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Initial Study /  
Environmental Checklist  
for the  
2020 Glenn County  
Regional Transportation Plan

December 2019



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2020 Glenn County

# *Regional Transportation Plan*

Initial Study / Proposed Negative Declaration

For the

Glenn County  
2020 Regional Transportation Plan

Report Prepared for:  
Glenn County Transportation Commission  
777 N Colusa St  
Willows, CA 95988

Report Prepared by Green DOT Transportation Solutions

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# Introduction

## Project Title

Glenn County 2020 Regional Transportation Plan

## Lead Agency Name and Address

Glenn County Transportation Commission  
777 N Colusa St  
Willows, CA 95988

## Contact Person and Phone Number

Mardy Thomas  
(530) 934-6530

## Project Sponsor's Name and Address

Glenn County Transportation Commission  
777 N Colusa St  
Willows, CA 95988

## Project Location and Setting

The project area consists of the entire County of Glenn. Glenn County is located in the northern Central Valley of California, approximately 75 miles north of Sacramento. The County seat is Willows. Glenn County is comprised of approximately 1,315 square miles making it one of the smaller counties in California. Glenn County is bounded by Tehama County to the north, Mendocino and Lake counties to the west, Colusa County to the south, and Butte County to the east (see Figure 1). The Sacramento River extends along the eastern boundary in a north-south direction and the western quarter of the County rises into the Pacific Coast Range where mountain peaks are in excess of 6,000 feet in elevation. Glenn County includes two incorporated cities (Willows and Orland), nine unincorporated communities (Hamilton City, Ord Bend, Artois, Elk Creek, Butte City, Bayliss, Afton, Codora, and Glenn), and numerous small settlements. The Grindstone Rancheria is located north of the community of Elk Creek and is the official recognized Tribal government in the County.

The County is predominately rural in nature with a predominate amount of land used for agricultural croplands and pasture. Average annual precipitation varies from 15 inches in the southeast portion of the County to as much as 50-60 inches at the highest mountain elevations in the coast range. The automobile is the prevalent mode of travel within the County. The County is served by the Glenn County airport in Willows, the Orland-Haigh airport in Orland, and the Glenn Medical Center in Willows. Travel in Glenn is primarily automobile-oriented due to the rural nature of the local communities, low development densities, and limited options for using non-auto modes of travel.

The roadway network serving the County is comprised of approximately 1,130 miles of streets, roads, and highways. Approximately 110 miles of the system are US Highways and State Routes, 867 miles are County roads, approximately 72 miles are city streets (within the Cities of Orland and Willows), and approximately 81 miles are maintained by federal agencies (e.g., U.S. Forest Service, U.S. Fish and Wildlife Service, etc.).

Interstate 5 is the major north-south highway, supplemented by State Route 45 at the eastern edge of the county and State Route 162 running east-west. Interstate 5 (I-5) traverses north-south through the middle of the Sacramento Valley providing direct access to the cities of Orland, Willows, and points beyond. State Route 45 (SR 45) enters Glenn County on the southeastern side from Colusa County and connects to Hamilton City, where it terminates. State Route 162 (SR 162) traverses the County in an east-west direction and connects Glenn County to Butte County in the east and Mendocino County to the west.

### **General Plan and Zoning**

There are a variety of General Plan Land Use designations applicable throughout the entire County, which includes the entire project area. The proposed project was designed to be consistent with the General Plans of Glenn County, Willows, and Orland. The Circulation Elements from each of these general plans were used as a reference during the development of the Glenn County 2020 Regional Transportation Plan (RTP). The proposed project is consistent with each of these general plans and does not include any proposed changes to the above-referenced general plans.

#### *GLENN COUNTY, WILLOWS AND ORLAND GENERAL PLANS*

There are a variety of General Plan Land Use designations applicable throughout the entire County, which includes the entire project area. The proposed project was designed to be consistent with the General Plans of Glenn County, Willows and Orland. The Circulation Elements from each of these general plans were used as a reference during the development of the Glenn County 2015 Regional Transportation Plan (RTP). The proposed project is consistent with each of these general plans and does not include any proposed changes to the above-referenced general plans.

#### *GLENN COUNTY, WILLOWS AND ORLAND ZONING CODES*

There are a variety of zoning designations applicable throughout the entire County, which includes the entire project area. The proposed project was designed to be consistent with the zoning codes of Glenn County, Willows and Orland.

The goals of each Plan are reinforced in the RTP, which recognizes that future development should occur in areas that have low public service costs, will have the least negative environmental effect, and will not displace or endanger the County's critical natural resources. This approach will also result in lower improvement costs and increased operational efficiency of the existing transportation system because projects will be sized to reflect more compact growth closer to existing or planned services. This will help the County achieve any established greenhouse gas (GHG) targets.

### **Project Description**

The Glenn County Transportation Commission (GCTC) is designated the Regional Transportation Planning Agency (RTPA) for Glenn County. The GCTC and Caltrans (District 3) mutually carry out the transportation planning process for Glenn County. One of the main responsibilities of the GCTC is the preparation and approval of the Regional Transportation Plan (RTP). The RTP serves as the planning blueprint to guide transportation investments in Glenn County involving local, state, and federal funding over the next twenty years. The GCTC last updated the RTP in 2015. The horizon year for the 2020 Glenn County RTP is 2040. Transportation improvements in the RTP are identified as short-term (0-10 years) or long-term (11-20 years).



This update must be consistent with the 2017 Regional Transportation Plan Guidelines, which requires inclusion of program-level outcome- based performance measures and close ties to the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP).

The overall focus of the 2020 RTP is directed at developing a coordinated and balanced multimodal regional transportation system that is financially constrained to the revenues anticipated over the life of the plan. The coordination focus brings the County, Caltrans, cities of Orland and Willows, governmental resource agencies, commercial and agricultural interests, Grindstone Indian Rancheria, and citizens into the planning process. The balance is achieved by considering investment and improvements for moving people and goods across all modes including roads, transit, bicycle, pedestrian, trucking, railroad, and aviation.

The State and the County are at a pivotal moment in creating a new transportation pattern integrated with land use planning. Regions across California have been asked to develop plans for more efficient land use and development to reduce vehicle miles traveled (VMT). This focus is making its way into rural areas as well. Planners generally agree that reducing congestion, commute times, and VMT will lead to reduced carbon emissions while improving the quality of life.

According to the US Census, the population of Glenn County increased by approximately 15.1% each decade from 1970 to 2010. During the 40-year period, the population grew from 17,521 to 28,122. The California DOF projects that the population of Glenn County will increase 11.5% between 2020 and 2040, which translates to an average annual increase of 0.57%. Over the 20 year lifetime of the Regional Transportation Plan, the population of 29,585 is expected to increase to 32,977 by 2040. The GCTC sees an opportunity in slow growth, as future RTP updates can wisely invest available funding in the transportation system. The County can become an even better place to live and work by integrating transportation improvements with land use planning.

### **Purpose of the Plan**

As defined by the 2017 RTP Guidelines, the purpose of the regional transportation plan is to accomplish the following objectives:

- Providing an assessment of the current modes of transportation and the potential of new travel options within the region;
- Projecting/estimating the future needs for travel and goods movement;
- Identification and documentation of specific actions necessary to address regional mobility and accessibility needs;
- Identification of guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing;
- Identification of needed transportation improvements, in sufficient detail, to serve as a foundation for the: (a) Development of the Federal State Transportation Improvement Program (FSTIP, which includes the STIP), (b) Facilitation of the National Environmental Policy Act (NEPA)/404 integration process and (c) Identification of project purpose and need;
- Employing performance measures that demonstrate the effectiveness of the system of

transportation improvement projects in meeting the intended goals;

- Promotion of consistency between the CTP, the RTP and other plans developed by cities, counties, districts, California Tribal Governments, and state and federal agencies in responding to statewide and interregional transportation issues and needs;
- Providing a forum for: (1) participation and cooperation and (2) facilitation of partnerships that reconcile transportation issues which transcend regional boundaries; and,
- Involving community-based organizations as part of the public, Federal, State and local agencies, California Tribal Governments, as well as local elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation. The TCTC prepared this 2019 RTP based on these objectives consistent with the 2017 RTP Guidelines (adopted January 18, 2017).

### **Project Purpose and Need**

The RTP guidelines require that an RTP “provide a clearly defined justification for its transportation projects and programs.” This requirement is often referred to as The Project Purpose and Need Statement. Caltrans’ Deputy Directive No. DD 83 describes a project’s “Need” as an identified transportation deficiency or problem, and its “Purpose” is the set of objectives that will be met to address the transportation deficiency. For Glenn County, each project by mode in Attachment E of the 2020 RTP includes a qualitative assessment of purpose and need indicating a project’s contribution to system preservation, capacity enhancement, safety, and/ or multimodal enhancements. These broader categories capture the intended outcome for projects during the life of the RTP and serve to enhance and protect the “livability” of residents in the County. The following definitions are used in the RTP document.

**System Preservation** – This category of improvement indicates a project that serves to maintain the integrity of the existing system so that access and mobility are not hindered for travelers. Improvements may include bridge repairs, upgrading of existing rail lines, airport runway repairs, and upgrades to signs and traffic control devices and stripping. In addition, because Glenn County is very rural and contains several small communities, the lack of maintenance funding has resulted in a large amount of “deferred maintenance” that has actually lapsed into a serious need to “rehabilitate” roadways to maintain system preservation. Rehabilitation entails primarily overlay and/or chip seal work that can also be considered a safety improvement. The majority of road projects listed indicate either “rehabilitation” or reconstruction” to maintain system preservation.

