacts, CEA would have been able to identify a Project alternative capable of reducing the Project’s impacts while also achieving the Project’s objectives, and provided it in response to the NOP.

### **Analysis of the Project’s Probable Environmental Effects**

An EIR must provide a degree of analysis and detail about environmental impacts that will enable decisionmakers to make intelligent judgments in light of the environmental consequences of their decisions. CEQA Guidelines §15151; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692. To this end, the lead agency must make a good faith effort at full disclosure of environmental impacts. In order to

accomplish this requirement, it is essential that the project is adequately described and that existing setting information is complete. *See County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199. Both the public and decisionmakers need to fully understand the implications of the choices that are presented related to the project, mitigation measures, and alternatives. *Laurel Heights Improvement Ass'n v. Regents of University of California* (1988) 6 Cal.4th 1112, 1123 (1988). Here, the NOP explains that the EIR for the proposed SOI Update will be a programmatic document. NOP at 1.

As an initial matter, a program EIR does not justify a lack of detailed analysis. Numerous CEQA provisions clarify that “tiering [e.g., preparing a program EIR followed by a project-level EIR] does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration.” Guidelines §15152(b); *see also id.* §15152(c). Rather, “[t]he degree of specificity required in an EIR must correspond with the degree of specificity of the proposed project. An EIR on a construction project will necessarily be more detailed in the specific effects of the project . . . .” *Id.* §15146. This rule persists regardless of “any semantic label accorded to the EIR.” *Friends of Mammoth v. Town of Mammoth Redevelopment Agency* (2000) 82 Cal.App.4th 511, 534. Given LAFCo’s acknowledgment that the SOI Update includes annexation of areas by Nevada City (at 6), the DEIR is obligated to analyze all foreseeable impacts of development facilitated by these annexations.

The NOP provides inconsistent and illogical information about the level of environmental review for the proposed Priority Annexation Areas. On the one hand, the document asserts that the level of review will be intended to support annexation of these areas with no or limited additional environmental review needed. NOP at 16. Yet, with respect to certain environmental topics, the NOP asserts that detailed environmental review will be deferred to a later date. (*See e.g.*, NOP at 17, stating that if there is a reasonable potential that threatened or endangered species exist within a Priority Annexation Area, a biological survey will *not* be done, but may be recommended prior to future projects (emphasis added)). For the reasons discussed above, the analysis of reasonably foreseeable significant environmental effects of the Project cannot be deferred.

It will also be important that the DEIR include a thorough description of the SOI Update’s environmental setting. An EIR’s description of a project’s environmental setting crucially provides “the baseline physical conditions by which a lead agency determines whether an impact is significant.” CEQA Guidelines § 15125(a). “Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, the EIR cannot provide a meaningful

assessment of the environmental impacts of the proposed project.” *Save Our Peninsula Committee v. Monterey Cnty. Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 119. Here, the NOP fails to include any information about the existing SOI or the reasoning behind the current SOI boundaries.

It will be important for the DEIR to recognize that development patterns within the existing SOI are fairly well established with large-lot rural neighborhoods. Largely due to this pattern of development, the City of Nevada City has well established clustering provisions and environmental protection policies and employs mechanisms, including conditional use permits, to regulate development. In fact, the City makes much more extensive use of CUPs than the County does.

The DEIR must also identify the development potential of the land within the existing SOI boundary relying on realistic assumptions. As discussed below, assumptions about the ability of the existing parcels to subdivide should be made on a parcel by parcel basis rather than gross average divided by units/acre permitted as much of the SOI is largely built out.

### ***Aesthetics and Visual Resources***

The DEIR must analyze the impacts of the proposed SOI Update on aesthetics including scenic vistas and scenic resources. This analysis must include clear graphics showing pre- and post-Project visual conditions.

### ***Air Quality***

The NOP fails to describe existing air quality in Nevada County. If the County is designated as a nonattainment area for any of the state and national ambient air quality standards, it will be important that the DEIR contain a thorough analysis of Project-related and cumulative impacts to air quality. Particular attention must be paid to comprehensively identifying each source of emissions that would be generated by development within the SOI including from motor vehicle traffic, stationary sources, and area sources. Since no or little supplemental environmental review is contemplated for development within the Priority Annexation Areas, this DEIR must identify and analyze construction-related increases in toxic air contaminants and criteria air pollutant emissions.

