# 4 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

# SCOPE OF ENVIRONMENTAL ANALYSIS

Pursuant to CEQA and the State CEQA Guidelines, a lead agency shall focus the environmental impact report's (EIR's) discussion on significant environmental effects and may limit discussion on other effects to brief explanations about why they are not significant (PRC Section 21002.1, CCR Section 15128). Potentially significant impacts were identified based on review of comments received as part of the public scoping process (see Appendix A) and additional research and analysis of relevant project data during preparation of this Draft Subsequent Environmental Impact Report (SEIR).

The County has determined that the project (i.e., modifications to the landfill's existing land use permit [LUP] and associated site modifications) has the potential to result in new and/or substantially more sever significant environmental impacts (pursuant to the State CEQA Guidelines [CCR Section 15162]) on the following resources, which are addressed in detail in this Draft SEIR:

- Aesthetics
- Air Quality
- Archaeological, Historical, and Tribal Cultural Resources
- Biological Resources
- Energy
- ► Geology, Soils, Mineral, and Paleontological Resources

- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- ► Hydrology and Water Quality
- Noise
- Transportation

No additional resources were identified as requiring further analysis during public review of the NOP for the SEIR.

Where appropriate, the Draft SEIR also discusses previous analyses and the previously adopted mitigation measures from the certified 1993 and 2005 EIRs conducted for the RHR Landfill (also referred to as landfill) and related to the County's LUP for the landfill. In certain instances, new mitigation measures are proposed to replace previously adopted and implemented mitigation, because of changes in applicable regulations (including CEQA) and standards of review.

# TERMINOLOGY USED IN THE SEIR

This Draft SEIR uses the following terminology to describe environmental effects of the proposed project:

**Less-Than-Significant Impact**: A project impact is considered less than significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment (no mitigation required).

**Potentially Significant Impact**: A potentially significant impact is an environmental effect that may cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

**Significant Impact**: A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. Mitigation measures and/or project alternatives are identified to reduce these effects to the environment where feasible.

**Significant and Unavoidable Impact**: A project impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level if the project is implemented. If a lead agency proposes to approve a project with significant unavoidable impacts, it must adopt a statement of overriding considerations to explain its actions (CEQA Guidelines, Section 15093(b)).

**Cumulative Impacts**: According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable... [or] ... provide a basis for concluding that the incremental effect is not cumulatively considerable (CEQA Guidelines, Section 15130 (a))."

Mitigation Measures: The CEQA Guidelines (Section 15370) define mitigation as:

- a) avoiding the impact altogether by not taking a certain action or parts of an action;
- b) minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- e) compensating for the impact by replacing or providing substitute resources or environments.

# FORMAT OF THE ENVIRONMENTAL ANALYSIS

Each section begins with descriptions of the regulatory and environmental settings as they pertain to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the proposed project and alternatives (Chapter 6). The setting description in each section is followed by an impacts and mitigation discussion. The impacts and mitigation portion of each section includes impact statements, which are prefaced by a number in bold-faced type. An explanation of each impact and analysis of its significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement. The degree to which the identified mitigation measure(s) would reduce the impact is also described.

### **Regulatory Setting**

This section of each chapter describes the federal, State, and local regulations that would apply to the proposed project and that could reduce or eliminate potentially significant impacts. This section also informs the reader of the applicable Solano County General Plan policies.

### **Environmental Setting**

According to Section 15125 of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline condition" against which project-related impacts are compared. The baseline condition is typically the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the proposed project was published on March 12, 2018, and recirculated on August 31, 2018. Therefore, this SEIR assesses the impacts of the proposed project in comparison to the uses existing at that time on the project site.

### **Environmental Impacts and Mitigation Measures**

This section analyzes project-specific environmental impacts and recommends mitigation measures to reduce potentially significant or significant impacts. Information included in this section is described in more detail below.

### SIGNIFICANCE CRITERIA

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant" (CEQA Guidelines Section 15382). Definitions of significance vary with the physical conditions affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make "mandatory findings of significance" (CEQA Guidelines, Section 15065). For all environmental issues, this SEIR identifies specific standards of significance.

#### METHODOLOGY

This subsection identifies the methodology used to analyze potential environmental impacts.

#### ISSUES NOT DISCUSSED FURTHER

This section identifies any topic in the technical issue area that will not affected by the proposed project.

## PROJECT IMPACTS AND MITIGATION MEASURES

The project impact and mitigation measure section analyzes the environmental impacts of the project. This subsection describes the potential environmental impacts of the proposed project and, based upon the thresholds of significance, concludes whether the environmental impacts would be considered significant, potentially significant, or less than significant. Each impact is summarized in an impact statement, followed by a more detailed discussion of the potential impacts and the significance of each impact before mitigation.