**Capacity Enhancement** – capacity enhancement indicates a project that serves to increase traffic flows and to help alleviate congestion and improve LOS. This result may be achieved by adding a lane of traffic, adding a passing lane, and/or adding a turn-out for slow-moving vehicles. Because Glenn County experiences large volumes of truck and recreational traffic on many of its roadways, the ability of vehicles to travel at desired speeds is sometimes restricted. Capacity enhancement projects are designed to increase travel speeds and provide for opportunities to pass slower vehicles safely. Additional capacity can also apply to airport projects where runways are added or extended. The desired outcome is to maintain acceptable LOS on State and regionally significant roads, and adequate capacity at the County’s two airports to meet existing and future demand.

**Safety Projects** – Safety improvements are intended to reduce the chance of conflicts between modes, prevent injury to motorists using the transportation system, and to ensure that motorists can travel to their destination in a timely manner. Safety improvements may include roadway and intersection realignments to improve sight-distance, pavement or runway resurfacing to provide for a smooth travel

surface, signage to clarify traffic and aviation operations, congestion relief, obstacle removal so that traffic flows are not hindered, and improvements to pedestrian and bicycle facilities to promote safe travel to desired destinations. In addition, bridge repairs and reinforcement serve to improve safety. The desired outcome is to reduce the incident of collisions on County facilities and the societal costs in terms of injury, death or property damage.

**Multi-modal Enhancement** – These type of improvements focus on non-auto modes of travel such as bicycling, walking and transit. Projects that are designated as multimodal are designed to enhance travel by one or more of these modes, provide for better connectivity between modes, and to improve non-auto access to major destinations and activity centers. Typical projects include separated bike lanes, shared bike routes, sidewalks, transit amenities, street furniture, and signage.

All projects listed in the Action Element and Attachment E of the RTP fall into one of the following designations. It should be noted that projects within each grouping are for the most part in random order. Consequently, the GCTC, County, Cities, and/or Caltrans may change the priority ranking or project scope during the RTP approval process.

- Short Range: RTP improvements represent short-range projects that are fully fundable from anticipated revenue sources, referred to as “constrained”, and will normally be programmed during the first 10 years (0-10 years) of the RTP.
- Long Range: RTP improvements represent long-range projects that are included on the unconstrained or “unfunded” list of projects in Appendix G of the RTP and are planned for programming in the 11-20 year time frame (by the RTP horizon year, 2040).

There are no new roadways proposed as part of the proposed project. The RTP does not directly provide for the implementation of transportation projects and/or facilities. Rather, it identifies necessary improvements in order to provide the best possible transportation/circulation system to meet the mobility and access needs of the entire County.

Due to the regional nature of the RTP, the analysis in this Initial Study focuses on those impacts that are anticipated to be potentially significant on a regional system-wide level. As individual projects near implementation, it will be necessary to undertake project-specific environmental assessments before each project is approved and implemented. Such future environmental review will be required in accordance with CEQA and, if federally funded, NEPA. Adoption of this Initial Study/Negative Declaration and approval of the RTP does not authorize Glenn County, Caltrans, or the cities of Willows and Orland to undertake construction of specific improvement projects identified in the RTP without further environmental review and consideration.

## Regional Goals

The comprehensive goals, objectives, and policies that have been developed for this RTP meet the needs of the region and are consistent with the County’s regional vision and priorities for action, which set the framework for carrying out the roles and responsibilities of the GCTC and assists them in their decision-making process for transportation investment. These objectives are intended to guide the development of a transportation system that is balanced, multi-modal, and will maintain and improve the quality of life in Glenn County.

- Goal 1: Upgrade and maintain existing road system.
  - Policy 1.1: Promote investment in transportation infrastructure.
  - Policy 1.2: Support a high level of state maintenance for Interstate 5.
  - Policy 1.3: Support reducing the potential for flooding of existing arterials and

- collectors to the extent that it is economically feasible.
  - Policy 1.4: Support the development of justified capacity improvements in a timely manner.
- Goal 2: Provide a Safe Transportation System.
  - Policy 2.1: Support the improvement of all state, county, and local roads to adopted design standards.
  - Policy 2.2: Support the implementation of improved safety measures for at-grade rail crossings.
  - Policy 2.3: Promote aviation safety.
  - Policy 2.4: Promote the safety of transit passengers.
- Goal 3: Align financial resources to meet the highest demonstrated transportation needs.
  - Policy 3.1: Support new development through “fair share payments” for required transportation infrastructure.
  - Policy 3.2: Support the development of assessment districts to maintain and/or improve existing road design standards.
  - Policy 3.3: Maintain an effective and safe transportation network.
- Goal 4: Promote Coordination.
  - Policy 4.1: Consider input from the Social Services Transportation Advisory Council (SSTAC) in formulating transportation service policies and programs.
  - Policy 4.2: Support the involvement of the general public in all phases of transportation planning and programming.
- Goal 5: Efficient and Effective Transportation System.
  - Policy 5.1: Promote strategies that result in an efficient and effective transportation system in Glenn County.
  - Policy 5.2: Utilize cost-efficiency guidelines in making decisions about new or existing public transit services.
- Goal 6: Promote Economic Development and Land Use Policies.
  - Policy 6.1: Support the rehabilitation and widening of Forest Highway 7 to two travel lanes west from Highway 162 into Mendocino County.
  - Policy 6.2: Emphasize aviation-related uses on land at the two county-operated airports.
  - Policy 6.3: Support continued operation and expansion where feasible of existing private rail and bus operations.
  - Policy 6.4: Promote the orderly implementation of land use policies not specifically included above.
- Goal 7: Provide Non-Auto Transportation Modes Consistent with Demand and Available Resources.
  - Policy 7.1: Transit planning should include transit services to significant portions of Glenn County including the County airports.
  - Policy 7.2: Support improvements in specialized transportation services (including the acquisitions of new transit vehicles) provided by public and private corporations, as long as adequate coordination between other providers exists.
- Goal 8: Develop a Comprehensive System of Bikeway Facilities to Serve Glenn County.
  - Policy 8.1: Identify and serve existing and future bicycle travel demand for commuters and recreational purposes.
  - Policy 8.2: Promote a bikeway system that is cost-effective to construct, easy to maintain, respects landowners, utilities, and special districts' property rights, and minimizes the potential for conflicts with other types of vehicles and other recreational users.
- Goal 9: Increase the efficiency of the existing transportation system and Implement

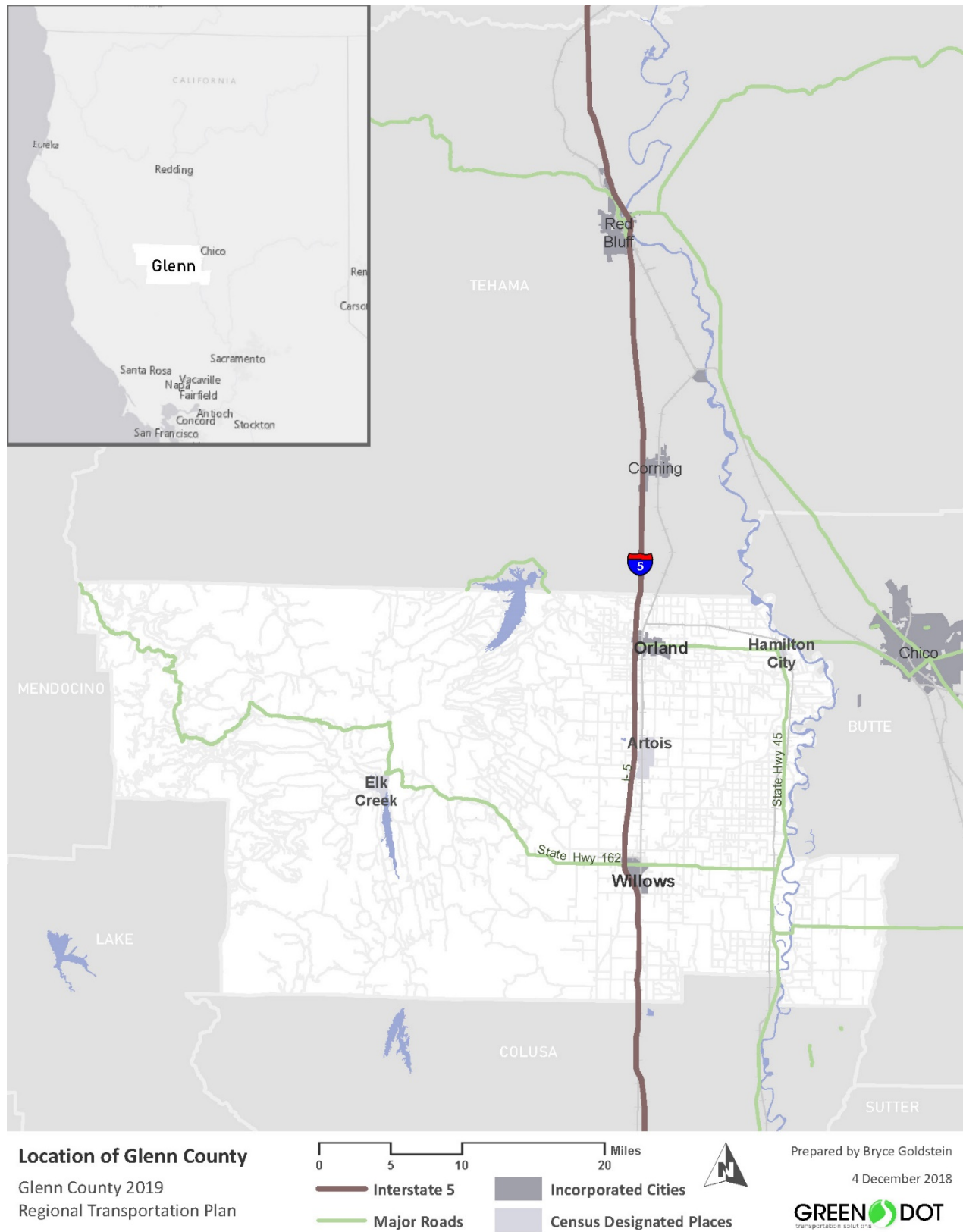
Transportation System Management (TSM) techniques where feasible.