The City’s low density land use designations and limited development potential in the existing SOI will have a limiting effect on generation of air pollutant emissions. Any



recommendations for an increase in the population holding capacity of the SOI must be evaluated for increased air quality impacts.

### ***Biological Resources***

Unfortunately, the NOP fails to provide any indication as to the extent of impacts to biological resources. A full analysis of the Project-specific and cumulative effects on biological resources impacts will be essential to development of effective mitigation measures to ensure that biological resources' impacts will be fully offset. This detailed analysis must be prepared by a qualified, independent biologist.

The biological resources study must be based on surveys and detailed field studies that are completed at appropriate times of the year for each species potentially in the area. A search of the California Natural Diversity Database (CNDDDB) maintained by the Department of Fish & Wildlife is a good starting point, but it is not sufficient to provide the level of detail necessary for the EIR. The DEIR must also include wetland delineations to the extent they have been completed by the U.S. Army Corps of Engineers.

Mitigation measures for impacts to biological resources should be supported by the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, and the U.S. Army Corps of Engineers. Deferral of mitigation measures until specific projects are proposed and federal and state permitting processes have begun is not appropriate.

### ***Cultural Resources***

The NOP proposes the same flawed approach to cultural resources as it does to biological resources. The document explains that if there is a reasonable potential that significant archaeological sites exist within the Priority Annexation Areas, archaeological field survey will *not* be done, but may be recommended prior to future projects. NOP at 17. For the reasons explained above, this approach violates CEQA.

### ***Greenhouse Gas Emissions***

LAFCo must ensure that the DEIR accurately identifies the Project's increase in greenhouse gas (GHG) emissions and adequately analyzes how the increase in emissions would contribute to climate change. This analysis is particularly important because existing conditions are such that we have already exceeded the capacity of the atmosphere to absorb additional GHG emissions without risking catastrophic and irreversible consequences. Therefore, even seemingly small additions of GHG emissions into the atmosphere must be considered cumulatively considerable. *See Communities for*

*a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 120 (“[T]he greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”); *see also Center for Biological Diversity v. National Highway Traffic Safety Administration* (9th Cir. 2007) 508 F.3d 508, 550 (“[W]e cannot afford to ignore even modest contributions to global warming.”).

To this end, the DEIR must also specifically analyze how the project would comply with AB 32, the Global Warming Solutions Act of 2006, which requires the State of California to reduce GHG emissions to 1990 levels no later than 2020. In addition, the DEIR must analyze the project’s consistency with Executive Order (EO) S-3-05 which calls for reducing GHG emissions to 80% below 1990 levels by 2050, and EO B-30-15, signed by the Governor in 2015, which establishes an interim target to reduce GHG emissions by 40 percent below 1990 levels by 2030. It will be critical that the mitigation measures for the Project ensure that GHG emissions are reduced to less than significant levels.

### ***Hydrology and Water Quality***

The EIR must determine whether development facilitated by the SOI Update would result in the violation of any water quality standards, result in substantial new amounts of polluted runoff, deplete groundwater supplies or interfere with groundwater recharge.

Although certain of the Priority Annexation Areas are located in Zones AE and A, (NOP at 17), the NOP does not disclose whether structures would be placed within the floodplain that could impede or redirect flows. Flood risk is a serious site development constraint which must be carefully studied. The DEIR should provide an exhaustive and detailed analysis of the Project’s hydrological and water quality impacts and identify feasible mitigation for any impacts determined to be significant.

It will be important for the DEIR to recognize that the existing SOI boundaries were delineated largely to protect the watershed of Deer Creek.

### ***Land Use***

The EIR’s analysis of land use and planning impacts must be carefully conducted. As the NOP acknowledges, the DEIR must describe the existing land uses adjacent to and within the SOI and the reasonably foreseeable development of the SOI. NOP at 17, 18. As mentioned above, assumptions about the ability of the existing parcels to subdivide in



the future should be made on a parcel by parcel basis rather than gross average divided by units/acre permitted as much of the SOI is largely built out. The DEIR must also evaluate the likely development with respect to compatibility with existing and proposed City and County land use planning and policy documents and land use regulations, and the impacts of removing the protection of County General Plan Goal 1.8

The NOP asserts that the DEIR may also make recommendations for areas of the SOI that are not identified in the Priority Annexation Areas for consideration by the City in a future General Plan update. *It is not an EIR's role to make land use recommendations unless doing so would reduce the environmental effects of the SOI Update.* And it is certainly not the role of LAFCos.

