1.	**Name of Proponent:**	HomeFed Otay Land II, LLC
2.	**Lead Agency Name and Address:**	City of Chula Vista Development Services Department 276 Fourth Avenue Chula Vista, CA 91910
3.	**Address and Phone Number of Proponent:**	1903 Wright Place, Suite 220 Carlsbad, CA 92008
4.	**Name of Proposal:**	Otay Trails & Mitigation Bank Expansion Project
5.	**Date of Checklist:**	November 26, 2021
6.	**Case No.:**	IS-21-0004

ENVIRONMENTAL ANALYSIS QUESTIONS:

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	**X**	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	**X**

Comments:

a) **Less-than-Significant Impact**. Implementation of the proposed project would not have an adverse effect on a scenic vista. The proposed project is in the Otay River Valley, which is designated as a scenic resource and Open Space Preserve by the City of Chula Vista General Plan (City of Chula Vista 2015). The Otay River Valley, along with several other open space areas, make up the majority of the City's open space and park system and are also valued as scenic resources (City of Chula Vista 2015). Open space also bounds the western, eastern, and southern boundaries of the project site as well as large portions of the northern boundary.

The visual setting of the proposed project site includes the valley floor of the Otay River Valley. The valley floor is approximately 1,000 to 1,500 feet within the proposed project area. Elevations of the valley floor range from approximately 215 feet at the downstream end to 250 feet at the upstream end; typically the valley floor is 10 to 20 feet below the adjacent ground of the surrounding foothills. Given the rolling topography of the surrounding area and the location of the project site on the river valley floor, the only public views of the project site are from the Otay Lakes County Park and recreational trails surrounding the area. The viewer groups include users of the park facilities and nearby trails. It is likely that only the easternmost portion of the project site would be visible to viewers.

Implementation of the proposed project would restore and enhance the proper hydrology of the river and channels and native habitat within the boundaries of the restoration site, bringing the area back to its natural state. This would improve views of the project site by removing invasive species and improving hydrological conditions. In addition, the proposed project would include the creation, modification, and expansion of trails within the project site.

The City of Chula Vista Greenbelt Master Plan includes guidelines for signs that state that visitors should be greeted by a consistent, unique logo that identifies the Greenbelt and guides users along the Greenbelt. The Otay Valley Regional Park (OVRP) Trail Guidelines describe appropriate design

selections for sign post, sign face, fonts, and color. The proposed project would comply with the OVRP Trail Guidelines (County of San Diego et al. 2003) and Greenbelt Master Plan design standards for signage and educational kiosks (City of Chula Vista 2003a). Wayfinding signs and interpretive opportunities would be installed and utilized along scenic points of the river and riparian areas. There are several viewpoints and other nodes along the trail corridor for interpretive opportunities that would be further identified following trail construction. Wayfinding signs would be limited to the trail intersections to minimize the number of signs in the open space. Typical sign dimensions highlighted in the plans are 4- by 4- by 2-foot wood trail signs constructed on and attached to a 6-foot-tall post with 4-foot-tall trail markers. All signs would be painted with graffiti-resistant paint and be in English and Spanish. The number of wayfinding signs for the proposed project site could range from 35 to 50 signs distributed across the proposed project site at primary trail intersections.

The City of Chula Vista Greenbelt Master Plan also states that Greenbelt kiosks should be located at active trailheads and staging areas and include the Greenbelt logo, a trail map, regulations for use of the trails, community events, and other information (City of Chula Vista 2003a). The 2003 OVRP Concept Plan (County of San Diego et al. 1997) and Trail Guidelines include guidance for kiosks to include regulatory, interpretive, and directional information, and state that kiosks should be placed at strategic access points along trails. As part of the proposed project, educational kiosks would be installed at key viewing locations within the disturbed areas to help inform the readers of the importance of the restoration site as well as to keep users on the trails and outside of the restoration area. Kiosks could be up to 8 feet tall.

Fencing would follow the natural grades along the trails and could be up to 4 feet tall. The fencing would be constructed using treated wood posts and dowels. Most of the small sections of fence would be proposed at transition points in the trail network where the multi-use trails intersect with the secondary trails. Fence locations would be determined in the field to best fit the landscape setting, and gates intended to restrict vehicular access would be designed to allow unrestricted access for pedestrians and cyclists.

The proposed project would not have a substantial adverse effect on scenic vistas of the project site due to the short-term, phased nature of construction activities associated with the creation, modification, and expansion of trails and mitigation bank expansion. In the long term, operational activities of the proposed project, specifically maintenance and biological monitoring of the project area, would improve scenic views by improving site conditions as compared to the existing setting. Impacts would be less than significant and no mitigation is required.

b) **Less-than-Significant Impact**. Implementation of the proposed project would not substantially damage scenic resources along a scenic highway. There are no officially designated state scenic highways in the vicinity of the proposed project (California Department of Transportation 2015). According to Figure 5-4 of the General Plan's Land Use and Transportation Element, the nearest scenic roadway is Hunte Parkway approximately 1 mile north of the project site (City of Chula Vista 2015). However, given the rolling topography of the surrounding area and the location of the project site on the river valley floor, the project site is not visible from this scenic roadway. The proposed project would improve habitat and hydrological conditions as well as create, modify, and expand trails within the proposed project limits. The proposed project would not remove any sensitive trees. Therefore, the proposed project would not substantially damage scenic resources along a state scenic highway or local roadway. Impacts would be less than significant and no mitigation is required.

c) **Less-than-Significant Impact**. Implementation of the proposed project would not significantly degrade the existing visual character of the site or its surroundings. The proposed project would enhance the existing visual quality of the site. The visual character of the site vicinity is best described as being in a natural but disturbed state, with mounds from mine tailings and dense stands of invasive nonnative plants in the river valley and existing dirt roads and unofficial trails used for a variety of purposes by the U.S. Border Patrol, San Diego Gas and Electric (SDG&E), City of San Diego, and Otay Water District, as well as by hikers, cyclists, and equestrians crossing the site. The proposed

project would keep the current character and enhance it by restoring native habitat and hydrological functions and creating, modifying, and expanding trails. Additionally, certain segments of roads have been identified as redundant and unnecessary and would be graded where appropriate and revegetated to blend into the surrounding landscape. As a result, the proposed project would not substantially degrade the character or quality of the site or its surroundings; impacts related to visual quality of the project site would be less than significant and no mitigation is required.

d) **No Impact**. Implementation of the proposed project would not create a new source of substantial light or glare. The proposed project would not install any lighting, nor would the implementation, monitoring, and maintenance effort require any lighting because all such work would be conducted during daylight hours. Furthermore, no glare would be produced because there are no reflective surfaces proposed as part of the improvements. No impacts would occur and no mitigation is required.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURAL RESOURCES. Would the project:				
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**	☐
d) Result in the loss of forest land of conversion of forest land to non-forest use?	☐	☐	☐	**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	**X**

Comments:

a) **Less-than-Significant Impact.** Implementation of the proposed project would not convert farmland to a non-agricultural use. The proposed project is within and adjacent to areas of Farmland of Local Importance and Grazing Land per Farmland Mapping and Monitoring Program data for San Diego County, as shown on Figure 12. There are approximately 89.1 acres of Farmland of Local Importance and 39.9 acres of Grazing Land identified within the proposed project site (California Department of Conservation 2016). However, the project site and the surrounding area are designated as Open Space Preserve by the City of Chula Vista General Plan, and zoned Residential by the City of Chula Vista's Zoning Code. Upon completion of the proposed project, no further project activities would take place in this area and future agricultural uses would not be precluded within the restoration site. However, no agricultural activities currently occur or are planned in these areas. The proposed project would keep the current character and enhance it by restoring native habitat and hydrological functions and creating, modifying, and expanding trails. The existing land uses associated with the sites would remain unchanged. Long-term agricultural use is not planned for in the General Plan area but is allowed where it is consistent with the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan and zoning, including within portions of the Chula Vista Greenbelt open space system (City of Chula Vista 2015).

The proposed project would not result in the conversion of existing Farmland of Local Importance and would not involve significant changes in the existing land use. Notably, the proposed project would improve ecological conditions as part of the Expanded Mitigation Bank. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and impacts would be less than significant.

b) **No Impact.** Implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. There are no Williamson Act contracts or land zoned for agricultural use within the proposed project site. The proposed project site and surrounding area

are designated as Open Space Preserve by the City of Chula Vista General Plan and are within the planning boundaries of the City of Chula Vista MSCP Subarea Plan. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and there would be no impact.

c) **Less-than-Significant Impact**. Implementation of the proposed project would not involve other changes that would result in conversion of farmland to a non-agricultural use. See thresholds II. and II.b. Future agricultural uses would not be precluded within the proposed project site after implementation of proposed project activities. In addition, the proposed project would improve ecological conditions as part of the Expanded Mitigation Bank. Therefore, the proposed project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use, and impacts would be less than significant.

d) **No Impact.** The proposed project is not within an area designated as forest land, timberland, or timberland production zone. Therefore, the proposed project would not result in the loss forest land or the conversion of forest land to non-forest use. No impact would occur.

e) **No Impact.** The proposed project is designated as Open Space Preserve by the City of Chula Vista. The proposed project would not result in the conversion of farmland to non-agricultural use or conversion of forest to non-forest uses. Therefore, no impact would occur.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Would the project:				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	**X**	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	**X**	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	**X**	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact.** The San Diego Air Pollution Control District (SDAPCD) is required, pursuant to the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), to reduce emissions of criteria pollutants for which the San Diego Air Basin (defined as all of San Diego County) is not in attainment (i.e., ozone [O_3], particulate matter 10 microns or fewer in diameter [PM_{10}], and particulate matter 2.5 microns or fewer in diameter [$PM_{2.5}$]). SDAPCD has adopted air quality plans to attain the air quality standards, with the most recent being the 2016 Regional Air Quality Strategy (RAQS) and the 2016 O_3 attainment plan. The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3, while the 2016 O_3 attainment plan includes SDAPCD's plans and control measures for attaining the NAAQS for O_3. The RAQS relies on mobile source emission projects from the California Air Resources Board (CARB) and growth projections from the San Diego Association of Governments to project future emissions and determine appropriate emissions reduction strategies. In turn, the CARB mobile source emission projections and San Diego Association of Governments growth projections are based on population and vehicle trends and land use plans developed by the region's cities and by the County of San Diego. The 2016 O_3 attainment plan represents SDAPCD's portion of the State Implementation Plan, which is a comprehensive plan consisting of previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls that describes how each nonattainment area in the state will attain and/or maintain the NAAQS.

A determination that a project would not conflict with applicable air quality plans is typically made if a project proposes development that is consistent with the growth anticipated by the relevant land use plans that were used in the formulation of the RAQS and O_3 attainment plan prepared for the San Diego region. If the project is consistent with anticipated growth, the project would be consistent with the RAQS and O_3 attainment plan. As discussed in Section XI, *Land Use and Planning*, several planning documents apply to portions of the project area, including the City's General Plan, which designates the project site as an Open Space Preserve. Because the proposed project would involve expanding the existing Mitigation Bank area and the creation and modification of trails and would not add any housing or commercial development such that population growth would occur,

implementation of the proposed project would not affect the growth assumptions used in the development of the RAQS and O_3 attainment plan. While the proposed project would generate emissions during construction (discussed below under threshold III.b), these emissions would be short term and would cease upon completion of the construction activities. Additionally, while pollutant emissions would also be generated during operations from the use of construction equipment for maintenance of the Mitigation Bank area, these emissions would not be substantial and would only occur periodically. Furthermore, the proposed project would be required to comply with SDAPCD rules that have been implemented to reduce regional particulate matter and O_3 emissions—Rule 50 (Visible Emissions), Rule 51 (Nuisance), Rule 52 (Particulate Matter), Rule 54 (Dust and Fumes), and Rule 55 (Fugitive Dust Control). Overall, emissions generated from project construction and operations are not expected to impede attainment or maintenance of the NAAQS or CAAQS. Therefore, the impact related to project implementation conflicting with or obstructing implementation of an applicable air quality plan is considered less than significant, and no mitigation is required.

b) **Less-than-Significant Impact.** Construction of the proposed project would result in the short-term generation of criteria pollutant emissions. Emissions were estimated based on a construction phasing schedule and details regarding the types and numbers of construction equipment; haul, delivery, and employee vehicle trips; and material volumes obtained from the construction contractor. Estimates of construction-period emissions are based on the contractor's work on the Original Mitigation Bank, and were quantified using the Road Construction Emissions Model, version 9.0.0. Assumptions used in the estimates of construction-period emissions are provided in the technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021a). As discussed in the Project Description, construction of the proposed project is anticipated to commence in the fall of 2020 and be completed in the spring of 2021 and would be undertaken in two stages: (1) Site Preparation/Clearing and (2) Grading and Site Finish. Because construction activities in the Site Preparation/Clearing stage could potentially overlap with the Grading and Site Finish Stage, for the purpose of conducting a conservative analysis, the emissions from each of these two construction stages have been summed to present the maximum emissions that could be generated by the proposed project during a peak construction day.

   Estimated construction-period emissions are shown in Table 2-1. As shown therein, the proposed project's criteria pollutant emissions would not exceed the Air Quality Impact Analysis (AQIA) thresholds established by SDAPCD for either construction stage or the period during which stages overlap. Therefore, because the SDAPCD AQIA thresholds have not been exceeded, the proposed project would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment (i.e., O_3, PM_{10}, and $PM_{2.5}$) and construction-period emissions would be less than significant. As identified above, standard compliance measures would be implemented, including fugitive dust control.

   Long-term operations of the proposed project would involve periodic maintenance of trails, pest management, and small-scale weeding efforts, and would require approximately three workers and the potential use of chainsaws, line trimmers, and a skid steer. Operational emissions were estimated using the California Emissions Estimator Model version 2020.4.0 and assumptions provided by the contractor based on the work on the Original Mitigation Bank. Because maintenance activities would vary by day, a range in the number of equipment pieces (i.e., chainsaws and line trimmers) that could be used on a given day was provided by the contractor. For the purpose of conducting a conservative analysis, the emissions generated by the operation of the maximum number of chainsaws and line trimmers that could potentially occur in a given day along with the skid steer were modeled to capture a peak day of operational emissions. Table 2-2 shows estimated daily emissions from long-term operational activities. As shown therein, the proposed project's criteria pollutant emissions during operations would not exceed the AQIA thresholds. Therefore, because the SDAPCD AQIA thresholds would not be exceeded, the proposed project would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment (i.e., O_3, PM_{10}, and $PM_{2.5}$) and impacts resulting from long-term operation of the proposed project would be less than significant.