The impact number consists of the section of the EIR in which that impact is identified followed by a dash to indicate the number of the impact in that section. For example, Impact 4.1-1 is the first impact identified in Section 4.1.

The impact discussion includes a description of applicable regulations and concludes with a statement regarding whether the impact would be less than significant or significant before mitigation. If the impact is significant and mitigation is required, the finding of significance after mitigation is also identified.

The analysis of environmental impacts considers both the construction and operational phases associated with implementation of the proposed project. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or offsite impacts are addressed, as appropriate, for the environmental issue area being analyzed. As described above under "Terminology," the Draft SEIR uses the following terms to describe the level of significance of impacts identified: less than significant, potentially significant, significant, and significant and unavoidable.

#### IMPACT ISSUE AREAS NOT WARRANTING DETAILED EVALUATION

CEQA requires that the discussion of any significant effect on the environment addresses substantial, or potentially substantial, adverse changes in the physical conditions that exist within the affected area. A lead agency is not required to provide a detailed discussion of the environmental effects that would not be significant, and may instead provide a brief statement of dismissal (CEQA Statues Section 21100, CEQA Guidelines Sections 15126.2[a] and 15128). Based on a review of the information presented in the NOP, previous CEQA documents approved for the landfill and comments received as part of the public review process (Appendix A), impacts associated with some resources would not result in new or substantially different environmental impacts compared to the previous 1993 EIR and 2005 SEIR. As described above, several sections within Chapter 4 of this Draft SEIR identify "Issues Not Discussed Further" that describe topics

within the technical issue area that will not be affected by the proposed project. Resources topics that are not included in Chapter 4 because they would not result in a significant impact to the environment are described below.

#### Agriculture and Forestry Resources

The RHR Property is located within unincorporated Solano County in an area zoned as A-80 and A-160 Exclusive Agricultural, meaning agricultural use with a minimum parcel size of 80 and 160 acres, respectively. The Solano County General Plan designates the permitted landfill boundaries and Triangle as Public/Quasi Public. Under these zoning and land use designations, landfill operations are conditionally permitted uses. The RHR Property is not used or zoned for timber harvest, and no forest land exists onsite. The 24-acre Triangle contains undeveloped annual grassland that was previously used for sheep grazing. The RHR Property is not classified as Important Farmland under the California Department of Conservation's Farmland Mapping and Monitoring Program; the permitted landfill area is classified as Urban and Built-Up Land and the remainder of the RHR property, including the Triangle, is classified as Grazing Land (California Department of Conservation 2016). The RHR Property is not enrolled in a Williamson Act contract.

Therefore, implementation of the project, including lateral expansion of the landfill disposal area within the Triangle, would not result in direct or indirect conversion of agricultural land to non-agricultural use or convert forestland to non-forest use. The project would not conflict with zoning for agricultural use or a Williamson Act contract. The project would have **no impact** on agriculture and forestry resources and these issues will not be discussed further in this Draft SEIR.

#### Land Use and Planning

The Solano County General Plan designates the permitted landfill boundaries and Triangle as Public/Quasi Public. This public use designation provides for airports, schools, solid waste facilities, hazardous waste facilities, and other public and quasi-public facilities. The portion of the RHR Property located south of the Triangle and landfill is designated as Agriculture with a Resource Conservation Overlay; no changes to this area are proposed. The RHR property is located within an area zoned as A-80 and A-160 Exclusive Agricultural, meaning agricultural use with a minimum parcel size of 80 and 160 acres, respectively, and agriculture is encouraged to the exclusion of other land uses that would conflict with agricultural development. Within this zone, refuse dumping, disposal, processing, and composting are conditionally permitted uses. Travis Air Force Base is located approximately four miles to the southwest. According to the Travis Air Force Base (AFB) Land Use Plan (LUP) (Solano County ALUP 2002: Figure 2A), a majority of the RHR Property falls within the Travis Air Force Base Land Use Plan Compatibility Zone C, with a small part of the northwestern portion of the Property falling within Zone B2. Compatibility Zone C encompasses locations exposed to potential noise in excess of approximately 60 decibel Community Noise Equivalent Level (dB CNEL) and occasionally affected by concentrated numbers of low-altitude (below 3,000 feet mean sea level) aircraft overflights. Zone B2, within which no project components are located, encompasses locations with a reduced accident potential based on crash patterns and potential noise levels in the 70-to-80 dB CNEL range.