### ***Population, Housing and Growth Inducing Impacts***

The DEIR must assess whether the SOI Update will induce substantial population growth either directly (by construction of new residential units) or indirectly (by extension of infrastructure such as service facilities and roads). The growth inducing analysis in the DEIR must include: (1) an estimate of the amount, location, and time-frame of growth that may occur as a result of the Project and (2) identification of mitigation measures or alternatives to address significant direct and indirect impacts.

It is CEA's view that the growth that will occur in the largely developed SOI will not generate a substantial need for additional affordable housing, employment, or commercial zoning. The DEIR should evaluate the fact that the City of Nevada City has substantial acreage zoned for affordable housing well beyond State requirements for current City limits in its R-3 (16 du/acre), R-2 (8 du/acre), and Local Business, General Business, and Service Lodging zones where R-2 is also permitted by right. The City's affordable housing ordinances address each housing project that is two units or more in size (single family or multi-family), requiring 30% small units under 1500 square feet and 30% of all units to be affordable to moderate income or lower households. Twenty percent of all single family projects must also include second units. In this way, affordable housing is provided as growth occurs.

### ***Public Services, Utilities, Wastewater, Solid Waste, Parks***

The DEIR must analyze the increased demand for all essential public services and utilities resulting from the allowable development under the proposed SOI Update. In addition, the DEIR must analyze the cumulative demand for these services, utilities and facilities.

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SR Jones  
Nevada County Local Agency Formation Commission  
March 29, 2019  
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Cal.App.3d 61, 74 n.13. In addition, projects anticipated beyond the near future should be analyzed for their cumulative effect if they are reasonably foreseeable. *See Bozung v. Local Agency Formation Comm'n* (1975) 13 Cal.3d 263, 284.

## Conclusion

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Thank you again for the opportunity to provide these comments. Please keep this office informed of all notices, hearings, staff reports, briefings, meetings, and other events related to the SOI Update. In addition, please notify us of the release of the DEIR for the SOI Update.

Very truly yours,  
SHUTE, MIHALY & WEINBERGER LLP



Tamara S. Galanter

Very truly yours,  
SHUTE, MIHALY & WEINBERGER LLP



Laurel L. Impett, AICP, Urban Planner

**From:** [SR Jones](#)  
**To:** [Stoneman, Brad](#)  
**Subject:** Did I send forward this to you yet?? FW: Nevada City Sphere of Influence Update NOP Comments  
**Date:** Wednesday, March 27, 2019 12:54:06 PM

---

Brad, did you get this emailed comment on the NOP from the local fire district?  
SR

---

**From:** Jim Turner [mailto:jimturner@nccfire.com]  
**Sent:** Monday, March 25, 2019 10:58 AM  
**To:** SR Jones <SR.Jones@co.nevada.ca.us>  
**Cc:** Keith Grueneberg <keithgrueneberg@nccfire.com>; Jeff Van Groningen <jeffvg@nccfire.com>  
**Subject:** Nevada City Sphere of Influence Update NOP Comments

SR,

After carefully reviewing the "Notice of Preparation" Nevada City Sphere of Influence Update Environmental Impact Report, the Nevada County Consolidated Fire District (NCCFD) would like to have the following concerns and/or comments documented and addressed within the formal process.

Nevada County Consolidated Fire District response according to Fire Chief Jim Turner. As the geographical area of the Nevada City jurisdiction (city limits) increases due to annexation and subsequent development, Nevada City's first responder responsibilities increase. The Joint Operational Area (JOA) agreement is dependent on equity between JOA responses in each jurisdiction and resources provided by each JOA partner. As the tax share payments from Nevada City to NCCFD decrease over the ten-year period, the resources provided by Nevada City needs to increase accordingly, which may require changes to the JOA agreement.