- Policy 9.1: Manage the transportation system to achieve desired speeds and travel times in recognition of funding resources and environmental objectives of the County.
  - Policy 9.2: Promote access management and accident scene management measures to increase traffic flow.
- Goal 10: Reduce the Demand for Single Occupant Vehicle Travel through Transportation Demand Management (TDM) Techniques.
  - Policy 10.1: Promote public awareness of transit and rideshare opportunities through media and promotional events.
  - Policy 10.2: Increase the mode share for public transit by 5 percent by 2039.
- Goal 11: Improve Livability in the County through Land Use and Transportation Integration and Decisions that Encourage Walking, Transit, and Bicycling.
  - Policy 11.1: Encourage all County entities to actively participate in the RTP update process to ensure that all modal issues are addressed.

### **Other Public Agencies Whose Approval Is Required (e.g., Permits, etc.)**

Glenn County will be the Lead Agency for the proposed project pursuant to the California Environmental Quality Act (CEQA), Section 15050. No specific permits are required to approve the proposed project. Future permit approvals vary among projects and may include, but are not necessarily limited to: Caltrans, CA Department of Fish and Wildlife, Regional Water Quality Control Board, Bureau of Reclamation, Bureau of Land Management, US Army Corps of Engineers, US Fish and Wildlife Service, Federal Highway Administration, Federal Aviation Administration, and the California Transportation Commission.

Figure 1: Regional Location Map



## Environmental Factors Potentially Affected

None of the environmental factors listed below would be potentially affected by this project, as described on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources		Cultural Resources		Geology /Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Utilities / Service Systems		Tribal Cultural Resources
	Mandatory Findings of Significance				

## Determination

On the basis of this initial evaluation:

X	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Mathew Boyer, Executive Director

Date

## Evaluation of Environmental Impacts

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- **Potentially Significant Impact.** This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- **Less than Significant With Mitigation.** This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- **Less than Significant Impact.** A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- **No Impact.** These issues were either identified as having no impact on the environment, or they are not relevant to the Project.



## Environmental Checklist

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 17 environmental topic areas.

### I. AESTHETICS – WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

### SETTING

Glenn County is characterized by rolling foothills, fertile valleys, and vast rangelands. Views of the Sutter Buttes, Coastal Range, Sierra Nevadas, waterways, farmland, and other scenic resources are available from highways and roadways throughout the County. The region's economy is largely dependent on these diverse natural settings, and they are a significant reason why many residents choose to live in Glenn County. The Glenn County General Plan envisions conservation rather than development of open lands, and the RTP aligns with this vision by programming transportation system improvements rather than expansion.

### RESPONSES TO CHECKLIST QUESTIONS

**Response a-d): Less than Significant.** The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. There are no new roadways proposed as part of the 2020 RTP update, and as such, the proposed project would not lead to indirect population growth as a result of access improvements into areas that are currently undeveloped.

The proposed project identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Implementation of the proposed project would not result in significant or adverse changes to the visual quality of the county, and would not result in the introduction of increased nighttime lighting or daytime glare. This is a less than significant impact and no mitigation is required.

## II. AGRICULTURAL RESOURCES --WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non- agricultural use?				X

### SETTING

With over 1,188 farms (Glenn County, 2019), agriculture remains the primary source of Glenn County's economy. Major commodities include rice, almonds, milk products, livestock, walnuts, prunes, olives, and apiary products. According to the 2018 Glenn County Annual Crop and Livestock Report, the 2018 gross production of agricultural commodities was valued at \$729,125,000. This represents a 13.1% decrease from the 2017 gross agricultural production value of \$839,509,000. The top five highest value agricultural crops for Glenn County in 2018 were almonds, rice, walnuts, dairy, and apiary products.

Agriculture also supported 4,182 direct employees, or nearly one out of every three jobs in the county (30.2%) in 2017, according to the 2019 Glenn County Crop Report Plus Series Economic Contributions of Glenn County Agriculture.

### RESPONSES TO CHECKLIST QUESTIONS

**Response a): No Impact.** Implementation of the proposed project would allow for roadway and multimodal transportation improvements throughout the County over the next 20 years. The proposed project would not result in the conversion of any agricultural lands to non- agricultural uses, and as such, would have no impact on any Prime Farmland, Unique Farmland or Farmland of Statewide importance. There is no impact and no mitigation is required.

**Response b): No Impact.** The proposed project does not propose any changes to General Plan land use designations or zoning districts, and would have no impact on zoning for agricultural use. The proposed project would not result in conflicts with any Williamson Act contracts, nor would it result in the cancellation of any Williamson Act contracts. Implementation of the proposed project will have no impact on a Williamson Act contract, and no mitigation is required.

**Response c): No Impact.** See responses a) and b) above. The proposed project will have no impact on agricultural lands or operations.

### III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

#### SETTING

Glenn County is located within the Sacramento Valley Air Basin (SVAB). The SVAB is the northern half of California's Great Valley and is bordered on three sides (west, north, and east) by mountain ranges, with peaks in the eastern range above 9,000 feet. SVAB is approximately 13,700 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County, which rise abruptly to more than 2,100 feet above the valley floor.

The SVAB consists of nine counties and is split into two planning sections based on the degree of pollutant transport from one area to the other and the level of emissions within each area. The Glenn County area belongs to the Northern Sacramento Valley Air Basin (NSVAB), which is composed of the seven northernmost counties of the SVAB. These counties include Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba. The air basin of the Sacramento Valley is about 200 miles long in a north-south direction, and has a maximum width of about 150 miles, although the width of the valley floor only averages about 50 miles.

Based on the 2018 Air Resources Board Area Designation Maps, Glenn County is currently non-attainment for state PM10 standards, but unclassified for federal PM10 standards. Primary sources of PM10 pollution include wood stoves, open and prescribed burning, wind-blown dust generated from unpaved roads and agriculture. Glenn County is in attainment for state ozone standards, but unclassified for federal 8-hour ozone standards. The district is either in attainment or unclassified for all other monitored air pollutants.

Ozone violations are caused in part, by combustion sources, and are occasionally influenced by smoke impacts due to nearby wildfires. The primary emission source is the internal combustion engine. The ozone problem is further aggravated by transport from the Broader Sacramento Area (BSA), which is comprised of all of the Sacramento Metropolitan AQMD, Yolo-Solano AQMD and a portion of El Dorado, Placer and Sutter counties. Ozone is formed by a photochemical reaction of nitrogen oxides and reactive organic gases. These ozone precursors are emitted as part of the exhaust of internal combustion engines in the NSVAB and BSA and transported northward via prevailing winds. Due to the regional nature of the

ozone problem and the fact that the NSVAB counties share the same air basin with BSA, the Attainment Plan is prepared in conjunction with the Sacramento Valley Air Basin Control Council's Technical Advisory Committee (TAC).

#### *Glenn County Air Pollution Control District*

The administration of air quality regulations in Glenn County is handled by the Glenn County Air Pollution Control District (APCD), a division of the County's Agriculture Department. The APCD is responsible for the preparation of plans for the attainment and maintenance of Ambient Air Quality Standards (AAQS), adoption and enforcement of rules and regulations for sources of air pollution, and issuance of permits for stationary sources of air pollution.

The APCD also inspects stationary sources of air pollution, regulates agricultural burning, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by federal and state air quality regulations.

The APCD works to ensure a coordinated approach in the development and implementation of transportation plans throughout the County. This coordination ensures compliance with pertinent provisions of the federal and state Clean Air Acts, as well as related transportation legislation (such as the Intermodal Surface Transportation Efficiency Act, Transportation Conformity, and Transportation Improvement Plans).

#### *Northern Sacramento Valley Air Quality Attainment Plan*

The California Clean Air Act (CCAA) of 1988 requires air districts to endeavor to achieve and maintain the state ambient air quality standards by the earliest practicable date and to develop plans for attaining the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. It is the responsibility of each air pollution control district and air quality management district within the State to attain and maintain California's ambient air quality standards. The CCAA requires that an Attainment Plan (Plan) be developed by all non-attainment districts for ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur oxides (SO<sub>x</sub>), and nitrogen oxides (NO<sub>x</sub>) that are either receptors or contributors of transported air pollutants. The purpose of the Plan is to comply with the requirements of the CCAA as implemented through the California Health and Safety Code (HSC). Districts are required to update the Plan every three years.

The Northern Sacramento Valley (NSV) is classified as a moderate nonattainment area for State ozone standard. The NSV comprises the northern portion of the Sacramento Valley Air Basin and includes the counties of Butte, Colusa, Glenn, Tehama, Shasta and the northern portions of Yuba & Sutter (Feather River Air Quality Management District). The NSV is generally rural in nature, with a low population density and a predominately agricultural economy. Its industrial base is dominated by agricultural/construction support operations, although small scale manufacturing is also found throughout the region.