The proposed project would not include any components that would physically divide an established community. Therefore, no impacts on established communities would be anticipated with project implementation. The site's existing Solid Waste Facility Permit (SWFP) and Land Use Permit (LUP) would be modified before implementation of the project and would not conflict with the land use or zoning designations for the site or a policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. As described in Section 4.8, Hazards and Hazardous Materials, the proposed project would not conflict with the Travis AFB Land Use Compatibility Plan. Therefore, the proposed project would have no adverse impacts on applicable land use plans, policies or regulations.

As described in Section 4.4, Biological Resources of this Draft SEIR, the project site is within Zone 3 (remainder of the County) of the Solano Multispecies Habitat Conservation Plan (MSHCP) area. However, projects within unincorporated Solano County are not subject to the MSHCP provisions. Additionally, while a final draft of the MSHCP and its EIS/EIR has been released, the MSHCP has not yet been adopted. Because the MSHCP is not an approved plan and unincorporated Solano County is not a participant in the plan, no conflicts with adopted plans would occur and there would be **no impact**.

#### Population, Employment, and Housing

A project is considered to be growth-inducing if it fosters economic or population growth, directly or indirectly, in the surrounding environment. These impacts could result from projects that include housing construction or the removal of an obstacle to growth, such as expansion of a wastewater treatment plant, extending transportation routes into previously undeveloped areas; and establishing major new employment opportunities. The proposed project would include an increase in the capacity of the RHR Landfill. Expansion of the landfill would not result in population growth through the provision of new homes, new businesses, additional employees, or in any other manner. In addition, all proposed facility modifications would be limited to the footprint of the RHR property and, thus, would not displace existing housing or people such that replacement housing would be required to be constructed elsewhere. Therefore, **no impacts** would occur and this technical issue area is not discussed further in this SEIR. The potential for growth-inducing effects of expanding the capacity of the landfill are discussed further in Chapter 7, under the subsection "Growth-Inducing Effects."

#### Public Services and Recreation

As discussed above, the proposed project does not include new housing or other project elements that would increase the permanent resident population in the project area. Increasing the capacity of the existing landfill and other elements of the project would have no effect on population growth. There could be a slight increase in the demand for police, fire, emergency services related to extending the life of the landfill; however, this increase would be minimal and would be covered by the existing police and fire facilities. There would be no increased demand on schools or recreational facilities. In addition, there are no police, fire, school, or recreational facilities located within the project site or in the immediate project vicinity; therefore, the project would have no direct effect on public services or recreation. **No impact** would occur and these technical issue areas are not discussed further in this SEIR.

#### Utilities and Service Systems

The landfill does not connect to local or regional water, wastewater, or natural gas utility infrastructure. Further, none of the proposed amendments to the landfill's LUP would increase demand for such utilities.

The RHR Landfill is not connected to a municipal water system and does not use potable water. Employees are provided with bottled water for consumption. The site maintains one 10,000-gallon water tank that is supplied by dewatering of the borrow pit. The tank supplies RHR's 4,000-gallon water truck, which is used for dust control on onsite roadways. Use of non-potable water onsite is limited to dust control and washing/restroom uses at the office; implementation of the project is not expected to change the volume of water use onsite. (Wolfe, pers. Comm., 2018). Recology would continue to use water from borrow pit dewatering for dust control. No modification or expansion of the landfill's administrative functions, including the hiring of additional employees, that could result in additional potable water demand would occur as a result of the project. Therefore, **no impact** would occur and this topic is not discussed further in this SEIR.

With respect to wastewater, existing wastewater supplies are collected via an onsite septic system and because no expansion of administrative or other use that would require septic service would occur under the project, no expansion of wastewater infrastructure is anticipated. Therefore, **no impact** would occur and wastewater is not discussed further in this SEIR.

The landfill is not currently served by natural gas facilities, and no new natural gas facilities are included as part of the proposed project. Therefore, **no impact** would occur and natural gas usage is not discussed further in this SEIR.

The proposed project would not result in any changes to demand for electricity or telecommunication service or facilities at the landfill as none of the proposed amendments to the LUP would result in an increase in demand for such services; therefore, **no impact** would occur and these topics are not discussed further in this SEIR.

No new utilities would need to be constructed with implementation of the project. Because no new utilities would be constructed, the project would not have the potential to disrupt or damage any existing utilities or utility services. Further, relocation of existing water, wastewater, electricity, natural gas, or telecommunications facilities would not occur as a result of the project. Therefore, **no impact** would occur and utilities are not discussed further in this SEIR.

With respect to solid waste, some additional solid waste (i.e., construction debris) may be generated during construction but would be accommodated onsite. Further, any excess soils associated with construction of either the proposed flare or the lateral expansion into the Triangle would be used onsite as daily ground cover within the active disposal areas of the landfill and would not require offsite hauling or disposal at another solid waste facility. Therefore, **no impact** would occur and construction waste from project implementation is not discussed further in this SEIR.