Table 2-1. Estimated Construction-Period Emissions (pounds per day)

Phase	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Site Preparation/Clearing	3	40	17	9	3	< 1
Grading and Site Finish	5	55	29	10	4	< 1
Maximum Daily Emissions [a]	8	96	46	19	7	< 1
Thresholds	75	250	550	100	55	250
Exceed Threshold?	No	No	No	No	No	No

Source: SDAPCD (2016) Regulation II, Rule 20.2.
[a] Maximum daily emissions are representative of the emissions generated during a peak construction day when activities associated with the Site Preparation/Clearing stage and Grading and Site Finish stage are concurrent.
Note: Daily thresholds are used for assessing impacts from standard construction and operational emissions. Emissions may not sum due to rounding.
Modeling outputs and assumptions included in technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021a).
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic compounds; SO_X =-sulfur oxides

Table 2-2. Estimated Operational Emissions (pounds per day)

Phase	ROG	NO_X	CO	PM10	PM2.5	SO_X
Area	6	< 1	< 1	< 1	< 1	< 1
Energy	< 1	< 1	< 1	< 1	< 1	< 1
Mobile	< 1	< 1	< 1	< 1	< 1	< 1
Off-road	2	15	18	1	1	< 1
Maximum Daily Emissions	8	15	18	1	1	< 1
Thresholds	75	250	550	100	55	250
Exceed Threshold?	No	No	No	No	No	No

Source: SDAPCD (2016) Regulation II, Rule 20.2.
Note: Daily thresholds are used for assessing impacts from standard construction and operational emissions. Emissions may not sum due to rounding.
CO = carbon monoxide; NO_X = nitrogen oxides; ROG = reactive organic compounds; SO_X =-sulfur oxides

In the California Supreme Court's decision in *Sierra Club v. County of Fresno*, 6 Cal. 5th 502 (2018) (hereafter referred to as the Friant Ranch Decision), the court determined that under conditions when significant and unavoidable exceedances of criteria pollutant thresholds occur, environmental documents must attempt to connect a project's air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis. As discussed above, the proposed project's construction and operational emissions would not exceed SDAPCD's AQIA thresholds. Accordingly, the proposed project's air quality impacts would be less than significant, and no analysis of human health impacts is required.

c) **Less-than-Significant Impact.** Diesel particulate matter (DPM), which is classified as a carcinogenic toxic air contaminant by CARB, is the primary pollutant of concern with regard to health risks to sensitive receptors. Diesel-powered construction equipment as well as heavy-duty truck movement and hauling both on and off site would emit DPM that could potentially expose nearby sensitive receptors to pollutant concentrations. Other localized pollutants of concern to human health are fugitive dust (particulate matter) and carbon monoxide (CO). Dust can be an irritant and cause watering eyes or irritation to the lungs, nose, and throat. Breathing CO can cause headaches, dizziness, vomiting, and nausea, and long-term exposure has been linked to increased risk of heart disease. According to SDAPCD, sensitive receptors include facilities that generally house people that may experience adverse effects from unhealthful concentrations of air pollutants (e.g., schools, hospitals, jails, clinics, elderly housing, and residences). The closest sensitive receptors to the project site are High Tech High, Middle, and Elementary Chula Vista, which are 0.9 mile north of the northern boundary of the Mitigation Bank expansion area.

The proposed project's construction activities would be short term and are expected to occur for less than a 1-year period, which is much shorter than the assumed 70-year exposure period used to estimate lifetime cancer risks. Also, construction activities would be sporadic, transitory, and short term in nature. Once construction activities have ceased, so too will the source emissions. Diesel activity occurring on site would be short term and occur at distances not expected to expose sensitive receptor locations to substantial pollutant concentrations. Long-term maintenance activities associated with project operations would be limited to periodic vehicle trips and minimal onsite fuel combustion. Onsite truck idling would be limited to a maximum of 5 minutes per truck, consistent with CARB's Heavy Duty Idling Reduction Program. Additionally, adherence to SDAPCD Rules, particularly Rule 55 (Fugitive Dust Control), would limit emissions that could affect nearby receptors. Therefore, the potential human health impact from exposure to DPM and localized fugitive dust is considered to be minimal. In addition, the proposed project would not create congestion at nearby roadways or intersections, so the exposure to elevated CO concentrations is considered minimal. Overall, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

d) **Less-than-Significant Impact.** According to CARB's *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing (CARB 2005). Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, and schools, warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential sources of odor during construction and operational activities include diesel exhaust. Given the distance of project construction and operational activities from existing receptors and that such odor emissions would be temporary in nature, no violations of SDAPCD Rule 51 are anticipated. Construction and operational odor impacts would be limited to the circulation routes, parking areas, and areas immediately adjacent to the Mitigation Bank area, and would not change existing odor conditions substantially. Although such brief exhaust odors may be considered unpleasant, they would not affect a substantial number of people, and any odor-related impacts would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. GREENHOUSE GAS EMISSIONS. Would the project:				
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**	☐

Comments:

a) **Less-than-Significant Impact.** Project-related greenhouse gas (GHG) emissions would be generated during short-term construction activities as well as long-term project operations as a result of equipment use and vehicle commute trips. GHG emissions are fundamentally a cumulative impact issue. No single development project would result in sufficient GHG emissions to affect global warming or climate change in isolation. Instead, it is the cumulative global emissions that are of a sufficient scale to change the radiative balance of the atmosphere. As such, project-level effects in isolation would be less than significant and the analysis below is a cumulative impact analysis.

The CEQA Guidelines do not indicate what amount of GHG emissions would constitute a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)). Several agencies throughout the state, including multiple air districts, have drafted and/or adopted varying threshold approaches and guidelines for assessing the significance of GHG emissions in CEQA documents. However, none of these are binding; they are only recommendations for consideration by CEQA lead agencies. Currently, neither SDAPCD nor the City have adopted project-level numerical thresholds for GHG emissions. At the local level, the City has been implementing its most recent Climate Action Plan (CAP) that was adopted by the City Council on September 26, 2017. However, the City's CAP does not yet qualify for "tiering" per Section 15183.5 of the State CEQA Guidelines, as the CAP has not undergone CEQA review, and is not legally binding. Therefore, this analysis utilizes the 900-metric-ton-carbon-dioxide-equivalent ($MTCO_2e$) screening level threshold from the California Air Pollution Control Officers Association 2008 *CEQA & Climate Change* White Paper (California Air Pollution Control Officers Association 2008). This numerical bright-line threshold was recommended by the California Air Pollution Control Officers Association to identify the point at which additional analysis and mitigation of project-related GHG emission impacts is necessary. Projects that generate GHG emissions below this 900 $MTCO_2e$ level are sufficiently small enough that the incremental contribution of GHGs would not be cumulatively considerable, while projects that generate emissions above this 900 $MTCO_2e$ level would require further analysis and identification of project design features or potential mitigation measures to reduce GHG emissions. This 900 $MTCO_2e$ screening level, which is based on emission sources associated with typical land use development projects (e.g., on-road passenger vehicle and trucks, electricity consumption), was previously recommended by the County of San Diego. In light of the numerous numerical thresholds that have been recommended by agencies in the state, including multiple air districts, the 900 $MTCO_2e$ screening level currently remains as the lowest numerical GHG threshold developed in the state. As such, the use of this threshold for the proposed project serves as a reasonable worst-case and conservative criterion.

Table 2-3 shows the estimates of construction-period GHG emissions that would result from the proposed project and Table 2-4 shows annual GHG emissions from long-term operations. As discussed above in threshold III.b above, the maximum number of pieces of equipment used per day for long-term operations was modeled to capture a peak day of operational emissions. Given that it is unlikely that the peak number of pieces of equipment would be used every day, GHG emissions from long-term project operations would be lower than identified in Table 2-4, but such estimates provide a reasonable worst-case scenario to analyze the proposed project's GHG emissions. Consistent with established protocols for GHG emission analyses, the proposed project's construction-related GHG emissions are amortized over a 30-year period and added to the proposed project's total operational GHG emissions. As shown in Table 2-4, the total annual GHG emissions generated by the proposed project would be 343 $MTCO_2e$. This is far below the 900 $MTCO_2e$ numerical screening criteria. As such, the proposed project would not generate GHG emissions to a level that would be cumulatively considerable, and impacts would be less than significant.

Table 2-3. Estimated Construction Greenhouse Gas Emission Estimates (metric tons)

Construction Stage	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Site Preparation/Clearing	130	< 0.1	< 0.1	132
Grading and Site Finish	189	< 0.1	< 0.1	192
Total Construction Emissions	319	< 0.1	< 0.1	324
Amortized Construction (averaged over a 30-year period)	-	-	-	11

Modeling outputs and assumptions included in technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Projec*t (ICF 2021a).
CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; N_2O = nitrous oxide

Table 2-4. Estimated Annual GHG Emissions from Project Operations (metric tons per year)

Operational Element	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Mobile	0.1	< 0.1	< 0.1	0.1
Off-road	331	< 0.1	< 0.1	332
Total Annual Operational Emissions	331	< 0.1	< 0.1	332
Amortized Construction (averaged over a 30-year period)	-	-	-	11
Total Operational Emissions	-	-	-	343

Modeling outputs and assumptions included in technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021a).
CH_4 = methane; CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; N_2O = nitrous oxide

b) **Less-than-Significant Impact.** At the local level, the City's most recent CAP was adopted by the City Council in September 2017. The CAP demonstrates how the City would achieve GHG emissions reductions in line with state legislation. However, the proposed project represents a project type not specifically contemplated in the CAP's implementation actions. Therefore, the CAP has limited applicability to the proposed project. Nevertheless, the proposed project's consistency with the CAP is discussed in Table 2-5. As shown therein, the proposed project would not conflict with the CAP.

Table 2-5. Consistency of Proposed Project with the City of Chula Vista's Climate Action Plan Objectives and Strategies

Objective/Strategy	Proposed Project Consistency Analysis
Objective 1.1 – Water Education & Enforcement Performance Metric: Directly engage 8% of households on water conservation per year Strategy 1. Expand education and enforcement targeting landscape water waste.	This policy is a City program that requires no action at the project level. No water use is proposed, and therefore the proposed project would not conflict with this objective.
Objective 1.2 – Water Efficiency Upgrades Performance Metric: Retrofit 1,000 homes per year with water-efficient devices (including landscaping) Strategy 1. Update the City's landscaping regulations to promote more water-wise designs Strategy 2. Require water-savings retrofits in existing buildings at a specific point in time.	This policy is a City program that requires no action at the project level. No water use is proposed, and therefore the proposed project would not conflict with this objective.
Objective 1.3 – Water Reuse Plan & System Installations Performance Metric: Install 3,750 water reuse systems citywide by 2020 (6,000 by 2035) Strategy 1. Develop a Water Reuse Framework for storm water, graywater, and onsite water reclamation. Strategy 2. Facilitate simple graywater systems for Laundry-to-Landscape applications. Strategy 3. Streamline complex graywater systems permit review.	This policy is a City program that requires no action at the project level. No water use is proposed, and therefore the proposed project would not conflict with this objective.
Objective 2.1 – Zero Waste Plan Performance Metric: Divert 75% of solid waste from the landfill by 2020 (90% by 2035) Strategy 1. Develop a Zero Waste Plan to supplement statewide green waste, recycling, and plastic bag ban efforts.	This policy is a City program that requires no action at the project level. Waste generation from the proposed project would be minimal, and therefore the proposed project would not conflict with this objective.
Objective 3.1 – Energy Education & Enforcement Performance Metric: Engage 8% of households and businesses on energy conservation per year Strategy 1. Expand education targeting key community segments and facilitate energy performance disclosure. Strategy 2. Leverage the building inspection process to deter unpermitted, low-performing energy improvements.	This policy is a City program that requires no action at the project level. No electricity use is proposed, and therefore the proposed project would not conflict with this objective.
Objective 3.2 – Clean Energy Sources Performance Metric: Provide more than 50% of electricity from renewable sources by 2020 (100% by 2035) Strategy 1. Incorporate solar into all new buildings to help transition to Zero Net Energy design. Strategy 2. Provide more grid-delivered clean energy (up to 100%) through Community Choice Aggregation or other mechanism.	This policy is a City program that requires no action at the project level. No electricity use is proposed, and therefore the proposed project would not conflict with this objective.
Objective 3.3 – Energy Efficiency Upgrades Performance Metric: Retrofit 13% of single family & multifamily homes and 10% of commercial square feet to save 25% by 2020 (20% of both with 50% savings by 2035) Strategy 1. Reauthorize the City's "cool roof"	This policy is a City program that requires no action at the project level. No electricity use is proposed, and therefore the proposed project would not conflict with this objective.

Objective/Strategy	Proposed Project Consistency Analysis
standards and expand to include re-roofs and western areas. Strategy 2. Facilitate more energy upgrades in the community through incentives, permit streamlining (where possible), and education. Strategy 3. Require energy-savings retrofits in existing buildings at a specific point in time.	
Objective 3.4 – Robust Urban Forests Performance Metric: Expand urban tree canopy cover to 15% by 2020 (25% by 2035) Strategy 4. Plant more shade trees to save energy, address heat island issues, and improve air quality.	This policy is a City program that requires no action at the project level. The proposed project would involve maintenance of a natural area within the City's boundaries, and therefore would not conflict with this objective.

Source: City of Chula Vista 2017.

At the state level, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is CARB's 2017 Climate Change Scoping Plan (Scoping Plan), which outlines the framework and strategies the state will take to achieve its emission reduction targets. Table 2-6 provides a discussion of the proposed project's consistency with the Scoping Plan. As shown therein, nearly all policies are state programs that require no action at the local or project level. Therefore, the proposed project would not conflict with implementation of the Scoping Plan. Because the proposed project would not conflict with either the City's CAP or CARB's Scoping Plan, impacts would be less than significant.

Table 2-6. Consistency of Proposed Project with Climate Change Scoping Plan[a] Policies

Policy	Primary Objective	Proposed Project Consistency Analysis
Senate Bill 350	Reduce GHG emissions in the electricity sector through the implementation of the 50 percent Renewables Portfolio Standard, doubling of energy savings, and other actions as appropriate to achieve GHG emissions reductions planning targets in the Integrated Resource Plan process.	This policy is a state program that requires no action at the local or project level. No electricity use is proposed, and therefore the proposed project would not conflict with this statewide policy.
Low Carbon Fuel Standard	Transition to cleaner/less-polluting fuels that have a lower carbon footprint.	This policy is a state program that requires no action at the local or project level. Project construction and maintenance vehicles and equipment would use fuels that are commercially available as a result of this policy. Therefore, the proposed project would not conflict with this policy.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled.	This policy is a state program that requires no action at the local or project level. No substantial long-term trip generation would result from the proposed project. Therefore, the proposed project would not conflict with this policy.
Senate Bill 1383	Approve and Implement Short-Lived Climate Pollutant strategy to reduce highly potent GHGs.	This policy is a state program that requires no action at the local or project level and thus does not apply to the proposed project.

Policy	Primary Objective	Proposed Project Consistency Analysis
California Sustainable Freight Action Plan	Improve freight efficiency, transition to zero-emission technologies, and increase competitiveness of California's freight system.	This policy is a state program that requires no action at the local or project level and thus does not apply to the proposed project.
Post-2020 Cap-and-Trade Program	Reduce GHGs across largest GHG emissions sources.	This policy is a state program that requires no action at the local or project level. The proposed project does not include any facilities that would be regulated under the Post-2020 Cap-and-Trade Program. As such, the proposed project would not conflict with this program.

Source: CARB 2017.
Notes:
[a] The Scoping Plan policies included in this table are those representing the state strategy for meeting the 2030 GHG target of Senate Bill 32.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. BIOLOGICAL RESOURCES. Would the project:				
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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	**X**	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, 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**

Comments:

The discussions of project effects on biological resources provided below are based on the analysis of project impacts included in technical attachment *Otay Trails and Mitigation Bank Expansion Project Biological Resources Report 2021 Update* (BRR), dated March 2021 (ICF 2021b). Refer to the BRR for a detailed discussion of the environmental setting, including surveys conducted of sensitive biological resources and impact analysis of biological resources.

The project area is defined as the Mitigation Bank Expansion Area and the Trails Work Areas; refer to the BRR's list of defined terms for full descriptions of the project elements and to Figure 3a of the BRR's Appendix A for a map of the project area and project elements. Refer to the BRR Section 1.2.3., *Restoration Activities*, for impact area definitions according to restoration activity level (e.g., "heavy," "moderate," and "low" activity impact level areas) and to Figure 5b of the BRR's Appendix A for visual

representation of these areas. Heavy restoration activities would include restoration of the mainstem Otay River and floodplain areas, restoration of tributaries, depressional and vernal pool establishment, and soil placement for slope repair. Moderate restoration activities would include dethatching, weeding, grow/kill cycles, and planting. Low restoration activities would include upland enhancement and weeding. Other heavy activities would include the construction of trails and crossings. Other moderate activities would include trail reclamation.