Health and Safety Code (HSC) section 41503(b) requires that control measures for the same emission sources be uniform throughout the air basin. To meet this requirement the NSV has coordinated the development of the Plan and established specific rule adoption protocols through the Technical Advisory Committee (TAC) of the Sacramento Basinwide Control Council.

#### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-e): Less Than Significant.** It is the intention of the RTP to rehabilitate the current road base and improve existing and future circulation within the County wherever possible. With this focus,

improvements in the RTP may benefit regional air quality by reducing congestion on major roads within the County. Some of the route improvements contemplated in the RTP could have direct impacts on air quality, sensitive receptors, or create objectionable odors on a project-specific basis during construction. The Clean Air Act sets national ambient air quality standards for various air pollutants, including carbon monoxide, ozone, oxides of nitrogen, sulfur dioxide and particulate matter.

Individual projects contemplated in the RTP will be subject to project-level environmental review prior to approval and construction. Measures, such as construction best management practices (BMPS), may be required for individual projects to reduce temporary short-term construction related impacts to air quality.

The project would not result in any indirect or cumulatively adverse impacts on air quality, as the project would not result in increased vehicle trips within the County or an overall increase in vehicle miles travelled as a result of implementation of the RTP.

The proposed project would not conflict with or obstruct the implementation of the air quality plan, or violate any air quality standard.

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 known as the California Global Warming Solutions Act (Section 38560.5 of the Health and Safety Code). The bill establishes a cap on statewide greenhouse gas emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels.

In January 2007, the Legislature asked the CTC to review the RTP guidelines to incorporate climate change emission reduction measures. The request emphasized that RTPs should utilize models that accurately measure the benefits of land use strategies aimed at reducing vehicle trips and/or trip length. The CTC staff established an RTP guidelines work group to assist in the development of “best practices” for inclusion in the RTP Guidelines. The 2017 RTP Guidelines provides several recommendations for consideration by rural RTPAs to address GHG. The following strategies from the 2017 RTP guidelines have specific application to Glenn County.

- Implement operational efficiencies that reduce congestion in vehicle throughput on roadways or improve transit access or other alternative access without physical expansion of the roadways.
- For purposes of allocating transportation investments, recognize the rural contribution towards GHG reduction for counties that have policies that support development within their cities, and protect agriculture and resource lands. Consideration should be given to jurisdictions that contribute towards these goals for projects that reduce GHG or are GHG neutral, such as safety, rehabilitation, connectivity and for alternative modes.
- In setting priorities, consider transportation projects that increase efficiency, connectivity and/or accessibility or provide other means to reduce GHG.
- In setting priorities, consider transportation projects that provide public health co-benefits.
- Emphasize transportation investments in areas where desired land uses as indicated in a city or County general plan may result in vehicle miles traveled (VMT) reduction or other lower impact use.
- Employ “Fix It First” policies to ensure that preventive maintenance and repair of existing transit and roads are the highest priority for spending, to reduce overall maintenance costs, and to support development in existing centers and corridors.

The transportation planning literature recognizes three interrelated components that contribute to transportation emissions reductions. Those components include changes in vehicle technology (cleaner burning engines), alternative fuel sources, and vehicle use. The first two components are typically the responsibility of industry and national governmental interests. RTPAs and local governments have the ability to affect vehicle use by promoting transportation alternatives to the automobile, and by managing the demand for transportation. These efforts typically involve goals and policies and/or projects and programs focused on getting people out of their cars and into non-auto modes of travel (mode shifting).

The following RTP goals are established for Glenn County to increase safety while reducing dependence on the automobile and to promote mode shifting to other forms of transportation.

- Goal 1: Upgrade and maintain existing road system.
- Goal 2: Provide a Safe Transportation System.
- Goal 3: Align financial resources to meet the highest demonstrated transportation needs.
- Goal 4: Promote Coordination.
- Goal 5: Efficient and Effective Transportation System.
- Goal 6: Promote Economic Development and Land Use Policies.
- Goal 7: Provide Non-Auto Transportation Modes Consistent with Demand and Available Resources.
- Goal 8: Develop a Comprehensive System of Bikeway Facilities to Serve Glenn County.
- Goal 9: Increase the efficiency of the existing transportation system and Implement Transportation System Management (TSM) techniques where feasible.
- Goal 10: Reduce the Demand for Single Occupant Vehicle Travel through Transportation Demand Management (TDM) Techniques.
- Goal 11: Improve Livability in the County through Land Use and Transportation Integration and Decisions that Encourage Walking, Transit, and Bicycling.

The effectiveness of efforts by the RTPA to provide transportation alternatives and to implement TDM and TSM policies and strategies can be measured in terms of reductions in VMT or the expected growth in VMT. VMT reductions correlates directly with reductions in GHG emissions.

Caltrans reports VMT by County on an annual basis (Figure 2). The daily vehicle miles traveled on County roads decreased by 4.69% between 2010 and 2017, or an average of -0.7% per year (see Table 2.18). During the same time period, the City of Orland saw an annual average decrease of 3.5% while the City of Willows experienced a decrease of 1.3%. Daily VMT decreased on all County and City roadways between 2010 and 2017. Only state highways increased in VMT during this time period.

Figure 2: Daily Vehicle Miles Travelled

Table 2.18 Vehicle Miles Traveled (VMT)								
Jurisdiction	Lane Miles	2010 Daily VMT	2012 Daily VMT	2014 Daily VMT	2016 Daily VMT	2017 Daily VMT	Change, 2010 - 2017	Average Annual Change
City of Orland	38.73	34.09	34.09	34.53	28.96	25.77	-24.41%	-3.5%
City of Willows	37.25	48.49	48.21	49.20	44.07	43.91	-9.45%	-1.3%
Bureau of Indian Affairs	1.25	0.05	0.05	0.05	0.01	0.01	-80.00%	-11.4%
State Highways	109.91	974.16	908.66	939.55	1,028.21	1,028.21	5.55%	0.8%
U.S. Army	0.47	0.98	0.98	0.00	0.01	0.01	-98.98%	-14.1%
U.S. Bureau of Fish & Wildlife	5.69	0.20	0.20	0.20	0.06	0.05	-75.00%	-10.7%
U.S. Forest Service	91.09	1.81	1.81	1.79	0.91	0.91	-49.72%	-7.1%
Glenn County	926.82	303.27	305.22	307.93	427.47	289.05	-4.69%	-0.7%
<b>Total</b>	<b>1,211.19</b>	<b>1,363.05</b>	<b>1,299.22</b>	<b>1,333.25</b>	<b>1,529.70</b>	<b>1,387.92</b>	<b>1.82%</b>	<b>0.3%</b>

Source: 2010 - 2017 California Public Road Data

Using the figures calculated for the average annual change in VMT, future VMT was projected over the lifetime of this Plan (2020-2040). As seen in Table 2.20, VMT is expected to continue to drop for the City of Orland and County roadways. VMT on City of Willows roadways is expected to increase slightly, however the majority of the increase in traffic in Glenn County is expected to occur on state highways. Overall, the VMT in the County is estimated to increase from 1,399 to 1,510 between 2020 and 2040, which equates to an increase of 7.9% or an average of 0.40% annually.

Figure 3: Projected Vehicle Miles Traveled

Table 2.20 Projected Vehicle Miles Traveled (VMT)							
Jurisdiction	Lane Miles	Daily VMT					
		2017	2020	2025	2030	2035	2040
City of Orland	38.73	25.77	25.00	23.78	22.61	21.51	20.45
City of Willows	37.25	43.91	44.04	44.27	44.50	44.73	44.96
Bureau of Indian Affairs	1.25	0.01	0.01	0.01	0.01	0.01	0.00
State Highways	109.91	1,028.21	1,054.36	1,099.43	1,146.42	1,195.43	1,246.52
U.S. Army	0.47	0.01	0.01	0.01	0.01	0.01	0.00
U.S. Bureau of Fish & Wildlife	5.69	0.05	0.05	0.05	0.04	0.04	0.04
U.S. Forest Service	91.09	0.91	0.67	0.41	0.25	0.15	0.09
Glenn County	926.82	289.05	275.19	253.56	233.62	215.25	198.33
<b>Total</b>	<b>1,211.21</b>	<b>1,387.92</b>	<b>1,399.34</b>	<b>1,421.50</b>	<b>1,447.46</b>	<b>1,477.11</b>	<b>1,510.40</b>

Source: 2010 - 2017 California Public Road Data

Based on the guidelines established in the 2017 RTP guidelines, the County is not required to run a network travel demand model to estimate VMT. Glenn County falls in the RTP Modeling Improvement Program Category 1, with attainment Air Quality (AQ), slow growth in population and jobs, little or no congestion, and no significant capacity-enhancing projects or limited transit expansion plans or areas of non-attainment due to transport. These counties are not required under federal or state statute or regulation to develop network travel model.

MPOs, RTPAs, and congestion management agencies are organized into travel analysis groups based on

federal and state laws. Group A includes Regional transportation planning agencies identified as Isolated Rural Attainment Areas (A1) and Isolated Rural Nonattainment or Maintenance Areas (A2). RTPAs that fall within the A grouping are not required to conduct federal air quality conformity analysis as part of their RTP development. Caltrans is required to perform project-level air quality conformity analysis for regionally significant federal funded projects. Glenn County is within the A grouping and is completely identified as A1.

The guidelines cite the lack of road congestion and the fact that emission changes from higher-MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board as part of AB 32.