As a further note, the current master tax share agreement between Nevada City and NCCFD was written before the NCCFD Special Tax of 2012 was passed by voters. The master tax share agreement needs to be modified to include the NCCFD Special Tax of 2012 and the District's Benefit Assessment.

I would like to ask LAFCo to please take consideration to the Districts concerns during your review and consideration of the proposed changes to the City of Nevada City's "Sphere of Influence Update".

Please feel free to contact me with any additional questions that you may have.

Respectfully,

Jim Turner, Fire Chief  
**Nevada County Consolidated Fire District**  
640 Coyote Street  
Nevada City, CA 95959

Office (530) 265-4431  
Fax (530) 265-4438  
[jimturner@nccfire.com](mailto:jimturner@nccfire.com)

## APPENDIX B

### CalEEMod



## Nevada City - Nevada County, Annual

**Nevada City**  
**Nevada County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	522.00	Dwelling Unit	169.48	939,600.00	1493
Hotel	312.00	Room	10.40	453,024.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	80
<b>Climate Zone</b>	1			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - operations only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	PhaseEndDate	11/6/2020	2/2/2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural



[illegible]

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069
Energy	0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	3,140.2294	3,140.2294	0.1201	0.0369	3,154.2329
Mobile	3.4186	24.0058	40.1669	0.1254	8.6119	0.1232	8.7350	2.3141	0.1161	2.4302	0.0000	11,549.5340	11,549.5340	0.5936	0.0000	11,564.3740
Waste						0.0000	0.0000		0.0000	0.0000	110.4413	0.0000	110.4413	6.5269	0.0000	273.6136
Water						0.0000	0.0000		0.0000	0.0000	13.3008	88.7215	102.0224	1.3701	0.0331	146.1356
Total	43.8080	25.4427	84.9918	0.2035	8.6119	5.8720	14.4838	2.3141	5.8649	8.1790	662.9460	15,010.9560	15,673.9020	9.1145	0.1124	15,935.2631

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069
Energy	0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	3,140.2294	3,140.2294	0.1201	0.0369	3,154.2329
Mobile	3.4186	24.0058	40.1669	0.1254	8.6119	0.1232	8.7350	2.3141	0.1161	2.4302	0.0000	11,549.5340	11,549.5340	0.5936	0.0000	11,564.3740

Waste						0.0000	0.0000		0.0000	0.0000	110.4413	0.0000	110.4413	6.5269	0.0000	273.6136
Water						0.0000	0.0000		0.0000	0.0000	13.3008	88.7215	102.0224	1.3701	0.0331	146.1356
Total	43.8080	25.4427	84.9918	0.2035	8.6119	5.8720	14.4838	2.3141	5.8649	8.1790	662.9460	15,010.9560	15,673.9020	9.1145	0.1124	15,935.2631

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/3/2020	2/2/2020	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.4186	24.0058	40.1669	0.1254	8.6119	0.1232	8.7350	2.3141	0.1161	2.4302	0.0000	11,549.5340	11,549.5340	0.5936	0.0000	11,564.3740
Unmitigated	3.4186	24.0058	40.1669	0.1254	8.6119	0.1232	8.7350	2.3141	0.1161	2.4302	0.0000	11,549.5340	11,549.5340	0.5936	0.0000	11,564.3740

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	2,549.04	2,555.28	1856.40	4,924,439	4,924,439
Single Family Housing	4,969.44	5,173.02	4499.64	18,338,523	18,338,523
Total	7,518.48	7,728.30	6,356.04	23,262,962	23,262,962

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	14.70	6.60	6.60	19.40	61.60	19.00	58	38	4
Single Family Housing	16.80	7.10	7.90	42.30	19.60	38.10	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.440877	0.040349	0.242673	0.142275	0.034720	0.006163	0.014935	0.067430	0.001823	0.000752	0.005858	0.000581	0.001565
Single Family Housing	0.440877	0.040349	0.242673	0.142275	0.034720	0.006163	0.014935	0.067430	0.001823	0.000752	0.005858	0.000581	0.001565

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,300.8385	2,300.8385	0.1040	0.0215	2,309.8539
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,300.8385	2,300.8385	0.1040	0.0215	2,309.8539
NaturalGas Mitigated	0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	839.3909	839.3909	0.0161	0.0154	844.3790
NaturalGas Unmitigated	0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	839.3909	839.3909	0.0161	0.0154	844.3790