Figure 5b of the BRR's Appendix A shows the areas of permanent and temporary impacts. Permanent impacts would occur from the creation of new trails and from channel armoring on at least two existing stream crossings. All other impacts from habitat restoration and establishment/re-establishment are considered temporary because the proposed project is a restoration activity, and any affected area would be restored with native vegetation, ultimately leading to a net gain in viable habitat and native plant communities as well as overall improvement in river conditions.

Vegetation mapping and focused surveys for special-status species and jurisdictional resources were conducted within the portions of the project area in 2018 and 2019. Refer to BRR Section 1.4.2, *Field Surveys and Wetland Delineation,* for a description of the focused biological resources surveys conducted, methodology, and timing. See Figure 3B in the BRR's Appendix A for the various survey areas' coverages. In summary, the following biological resources surveys were conducted within the project area:

- Vegetation mapping
- Special-status plant surveys
- Special-status wildlife surveys: listed fairy shrimp surveys, coastal California gnatcatcher surveys, least Bell's vireo surveys, Quino checkerspot butterfly habitat assessments, and western burrowing owl surveys
- Jurisdictional delineation

The mitigation measures identified in the analysis that follows were developed in the BRR in response to the evaluation of potential project impacts on biological resources; the numbering of the mitigation measures is consistent with the order they are discussed in the BRR.

c) **Less than Significant with Mitigation Incorporated**. The proposed project has the potential to impact species listed as federally or state endangered or threatened, non-listed special-status species, and their habitats. The proposed project would ultimately improve and enhance sensitive native and naturalized habitat function and suitability for native, sensitive, and special-status species through restoration and enhancement activities. As explained below, impacts on federally and state-listed plant and animal species, on non-listed special-status plant and wildlife species, and on their habitats are considered less than significant with mitigation incorporated.

Listed Special-Status Plants

No listed plant species have been documented within the heavy impact areas associated with the proposed project that are subject to grading. Five federally or state-listed as threatened or endangered plant species have moderate to high potential to occur within the project area: Otay mesa mint (high potential to occur), Otay tarplant (high potential to occur and adjacent to project area), San Diego ambrosia (moderate), San Diego button-celery (high), and California Orcutt grass (moderate). If present within the project area, these species have the potential to be impacted by direct removal of individuals during grading activities or increased trampling from restoration personnel during restoration and enhancement activities. Absent mitigation, these impacts would be significant if these species were present.

Spreading navarretia, federally listed as threatened, occurs in a localized area within the southeastern portion of the proposed project within the upland restoration area (a low impact activity level area). As described in the BRR, the location would be confirmed, flagged, and avoided during project activities (weeding and planting). No spreading navarretia individuals occur within areas proposed for permanent impacts or grading. As a result, no direct impacts on this species would occur.

Otay tarplant, federally listed as threatened and state-listed as endangered, occurs outside of but adjacent to the proposed project boundary and would not be directly impacted as a result of project implementation. Specifically, Otay tarplant occurs adjacent to an access route that would be part of the trail system work (e.g., trail widening and grading for future utility access; see Figure 7 of the BRR's Appendix A). As described in the BRR, flagging would be placed around the known occurrence to ensure avoidance during all project work activities, especially grading.

Impacts on federally listed plant species, such as removal during grading activities or increased trampling from restoration personnel, would be avoided through implementation of **Mitigation Measures BIO-9** and **BIO-11.** Thus, impacts on federally listed plant species would be less than significant with mitigation incorporated.

Listed Special-Status Wildlife

Five species listed as federally or state endangered or threatened have been observed within the project area during focused species surveys: San Diego fairy shrimp, Quino checkerspot butterfly, western yellow-billed cuckoo (nesting),[1] least Bell's vireo (nesting), and coastal California gnatcatcher.

A small amount of permanent impacts on suitable and occupied habitats for San Diego Fairy shrimp, Quino checkerspot butterfly, least Bell's vireo, and coastal California gnatcatcher would occur due to habitat removal for trail creation and armoring of existing stream crossings, which could result in direct mortality of individuals. Within temporary impact areas subject to grading activities, vegetation removal could result in direct mortality of individuals, particularly eggs or chicks present within that vegetation. Filling of road ruts that contain San Diego fairy shrimp could also result in mortality if that filling occurred during the wet season when San Diego fairy shrimp individuals were present (i.e., not in cyst form). A direct loss of individuals of these federally listed species would be significant, absent mitigation.

Implementation of **Mitigation Measures BIO-2** through **BIO-6** and **BIO-8** through **BIO-10** would ensure avoidance of known locations of habitats occupied by federally listed species to the maximum extent practicable. Overall, suitable habitat for federally listed species within the project area would ultimately increase in quality as a result of restoration and enhancement activities because areas would be managed against nonnative plant species, host plants would be further seeded, and sensitive habitats would be restored and enhanced. Furthermore, San Diego fairy shrimp, Quino checkerspot butterfly, least Bell's vireo, and coastal California gnatcatcher are Covered Species in the City of Chula Vista MSCP Subarea Plan, and the proposed project is a Covered Project under that plan (City of Chula Vista 2003b).

Once the trail alignments have been finalized to further avoid impacts on these species, the applicant would enter into consultation with the U.S. Fish and Wildlife Service (USFWS) to document how the proposed project is consistent with the City of Chula Vista MSCP Subarea Plan, as described in **Mitigation Measure BIO-1**. As a result of the consultation process, the USFWS would provide a Biological Opinion on the proposed project's potential effects on these species. The applicant would adhere to any conservation measures provided by the USFWS in their Biological Opinion as required by law. Implementation of these mitigation measures and anticipated conservation measures from the Biological Opinion would reduce impacts on federally listed species to less than significant with mitigation incorporated.

Non-Listed Special-Status Plant Species

Five California Rare Plant Rank (CRPR) 1B or 2B, County Group A or B plant species, or narrow endemic plant species under the City of Chula Vista MSCP Subarea Plan are present within the project area inside of the heavy restoration activity areas (i.e., permanent impact area or temporary impact areas where heavy grading will occur; refer to the BRR Section 1.3.3 for activity level definitions):

[1] Western yellow-billed cuckoo is considered protected while nesting. The individual observed on site was a transient foraging migrant, and the site does not have suitable habitat to support nesting cuckoo.

singlewhorl burrobrush (CRPR 2B.2), San Diego barrel cactus (CRPR 2B.1, County List B, City of Chula Vista MSCP), Tecate cypress (CRPR 1B.1, County List A, City of Chula Vista MSCP), San Diego marsh-elder (CRPR 2B.2, County List B), and Munz's sage (CRPR 2B.2, County List B). Six CRPR 3 or 4, County Group C or D special-status plant species or covered plant species under the City of Chula Vista MSCP Subarea Plan are also present within the project area in heavy restoration activity areas: San Diego County viguiera (CRPR 4.2, County List D), Palmer's grapplinghook (CRPR 4.2, County List D), graceful tarplant (CRPR 4.2, County List D), southwestern spiny rush (CRPR 4.2, County List D), ashy spike-moss (CRPR 4.1, County List D), and San Diego County needle grass (CRPR 4.2, County List D).

Permanent impacts, such as direct removal of individual plants, would not result in a regional long-term decline in any of these species, especially considering the conservation objectives and preserve assembly occurring within the larger Chula Vista and Otay area. As a result, these impacts would be less than significant. Plants that only occur within restoration activities areas subject to "moderate" and "low" restoration activity levels but not within areas subject to new trail creation or grading would not experience significant mortality, if any, during restoration activities. As a result, impacts on these species would not result in a regional long-term decline of these species, and would be less than significant.

Impacts from trail creation and restoration activities' grading would be avoided further through implementation of **Mitigation Measure BIO-9**, which includes rare plant salvage and avoidance measures (e.g., exclusionary flagging and fencing, and salvage and relocation). Implementation of **Mitigation Measure BIO-11** would ensure persistence of viable populations of these species within the project area by limiting trespassing into the restoration areas and special-status plant populations. Additionally, as described in the BRR, the project's footprint and trail alignment would be further refined in the design finalization and permitting process, which is anticipated to further reduce impacts on special-status species through avoidance. For example, the Tecate cypress within the current grading footprint may be required to be avoided entirely in the final design of the grading footprint. The proposed project is a restoration project that will ultimately improve and enhance habitat and populations of these species within the project area. Therefore, impacts on these special-status plant species would be less than significant.

Narrow Endemic Species

Narrow endemic species, as identified in the City of Chula Vista MSCP Subarea Plan, that are present or have a moderate to high potential to occur within the project area include: Otay tarplant (high potential to occur), San Diego ambrosia (moderate potential to occur), Orcutt's brodiaea (high potential to occur), snake cholla (high potential to occur), and variegated dudleya (present).

A very small amount of permanent impacts on natural habitats that can support narrow endemic species may occur due to the construction of new trails and armoring of existing stream crossings; however, the project would primarily result in temporary impacts on natural habitats and narrow endemic species during restoration and enhancement activities. All narrow endemic plant species would be avoided to the maximum extent practicable. Under the current project design, no known narrow endemic plant species are within the area of permanent or temporary grading impacts, and no direct mortality is anticipated. Fencing or staking would be provided around narrow endemic species, where necessary within the project area, and every effort would be made to completely avoid trampling or impacting narrow endemic species. If individuals must be removed under future design limits, less than 5 percent of the population of a narrow endemic plant species within the project area would be removed, in accordance with the provisions in the MSCP. Implementation of **Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-5, BIO-8,** and **BIO-9** would further minimize temporary impacts and avoid direct impacts on narrow endemic species. Overall, the proposed project would increase habitat quantity and quality for narrow endemic species. Therefore, impacts on narrow endemic species would be less than significant.

Non-Listed Special-Status Wildlife Species

In summary, 40 non-listed special-status species are known to be present or have a moderate to high potential to occur within the project area, including species considered Covered Species under the City of Chula Vista MSCP Subarea Plan. A small amount of potential habitat for special-status wildlife species is considered as being permanently impacted by the proposed project. Special-status wildlife habitat would be temporarily impacted by the project; grading and restoration activities would result in the temporary loss of vegetation that could result in direct and indirect impacts on special-status wildlife species. These temporary impacts include removal of potentially suitable habitat for sensitive species prior to revegetation and restoration completion and indirect impacts due to construction-related disturbance (e.g., increased human activity, noise, dust). Direct loss of individuals and their habitat could occur in the areas of permanent and temporary impacts such as where grading and vegetation removal would occur. Direct loss of special-status wildlife species and disturbance resulting in direct mortality of individual special-status wildlife would be significant impacts absent mitigation.

Direct impacts as a result of grading and vegetation removal activities would be minimized or avoided to the maximum extent practicable through implementation of mitigation measures. Specifically, grading and ground disturbance activities would be conducted outside of the nesting season, when feasible, to avoid direct impacts on nesting birds, including those protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (**Mitigation Measure BIO-6**). Preconstruction burrowing owl surveys would be completed to avoid impacts on burrowing owl (**Mitigation Measure BIO-7**), which are discussed further below. Therefore, no special-status bird nests would be directly impacted.

Indirect impacts on special-status wildlife would be minimized or avoided through implementation of **Mitigation Measures BIO-2, BIO-3, BIO-5,** and **BIO-11**. The proposed project is a restoration project that would ultimately improve and enhance function of native habitats that are suitable for special-status wildlife species. In addition, the proposed project is a Covered Project under the City of Chula Vista MSCP and many of these special-status wildlife species are Covered Species that would directly benefit from the proposed project in the long term. Therefore, impacts on special-status wildlife species would be less than significant with mitigation incorporated.

Designated Critical Habitat

Otay Tarplant

Activities associated with grading, trails creation and reclamation, and upland enhancement within the project area would impact approximately 140.61 acres of designated Otay tarplant critical habitat. Approximately 3.6 acres of Otay tarplant critical habitat would be permanently impacted due to the creation of new trails. However, these permanent impacts would occur primarily within existing access roads that do not provide the physical and biological features (PBFs)[2] necessary to support Otay tarplant. Only approximately 1.94 acres of critical habitat that has PBFs for Otay tarplant (Diegan coastal sage scrub and non-native grasslands) would be permanently affected by construction of the trails.

Revegetation, rehabilitation, and enhancement activities would occur in areas of temporary impact totaling approximately 134.91 acres of Otay tarplant critical habitat. However, only 30.6 acres of the total temporary impact area would be affected by "heavy" temporary work activities involving grading prior to restoration that could temporarily remove suitable Otay tarplant habitat. Within these heavy

[2] Physical or biological features essential for the conservation of the species, also called primary constituent elements, are defined in the Designation of Critical Habitat for *Deinandra conjugens* (Otay tarplant); Final Rule (USFWS 2002). All areas designated as critical habitat are within the species' currently known range and contain one or more of these physical or biological features essential for the conservation of the species. The primary constituent elements of *Deinandra conjugens* critical habitat consist of, but are not limited to, soils with a high clay content (generally greater than 25 percent) (or clay intrusions or lenses) that are associated with grasslands, open coastal sage scrub, or maritime succulent scrub communities between 25 meters (80 feet) and 300 meters (1,000 feet) in elevation.

grading areas, only approximately 49.08 acres contain PBFs for Otay tarplant because they are within coastal sage scrub and non-native grassland vegetation communities. Indirect and direct impacts resulting from restoration-related activities could occur on the areas that contain PBFs, such as increased dust deposition, spills of pollutants, and trampling of plants if present. Absent mitigation, permanent and temporary impacts would be significant.

With implementation of **Mitigation Measure BIO-9**, no Otay tarplant individuals potentially occurring within critical habitat are anticipated to be impacted by either permanent impacts or heavy grading in temporary impact areas. Implementation of **Mitigation Measures BIO-2** through **BIO-5** would ensure indirect and direct impacts on Otay tarplant critical habitat that could result during restoration-related activities are minimized to the maximum extent practicable. Furthermore, upland enhancement and trail reclamation, as well as implementation of **Mitigation Measure BIO-11**, would likely result in improved conditions of critical habitat for Otay tarplant in the temporary impact area and an overall positive effect of improved quality of critical habitat is anticipated within Otay tarplant critical habitat. Therefore, impacts on Otay tarplant critical habitat would be less than significant with mitigation incorporated.

Spreading Navarretia, Quino Checkerspot Butterfly, and San Diego Fairy Shrimp

There is no designated critical habitat for spreading navarretia, Quino checkerspot butterfly, and San Diego fairy shrimp within the project area; however, there is critical habitat for these species located adjacent to the project area. No activities associated with the proposed project would impact designated critical habitat for spreading navarretia, Quino checkerspot butterfly, or San Diego fairy shrimp. Thus, no impact would occur on designated critical habitat of spreading navarretia, Quino checkerspot butterfly, or San Diego fairy shrimp.

d) **Less than Significant with Mitigation Incorporated**. Project-related construction, grading, clearing, or other activities would temporarily and permanently remove sensitive native or naturalized habitat within the project area. As shown in the BRR technical attachment Section 2.2.1 (ICF 2021b), permanent impacts would occur on sensitive native and naturalized habitats. Approximately 2.96 acres of Tier I, II, and III habitats and 0.19 acre of riparian and wetland habitats would be permanently impacted by the proposed project.[3] Temporary impacts could occur on up to 166.21 acres of Tier I, II, or III habitats (67.06 acres of which would be subject to grading during restoration activities, with the remainder associated with disturbance during enhancement activities such as weeding and invasive species treat). Temporary impacts would also occur on up to 40.97 acres of riparian and wetland habitats (35.39 acres of which would be subject to grading during channel and floodplain restoration activities, with the remainder associated with disturbance during enhancement activities).