The Glenn County 2020 RTP recognizes that TDM and other non-auto mobility options, including walking, biking and transit, require coordinated land use decisions and improved infrastructure. To this degree, the goals and policies in the RTP are consistent with the City of Willows General Plan, City of Orland General Plan, and the Glenn County General Plan to provide a balanced multi-modal transportation system that includes non-auto choices for access and mobility.

The County is committed to implementing these types of policies and strategies that reduce reliance on the automobile and contribute to the reduction of GHG. As such, the proposed project would result in less than significant impacts to air quality and global climate change, and no mitigation is required.



#### IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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 Wildlife or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) 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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

#### SETTING

Glenn County extends from high elevations (+7,000 feet) in the east slope of the North Coast Range to the low elevations in the broad flat alluvial plain of the Sacramento Valley. As a result of such major changes in elevation, Glenn County includes a great variety of climatic, soils and geographic conditions which, in turn, influence the distribution, variety, and abundance of the plant and animal species within the County.

The variety of vegetative cover types in the County provide habitat for many different types of wildlife. Of particular significance is the large expanse of deer range located in western Glenn County and the winter waterfowl habitat located within and surrounding the Sacramento National Wildlife Refuge. Three major deer herds are located in the area, the Clear Lake Deer Herd, the Alder Springs Deer Herd, and the East Park Capay Deer Herd. The Alder Springs and East Park Capay herds are the principal herds within Glenn County and include resident and migratory Columbia blacktail and California mule deer. The migratory deer spend summers at high elevations in the North Coast Range and migrate to lower elevations in the winter.

The winter waterfowl habitat of the Sacramento National Wildlife Refuge is administered by the U.S. Fish and Wildlife Service (USFWS), encompassing over 10,000 acres and providing winter migratory habitat for over one million birds at the peak of migration (December-January). The most abundant waterfowl include pintail, mallard, pigeon, snow geese, white-fronted geese, and cackling geese.

Within the Mendocino National Forest, the Forest Service maintains a habitat management program, the main objective of which is to maintain or enhance viable populations of fish and wildlife species. To ensure that viable populations of all species are maintained, several species have been selected as "management indicator species" (MIS) to function as barometers for wildlife communities. These include species designated as Sensitive by the Forest Service, species of local interest, and species listed as Threatened or Endangered by either the Federal or State government. These include the bald eagle, peregrine falcon, and spotted owl (Threatened/Endangered); fisher, goshawk and marten(sensitive), black-tailed deer, douglas tree squirrel and western gray squirrel (harvest); tule elk (special interest); and acorn woodpecker, pileated woodpecker, and California thrasher (maintenance).

The major aquatic resources found in Glenn County include the Sacramento River, Stony Creek, Wilson Creek, Willow Creek, Grindstone Creek, Elk Creek, Black Butte Reservoir, and Stony Gorge Reservoir. Drainages within the County are segments of the Central Valley subsystem of the Sacramento-San Joaquin drainage system. These resources include a variety of aquatic habitat types, including high altitude streams, rivers, reservoirs, sloughs, farm ponds, and marshes.

High elevation streams along the east slope of the North Coast Range are occupied by species adapted to the cool, swift-moving, highly oxygenated waters. Such species include rainbow trout, brook trout, riffle sculpin, and speckled dace. Foothill streams generally flow in winter, but are intermittent in the summer. California roach are the typical native species of these streams due to their tolerance of low oxygen and high water temperatures; however, green sunfish and fathead minnows can also be found and, in winter, Sacramento suckers, squawfish, and other minnows may spawn and over summer in pools. The rivers and sloughs contain the widest variety of species, including resident and anadromous species.

Typical native anadromous species include Pacific lamprey, white sturgeon, chinook salmon, and steelhead trout. Resident native species include Sacramento blackfish, hardhead, hitch, Sacramento squawfish, California roach, Sacramento sucker, and Sacramento perch. Significant introduced species include threadfin and American shad, brown trout, carp, golden shiner, fathead minnow, channel catfish, black bullhead, mosquitofish, striped bass, black crappie, white crappie, green sunfish, bluegill, smallmouth bass, and largemouth bass. The principal reservoirs in the County, Black Butte and Stony Gorge, provide a typical warm water fishery including largemouth bass, smallmouth bass, white crappie, black crappie, channel catfish, striped bass, bluegill, carp, and Sacramento squawfish.

### *State Wildlife Action Plan*

The goals identified in the Policy Element (Chapter 3) of this Plan consider stressors identified in the State Wildlife Action Plan. The State Wildlife Action Plan (SWAP) identifies separate conservational provinces broken into subzones called ecoregions. Glenn County crosses through the Central Valley and Sierra Nevada Province and the North Coast and Klamath Province.

In the Central Valley and Sierra Nevada Province, Glenn County is classified within the Great Valley ecoregion; in the North Coast and Klamath Province, Glenn County is classified within the Northern California Coast Ranges and the Northern California Interior Coast Ranges ecoregions. The SWAP identifies sensitive species, habitat stressors, and suggested conservation goals and actions for each of

the ecoregions in California. According to the SWAP, the major stressors within Glenn County are as follows:

- Agricultural and forestry effluents.
- Annual and perennial non-timber crops.
- Climate change.
- Commercial and industrial areas.
- Dams and water management/use.
- Fire and fire suppression.
- Household sewage and urban waste water.
- Housing and urban areas.
- Invasive plants/animals.
- Livestock, farming and ranching.
- Logging and wood harvesting.
- Parasites/pathogens/diseases
- Recreational activities.
- Roads and railroads.
- Utility and service lines.

*California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB)*

A review was performed of county-wide species using the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB). The information in the species list includes known occurrences and historical occurrences of species listed as threatened, endangered or otherwise protected under policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA, §15380).

The CNDDDB County Species List for Glenn County contains 120 total animal and plant species and communities within Glenn County. Of these, 23 species are classified by the CDFW as Fully Protected, Species of Special Concern, or Watch List. The CNDDDB list also contains 6 species federally listed as endangered, and 10 federally threatened. 1 species is listed by the State as Candidate Threatened, 7 as endangered, and 6 as threatened. Many of the above-listed species are recognized in two or more classifications.

## RESPONSES TO CHECKLIST QUESTIONS

**Response a-f): Less than Significant.** The proposed project does not propose the construction of new roadways in areas of the County that have previously been undisturbed. Nearly all of the roadway projects identified in the RTP consist of rehabilitation efforts, which would occur within the roadbeds of the existing roadways, and would not have the potential to impact any special status species or habitat. Individual projects identified in the RTP that may include the widening of a particular roadway would be subject to project-level environmental review prior to approval and construction of the improvements. This future project-level environmental review of individual projects would identify the potential for impacts to any special status species, habitat, or wetlands. As such, implementation of the proposed project would not directly or indirectly impact any biological resources, wetland resources, or conflict with any habitat conservation plan or local ordinance protecting natural and biological resources. This is a less than significant impact and no mitigation is required.

## V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

### SETTING

Glenn County was incorporated on March 5, 1891. The County seat, Willows, was created March 11, 1891. Glenn County was developed out of the northern portion of Colusa County and was named for Dr. Hugh J. Glenn, who was the largest wheat farmer in the state during his lifetime, and a man of great prominence in political and commercial life in California (Glenn County, 2019).

There is currently one federally recognized Tribal entity in Glenn County. The Grindstone Indian Rancheria of Wintun-Wailaki Indians of California has headquarters in the unincorporated community of Elk Creek. In addition, the Colusa Indian Community Council has cultural ties to Glenn County. Cooperative planning between Tribal governments, regional and local agencies and Caltrans was achieved during the planning process of this document.

Prehistoric and historic resources are valuable to the people of Glenn County in various ways: recreation opportunities, community identity, aesthetic beauty, spiritual importance, and historic interest. Prehistoric, historic, and contemporary cultural resources could be located anywhere within the County. No comprehensive inventory of cultural resource sites within Glenn County exists.

### RESPONSES TO CHECKLIST QUESTIONS

**Response a-d): Less than Significant.** The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. The proposed project identifies roadway and multimodal transportation improvement funding priorities that will be implemented over the next 20 years. Nearly all of the roadway projects identified in the RTP consist of rehabilitation efforts, which would occur within the roadbeds of the existing roadways, and would not have the potential to impact any known or previously undiscovered cultural resources. Individual projects identified in the RTP that may include the widening or a particular roadway would be subject to project-level environmental review prior to approval and construction of the improvements. This future project-level environmental review of individual projects would identify the potential for impacts to any cultural, historical, paleontological or archaeological resources. This is a less than significant impact and no mitigation is required.

## VI. GEOLOGY AND SOILS -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) 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?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	

## SETTING

Glenn County topography is typified by steeper terrain in the western portion of the County trending down to relatively flat features along its eastern boundary. Two major geologic provinces exist within the County and have a major influence on the County's topography. They are the Sacramento Valley which generally characterizes the eastern third of the County, and the Coast Range which dominates the western two-thirds.

The Sacramento Valley consists of nearly level terraces, smooth alluvial fans, narrow flood plains and water filled basins. Elevation ranges from approximately 100 feet above mean sea level (MSL) at the Sacramento River to approximately 300 feet above MSL at the western edge of the Valley, west of Interstate 5. A small portion of southeastern Glenn County, in the vicinity of Butte City, is located east of the Sacramento River. This is essentially an area of level flood plains and basins with little discernible

slope.

West of the Valley province is the Coast Range, which can be further subdivided into the rolling terrain of the Coast Range foothills which increase in elevation from the easterly edge of the Valley to approximately 2,000 feet, and the mountainous Coast Range which rises to an elevation of almost 7,500 feet above MSL at Black Butte Mountain. The foothills consist of smooth, rolling to steep hills and narrow valleys with distinct areas of south to north drainage. Much of the mountainous region to the west of the foothills ranges above 6,000 feet and includes a portion of the crest of the Coast Range.