5.2 Energy by Land Use - NaturalGas  
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	9.40478e+006	0.0507	0.4610	0.3873	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.8748	501.8748	9.6200e-003	9.2000e-003	504.8572
Single Family Housing	6.32481e+006	0.0341	0.2914	0.1240	1.8600e-003		0.0236	0.0236		0.0236	0.0236	0.0000	337.5161	337.5161	6.4700e-003	6.1900e-003	339.5218
Total		0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	839.3909	839.3909	0.0161	0.0154	844.3790

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	9.40478e+006	0.0507	0.4610	0.3873	2.7700e-003		0.0350	0.0350		0.0350	0.0350	0.0000	501.8748	501.8748	9.6200e-003	9.2000e-003	504.8572
Single Family Housing	6.32481e+006	0.0341	0.2914	0.1240	1.8600e-003		0.0236	0.0236		0.0236	0.0236	0.0000	337.5161	337.5161	6.4700e-003	6.1900e-003	339.5218
Total		0.0848	0.7525	0.5113	4.6300e-003		0.0586	0.0586		0.0586	0.0586	0.0000	839.3909	839.3909	0.0161	0.0154	844.3790

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	3.37956e+006	983.1525	0.0445	9.2000e-003	987.0048
Single Family Housing	4.52951e+006	1,317.6861	0.0596	0.0123	1,322.8491
Total		2,300.8385	0.1040	0.0215	2,309.8539

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			



Hotel	3.37956e+006	983.1525	0.0445	9.2000e-003	987.0048
Single Family Housing	4.52951e+006	1,317.6861	0.0596	0.0123	1,322.8491
<b>Total</b>		<b>2,300.8385</b>	<b>0.1040</b>	<b>0.0215</b>	<b>2,309.8539</b>

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069
Unmitigated	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069

## 6.2 Area by SubCategory

### Unmitigated

[illegible]

Hearth	32.7535	0.6396	40.4307	0.0733		5.6688	5.6688		5.6688	5.6688	539.2039	226.1343	765.3382	0.4976	0.0424	790.4170
Landscaping	0.1175	0.0448	3.8830	2.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	6.3368	6.3368	6.1200e-003	0.0000	6.4899
Total	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.9948					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	32.7535	0.6396	40.4307	0.0733		5.6688	5.6688		5.6688	5.6688	539.2039	226.1343	765.3382	0.4976	0.0424	790.4170
Landscaping	0.1175	0.0448	3.8830	2.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	6.3368	6.3368	6.1200e-003	0.0000	6.4899
Total	40.3046	0.6844	44.3136	0.0735		5.6902	5.6902		5.6902	5.6902	539.2039	232.4711	771.6750	0.5037	0.0424	796.9069

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

Mitigated	102.0224	1.3701	0.0331	146.1356
Unmitigated	102.0224	1.3701	0.0331	146.1356

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	7.91443 / 0.879381	15.8645	0.2585	6.2100e-003	24.1788
Single Family Housing	34.0104 / 21.4413	86.1578	1.1116	0.0269	121.9568
Total		102.0224	1.3701	0.0331	146.1356

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	7.91443 / 0.879381	15.8645	0.2585	6.2100e-003	24.1788
Single Family Housing	34.0104 / 21.4413	86.1578	1.1116	0.0269	121.9568
Total		102.0224	1.3701	0.0331	146.1356

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	110.4413	6.5269	0.0000	273.6136
Unmitigated	110.4413	6.5269	0.0000	273.6136

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	170.82	34.6749	2.0492	0.0000	85.9056
Single Family Housing	373.25	75.7664	4.4777	0.0000	187.7080
Total		110.4413	6.5269	0.0000	273.6136

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	170.82	34.6749	2.0492	0.0000	85.9056
Single Family Housing	373.25	75.7664	4.4777	0.0000	187.7080
<b>Total</b>		<b>110.4413</b>	<b>6.5269</b>	<b>0.0000</b>	<b>273.6136</b>

### 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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### 10.0 Stationary Equipment

#### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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#### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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#### User Defined Equipment

Equipment Type	Number
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### 11.0 Vegetation