The proposed project includes a wetland buffer adequate to protect the functions and values of existing wetlands; no permanent structures would be built within or near wetlands with the exception of armoring of existing low-flow stream crossings. One of the primary goals of the proposed project is to enhance the functions and values of the wetlands on site. Any work performed would only have temporary impacts on wetlands, and the result of the work would include an overall net gain in functions and values of the existing wetlands. The proposed project would ultimately improve and enhance sensitive native and naturalized habitat function, including wetland and riparian habitats, and suitability for native, sensitive, and special-status species through restoration and enhancement activities.

[3] Under the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 2003b), upland vegetation communities, defined according to the Holland classification system, are grouped into habitat tiers, Tier I through Tier IV, based on species composition and rarity within the region. Tier I (rare uplands), Tier II (Uncommon Uplands), and Tier III (common uplands) are considered to be sensitive habitats. Tier IV habitats (other uplands) consist of disturbed and developed habitats and are not considered sensitive. In addition, all wetland and riparian areas are considered sensitive under the Wetlands Protection Program described in Section 5.2.4 of the City of Chula Vista MSCP Subarea Plan.

The proposed project was designed to prevent long-term indirect impacts on natural habitats within the project area by closing specific trail segments and minimizing trespass through strategically placed fencing adjacent to native habitats. The proposed project involves construction activities that would be active for a short period and would not introduce unnecessary human access or domestic animals. Overall, the proposed project is designed as a restoration and enhancement project to improve natural habitats within the project area. The proposed project would re-establish primary and secondary flow channels, low and high floodplains, and native transitional habitat as well as remove nonnative invasive species and restore native vegetation. This would serve to improve hydrologic conditions, significantly reduce the upstream invasive species seed sources, preserve connectivity between adjacent areas of preserved land and natural habitats, and preserve wildlife movement corridors, and would result in a net gain in functions and services following restoration activities.

Implementation of **Mitigation Measures BIO-2** through **BIO-5** and **BIO-11** would avoid and minimize impacts on sensitive native and naturalized habitats to the maximum extent practicable. The proposed project would apply for and comply with all regulatory aquatic permits for impacts on jurisdictional riparian or wetland habitats per **Mitigation Measure BIO-1**. Therefore, impacts on sensitive native and naturalized habitats, including wetland and riparian habitats, would be less than significant with mitigation incorporated.

e) **Less than Significant with Mitigation Incorporated**. The proposed project would cause temporary and permanent impacts on wetlands and jurisdictional waters as defined by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). Grading (for both trail construction and restoration activity purposes), vegetation removal, reconstruction of road (trail) crossings, placement of fill (for crossing armoring), and limited dewatering activities (if a high groundwater table is encountered) could occur within these areas.

As mentioned above, the ultimate goal of the proposed project is to restore the Otay River and surrounding communities to an ecologically functional, self-sustaining wetland that is resilient to a range of natural disturbances (e.g., drought, flood). Temporary impacts associated with the proposed project are focused on two restoration activities: habitat restoration (habitat enhancement and rehabilitation) and grading (for habitat establishment and reestablishment). A relatively small amount of permanent impacts would occur due to creation of new trails (including grading) and from work on at least two existing stream crossings (i.e., channel armoring). All habitat restoration and establishment/reestablishment impacts are considered temporary because the proposed project is a restoration project, and any impacts would be restored with native vegetation and ultimately lead to a net gain in viable habitat, native plant communities, and overall improved river conditions. Habitat restoration would involve invasive vegetation removal followed by re-establishment of native vegetation communities. Enhancement and rehabilitation activities would generate little to no ground disturbance, and invasive plant species removal would target select species of plants in order to minimize potential impacts on native and sensitive species. Grading activities would involve considerable ground disturbance, with the ultimate goal of redefining the channel and other hydrologic features along the Otay River.

Wetlands and Non-Wetland Waters of the U.S.

As described in the BRR technical attachment Section 2.2.5 (ICF 2021b), a total of 232 linear feet/0.10 acre of waters of the U.S. subject to jurisdiction of the USACE and RWQCB (0.09 acre of non-wetland and 0.01 acre of wetland) would be permanently impacted by the proposed project. A total of 3,340 linear feet/31.42 acres of waters of the U.S. (0.95 acre of non-wetland and 30.46 acres of wetland) would be temporarily impacted by the proposed project. Absent mitigation, these impacts would be significant. However, permanent and temporary impacts would be mitigated on site as part of the proposed project (**Mitigation Measure BIO-1**), including rehabilitation and reestablishment of the river channel and its floodplain. In addition to restoring existing wetlands, waterways, and riparian habitat, the proposed project would expand and reestablish both federal wetlands and waterways,

including over 30 acres of waters of the U.S. and more than 3,300 feet of restored channel length. In addition, hydrology would be restored, and invasive vegetation removed, further improving conditions for native species composition, diversity, and abundance throughout the site. Implementation of **Mitigation Measures BIO-2** (biological awareness training for all workers), **BIO-3** (temporary fencing of sensitive resources), **BIO-4** (onsite biological monitor during grading and vegetation removal activities), **BIO-5** (implementation of best management practices [BMPs]), and **BIO-11** (management of public access, trails, and recreation to deter trespassing and protect sensitive resources) would minimize indirect impacts on federal jurisdictional resources. As mentioned above, the proposed project would also apply for and comply with all regulatory permits as appropriate per **Mitigation Measure BIO-1**. Therefore, impacts on federal jurisdictional wetlands and waterways would be less than significant with mitigation incorporated.

Streambed and Riparian Waters of the State

As described in the BRR technical attachment Section 2.2.5 (ICF 2021b), a total of 232 linear feet/0.14 acre of waters of the state subject to jurisdiction of CDFW (232 linear feet/0.13 acre of streambed and 0.02 acre of riparian) would be permanently impacted by the proposed project. A total of 5,554 linear feet/55.98 acres of waters of the state (5,554 linear feet/19.66 acres of streambed and 36.32 acres of riparian) would be temporarily impacted by the proposed project. Absent mitigation, these impacts would be significant.

However, permanent and temporary impacts would be mitigated on site as part of the proposed project (**Mitigation Measure BIO-1**), including rehabilitation and reestablishment of the river channel and its floodplain. In addition to restoring existing wetlands and riparian habitat, the proposed project would also expand and reestablish both federal and state wetlands, including over 55 acres of waters of the state and more than 5,500 feet of restored channel length. In addition, hydrology would be restored, and invasive vegetation removed, further improving conditions for native species composition, diversity, and abundance throughout the site. Implementation of **Mitigation Measures BIO-2** (biological awareness training for all workers), **BIO-3** (temporary fencing of sensitive resources), **BIO-4** (onsite biological monitor during grading and vegetation removal activities), **BIO-5** (implementation of BMPs), **and BIO-11** (management of public access, trails, and recreation to deter trespassing and protect sensitive resources) would minimize indirect impacts on jurisdictional resources. As mentioned above, the proposed project would also apply for and comply with all regulatory aquatic permits as appropriate per **Mitigation Measure BIO-1**. Therefore, impacts on state jurisdictional wetlands and/or riparian habitats would be less than significant with mitigation incorporated.

f) **Less than Significant with Mitigation Incorporated**. The proposed project is within a core habitat area under the City of Chula Vista MSCP Subarea Plan and, as a result, has the potential to temporarily impact a core wildlife area but would not result in the loss of a core wildlife area. The proposed project would not prevent wildlife access to habitat, nor would it create a barrier to wildlife movement. The proposed project would not permanently prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction; overall, the proposed project would improve these characteristics of the site. Wildlife nursery areas within the project area could include vegetation communities that support nesting birds, riparian habitat, wetlands, and stream habitat.

A very small amount of permanent impacts on natural habitats would occur due to conversion to trails, though this would not be expected to negatively impact wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction due to the existing trail networks in the project area. Additionally, some existing trails would be reclaimed, improving these characteristics on the site. Temporary impacts on natural habitats would occur due to implementation of restoration activities in the Otay River channel and floodplain, such as large areas of grading. Temporary disturbances from project activities include increased human activity, noise, and dust, and temporary removal of natural habitats during restoration activities; however, these impacts would be

less than significant in regards to wildlife movement and connectivity because they would be temporary in nature and would not result in the permanent loss of a core wildlife area.

Overall, native plant revegetation, restoration of the river and wetland hydrology, and enhancement of riparian vegetation communities (e.g., invasive species treatment) is expected to improve the habitat quality of the riparian corridor, wetlands, and stream habitat, which would benefit wildlife movement and wildlife corridor areas. Therefore, impacts on wildlife corridors and wildlife movement resulting from grading and vegetation removal would be less than significant. The proposed project would not impact visual continuity within a wildlife movement corridor. No permanent buildings or elevated human-made structures would be built within the project area. The only permanent structures to be built would be reinforced at-grade stream crossings and fencing/signage to prevent human trespass into sensitive resource areas. The proposed project also does not propose to permanently increase noise or nighttime lighting within a wildlife corridor. No nighttime lighting would be employed during construction activities for the restoration and enhancement project. However, temporary indirect impacts, like increased noise, could occur due to construction activities within wildlife habitats, including corridor habitats along the Otay River channel. Absent mitigation, this would be a significant impact.

However, implementation of **Mitigation Measures BIO-2** through **BIO-5** and **BIO-11** would minimize impacts on core wildlife areas, edge of open space or other natural areas, connectivity habitat, and wildlife corridors. All personnel would undergo comprehensive environmental training (**Mitigation Measure BIO-2**), fencing would be installed during construction to focus work areas and illustrate avoidance areas (**Mitigation Measure BIO-3**), a qualified biological monitor would be on site to ensure minimization of impacts on biological resources during vegetation removal and grading activities (**Mitigation Measure BIO-4**), BMPs would be implemented throughout the project work area to minimize impacts on adjacent resources (**Mitigation Measure BIO-5**), and signage and wood split-rail fencing would be installed to limit trespassing and protect sensitive biological resources (**Mitigation Measure BIO-11**). The proposed project is a restoration project that would provide a net improvement and enhancement of habitat for wildlife species and the functions and values of these areas, consistent with the goals and objectives of the City of Chula Vista MSCP Subarea Plan. Therefore, impacts on the edge of open space or other natural areas, connectivity habitat, and wildlife corridors would be less than significant with mitigation incorporated.

g) **No Impact**. As described in the BRR technical attachment Section 1.6.3 (ICF 2021b), there are multiple local environmental regulations applicable to the proposed project, including: the City of Chula Vista General Plan, the City of Chula Vista Greenbelt Master Plan, the City of Chula Vista MSCP Subarea Plan, the Otay Ranch General Development Plan/Otay Subregional Plan and Otay Ranch Resource Management Plan, the Otay River Watershed Management Plan and Special Area Management Plan, the Otay Valley Regional Park Concept Plan, and the Otay Regional Park Habitat Restoration Plan & Non-Native Plant Removal Guidelines.

Ultimately, the proposed project would restore and enhance existing preserve land and minimize impacts on sensitive biological resources protected under local policies and ordinances. As described in the Project Description, the proposed project is designed specifically to be consistent with the plans mentioned above. As such, the proposed project would not conflict with local policies or ordinances protecting biological resources that are listed above and no impact would occur.

h) **No Impact.** The project area is within the City of Chula Vista's MSCP Subarea Plan area, which provides a blueprint for conservation of covered species and their associated habitats and forms the basis for federal and state incidental take permits for 86 plant and animal species within the City. Lands that are managed under the MSCP are designated as 100 percent Conservation Areas, where the habitat is protected on site from development and impacts. The City of Chula Vista and the County of San Diego jointly manage these Conservation Areas within Otay Ranch (City of Chula Vista 2003b). The 100 percent Conservation Areas are either already in public ownership or will be dedicated to the

MSCP Preserve as part of the development approval process for Covered Projects.[4] Any portions of Covered Projects that are within 100 percent Conservation Areas must be consistent with conditions allowing specific land uses within the MSCP Preserve, as outlined in Chapter 6.0 of the Subarea Plan, and are subject to the narrow endemic species policy (avoidance and minimization) as outlined in Section 5.2.3, and the Wetlands Protection Program as outlined in Section 5.2.4 of the Subarea Plan (City of Chula Vista 2003b). In compliance with the City of Chula Vista MSCP Subarea Plan, and as a condition of issuance of take authorization by the wildlife agencies, the City established a development standard and an implementing ordinance, the Habitat Loss and Incidental Take Ordinance (HLIT). The HILT is consistent with the conservation and mitigation goals of the San Diego County MSCP Subregional Plan and the City of Chula Vista MSCP Subarea Plan, which require impacts on sensitive vegetation communities to be avoided and minimized to the maximum extent practicable.

The proposed project is considered a "Covered Project" under the City of Chula Vista MSCP Subarea Plan. The proposed project is within the 100 percent Conservation Areas of Covered Projects (i.e., within the MSCP Preserve) and is therefore limited to the compatible uses described in Section 6.2 of the Subarea Plan, which include habitat restoration and enhancement activities. The proposed project is also subject to approval by the City and/or Appropriate Managing Entity, as applicable, and the underlying landowner, including obtaining any necessary permits. All activities must be consistent with the Subarea Plan including any conditions associated with RWQCB 401 certifications, USACE 404 permits, CDFW 1600 permits, or other resource conservation permits. In addition, reasonable access would be provided to the wildlife agencies (CDFW and USWFS) for the purposes of monitoring species and habitat and evaluating compliance with the take permit. Any take resulting from management and/or scientific activities undertaken pursuant to Section 7.0 of the Subarea Plan, including Section 7.5 – City Planning Component Framework Management Plan – and the Otay Ranch Resource Management Plan (Appendices D, E, and/or F), and/or pursuant to area-specific management directives prepared pursuant to the Subarea Plan, will be authorized by the MSCP take authorizations.

Impacts on natural vegetation, narrow endemic species, and wetlands are addressed in the City of Chula Vista MSCP Subarea Plan with protection requirements and guidelines, as follows:

- **Natural Vegetation Protection:** Natural vegetation is vegetation identified as Tier I, II, or III on Table 5-3 of the City of Chula Vista MSCP Subarea Plan. Impacts on Tier I, II, and III habitats will be mitigated pursuant to HLIT mitigation standards contained in Table 5-3 of the Subarea Plan. To ensure complete assembly of the Preserve as planned by this Subarea Plan, the City will encourage all mitigation to be conducted within the Preserve.
- **Narrow Endemic Species Protection:** Impacts on covered Narrow Endemic Species from planned and future facilities located within the 100 percent Conservation Areas of Covered Projects will be avoided to the maximum extent practicable. Where impacts are demonstrated to be unavoidable, impacts will be limited to 5 percent of the total Narrow Endemic Species population within the project area. Unavoidable impacts on narrow endemics are subject to the equivalency findings, limitations, and provisions of Section 5.2.3.6, Equivalency Findings, of the Subarea Plan. If impacts exceed 5 percent of the covered Narrow Endemic Species population within the project area after comprehensive consideration of avoidance and minimization measures, the City must make a determination of biologically superior preservation consistent with Section 5.2.3.7 of the Subarea Plan. Regardless of the percent of impact on Narrow Endemic Species, the findings of equivalency and wildlife agency concurrence are required.

[4] Covered Projects are defined in the City of Chula Vista MSCP Subarea Plan as, "Those projects involving land use development within the City of Chula Vista for which hard-line Preserve boundaries have been established pursuant to the approved Chula Vista Subarea Plan, and where conservation measures consistent with the MSCP Subregional Plan and Chula Vista Subarea Plan have been or will be specified as binding conditions of approval in such Project's plans and approvals. Covered Projects are shown on Figure 5-1 of [the] Subarea Plan. The conditions of coverage for each Covered Project are specified at 7.5.6 of the Subarea Plan" (City of Chula Vista 2003b).