Similar to the County's terrain, rock types can be broadly divided into three different units which increase in age from east to west. In the east, geologic materials consist primarily of unconsolidated Pleistocene and Recent sediments (Qal) including alluvial fan deposits, stream channel deposits of the Sacramento River and inland basin deposits. Exposed at the lower elevations of the foothills are Tertiary sediments, primarily consisting of Pliocene sediments with some continental volcanics. At the higher foothill elevations, exposed outcrops are Cretaceous and Jurassic marine and non-marine sedimentary rocks, while the western mountainous region of the County is formed mainly of deformed Jurassic marine sediments and volcanic.

Glenn County is exposed to minimal seismic hazards due to its geographic location. Glenn County has been shaped by several earthquake fault zones (California Department of Conservation 2010). However, no displacement has occurred along these faults recently and there are no active or potentially active faults within Glenn County.

According to the General Plan Public Safety Element, Geologic Hazards in Glenn County include the potential for landslides, subsidence, erosion, and soil expansion. When compared to other areas of the State, the county is in a relatively inactive seismic area. The areas of highest apparent landslide potential are in the mountain and foothill regions. The eastern portion of the county has the most potential for subsidence activity due to groundwater withdrawal and natural gas extraction. The potential for water runoff-related erosion occurs both in the foothill areas and on the valley floor along streambanks. Much of the county contains expansive soils.

## RESPONSES TO CHECKLIST QUESTIONS

**Responses a-e): Less than Significant.** Seismicity is directly related to the distribution of fault systems within a region. Depending on activity patterns, faults and fault-related geologic features may be classified as active, potentially active, or inactive. The entire State of California is considered seismically active and is susceptible to seismic ground shaking, however, the most highly active fault zones are along the coastal areas.

*Fault Rupture.* A fault rupture occurs when the surface of the earth breaks as a result of an earthquake, although this does not happen with all earthquakes. These ruptures generally occur in a weak area of an existing fault. Ruptures can be sudden (i.e. earthquake) or slow (i.e. fault creep). The Alquist-Priolo Fault Zoning Act requires active earthquake fault zones to be mapped and it provides special development considerations within these zones. While fault rupture is possible throughout seismically active areas of California, there are no Alquist-Priolo Fault zones within Glenn County.

*Seismic Ground Shaking.* The potential for seismic ground shaking in California is expected. As a result of the foreseeable seismicity in California, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. These

seismic design provisions require enhanced structural integrity based on several risk parameters. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed project would result in a less than significant impact from seismic ground shaking.

*Liquefaction.* Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet. Most areas of Glenn County are considered to be at a low risk of hazards from liquefaction. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed project would result in a less than significant impact from liquefaction.

*Landslides.* Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The projects identified in the RTP consist primarily of roadway maintenance and improvement projects, and would occur within the existing right of way of the County's roadway system. As such, the potential for impacts related to landslides is considered less than significant.

*Lateral Spreading.* Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Glenn County is considered to be at a low risk of hazards of lateral spreading. Any future roadway improvements implemented as a result of adoption of the RTP would be subject to detailed engineering requirements to ensure structural integrity consistent with the requirements of state law. As such, implementation of the proposed project would result in a less than significant impact from lateral spreading.

*Erosion.* Erosion naturally occurs on the surface of the earth as surface materials (i.e. rock, soil, debris, etc.) is loosened, dissolved, or worn away, and transported from one place to another by gravity. Two common types of soil erosion include wind erosion and water erosion. The steepness of a slope is an important factor that affects soil erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover. Future roadway improvement projects would be required to implement measures during construction, including various BMPs, that would reduce potential impacts related to erosion. This is considered a less than significant impact.

*Expansive Soils.* Expansive soils are those that shrink or swell with the change in moisture content. The volume of change is influenced by the quantity of moisture, by the kind and amount of clay in the soil, and by the original porosity of the soil. Glenn County contains many regions with expansive soils. Shrinking and swelling can damage roads and structures unless special engineering design is incorporated into the project plans.

*Septic Tanks.* Implementation of the RTP would not result in the use or expansion of any septic

systems. Implementation of the proposed project would have a less than significant impact on this environmental topic, and no mitigation is required.



## VII. GREENHOUSE GAS EMISSIONS -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

### SETTING

According to the US Census, the population of Glenn County increased by approximately 15.1% each decade from 1970 to 2010. During the 40-year period, the population grew from 17,521 to 28,122. The California DOF projects that the population of Glenn County will increase 11.5% between 2020 and 2040, which translates to an average annual increase of 0.57%. Over the 20 year lifetime of the Regional Transportation Plan, the population of 29,585 is expected to increase to 32,977 by 2040.

Based on this trend and the guidelines established in the 2017 RTP guidelines, the County is not required to run a network travel demand model to estimate Vehicle Miles Traveled (VMT). The guidelines cite the lack of road congestion and the fact that emission changes from higher-MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board as part of AB 32.

### RESPONSES TO CHECKLIST QUESTIONS

**Response a) and b): Less than Significant.** As described above, population growth in Glenn County has been low over the past decade, and this trend is anticipated to continue through 2040. As a result of the County's low historic and projected population growth, increases in VMT are anticipated to remain low as well. The RTP includes numerous goals related to the increase in multi-modal transportation options, which reduce dependence on the automobile, and may subsequently result in decreases in total VMT throughout the County.

The RTP includes goals, policies, and strategies aimed at reducing greenhouse gas emissions in Glenn County. RTP projects such as roadway and bridge repairs are necessary to maintain a safe regional transportation system and to prevent deterioration of roadways and bridges which may require costlier repairs in the future. These projects will not result in greater traffic volumes along state highways, County roads or city streets. To the degree that keeping an existing travel route open avoids travel via longer alternative routes that would accompany a closure, maintaining existing roadways and bridges can help to avoid increases in VMT. The RTP also includes long-term bicycle and pedestrian improvement projects which will create more bicycle and pedestrian friendly communities and potentially further reduce VMT. The RTP also includes public transit elements. By expanding alternative forms of transportation, Glenn County is in-line with statewide climate change goals. The RTP is a programmatic document and the proposed projects will be reviewed on a project-by-project basis, therefore there is no potential for significant impact.

# **VIII. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:**

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?			X	
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 for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

## **SETTING**

The State of California has adopted U.S. DOT regulations for the intrastate movement of hazardous materials; State regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR). Both regulatory programs apply in California. The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the CHP and Caltrans. The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the State that can respond quickly in the event of a spill. Additionally, the Glenn County Public Health Department serves the public in an effort to protect

the health and welfare of the general public and environment through prevention and control of disease and pollutants.

## RESPONSES TO CHECKLIST QUESTIONS

**Responses a-c): No Impact.** A “hazardous material” is a substance or combination of substances that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a potential hazard to human health or the environment when handled improperly. The proposed project does not propose new development or any use that would result in the transport, use, or disposal of hazardous materials. Furthermore, the proposed project would not result in a foreseeable upset, accident, or emission of hazardous materials. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

**Responses d): Less than Significant.** There is one location in Glenn County that is registered with the Department of Toxic Substances Control and included on the Cortese List. The site consists of a single building at 726 Fifth Street in Orland, Glenn County California. Orland Cleaners is the apparent source of a groundwater plume that extends approximately 1.8 miles from the source in a southeast direction in the direction of groundwater flow to a depth up to 120 feet below ground surface. The plume is approximately 2100 feet wide.

Three LUST Cleanup Sites exist in Glenn County according to the Water Board GeoTracker database. Additionally, four sites in Glenn County are listed by the Water Board as having active Cleanup and Abatement Orders concerning waste that may include hazardous materials. None of the proposed improvements in the RTP would occur within the vicinity of these sites. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

**Response e-f): Less than Significant.** The Action Element of the RTP includes a list of proposed improvement projects related to aviation facilities in the County. The proposed aviation facility improvements consist primarily of rehabilitation efforts, and the implementation of other ancillary improvements such as fencing, lighting, etc. All improvements to aviation facilities within the County identified in the RTP are consistent with the applicable airport land use plans (ALUPs) and would not result in changes to the aviation and flight patterns surrounding County aviation facilities. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

**Response g): Less than Significant.** The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The improvements identified in the RTP would improve the transportation network in Glenn County, which would serve to improve emergency response times countywide. Construction activities associated with projects identified within the RTP may result in temporary lane closures that may temporarily impede emergency access to certain areas within the County during construction. However, each improvement project, when undertaken, will include measures to ensure that emergency access is not adversely impeded. Implementation of the proposed project would have a less than significant impact on this environmental topic and no mitigation is required.

**Response h): Less than Significant.** Wildfires are a major hazard in the State of California. Wildfires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low intensity wild fires have a role in the ecosystem, wildfires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk.

The proposed project consists primarily of projects that will improve and rehabilitate roadways throughout the County. Roadway rehabilitation is necessary for improving emergency response and evacuation efficiency. There are no new homes, business or habitable structures proposed as part of the RTP. Therefore, implementation of the proposed project would not result in increased risks associated with wild fires. This is a less than significant impact and no mitigation is required.

## IX. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) 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?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

### SETTING

Glenn County's climate is classified as Mediterranean in the Koppen climate classification system. Hot, dry summers and temperate winters generally characterize most of the County. Willows received approximately 25 inches of rainfall in the 2017 water year and 5 inches of rainfall in 2018 (National Weather Service 2018). Orland received approximately 30 inches of rainfall in the 2017 water year and 10 inches of rainfall in 2018. The foothills at the western edge of the County received approximately 50 inches of rainfall

in the 2017 water year and 15 inches of rainfall in 2018.