- **Wetlands Protection Program:** As part of the CEQA review, development projects that contain wetlands will be required to demonstrate that impacts on wetlands have been avoided to the greatest extent practicable and, where impacts are nonetheless proposed, that such impacts have been minimized. For unavoidable impacts on wetlands within the Development Area, the mitigation ratio will be in accordance with the wetland mitigation ratios identified in the Subarea Plan. The wetlands mitigation ratios provide a standard for each habitat type but may be adjusted depending on both the functions and values of the impacted wetlands and the wetlands mitigation proposed by the project. The City may also consider the wetland habitat type(s) being impacted and utilized for mitigation in establishing whether these standards have been met.

As discussed above, the proposed project would be consistent with the City of Chula Vista MSCP Subarea Plan. Ultimately, the proposed project would restore and enhance existing preserve land and minimize impacts on sensitive resources defined by the City of Chula Vista HLIT Ordinance. The proposed project would directly benefit the primary goals of the City of Chula Vista MSCP Subarea Plan, which are to conserve covered species and their habitat through the conservation of interconnected significant habitat cores and linkages. The proposed project would restore over 1 mile of lost river channel and its floodplain and further enhance existing preserved upland habitats all while minimizing impacts on sensitive resources. Ultimately, the proposed project would improve habitat functions and directly benefit many of the MSCP covered flora and fauna.

As described in thresholds V.a through V.c above, a small amount of permanent impacts on sensitive resources would occur due to the construction of new trails and armoring of existing stream crossings; however, the project would primarily result in temporary impacts on sensitive resources during restoration and enhancement activities. As described above, avoidance and minimization of impacts on sensitive resources would be accomplished to the maximum extent practicable through implementation of **Mitigation Measures BIO-1** through **BIO-11**. Overall, the proposed project would increase habitat quantity and quality for narrow endemic species; restore protected riverine, wetland, and riparian habitats; and enhance and restore Tier I, Tier II, and Tier III upland habitats. Therefore, the proposed project would not conflict with the provisions of the City of Chula Vista MSCP Subarea Plan.

Mitigation:

Mitigation Measure BIO-1: Obtain Approval of All Necessary Resource Agency Permits

Prior to the issuance of a grading permit, the applicant will obtain all necessary resource agency permits and provide copies to the City. All conditions identified within each of the resource agency permits will be implemented in accordance with the permit. The applicable resource agency permits for the proposed project include a Clean Water Act (CWA) Section 404 Permit from the USACE, a CWA Section 401 Water Quality Certification from the RWQCB, a CWA Section 402 National Pollutant Discharge Elimination System Construction General Permit (Order No. 2012-0006-DWQ) from the RWQCB, and a Section 1602 Streambed Alteration Agreement from the CDFW. In addition to the agency permits, a conservation easement or other approved site protection mechanism and endowment would be established per the USACE and Environmental Protection Agency Compensatory Mitigation Rule.

The applicant will also enter into consultation with the USFWS under Section 7 of the Federal Endangered Species Act (FESA) to seek concurrence that the proposed project is consistent with the City of Chula Vista's MSCP Subarea Plan and that incidental take authorization is provided for the proposed project under the City of Chula Vista's MSCP Subarea Plan.

Mitigation Measure BIO-2: Biological Awareness Training

Prior to initiation of grading activities, biological resource awareness training will be provided by a qualified biologist to all construction personnel. The training will include information regarding sensitive species with the potential to occur at the site as well as minimization and avoidance measures

to reduce potential indirect effects on the habitat. A log of personnel who have completed the training and a copy of the training report/outline (including special-status species photos, targeted invasive plant species, and descriptions of the measures discussed in the training session) will be maintained at the construction office.

Mitigation Measure BIO-3: Temporary Fencing

Prior to the initiation of grading activities, the limits of grading will be clearly marked by well-installed temporary fencing that is prominently colored. The fence will be installed by the construction contractor and will remain in place during all grading activities.

Mitigation Measure BIO-4: Biological Monitor

A qualified biological monitor will be on site during vegetation clearing activities to ensure that grading activities occur within designated areas. The monitor will also ensure that any special-status species that becomes entrapped within the grading limits is moved away from construction equipment. The biological monitor will also periodically inspect the limits of disturbance fence to ensure that it is in good condition. Any parts of the fence that need attention will be brought to the contractor's attention to be fixed immediately. In the event that a special-status species is located within the grading limits, the biological monitor will temporarily stop construction. Removal of special-status species should be done by a biologist qualified to handle that specific species. If needed, the CDFW will be informally consulted if there is a question on the best manner to safely address a situation with a special-status wildlife species.

Mitigation Measure BIO-5: Best Management Practices

BMPs will be implemented during all grading activities to reduce potential indirect effects on special-status species and habitat. BMPs will include the following.

- All trash will be properly stored and removed from the site daily to prevent attracting wildlife to the construction area.
- Vehicles and equipment will be stored only on pre-designated staging areas in disturbed or developed areas. Fueling should be conducted in a manner that prevents spillage of fuel into the Otay River or into riparian or wetland habitats.
- All maintenance of vehicles and equipment will be conducted in a manner so that oils and other hazardous materials will not discharge into the Otay River, or into riparian habitat areas (including Freshwater and Freshwater Marsh).
- Dust control measures will be implemented to minimize the settling of dust on vegetation.
- Appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) will be available on the site during all phases of proposed project construction, and appropriate fire prevention measures will be taken to help minimize the chance of human-caused wildfires.
- All construction will be performed between dawn and dusk to the degree feasible to minimize potential indirect effects (e.g., increased depredation) on the species beyond the limits of disturbance.

Mitigation Measure BIO-6: Nesting Bird Avoidance

To avoid any direct impacts on nesting coastal California gnatcatchers, least Bell's vireo, burrowing owl, raptors, or other birds protected under the Migratory Bird Treaty Act (MBTA), removal of any vegetation that may support active nests on within the project area will occur outside of the breeding season when feasible. The breeding season is defined as February 15–September 15. If work must be conducted during the breeding season, including any trail improvement work and upland enhancement, nesting bird surveys will be conducted within the work area and a 500-foot buffer in order to clear the area or locate active nests for avoidance. Adequate avoidance buffers would be established around any active nests in coordination with the wildlife agencies.

Mitigation Measure BIO-7: Preconstruction Burrowing Owl Survey

A biologist will conduct preconstruction take-avoidance surveys for burrowing owls within 150 meters of project areas in suitable habitat no more than 14 days prior to ground-disturbing activities according to methods outlined in the CDFW's 2012 (or most recent) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Surveys will provide data on whether burrowing owls occupy the site and, if so, whether the owls are actively nesting. If preconstruction take-avoidance surveys detect the presence of any active burrowing owl burrows during breeding season, the burrows will be avoided, and construction activities within 150 meters will be enclosed by construction fencing. Buffer sizes are outlined in CDFW's *Staff Report on Burrowing Owl Mitigation*. Active burrowing owl burrows will be monitored regularly to ensure no adverse effects on the burrowing owls are occurring. Avoidance buffers will remain in place until the nest fledges or fails. If, in consultation with the CDFW, it is determined that project activities require removal of occupied burrows, or burrows potentially occupied by burrowing owls, eviction and burrow closure may be required to ensure against "take" of owl or nests. If eviction is required, it will occur only after consulting with CDFW and CDFW approval. Monitoring will be conducted to ensure take is avoided during eviction procedures. Owls may not be evicted or captured without prior authorization from the CDFW.

Mitigation Measure BIO-8. Vernal Pool and Vernal Pool–Dependent Species Avoidance

The trails alignment described in this report is planned to be further refined in order to avoid all permanent impacts on federally listed branchiopods. To avoid potential fairy shrimp habitat areas and potential impacts on San Diego fairy shrimp and western spadefoot (*Spea hammondii*), ephemeral basins, which were primarily seasonally ponding features such as road ruts and road ponds, were identified by an aquatic resource and fairy shrimp specialist. Prior to any ground disturbing work on site, mapped ephemeral basins will be reevaluated using the finalized spatial extents of trails and all work areas. Vernal pools resources will be differentiated from all other ephemeral basins (e.g., unvegetated road ruts and road ponds) in a refined jurisdictional delineation and the potential for impacts will be re-evaluated using the finalized design and alignments.

In creation of the final extents of trails and work areas, to avoid direct impacts on San Diego fairy shrimp to the maximum extent practicable, road and trail improvements and creation will avoid existing ephemeral basins that are known to support or could potentially support San Diego fairy shrimp by moving the alignment prior to construction, as needed. Construction access routes will also be rerouted within the proposed grading footprint to avoid these ponding features to the maximum extent practicable.

During construction and restoration activities, occupied and potentially occupied habitat for San Diego fairy shrimp will be avoided during the wet season to the maximum extent practicable. Prior to ground disturbance, occupied and potentially occupied fairy shrimp habitats will be temporarily fenced and avoided during construction activities to the maximum extent practicable. No staging of any equipment will be allowed within vernal pools, road ruts, or other ephemeral basins occupied by or potentially occupied by San Diego fairy shrimp at any time. A biological monitor will be present during construction activities occurring adjacent to vernal pools and occupied or potentially occupied habitats, and will ensure that vehicles are fueled and maintained at least 100 feet away from such pools.

In addition, where appropriate, the adjacent upland areas surrounding road ruts, vernal pools, and other ephemeral basins will be restored with native species. Wood split-rail fencing, boulders, and signage will be used to inform the public of the sensitivity of the area and deter them from trespassing into the ponded areas and into the river restoration areas. Though the majority of grading will occur within the Otay River floodplain, some grading and staging of equipment will occur in upland areas outside of the floodplain. Grading activities will include vernal pool establishment and enhancement activities, as described in the *Otay Trails and Mitigation Bank Expansion Project Biological Resources Report 2021 Update (*ICF 2021b) at Section 1.3.3. In accordance with **Mitigation Measure BIO-1,** should any pools occupied by or potentially occupied by San Diego fairy shrimp be unable to be avoided in the final project design, the applicant will consult with the USFWS under Section 7 of FESA to seek

concurrence that the proposed project is consistent with the City of Chula Vista's MSCP Subarea Plan and that incidental take authorization is provided for the proposed project under the City of Chula Vista's MSCP Subarea Plan. Mitigation of impacts on fairy shrimp will be addressed in the Section 7 consultation process either with onsite pool enhancement/habitat creation or additional avoidance through project re-design prior to construction. Mitigation of impacts on jurisdictional vernal pool habitats will be also be mitigated for, as needed, to obtain CWA Section 401 and 404 permits from the RWQCB and USACE.

Mitigation Measure BIO-9: Special-Status Plant, Quino Host Plant, and Succulent Plant Salvage Plan

During grading and enhancement activities, special-status plants, Quino checkerspot host plants (e.g., dot-seed plantain) and succulent plants (i.e., target plant species) will be avoided where feasible. Prior to ground-disturbing work on site, special-status plant surveys will be conducted to locate target plant species within defined work limits to determine areas to be avoided. Salvage and relocation of target plant species will occur to the extent feasible in accordance with a Plant Salvage Plan. The Plant Salvage Plan will be prepared for the areas where temporary grading and habitat enhancement activities will occur, with an emphasis on collecting and relocating to adjacent areas the target plant species. The plan will be prepared and implemented prior to grading and enhancement activities. The Plant Salvage Plan will include a list of target plant species list, seed collection methods, succulent plant salvage techniques, transplanting methods, and applicable monitoring activities for transplanted individuals, as appropriate.

Mitigation Measure BIO-10: Quino Checkerspot Butterfly Seasonal Avoidance

Due to the presence Quino checkerspot butterfly within the project area and known populations nearby, no removal of any host plant vegetation or any native vegetation within 50 feet of host plants, will occur within the Quino flight season, defined by the USFWS 2014 protocol as the third week of February to the second Saturday in May. Biological monitors will stake locations of host plants for avoidance and will be present during vegetation removal activities within potentially suitable habitat for Quino located outside of the mapped host plant locations and 50 ft buffer to ensure that construction activities do not result in harm to individual Quino checkerspot butterflies that may be foraging or nectaring in the area.

Mitigation Measure BIO-11: Public Access, Trails, and Recreation

To deter trespassing into the restoration site, wood split-rail fencing will be installed to designate road/trail corridors along existing roads and existing unofficial trails that border the restoration site. Other barriers (boulders, brush piles, logs, and plantings) will be placed at strategic locations when protection of sensitive resources is required where fencing is not present. For safety purposes, reflective material will be placed on the wood fencing at specific locations to aid Border Patrol and other night-time users from unintentionally breaking through fencing into sensitive habitat. Additionally, signage and informational kiosks will be installed for educational purposes and to inform the public of the sensitivity of the restoration site and adjacent habitats. All installation activities (signage, fencing, kiosks) and reflective materials will occur outside of the breeding season defined as February 15–September 15 or be in accordance with **Mitigation Measure BIO-6** and require preconstruction surveys.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section in State CEQA Guidelines § 15064.5?	☐	☐	☐	**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines § 15064.5?	☐	**X**	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	**X**	☐

Comments:

a) **No Impact**. As described in technical attachment *CEQA Cultural Resources Technical Report, Otay River Restoration Project* (ICF 2021c), a records review and cultural resources survey identified no existing structures or buildings within the project area. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5.

b) **Less than Significant with Mitigation Incorporated**. As described in technical attachment *CEQA Cultural Resources Technical Report, Otay River Restoration Project* (ICF 2021c), a record search and pedestrian surveys were conducted for the proposed project. Seventeen previously identified resources were recorded within the project site, and the pedestrian survey relocated artifacts associated with 10 of the resources. In addition, one archaeological resource (a prehistoric lithic scatter) and five isolated artifacts were newly identified during the survey efforts.

The pedestrian survey identified artifacts associated with the following cultural resources: P-37-004732, P-37-004728, P-37-004735, P-37-010875, P-37-014566, P-37-014575, P-37-014585, P-37-031366, P-37-032254, and P-37-034106. The pedestrian survey did not relocate artifacts for portions of seven previously documented sites; although, in some instances, the project site intersected with a very small portion of the resource. No attempt was made to relocate portions of sites outside of the project site. The pedestrian survey did not relocate portions of seven resources that intersect with the project site (P-37-004733, P-37-007212, P-37-008649, P-37-014583, P-37-015386, P-37-015391, and P-37-031365).

Of the 10 relocated cultural resources (sites P-37-004732, P-37-004728, P-37-004735, P-37-010875, P-37-014566, P-37-014575, P-37-014585, P-37-031366, P-37-032254, and P-37-034106) and one newly recorded archaeological site, none have been formally evaluated for their eligibility for listing in the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP). In accordance with guidance from the California Office of Historic Preservation, the unevaluated sites must be considered eligible for the CRHR. Therefore, for the purposes of the proposed project, these sites are assumed to be eligible for the CRHR.

Five isolates were newly recorded within the project site. Intensive pedestrian surveys in the vicinity of the isolates revealed no additional artifacts or features. Although it is unknown whether there are buried archaeological deposits associated with these isolates, it is inferred that these isolates would have limited potential for being eligible for listing in the CRHR and/or NRHP because of a paucity of associated artifacts and features. No mitigation measures are necessary for isolates because they lack association and context with other archaeological materials; therefore, they are by definition not eligible for listing in the NRHP or CRHR.

Proposed project activities would include ground disturbance as part of road reclamation, installation of signage, stream recontouring and vegetation removal. Potential impacts on eligible resources could occur from these proposed activities if ground disturbance occurs within cultural resource boundaries. However, in order to reduce or minimize impacts on cultural resources, the proposed project would incorporate **Mitigation Measures CUL-1** through **CUL-3.** As part of the mitigation measures, the proposed project would establish environmentally sensitive areas (ESAs) around areas of artifact concentration and prohibit ground-disturbing activities, thereby avoiding impacts in the ESAs **(Mitigation Measure CUL-1**). In addition to establishing ESAs, areas requiring archaeological and Native American monitoring would be established within an existing cultural resources boundary but in areas where no artifact concentrations were identified during survey efforts. These areas are referred to as Monitoring Areas (MAs); ground-disturbing activities occurring within MAs will require the presence of an archaeological monitor and a Native American monitor.

The ESAs and MAs would be incorporated into the cultural resources monitoring and treatment plan (**Mitigation Measure CUL-2**) and would be made available to non-archaeological staff for scheduling purposes.

Table 2-7 summarizes proposed activities that would occur, the applicable mitigation measures that would reduce impacts to a less-than-significant level, and where they would apply within ESAs and MAs.

Table 2-7. Proposed Project Activities and Applicable Mitigation Measures

Proposed Project Activity	Mitigation Measure to Implement	Applies to ESA/MA
Herbicide and seeding with no ground disturbance	CUL-1	ESA 1 through ESA 4
Ground-disturbing activities	CUL-2, CUL-3	MA 1 through MA 8
Ground-disturbing activities within mining extent	None	None
Stream improvements	CUL-2, CUL-3	MA 1 through MA 8
Road improvements/closure	CUL-2, CUL-3	MA 1 through MA 8
Weed control-mechanical	CUL-2, CUL-3	MA 1 through MA 8
Sign installation	None	None
Fence installation	CUL-2, CUL-3	MA 3

In addition to the record search and survey, on September 18, 2018, ICF contacted the Native American Heritage Commission (NAHC) to conduct a Sacred Lands File search. NAHC responded on September 20, 2018, stating that the Sacred Lands File failed to indicate the presence of Native American cultural resources in the study area. NAHC also provided a list of Native American individuals and organizations that may have knowledge of cultural resources in the study area and recommended contacting the representatives from 10 Native American groups. On October 8, 2018, ICF sent due diligence outreach letters to all individuals and organizations identified by NAHC. In response to the due diligence outreach, a letter was received on October 22, 2018, from the Viejas Band of Kumeyaay Indians requesting that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. Given the prehistoric archaeological sensitivity of the proposed project area, and to minimize impacts on prehistoric resources, the proposed project would incorporate **Mitigation Measure CUL-3**. Therefore, with implementation of **Mitigation Measures CUL-1** through **CUL-3**, impacts on sensitive archaeological resources would be less than significant.

c) **Less-than-Significant Impact.** The record search review, pedestrian survey, and Sacred Lands File search in support of the proposed project did not identify human remains. The proposed project area is not within or near a known cemetery or burial ground. Additionally, portions of the proposed project area have undergone extensive ground disturbance in the form of mining activities. Therefore, it is highly unlikely that the proposed project would disturb any human remains during construction at the project site. In the unlikely event that human remains are discovered, the project construction manager would be required to comply with Health and Safety Code Section 7050.5 and Public Resources Code Section 5097. These regulations outline the procedures to follow in the event that human remains are uncovered, and the penalty for disobeying these procedures. Therefore, given the low likelihood of discovering human remains, as well as the existing laws in place that govern the handling of human remains, impacts related to the disturbance of human remains would be less than significant.

Mitigation:

Mitigation Measure CUL-1: Establishing Environmentally Sensitive Areas

- To reduce potential impacts on archaeological resources, Environmentally Sensitive Areas (ESAs) will be established in areas of artifact concentrations.
- In order to avoid impacts on ESAs 1 through 4, only non-ground-disturbing methods of seeding and herbicide control of nonnative species will be used.
- Cultural resources monitoring will not be required for seeding and herbicide control of nonnative species.

Mitigation Measure CUL-2: Archaeological Monitoring

To reduce potential impacts on archaeological resources, a qualified archaeologist will monitor initial ground-disturbing activities within Monitoring Areas (MAs) in order to minimize disturbance of archaeological deposits. Specifically, the following measures will be implemented to reduce impacts:

- Prior to the start of construction, a monitoring and treatment plan will be prepared that describes the nature of the archaeological monitoring work, procedures to follow in the event of an unanticipated discovery, and reporting requirements. The plan will include confidential maps of ESAs and MAs. The plan will be submitted for review to the City of Chula Vista.
- All monitoring will be conducted by individuals with experience monitoring for archaeological resources in southern California. All monitors will be under the supervision and direction of a qualified archaeologist(s) who meets the Secretary of the Interior's Professional Qualifications Standards, as promulgated in Code of Federal Regulations (CFR), Title 36, Section 61.
- Monitoring of initial ground disturbance will occur within MAs 1 through 8.
- The following activities will require the presence of an archaeological monitor when they occur within MAs 1 through 8:
    - Manual weed pulling, fence installation, mechanical work that includes ground disturbance, and other ground-disturbing activities necessary for the implementation of the project
- If intact subsurface deposits are identified during construction, the archaeologist will be empowered to divert construction activities away from the find and will be given sufficient time and compensation to investigate the find and determine its significance. No soil will be exported off site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- Recovered items will be treated in accordance with current professional standards by being properly provenienced, cleaned, analyzed, researched, reported, and curated in a collection facility meeting the Secretary of the Interior's Standards, as promulgated in 36 CFR 79, such as the San Diego Archaeological Center. The costs for curation will be included in the budget for recovery of the archaeological remains.

- A final cultural resources report will be produced and provided to the City of Chula Vista, which will discuss the monitoring program and its results and will provide interpretations of any recovered cultural materials.
- The qualified archaeologist will have the discretion to increase or decrease the level of monitoring based on profession judgment and field conditions.

Mitigation Measure CUL-3: Native American Monitoring

A Kumeyaay tribal monitor will be retained to conduct Native American monitoring for MAs and activities identified in **Mitigation Measure CUL-2** when an archaeological monitor is present.

- Attendance by Native American monitors during ground-disturbing activities is at the discretion of the tribe, and the absence of a Native American monitor, should the tribe choose to forgo monitoring for some reason, will not delay work.
- Interpretation of a find will be requested from Native American monitors involved with the discovery, evaluation, or data recovery of unanticipated finds for inclusion in the final cultural resources report.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	**X**	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	**X**

Comments:

a) **Less-than-Significant Impact**. Construction activities associated with implementation of the proposed project would involve onsite energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling, and materials delivery truck trips; operation of off-road construction equipment; and other intermittent sources. Energy expenditures during construction would be temporary, lasting for approximately 24 weeks. Site grading and earthwork activities would be limited to smaller (rubber-tired or small-tracked) equipment and a greater reliance on hand tools in waterways and ecologically sensitive areas. Larger equipment would be used in areas with less ecological sensitivity, such as the larger upper and lower floodplain areas. Assumptions used in the estimates of construction-period energy consumption are provided in the technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021a).

Table 2-8 shows energy consumption during construction and operation of the proposed project. Construction fuel consumption represents total fuel use over the 24-week construction period. Energy use associated with construction of the proposed project would not be considered an inefficient, wasteful, and unnecessary consumption of energy, and impacts on energy resources would be less than significant.

Table 2-8. Energy Consumption Estimate for Construction and Operation

	Fuel Use (gal)	MMBTU[a]
Construction	31,866.64	4,419.90
Operation	32,638.44[b]	4,526.95

[a] MMBTU= million British Thermal Units

[b] Assumptions made in the modeling outputs conservatively estimated six line trimmers, four chainsaws, and eight skid steers operating 8 hours a day, every day.

Modeling outputs and assumptions included in technical attachment *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021a).

Likewise, the proposed project would use a minimal amount of energy during operation and would comply with local general plan policies to avoid inefficient and unnecessary energy use. Due to the nature of the proposed project, long-term operational activities are expected to be minimal and would involve periodic maintenance of trails, pest management, and small-scale weeding efforts, and would require approximately three workers and the potential use of chainsaws, line trimmers, and a skid steer. Because maintenance activities would vary by day, a range in the number of equipment pieces (i.e., chainsaws and line trimmers) that could be used on a given day was provided by the contractor. For the purpose of conducting a conservative analysis, the energy consumption generated by the operation of the maximum number of chainsaws and line trimmers that could potentially occur in a given day

along with the skid steer was modeled to capture a peak day of operational energy consumption. The proposed project would not require the construction or expansion of recreational facilities and, therefore, would not increase the number of visitors traveling to the site. Energy use associated with operation of the proposed project would not be considered an inefficient, wasteful, and unnecessary consumption of energy, and impacts on energy resources would be less than significant.

b) **No Impact**. Construction would be consistent with the policies in the City of Chula Vista CAP. Since 2000, Chula Vista has been implementing a CAP to address climate change issues and its impacts on the City. The City's CAP is a group of documents including various GHG emission inventories, the original Carbon Dioxide Reduction Plan (2000), Mitigation Strategy Updates (2008), and new Climate Adaptation Strategies (2010). The City's Increased Energy Efficiency Ordinance, Green Building Standards, and Solar Ready Ordinances are products of the CAP (City of Chula Vista 2017). As described above in threshold XII.a, the proposed project would have only short-term, minimal impacts on energy resources during construction and operational activities. Therefore, no impact would occur, and no mitigation is required.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GEOLOGY AND SOILS, AND PALEONTOLOGICAL RESOURCES. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	**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, creating substantial direct or indirect risks to life or property?	☐	☐	**X**	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	**X**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	**X**	☐

Comments:

a) i. **No Impact**. According to the City of San Diego General Plan Public Facilities, Services and Safety Element (City of San Diego 2008), there are no active faults or fault zones within or adjacent to the proposed project's location The closest fault zone is the La Nacion Fault Zone approximately 5 miles to the west, which runs parallel to Interstate (I-) 805. Therefore, the proposed project would not directly or indirectly be affected by a condition that would cause potential impacts related to fault rupture or exacerbate such conditions. No impact would occur.

ii. **Less-than-Significant Impact**. Although the project area is not within or adjacent to a fault zone, the project site is in the seismically active region of Southern California. As mentioned above, the La Nacion Fault Zone is approximately 5 miles to the west. The next closest fault zone is the Newport-Inglewood-Rose Canyon Zone, approximately 13.5 miles to the northeast. Proposed project features involve the expansion of the Original Mitigation Bank (the Original Mitigation Bank Expansion is

described in detail in the Project Description) and the creation, modification, and expansion of trails. Consequently, no structures of significance or structures intended for human occupancy would be built as part of the proposed project. In addition, construction personnel (during the construction phase) and visitors (during operations) to the project site would be on site only temporarily; therefore, potential risks associated with seismic ground shaking are considered low. Furthermore, the proposed project does not contain features that would directly or indirectly cause or intensify the effects of seismic ground shaking. Therefore, impacts would be less than significant.

iii. **Less-than-Significant Impact.** Liquefaction occurs when saturated, low-density, and loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction most often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. According to Figure 9-7, Geologic Hazards Map, of the City of Chula Vista General Plan (City of Chula Vista 2005), the project site is identified as an area with shallow groundwater and poorly consolidated granular sediments, and is thus susceptible to liquefaction. However, and as previously mentioned, no structures of significance or structures intended for human occupancy would be built as part of the proposed project. In addition, construction personnel (during the construction phase) and visitors (during operations) would be on site only temporarily, making potential impacts associated with liquefaction negligible. Also, the proposed project does not contain features that would directly or indirectly cause or intensify the effects of liquefaction. Therefore, impacts would be less than significant.

iv. **Less-than-Significant Impact.** According to Figure 9-7, Geologic Hazards Map, of the City of Chula Vista General Plan (City of Chula Vista 2005), the southwestern portion of the proposed project is just beyond (approximately 600 feet to the northeast) an area identified as containing active landslide-prone terrain (characterized as areas containing incompetent sedimentary rocks with slopes generally greater than 25 degrees). Although the proposed project is just outside a landslide-prone area, the proposed project is in the Otay River Valley with elevated topography to the north and south (approximately a 300-foot elevation from the valley floor to the top of the hillside), making landslides as a result of seismic activity a possibility. However, similar to what has been described above, no structures intended for human occupancy would be built and people would be on site only temporarily. Also, the proposed project does not contain features that would directly or indirectly cause or intensify the effects of landslides; on the contrary, the proposed project intends to restore the area through the re-contouring of slopes (with the intent of mirroring adjacent natural slopes), further reducing risk of slope instability. Therefore, impacts would be less than significant.

b) **Less-than-Significant Impact with Mitigation Incorporated.** Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. Erosion is a condition that could adversely affect development on any site. The proposed project would include enhancement, rehabilitation, and re-establishment of hydrological processes, vegetation communities, and wildlife habitats. It would also re-establish primary and secondary flow channels, low and high floodplains, and native transitional habitat as well as remove nonnative invasive species and restore native vegetation. Additional improvements would include modifications to existing trail routes. Therefore, the proposed project would not add any new impervious surfaces. Construction activities could exacerbate erosion conditions by exposing soils and adding water to the soil from irrigation during construction. As discussed in more detail below in Section X, *Hydrology and Water Quality*, the National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Constructions and Land Disturbance Activities (Construction General Permit), which was adopted by the State Water Resources Control Board as Water Quality Order 2012-0006-DWQ on July 17, 2012, is required for soil disturbance activities greater than 1 acre. Compliance with the Construction General Permit requires development and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer that includes BMPs to be employed during construction to control soil erosion. The selection of erosion control BMPs is based on minimizing disturbed areas, stabilizing disturbed areas, and protecting water quality. Preliminary

erosion control measures (as part of the SWPPP) for the proposed project could include, but not be limited to, the use of hydraulic mulch, soil binders, geotextiles and mats, hydroseeding, straw mulch, earthen dikes, and velocity dissipation devices. Furthermore, as discussed above in Section V, *Biological Resources*, the proposed project would implement **Mitigation Measure BIO-1** to ensure all necessary agency permits, including a CWA Section 402 National Pollutant Discharge Elimination System Construction General Permit (Order No. 2012-0006-DWQ) from the RWQCB, have been approved before initiating grading activities, and impacts on geology and soils would be minimized per the conditions set forth in the permits. As a result, with implementation of **Mitigation Measure BIO-1**, the proposed project would result in less-than–significant impacts related to soil erosion during construction activities.

Project operations would not increase erosion because the restoration site would be restored to the desired functions with native habitat that would prevent substantial erosion or siltation on or off site. Furthermore, a restoration ecologist, to be retained by the project applicant, would work in coordination with the installation and maintenance contractors and oversee the protection of existing native vegetation, nonnative plant removal, contour grading, site preparation, planting and seeding, maintenance and monitoring, and reporting. If deemed necessary by the restoration ecologist, maintenance activities would include remedial measures for erosion control. In addition, maintenance of the trail improvements would be managed per a long-term management plan,[5] further minimizing the potential for conditions leading to erosion. Therefore, long-term operational impacts related to soil erosion or loss of topsoil would be less than significant.

c) **Less-than-Significant Impact.** According to the Natural Resources Conservation Service's *Web Soil Survey* (Natural Resources Conservation Service 2019), the primary soil unit that underlies the project site is characterized as Riverwash. Riverwash is described as material originating from sandy, gravelly, or cobbly alluvium derived from mixed sources. Other soil units underlying the project area include huerhuero loam (moderately well-drained, calcareous alluvium derived from sedimentary rock), Salinas clay loam (well-drained alluvium derived from mixed sources) and olivenhain cobbly loam (well-drained, gravelly alluvium derived from mixed source). As mentioned under threshold VIII.a, portions of the project site are located in an area susceptible to instability (for both landslides and liquefaction). However, no structures intended for human occupancy would be built as part of project implementation and people, either during construction activities or visiting during operation, would be on site only temporarily. In addition, the proposed project does not contain features that would directly or indirectly cause or intensify the effects of soil or geologic instability; on the contrary, the proposed project intends to restore and rehabilitate the project area to enhance and re-establish original hydrological processes, vegetation communities, and wildlife habitats. Therefore, impacts would be less than significant.

d) **Less-than-Significant Impact.** Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content as well as a significant decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils. Although onsite soils (described under threshold VIII.c) have some clay content, project features include expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails; as such, no significant structures or structures intended for human occupancy would be built as part of project implementation. In addition, project features do not include features that would directly or indirectly create or exacerbate expansive soil conditions. Therefore, impacts would be less than significant.