Glenn County is located in the Sacramento River Hydrologic Region. The major sources of groundwater in Glenn County include rainfall, infiltration from nearby rivers and streams, and the percolation of applied irrigation water in agricultural areas.

Glenn County's population and economy is dependent upon adequate water supplies. Water is a necessity for agricultural production and economic development and is vitally important to maintaining many of the county's wildlife resources and recreation attractions. Glenn County contains a portion of Black Butte Lake, a flood control and recreation facility located at the border of Tehama and Glenn County, as well as Stony Gorge Reservoir. The county's surface water resources also include numerous small reservoirs that were primarily developed for agricultural use.

Glenn County experiences periodic winter storms and thunderstorms that may result in flash floods. Under storm conditions, the region's stream systems pose a significant threat. The Sacramento River crosses the Glenn County from North to South and is fed by numerous tributaries beginning in the hills and mountains to the East and West. Glenn County contains numerous 100-year flood hazard areas. Many areas are designated by FEMA as Special Flood Hazard Areas (SFHA), meaning these areas have high potential to flood due to 100-year storms. Portions of Orland and over half the area of Willows are classified as flood hazard areas, including SFHA and moderate flood hazard areas.

## RESPONSES TO CHECKLIST QUESTIONS

**Response a-j): Less than Significant.** Implementation of the proposed project would result in the improvement and rehabilitation of roadways and transportation infrastructure throughout Glenn County. The project would not result in the development or construction of housing or other habitable structures that would be at risk from flooding events. There are a small number of projects identified within the RTP that may increase the area of impervious surfaces within the County. Such improvements consist primarily of roadway widening to address safety and operational concerns. The amount of impervious surfaces that may be added to the County as a result of project implementation is negligible, and would not result in impacts to groundwater recharge rates. The improvements identified in the RTP would not result in increased uses of ground or surface water and would not directly or indirectly lead to population growth. As such, the project would not result in an increased demand for ground or surface water resources, and would have no impact on these environmental topics.

There is the potential for water quality impacts to occur during construction activities associated with the various projects identified in the RTP. Each project is subject to further project-level environmental review prior to approval and construction. During subsequent environmental review, potential project-specific construction impacts to water quality would be identified, and mitigation measures, in the form of BMPs would be identified and implemented to ensure that impacts to water quality are reduced or avoided. Impacts to these environmental topics are considered less than significant and no mitigation is required.

**X. LAND USE AND PLANNING - *Would the project:***

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

**SETTING**

Glenn County is characterized by a wide range of existing land uses. Much of the residential development in the county is low-density single-family housing. Glenn County and its incorporated cities each have a General Plan containing policies to guide growth and land use changes.

**RESPONSES TO CHECKLIST QUESTIONS**

**Responses a-c): No Impact.** Implementation of the proposed project would result in improvements to the County's transportation network. There are no changes to land uses or land use designations proposed as part of the RTP. The County General Plan, in addition to the General Plans of Willows and Orland were reviewed during preparation of the RTP, and the RTP is consistent with these documents. No housing would be removed as part of the proposed project, and there are no new roadways proposed that would divide an established community. Implementation of the RTP would not conflict with a habitat conservation plan. There are no impacts to land use associated with the proposed project and no mitigation is required.

## XI. MINERAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?				X
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?				X

### SETTING

The Office of Mine Reclamation periodically publishes a list of mines regulated under SMARA that is generally referred to as the AB 3098 List. The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to state or local agencies. The current AB 3098 list (November 18, 2019) indicates that there are 8 mines regulated under SMARA in Glenn County.

### RESPONSES TO CHECKLIST QUESTIONS

**Response a-b): No Impact.** There are no active mines located within the areas proposed for improvement in the RTP. The proposed project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Implementation of the proposed project would have no impact on this environmental topic.



## XII. NOISE -- WOULD THE PROJECT RESULT IN:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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 expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			X	

### SETTING

The major noise sources in Glenn County are related to vehicular traffic on Interstate 5 and State Routes 32, 45, and 162. Other noise sources include overflights from airports, railroad activities, and agricultural operations, and commercial and light industrial uses. The Glenn County General Plan public safety element identifies major noise sources and sets goals, policies, and implementation strategies related to controlling noise.

### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-f): Less than Significant.** Implementation of the proposed project consists primarily of improvements to the existing transportation network in Glenn County. There are no new roadways proposed that would introduce new vehicle trips into areas not currently exposed to mobile noise sources from the existing transportation network. The improvements identified in the RTP would not directly result in increased vehicle trips on the County roadway network, and would therefore not result in increased noise levels from vehicles travelling on existing roadways and transportation facilities in the County. The improvements to aviation facilities identified in the RTP would not result in increased or expanded flight operations, and would not result in increased noise from aviation sources.

Construction activities associated with the various improvements identified in the RTP could result in short-term temporary noise impacts in the immediate vicinity of the improvements. These noise increases would be temporary in nature, and construction activities in the vicinity of residences and other sensitive noise receptors would usually be limited to the daytime hours. However, as described

throughout this initial study, subsequent environmental review of project-specific impacts would be required prior to approval and implementation of future improvements. This future environmental review would identify the potential for short-term construction noise impacts to sensitive receptors and assign mitigation measures as needed to reduce noise impacts. This is a less than significant impact and no mitigation is required.

### XIII. POPULATION AND HOUSING – WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial 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)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			X	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			X	

#### SETTING

According to the American Community Survey, the total number of housing units in Glenn County was estimated at 10,962 in 2017, of which an estimated 9,936 were occupied. Of the approximate 6,011 households located in the unincorporated County, an estimated 58.5% of the housing units were owner-occupied and 29.6% were renter-occupied. The vacancy rate in Glenn County (9.4%) is slightly higher than the state rate (7.9%). The median home value in the Cities of Orland and Willows are approximately \$192,200 and \$191,200 respectively. The median home value in Glenn County is about half of the statewide median value of \$443,400.

According to the US Census, the population of Glenn County increased by approximately 15.1% each decade from 1970 to 2010. During the 40-year period, the population grew from 17,521 to 28,122. The California DOF projects that the population of Glenn County will increase 11.5% between 2020 and 2040, which translates to an average annual increase of 0.57%. Over the 20 year lifetime of the RTP, the population of 29,585 is expected to increase to 32,977 by 2040.

#### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-c): Less than Significant.** The proposed project consists primarily of the rehabilitation of the existing transportation network in Glenn County. There are no new roadways proposed that would extend vehicular access into areas of the County that are not currently accessible by area roadways. The project would not result in the direct or indirect inducement of population growth. The proposed project includes projects that would occur primarily within the right-of-way of the existing transportation network, and would not displace any persons or housing units. This is a less than significant impact and no mitigation is required.

#### XIV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

#### SETTING

Glenn County is served by 12 fire departments including volunteer fire departments and the California Department of Forestry and Fire Protection (Cal Fire). Law enforcement in the unincorporated areas of Glenn County and Willows is provided by the Glenn County Sheriff's Department, located in Willows. The Orland police department serves the City of Orland. The California Highway Patrol enforces traffic laws throughout the county.

Glenn County is served by several school districts. Glenn County public schools include 26 schools, most of which serve broad geographical areas and a wide range of grades. There are also private schools located in the County. The Butte College satellite campus in Orland provides post-high school education opportunities for Glenn County residents. Additionally, the Glenn County Office of Education offers adult education classes.

The Glenn County Parks system is operated and maintained by the County Parks Department. The Parks system consists of five regional parks, one community park, and four specialty (memorial) parks. Additionally, there is an abundance of Federal land within the county that can be utilized for recreational purposes.

#### RESPONSES TO CHECKLIST QUESTIONS

**Response a): Less than Significant.** As described throughout this initial study, the proposed project (adoption of the RTP) consists primarily of the rehabilitation and improvement of the existing transportation network in Glenn County. The projects included in the RTP would not extend roadway infrastructure into areas not currently served, and would not result in the direct or indirect growth of the County's population. As such, the demand for increased public services, including police protection, fire protection, schools, parks and other public facilities would not increase as a result of implementation of the proposed project. This is a less than significant impact and no mitigation is required.

## XV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?			X	
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?			X	

### SETTING

As discussed previously, the Glenn County Parks system is operated and maintained by the County Parks Department. The Parks system consists of five regional parks, one community park, and four specialty (memorial) parks.

### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-b): Less than Significant.** As described throughout this initial study, the proposed project (adoption of the RTP) consists primarily of the rehabilitation and improvement of the existing transportation network in Glenn County. The projects included in the RTP would not extend roadway infrastructure into areas not currently served, and would not result in the direct or indirect growth of the County's population. As such, the demand for increased recreational facilities would not increase as a result of implementation of the proposed project. This is a less than significant impact and no mitigation is required.

**XVI. TRANSPORTATION/TRAFFIC -- WOULD THE PROJECT:**

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

**SETTING**

Glenn County is served by one federal highway and three state highways. These highways provide the main regional transportation routes for automobiles and trucks. The highway network includes Interstate 5 and State Routes 32, 45, and 162.

According to the California Public Road Data, approximately 1,000 centerline road miles are maintained by the cities and county. The City of Orland maintains 38.73 miles (3.9%); the City of Willows maintains 37.25 miles (3.7%); and the County of Glenn maintains 926.82 miles (92.4%). In addition to the 1,000 miles of roadway managed by the Cities and County, around 200 miles of roadway managed by State and Federal agencies exist in Glenn County.

I-5 is a major 4-lane freeway that extends 796 miles in California, 127 miles through Sacramento, Yolo, Colusa, and Glenn counties. I-5 runs through Glenn County from north to south passing through Willows and Orland. Daily traffic volumes on I-5 in Glenn County range from approximately 25,500 vehicle trips per day during normal months up to 37,000 or more during peak months. An interregional and regionally significant corridor, Interstate 5 is the backbone of the region's transportation network. It is

also part of a 1,382 mile north-south travel and freight corridor stretching from the Mexican to Canadian border. Residents rely on the goods movement system to bring consumer goods to the region. The north state acts as a major international trade gateway for the rest of California and the United States.

State Route 32 is a west-east 2-lane conventional highway (Classified as a Rural Principal Arterial and an Urban Principal Arterial for some portions near I-5) beginning at I-5 in the City of Orland and ending at SR 36 in Tehama County. SR 32 is the primary connection between the Cities of Orland, Hamilton City, and Chico and is the only transit corridor. Daily traffic volumes on SR 32 in Glenn County range from approximately 8,500 to 12,600 during peak months.

State Route 45 is a north-south 2-lane conventional highway (Classified as a Rural Minor Arterial) beginning in Yolo County at the town of Knights Landing and ending at Hamilton City in Glenn County. Rural low-density communities, agricultural land use, and recreational access points surround SR 45, which generate intercity traffic, agricultural traffic and seasonal recreational traffic. Daily traffic volumes on SR 45 in Glenn County range from 200 to 2,800 vehicles per day.

State Route 162 generally runs as an east-west 2-lane conventional highway (Classified as a Rural Minor Arterial) except through the City of Willows where it is classified as a 4-lane conventional highway. SR 162 is legislatively designated as an Interregional Road System (IRRS) Route beginning in the Mendocino National Forest and extending east into Oroville in Butte County. SR 162 connects I-5, SR 45, SR 99, and SR 70. Daily traffic volumes for SR 162 range from approximately 350 to 1,290 vehicles per day, with increased volumes of up to 11,000 vehicles per day near the I-5 junction in Willows.

In 2017, the California Transportation Commission adopted guidelines for Regional Transportation Planning Agencies for RTP analysis and modeling. This was the first time separate guidelines have been developed for RTPAs and Metropolitan Planning Organizations, recognizing the inherent differences. The 2017 RTP Guidelines for RTPAs formally recognizes that RTPAs are not required to develop Sustainable Communities Strategies as MPOs are. As such, air quality conformity analysis and travel demand models are not required either. Air quality conformity analysis on regionally significant, federally funded projects is performed by the California Department of Transportation in isolated rural nonattainment and maintenance areas.

The 2017 RTP guidelines incorporate California's Senate Bill 743 (SB 743), which requires a change in transportation impact metrics used in the CEQA process from Level of Service (LOS) to Vehicle Miles Traveled (VMT).

Estimates of countywide VMT for the three most recent years available, 2014, 2016 and 2017, are provided in Table 2.18 of the RTP. The daily vehicle miles traveled on County roads decreased by 4.69% between 2010 and 2017, or an average of -0.7% per year (see Table 2.18). During the same time period, the City of Orland saw an annual average decrease of 3.5% while the City of Willows experienced a decrease of 1.3%. Daily VMT decreased on all County and City roadways between 2010 and 2017. Only state highways increased in VMT during this time period. Overall, the VMT in the County is estimated to increase from 1,399 to 1,510 between 2020 and 2040, which equates to an increase of 7.9% or an average of 0.40% annually.

## RESPONSES TO CHECKLIST QUESTIONS

**Responses a-b): Less than Significant.** Implementation of the proposed RTP would result in improvements and rehabilitation to the existing transportation and roadway network in Glenn County.

Although an increase in VMT is likely to occur throughout the lifetime of this RTP, few changes are expected in the ratings of state routes in Glenn County. In 2040, most highway segments are expected to be operating at an acceptable congestion rating.

Implementation of the proposed project would not result in population growth within Glenn County, and would not directly result in increases of VMT. The proposed project would improve traffic flows and operations throughout the County and would not result in VMT that exceeds applicable standards or thresholds. This is a less than significant impact and no mitigation is required.

**Responses c-f): Less than Significant.** As described throughout this initial study, implementation of the proposed project would assist in the improvement of the County's transportation network across all modes of transit and transportation. The improvements proposed to aviation facilities in the County would not result in an increase in flights or a change in flight patterns. There are policies and programs included in the RTP that would improve public access to transit systems and alternative modes of transit, such as bicycle use. The various roadways improvements identified in the RTP would assist in the delivery of emergency services by improving the local and regional roadway network and eliminating existing design and safety hazards. The RTP and the projects included within were developed after careful review of the General Plans of the County and the Cities of Willows and Orland. The RTP is consistent with the circulation element of the General Plans, and would not result in conflicts or inconsistencies with the above referenced plans. This is considered a less than significant impact and no mitigation is required.



## XVII. TRIBAL CULTURAL RESOURCES – WOULD THE PROJECT

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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:				
a) Listed or eligible for listing in the California Register of the Historical Resources, or in a local register of historical resources as defined Public Resources Code section 5020.1(k), or			X	
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.			X	

### SETTING

There is currently one federally recognized Tribal entity in Glenn County. The Grindstone Indian Rancheria of Wintun-Wailaki Indians of California has headquarters in the unincorporated community of Elk Creek. In addition, the Colusa Indian Community Council has cultural ties to Glenn County. Cooperative planning between Tribal governments, regional and local agencies and Caltrans was achieved during the planning process of this document. Tribal cultural resources could be located anywhere within the County. No comprehensive inventory of tribal cultural resource sites within Glenn County exists.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe. The County provides notices of projects under AB52 to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-b): Less than Significant.** The proposed project does not entitle, propose, or otherwise require the construction of new roadways. The proposed project includes a variety of roadway improvement projects, which consist primarily of roadway rehabilitation efforts and roadway safety improvements. The proposed project identifies roadway and multimodal transportation improvement

funding priorities that will be implemented over the next 20 years. Nearly all of the roadway projects identified in the RTP consist of rehabilitation efforts, which would occur within the roadbeds of the existing roadways, and would not have the potential to impact any known or previously undiscovered cultural resources. Individual projects identified in the RTP that may include the widening of a roadway would be subject to project-level environmental review prior to approval and construction of the improvements. This future project-level environmental review of individual projects would identify the potential for impacts to any cultural resources. This is a less than significant impact and no mitigation is required.

**XVIII. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:**

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

**SETTING**

Glenn County's population and economy is dependent upon adequate water supplies. Water is a necessity for agricultural production and economic development and is vitally important to maintaining many of the county's wildlife resources and recreation attractions. Glenn County contains a portion of Black Butte Lake, a flood control and recreation facility located at the border of Tehama and Glenn County, as well as Stony Gorge Reservoir. The county's surface water resources also include numerous small reservoirs that were primarily developed for agricultural use. The major sources of groundwater in Glenn County include rainfall, infiltration from nearby rivers and streams, and the percolation of applied irrigation water in agricultural areas.

Glenn-Colusa Irrigation District (GCID) provides water to Glenn County. As the largest irrigation district in the Sacramento Valley, GCID has a long history of serving farmers and the agricultural community and maintaining critical wildlife habitat. The District fulfills its mission of efficiently and effectively managing and delivering water through an ever-improving delivery system and responsible policies, while maintaining a deep commitment to sustainable practices.

The Cities of Orland and Willows have municipal sewer systems. The unincorporated areas of Glenn County are heavily reliant upon on-site septic tank sewage treatment systems.

Solid waste management in Glenn County includes one transfer station and 5 recycling centers. Staff operate a variety of recycling and diversion programs that have successfully reduced the amount of refuse by nearly 50% since 1995.

#### RESPONSES TO CHECKLIST QUESTIONS

**Responses a-g): Less than Significant.** The project consists of various roadway and transportation network improvement projects throughout the County. The project would not result in direct or indirect population growth, and as such, would not increase the demand for water supplies or the treatment and/or conveyance of wastewater. The various roadway and infrastructure improvements may require modifications or expansions to existing and future stormwater conveyance infrastructure adjacent to roadways proposed for rehabilitation or modification. As described throughout this initial study, projects identified in the RTP would be subject to project-level environmental review to determine if potential impacts to the County's stormwater detention and conveyance infrastructure may occur. This future project-specific environmental review may include mitigation measures, as appropriate, to avoid or lessen potential impacts to the stormwater infrastructure adjacent to roadway and other improvement projects. Implementation of the projects identified in the RTP would not generate significant amounts of solid waste, and would not result in an exceedance of any landfill's capacity or violate any state, federal or local statutes related to the disposal of solid waste. This is considered a less than significant impact and no mitigation is required.

## XIX. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

### RESPONSES TO CHECKLIST QUESTIONS

**Responses a) - c): Less than Significant.** As described throughout the analysis above, the proposed project will not result in any changes to General Plan land use designations or zoning districts, would not result in annexation of land, and would not allow development in areas that are not already planned for development in the General Plan and Zoning Ordinance. The proposed project would not result in new adverse environmental impacts. The project would not threaten a significant biological resource, nor would it eliminate important examples California history or prehistory. The proposed project does not have impacts that are cumulatively considerable, nor would it have substantial adverse effects on human beings. Implementation of the proposed project would have a less than significant impact on these environmental topics.

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