[5] The purpose of the long-term management plan is to maintain control over factors that could adversely affect the site. Otay Land Company would evaluate the potential factors that could adversely affect the proposed project site in light of the location and the condition of riparian/wetland areas surrounding the proposed project site. The long-term management plan would be a "living" document and would include a provision to be updated every 5 years so that changes in the physical or anthropogenic environments can be adequately addressed.

e) **No Impact.** Project features do not include the use of septic tanks or alternative wastewater disposal systems. No impacts would occur.

f) **Less-than-Significant Impact**. The proposed project would not directly destroy a unique paleontological resource, site, or unique geologic feature. Project activities such as grading, vegetation removal, floodplain recontouring, plantings, installation of at-grade channel crossings, and decommissioning of existing roads would primarily occur in an area that was previously disturbed to great depths by gravel mining operations (ICF 2021c) or on Holocene-aged alluvial landforms (Tan and Kennedy 2002). In these locations, paleontological sensitivity is considered to be low. In instances where the proposed project would occur on Pleistocene-aged landforms composed of sedimentary rock, which tend to be paleontologically sensitive, project activities would be limited to plantings, decommissioning of existing roads, and minor trail improvements. All of these activities would result in disturbance limited to the topsoil and would not be sufficient to encounter as-yet undocumented paleontological resources. Therefore, impacts related to paleontological resources would be less than significant.

Mitigation:

Implement **Mitigation Measure BIO-1**.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
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) Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	**X**	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	**X**	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact.** Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails; the addition of protective fencing; and the inclusion of educational kiosks. Construction activities would involve the routine transport, use, and disposal of hazardous materials such as fuel, solvents, paints, oils, and grease. Such transport, use, and disposal must comply with applicable federal and state regulations, such as the Resource Conservation and Recovery Act and Department of Transportation Hazardous Materials Regulations, among others. Although small amounts of solvents, paints, oils, and grease would be transported, used, and disposed of during construction, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. In addition, construction activities would be conducted using BMPs as required under the Construction General Permit (Order

No. 2012-0006-DWQ). BMPs used during construction activities could include, but would not be limited to, practices related to controls for vehicle and equipment fueling and maintenance; material delivery, storage, and use; spill prevention and control; and solid and hazardous waste management. The proposed project includes the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails; as such, no significant amounts of hazardous materials would be used, handled, or stored as part of normal operations. Small-scale weed or pest infestations would be addressed as they are discovered during routine site monitoring and maintenance; however, the herbicides and pesticides to be used would be used in small, localized amounts and any spills would be cleaned as they occur. Therefore, impacts would be less than significant.

b) **Less-than-Significant Impact with Mitigation Incorporated.** Construction-related hazardous materials would be used during construction of the proposed project, including fuel, solvents, chemicals, and oils, for the operation of construction equipment. It is possible that any of these substances could be released in small amounts during construction activities. However, compliance with federal, state, and local regulations in combination with construction BMPs implemented from a SWPPP as required under the State Water Resources Control Board's Construction General Permit would ensure that all hazardous materials are transported, used, stored, and disposed of properly, which would minimize potential impacts related to a hazardous materials release during the construction phase of the proposed project. Furthermore, **Mitigation Measure BIO-1** would ensure all necessary agency permits, including a CWA Section 402 National Pollutant Discharge Elimination System Construction General Permit (Order No. 2012- 0006-DWQ) from the RWQCB, have been approved before initiating grading activities. No hazardous materials are expected to be transported, used, disposed of, or stored on site during the operational phase.

An environmental database search was conducted via the State Water Resources Board's GeoTracker (State Water Resources Control Board 2015) and Department of Toxic Substances Control's EnviroStor (Department of Toxic Substances Control 2019) websites to determine if there are any known hazardous materials sites within or adjacent to the project site that could result in a significant hazard due to project implementation. The following summarizes the findings of this records search.

Brown Field Bombing Range Formerly Used Defense Site

The southern portion of the proposed project site is within the Brown Field Bombing Range Formerly Used Defense Site (FUDS). The site is approximately 2 miles northeast of Otay Mesa and approximately 63 acres of the project site overlap with the FUDS site. Figure 11 shows the project footprint in correlation with the FUDS property boundaries. The Brown Field Bombing Range was identified in the EnviroStor database as being part of the Department of Toxic Substances Control's Site Cleanup Program with a status of *Inactive – Needs Evaluation* (as of July 2018). The Brown Field Bombing Range (also known as the Otay Mesa Bombing Range, the Otay Bombing Target, or Otay Mesa Bombing Target #32) was used by the Navy between 1942 and 1960 as a dive-bombing practice range, and later as an aerial rocket range. In 1961, the bombing range was assigned for disposal (Parsons 2007). Construction of the proposed project could create a significant hazard to construction workers or the environment by potentially exposing any remaining unearthed unexploded ordnances (UXO[6]), munitions and explosives of concern (MEC[7]), and munitions debris (MD[8]) associated with these types of facilities.

[6] UXO are defined as military munitions that have been prepared for action, remain unexploded, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute an explosive hazard.

[7] MEC are military munitions that may pose unique explosives safety risks, including UXO, Discarded Military Munitions (DMM), or Munitions Constituents (MC) present in high enough concentrations to pose an explosive or other health hazard.

[8] MD is remnants of munitions (i.e., penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal (Parsons 2007).

2007 Parsons Site Inspection Report

A site inspection evaluation consisting of a qualitative reconnaissance and surface soil sampling was conducted by Parsons in 2007 to evaluate the presence of MEC, MD, and MC within the Brown Field Bombing Range. The qualitative reconnaissance encompassed 15.9 miles of the former bombing range and a total of 10 soil samples (Figure 11). Results of the sampling event were as follows:

- Explosives were not detected in any of the soil samples collected.
- MC contamination was detected in surface soil samples, in particular aluminum, copper, iron, lead, potassium, manganese, and zinc.

Due to the laboratory results, an MC Screening Level Risk Assessment (SLRA) and a Screening Level Ecological Risk Assessment (SLERA) were conducted for aluminum, copper, lead, manganese, and zinc (iron and potassium were determined to not pose an unacceptable risk). Based on the results of the SLRA and SLERA, the Brown Field Bombing Range was determined not to pose an unacceptable risk to human health or ecological receptors resulting from potential exposure to MC in surface soil. As surface water and sediment samples were not collected at the time of the evaluation, the site inspection recommended the need for further investigation to determine the presence of MEC hazards in these types of media. **Mitigation Measure HAZ-1** would reduce potential impacts associated with unacceptable risks to human health or ecological receptors resulting from exposure to MC in surface water and sediment by requiring sampling and completion of the associated SLRA and SLERA studies, along with either avoidance or remediation of any affected areas before any construction activities may proceed.

The site inspection stated that, based on the MD observed during the investigation as well as the MD identified at the Brown Field Bombing Range in the past, it is likely that additional MD and/or MEC currently exist within the former Brown Field Bombing Range site. Implementation of **Mitigation Measure HAZ-2** would further reduce potential impacts related to the historical Brown Field FUDS site activities by performing a surface clearance sweep prior to initiating any construction activities and removing and disposing of any remaining unearthed UXO, MEC, and MD. In addition, **Mitigation Measure HAZ-2** would require a UXO-qualified technician to support the proposed project's restoration and grading activities to detect the presence of MEC in disturbed soil. Impacts would be less than significant with mitigation incorporated.

Other Nearby Sites

East Mesa Regional Firing Range

The East Mesa Regional Firing Rage was identified as a Cleanup Program Site and is located at 440 Alta Road, approximately 0.50 mile to the southeast of the proposed project. According to a Case Closure Summary letter from the County of San Diego Department of Environmental Health (County of San Diego 2011), in January of 2010 soil and surface water samples were taken on site, as impacts were suspected due to discolored soil and free-standing liquid that were identified during a site reconnaissance. Contaminants were not detected in any of the soil samples collected. One surface water sample exhibited elevated petroleum hydrocarbons as diesel concentrations; however, this reading was later attributed to heavy equipment used on the firing range. The County of San Diego Department of Environmental Health Land and Water Quality Division granted case closure in April of 2011.

Richard J. Donovan Correctional Facility

The Richard J. Donovan Correctional Facility was identified as a Cleanup Program Site and is located at 480 Alta Road, approximately 0.58 mile to the south of the proposed project. According to a County of San Diego Department of Environmental Health Voluntary Assistance Program application (County of San Diego 2019), approximately 44,000 cubic yards of inert fill were illegally placed within the correctional facility property. The State of California is requesting San Diego County oversight to remove concrete debris and stabilize remaining fill. The site is listed as *Open and Active* as of April, 2019; however, the case involves soils (fill) only. As such, the site is not considered a risk to the proposed project.

The site was also listed on the Leaking Underground Storage Tank Cleanup Site list for a waste oil release to onsite soils. Upon completion of a site investigation and corrective actions, the site was granted *No Further Action* status by the County of San Diego Department of Environmental Health as of July 2007.

East Mesa Detention Center

The East Mesa Detention Center was identified as a Leaking Underground Storage Tank Cleanup Site and is located at 446 Alta Road, approximately 0.70 mile to the southeast of the proposed project. According to a Case Closure Summary letter from the County of San Diego Department of Environmental Health (County of San Diego 2007), affected soil was discovered during the removal of two 12,000-gallon Underground Storage Tanks in 2005. Samples collected during the Underground Storage Tank removal contained elevated concentrations of petroleum hydrocarbons. Through sampling it was determined that contaminant impacts were exclusive to soils only. Upon completion of a site investigation and corrective actions, the site was granted *No Further Action* status by the County of San Diego Department of Environmental Health Land and Water Quality Division in December of 2007.

Based on the details described above, the likelihood of contamination migrating to the proposed project area and adversely affecting construction workers or the environment from the East Mesa Regional Firing Range, Richard J. Donovan Correctional Facility and East Mesa Detention Center sites is very low. Impacts related to the other nearby sites would be less than significant.

c) **No Impact.** Implementation of the proposed project would not create any impacts associated with hazardous emissions or handling of acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. There are no schools within 0.25 mile of the proposed project. The closest school is High Tech High Chula Vista, located at 1949 Discovery Falls Drive, approximately 0.85 mile to the north. No impact would occur.

d) **Less-than-Significant Impact with Mitigation Incorporated.** As discussed above, an environmental database search was conducted via the State Water Resources Board's GeoTracker and Department of Toxic Substances Control's EnviroStor websites to determine if there are any known hazardous materials sites within or adjacent to the project site that could result in a significant hazard due to project implementation. The project footprint was not identified in any environmental database; however, as mentioned under threshold VIX.b, the project site overlaps with the former Brown Field Bombing Range. As previously mentioned, the former Brown Field Bombing Range exhibits the potential for surface water and sediment contamination, as well as the potential for additional MD and/or MEC on site. Although there is a possibility of encountering affected media on site (described in detail under threshold VIX.b above), implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts associated with the former Brown Field Bombing Range by incorporating a surface water and sediment sampling study and providing site surface clearance prior to construction. Impacts would be less than significant with mitigation incorporated.

e) **Less-than-Significant Impact.** According to *the Brown Field Municipal Airport Land Use Compatibility Plan* (San Diego County Airport Land Use Commission 2010a), the proposed project is within Review Area 2 of the Brown Field Municipal Airport's Airport Influence Area. Review Area 2 consists of airspace protection and/or overflight notification areas. In addition, overflight notification documents are required in locations within Review Area 2.[9] According to the airport land use compatibility plan, limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. In addition to being within Review Area 2, the proposed project site sits within the Federal Aviation Administration (FAA) Part 77 Airspace

[9] An *Overflight Notification* informs property owners that the property is subject to aircraft overflight, aircraft noise exposure, and other airport-related impacts. No restrictions on the height of objects, requirements for marking or lighting of objects, or access to the property for these purposes are included in an Overflight Notification. An Overflight Notification serves only as buyer acceptance of overflight conditions.

Protection Height Notification Boundary for the airport. FAA Part 77 height restrictions within the project site vary from 876.3 feet above mean sea level farthest away from the airport to 676.3 feet above mean sea level. As previously mentioned, the proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails. Therefore, the proposed project does not include features that would surpass any of the height restrictions as part of the FAA Part 77 airspace protection and would not create the potential for airport navigational hazards. In addition, the proposed project does not contain permanent features that would exacerbate or worsen existing noise levels in the project area. During construction, equipment used on site would likely increase noise levels; however, the increase would be typical of construction projects and would only be temporary. Impacts would be less than significant.

f) **Less-than-Significant Impact.** The proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the upper portion of the Lower Otay River watershed, in an area surrounded by open space with no major arterials immediately adjacent. Therefore, construction and operational activities conducted on the project site would not impair the implementation of any local emergency response plan and the effectiveness with which emergency personnel respond. Additionally, the proposed project would not result in any substantial traffic queuing along Wiley Road and would not allow any construction vehicles or equipment to park or remain stationary within the roadway. Moreover, the proposed project does not include any characteristics (e.g., permanent public road closures, long-term blocking of public road access) that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. All large construction vehicles entering and exiting the site would be guided by personnel using signs and flags to direct traffic.

During construction activities, the proposed project would be required to comply with applicable requirements set forth by the County of San Diego Office of Emergency Services' Emergency Operations Plan, Chula Vista Police Department, and City of Chula Vista Fire Department, such as requirements related to evacuation during wildfires. The Office of Emergency Services provides coordination of emergency response at the local level in the event of a disaster, including wildland fires. This emergency response coordination is facilitated by the Operational Area Emergency Operations Center and responding agencies to the proposed project, the Chula Vista Police Department, and City of Chula Vista Fire Station No. 3. Furthermore, development of trails and access roads on the project site has been conducted in coordination with the U.S. Border Patrol to ensure the proposed project provides adequate access for vehicular surveillance. In addition, the proposed project would support establishment of a Greenbelt system that limits the use of multi-use trails to non-motorized uses except for motorized wheelchairs and utility, maintenance, and emergency vehicles, making emergency response in the project area more effective. Impacts would be less than significant.

g) **Less-than-Significant Impact.** The project site is within both High Fire Hazard Severity Zones and Very High Fire Hazard Severity Zones (VHFHSZ) (CAL FIRE 2009a, 2009b). However, due to the nature of the proposed project, it is not expected to draw a substantial amount of people, either during project implementation activities or permanently; therefore, the site would remain similar to existing conditions. No structures intended for human occupancy would be built as part of the proposed project. In addition, construction personnel and visitors during operations of the project site would be on site only temporarily, thereby reducing potential risks associated with wildland fires. Furthermore, the proposed project is expected to follow fire management policies, rules, and regulations established by the County of San Diego Office of Emergency Services, City of Chula Vista Fire Department, and California Department of Forestry and Fire Protection (CAL FIRE) such as policies and regulations addressing wildfire evacuation and fire prevention. Lastly, the proposed project would support establishment of a Greenbelt system that limits the use of multi-use trails to non-motorized uses except for motorized wheelchairs and utility, maintenance, and emergency vehicles, making emergency response to potential fires in the project area more effective. Impacts would be less than significant.

Mitigation:

Implement **Mitigation Measure BIO-1**.

Mitigation Measure HAZ-1: Sampling and Screening Level Risk Assessment (SLRA)/Screening Level Ecological Risk Assessment (SLERA) Studies for Onsite Surface Water and Sediment and Water/Sediment Remediation (if necessary)

Prior to construction activities associated with the project, surface water and sediment sampling will be conducted by an environmental consultant with experience in proper sample handling procedures. Samples will be collected from portions of the site where the project site overlaps with the Brown Field Bombing Range Formerly Used Defense Site, the number and location of which will be determined by a qualified environmental professional with experience in screening level risk assessments. Using the laboratory results, SLRA and SLERA studies will be conducted to assess potential risk associated with munitions constituents exposure to human and ecological receptors. A report will be prepared with the results of the study and submitted to the City for review and approval. Should results indicate the presence of contamination levels that would pose a risk to human health, the project proponent (in consultation with the City) will coordinate with the San Diego County Department of Environmental Health, the Department of Toxic Substances Control, and the Regional Water Quality Control Board (as necessary) regarding avoidance or remediation of affected water and soils in compliance with applicable federal, state, and local laws prior to any project-specific construction activities occurring. If the condition at the site requires it, the project proponent will not proceed with construction activities until a letter of closure is provided by the lead hazardous materials agency. Should the results indicate that no serious risk is present, project-related construction activities may proceed, pending compliance with any other applicable mitigation.

Mitigation Measure HAZ-2: Surface Clearance Prior to Construction

Prior to initiating project activities, a surface clearance will be conducted where project elements intersect with the Brown Field Bombing Range Formerly Used Defense Site boundary. The surface clearance would be employed to identify all munitions and explosives of concern (MEC) and munitions debris (MD) in the project site. A qualified survey company with experience in unearthed unexploded ordnances (UXO) will be retained to sweep the area for metallic items including those that may be obscured by vegetation or surface debris, and MD will be evaluated to determine if any explosive residue remains. If it is determined that there is the potential for an explosive hazard, the City of Chula Vista and County of San Diego will be contacted to respond to the item and dispose of it appropriately. Upon identifying an explosive hazard, the survey company will establish an exclusion zone around the material. The exclusion zone radius will depend on the type of material identified and will be expanded, if needed, while material is being worked on or if setting a charge to explode the material in place. If setting a charge, all personnel will be required to evacuate the area. All personnel will be required to remain out of the exclusion zone until the responders provide clearance. All MD determined to no longer contain explosive residue will be inspected by qualified personnel and containerized in lockable 55-gallon drums for later disposal by an approved recycler.

During construction, the qualified survey company will supply a UXO-qualified technician to support the project. The technicians will use magnetometers to detect the presence of MEC in disturbed soil. If no MEC items are identified, excavations will be advanced to desired depth. If MEC are detected during excavation/grading, these activities will stop immediately and the survey company technician(s) will contact the City of Chula Vista and County of San Diego for disposal of the material. The technician(s) will remain on site during disposal response actions to provide site safety and security and for technical consultation with emergency responders.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	**X**	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	**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 or through the addition of impervious surfaces, in a manner that would:				
i. Result in substantial erosion or siltation on or off site;	☐	☐	**X**	☐
ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;	☐	☐	**X**	☐
iii. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	**X**
iv. Impede or redirect flood flows?	☐	☐	**X**	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	**X**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact**. The proposed project would not result in an increase in pollutant discharges to receiving waters, result in significant alteration of receiving water quality during or following construction, or violate any water quality standards or waste discharge requirements. The project area is situated within the Otay River Watershed and contains the floodplain of the Otay River main channel downstream of Savage Dam and Lower Otay Reservoir. Two named creeks, O'Neal Canyon Creek and Salt Creek, flow into the Otay River project area. A total of 19 jurisdictional features were delineated on site, including the Otay River, several ephemeral drainages, and wetland depressions, as detailed further in technical attachment *Draft Otay River Mitigation Bank Jurisdictional Delineation Memorandum* (ICF 2021d). The Otay River is not listed as 303(d) impaired water body (State Water Resources Control Board 2018).

Construction activities would include the removal of invasive, nonnative tree, shrub, and herbaceous species followed by grading of the channel and floodplain areas to remove spoil piles, berms, and pits to re-establish the Otay River mainstem and the creation of a secondary channel and floodplain terrace to maximize the hydrologic function of the overall floodplain. The construction area would be treated for nonnative species and revegetated with native species such as sage scrub and cactus scrub. These improvements to the vegetative cover are expected to result in improved hydrology and flood capacity, bio-filtration, and sediment and toxicant trapping. As a result, the proposed project is anticipated to have a net benefit to water quality.

All vegetation debris would be removed off site or, as appropriate, mulched for use as erosion control at a later time. Excess soil material would be redistributed on site rather than exported. In order to minimize unwanted ecological impacts, site grading and earthwork activities would be limited to smaller (rubber-tired or small-tracked) equipment and a greater reliance on hand tools in waterways and ecologically sensitive areas. Larger equipment would be used in areas with less ecological sensitivity, such as the larger upper and lower floodplain areas, and in order to construct seasonal ponds. In addition to the proposed restoration activities, a trail crossing on an unnamed drainage north of the river would be improved to facilitate the connection of tributaries to the mainstem Otay River, and a trail crossing on Salt Creek would be part of a future phase of work. The trails would be installed as part of the restoration effort but are expected to be installed after the major earthwork in the river is complete. Installation would include recontouring of existing trails for proper drainage, select material placement, focused rock sills, strategic fencing and boulder placement, and signage and educational kiosk implementation.

The potential impacts of these construction activities on water quality are primarily related to sediment and sediment-bound pollutants that may be mobilized during construction when a rain event occurs. Ground-disturbing construction activities, such as grading, excavation, and stockpiling of spoil materials, and stormwater runoff from construction areas could result in soil erosion and sedimentation and reduce water quality in the Otay River. Additionally, hazardous materials (e.g., gasoline, oils, grease, lubricants) from construction equipment could be accidentally released during construction. Accidental discharge of these materials to surface waters could adversely affect water quality, endanger aquatic life, and/or result in a violation of water quality standards.

Because the proposed project would grade up to 130 acres of land, the proposed project is subject to the State Water Resources Control Board's Construction General Permit. Compliance with the Construction General Permit requires the development and implementation of a SWPPP by a Qualified SWPPP Developer, the elimination of non-stormwater discharge downstream into Otay River, and the implementation of various types of BMPs throughout the construction period to control the discharge of pollutants. The SWPPP requires a description of the restoration site, identification of sources of sediment and other pollutants that may affect the quality of stormwater discharges, a list of BMPs to provide sediment and erosion control, waste-handling measures, and non-stormwater management. Various BMPs may be needed at different times during construction because activities are constantly changing site conditions. Selection of erosion control BMPs is based on minimizing disturbed areas, stabilizing disturbed areas, and protecting water quality. Selection of sediment control BMPs is based on retaining sediment on site and controlling the site perimeter. The SWPPP would contain the final BMP list and would meet or exceed measures required by the Construction General Permit. In addition, the SWPPP is required to be implemented by a Qualified SWPPP Practitioner to ensure all BMPs are implemented correctly to protect water quality. The City would review the SWPPP and ensure that it meets the requirements of the Construction General Permit, the City's Municipal Permit, and the City's Storm Water Manual. As a result, the proposed project would result in less-than-significant impacts related to water quality standards during construction activities.

Limited dewatering may be required for construction during periods of higher flows in the river channel, or in areas with a high groundwater table. Dewatering activities, if needed, would be minimal and conducted in a manner that allows for completion of the proposed channel improvements without adversely affecting adjacent plant communities. The proposed project would comply with the

Groundwater Dewatering Permit. The proposed project would comply with dewatering requirements imposed by the San Diego RWQCB general waste discharge requirements for discharges from temporary groundwater extraction and similar waste discharges to surface waters (Order R9-2015-0013). To obtain coverage under this order, a discharger must submit a complete Notice of Intent application package to the San Diego RWQCB office at least 60 days before proposed commencement of the discharge. The project proponents would be required to maintain compliance with the effluent limitations applicable to the receiving water, as specified in Order R9-2015-0013 (refer to Table 5 of the order). For example, the permit has effluent limitations for settleable solids, total suspended solids, turbidity, pH, and a number of additional parameters. In addition, Order R9-2015-0013 identifies the monitoring and reporting program requirements. The purpose of the monitoring and reporting program is to determine and ensure compliance with effluent limitations and other requirements established in the order, assess treatment efficiency, characterize effluents, and characterize the receiving water and the effects of the discharge on the receiving water. The San Diego RWQCB may specify increased monitoring requirements as necessary to ensure that applicable water quality objectives are maintained in the receiving water. Any dewatering or construction-related non-stormwater discharges would be controlled in compliance with the San Diego RWQCB permit for dewatering. The permit requires permittees to conduct monitoring of dewatering discharges and adhere to effluent and receiving water limitations contained within the permit so that water quality of surface waters is protected. As such, the proposed project is not anticipated to affect groundwater quality or surface water quality.

The proposed project would restore a portion of the Otay River and recreate appropriate channel morphology and a floodplain composed of low and high terraces that would be activated at various flood events. As a result, the proposed project is designed to enhance, rehabilitate, and re-establish hydrological processes and vegetation communities within the Lower Otay River Watershed that would be self-sustaining and can adjust to dynamic natural processes. Long-term operation of the proposed project would result in stabilized banks and channels that would result in a reduction in sediment load from the restoration site compared to existing conditions. This would result in a small improvement of the quality of water discharging from the restoration site. Because the proposed project would re-establish primary and secondary flow channels, low and high flood terraces, and native transitional habitat as well as remove nonnative invasive species and restore native vegetation, this would serve to improve hydrological conditions. Due to the nature of the proposed project, long-term operational activities are expected to be minimal and would include maintaining vegetation overgrowth on the multi-use and secondary trails, erosion control and fencing, and signage and education kiosk maintenance. Ongoing maintenance of the proposed project would include nonnative weed control. As a result, operation and maintenance-related impacts on water quality standards would be less than significant, and no mitigation is required.

b) **Less-than-Significant Impact**. The proposed project is within the Coastal Plain of the San Diego Basin (California Groundwater Basin 9-033). In late 2016, the California Department of Water Resources approved state-recognized boundaries for the Coastal Plain of the San Diego Groundwater Basin, consolidating the San Diego Formation, Lower Sweetwater River Valley, Otay River Valley, and Tijuana River Valley basins (California Department of Water Resources 2018a). The basin is bound on the west by the San Diego Bay and the Pacific Ocean, on the south by the international border with Mexico, on the north by the alluvium of the Mission Valley Basin, and on the east by the La Nacion fault and the lateral extents of the San Diego Formation and the alluvial areas in Otay Valley and Sweetwater Valley. The surface waters are drained westerly toward the Pacific Ocean by the Sweetwater River, the Otay River, the Tijuana River, and various creeks. Average annual precipitation ranges from about 12 to 20 inches (California Department of Water Resources 2018b). Groundwater flow within the watershed generally mimics surface topography. Most of the groundwater in the watershed occurs west and downstream of the project area. Although the project site is degraded as a result of past activities, there are still various functions provided by the existing project site, including groundwater recharge due to the underlying alluvium soils on site.

The proposed project would not result in groundwater pumping or include sources of impervious surface that would impede groundwater recharge. However, the restoration of the channels could intercept shallow groundwater from the alluvium layer, which would subject shallow groundwater to small losses from evaporation and transpiration. Interception of shallow groundwater would not be expected to cause a significant drawdown in groundwater levels, as the existing presence of dense stands of invasive, nonnative trees and other invasive species already intercept shallow groundwater from the alluvium layer. These invasive species would be removed and replaced with native vegetation, which would utilize less groundwater. In addition, grading and contouring would improve the flood banks, allowing for stormwater during rain events to flow onto the upland areas. These improvements would potentially increase the recharge characteristics of the project area over existing conditions during large storm events. Therefore, the proposed project would not 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. In addition, because the proposed project would not utilize groundwater and would potentially improve groundwater recharge, the proposed project would not impede sustainable groundwater management of the basin. Impacts would be less than significant.

c) i. **Less-than-Significant Impact**. The existing channel has been disturbed through gravel and sand mining during the twentieth century. Dozens of mine tailing mounds exist within the historic channel, and drainage patterns have been severely altered as a result. In addition, regular vehicular and foot traffic have created disruptions in the floodplain hydrology. Construction activities would include the removal of all invasive nonnative tree, shrub, and herbaceous species followed by grading of the channel and floodplain areas to remove spoil piles, berms, and pits to restore the area to the desired functions. The SWPPP, required as part of compliance with the Construction General Permit identified in threshold X.a above, would address impacts from erosion or siltation on or off site during construction to less-than-significant levels.

Operation of the proposed project would restore the portion of the Otay River within the boundaries of the restoration site by creating complex channel morphology including primary and secondary channels. A floodplain would be recreated with low and high terraces that would be activated at various flood events. This would be an improvement to drainage patterns over existing conditions and would not increase erosion or siltation off site because the restoration site would be restored to the desired functions with native habitat that would prevent substantial erosion or siltation on or off site. Moreover, any project improvements to OVRP-designated trails would be required to comply with OVRP Trail Guidelines, which identify erosion control requirements for trail design, especially for soft-surface, multi-use trails, including regarding installation of the proposed fence, signs, and educational kiosks. Per City requirements, the OVRP Trail Guidelines shall be implemented to reduce soil erosion and any ensuing trail damage. A restoration ecologist would be retained by the project applicant, would work in coordination with the installation and maintenance contractors, and would oversee the protection of existing native vegetation, nonnative plant removal, contour grading, site preparation, planting and seeding, maintenance and monitoring, and reporting. Therefore, the proposed project would not substantially alter the existing drainage pattern of the restoration site or area in a manner that would result in substantial erosion or siltation on or off site, and impacts would be less than significant.

ii. and iv. **Less-than-Significant Impact**. The project site is within the floodway and flood zone (A and AE) associated with the Otay River, according to the Federal Emergency Management Agency's Flood Insurance Rate Map 06073C2177G (Federal Emergency Management Agency 2012). The proposed project would alter an existing stream but would represent an improvement in drainage patterns over existing conditions. The proposed project would re-establish primary and secondary flow channels, low and high floodplains, and native transitional habitat as well as remove nonnative, invasive species and restore native vegetation. This would improve hydrologic conditions, preserve connectivity between adjacent areas of preserved land and natural habitats, and result in a net gain in functions and services following restoration activities. Before it was disturbed, the Otay River

throughout the proposed project area consisted of a braided river channel and associated floodplain; therefore, the intent of the restoration phase of the proposed project is to rehabilitate the channel and re-establish these conditions through the creation of a series of secondary channels. The created channels would connect to the up- and downstream existing mainstem and would include a low and high terrace along with sandy bar complexes and would be designed to accommodate flood events. In particular, the active low floodplain is intended to accommodate a 10-year flood event, while the high floodplain would likely correspond to a 25-year event, with larger events inundating the entire valley floor with water rising into the upland areas as needed. Rehabilitation activities would include removing flow-impeding features left behind by the sand mining operation, including existing berms, cobble rows, and sediment piles, and recontouring the transitional upland area to mirror adjacent natural slopes and accommodate rising floodwaters. This area would also be treated for nonnative species and revegetated with native species such as sage scrub and cactus scrub. These improvements to the vegetative cover are expected to result in improved hydrology and flood capacity, bio-filtration, and sediment and toxicant trapping. No increase in runoff would occur as a result of the proposed project given the proposed project would not increase impervious surfaces on site. The proposed project would result in an incremental improvement to drainage patterns over existing conditions and would not affect flooding off site. Therefore, the proposed project would not substantially alter the existing drainage pattern of the restoration site or area, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site, or place structures within a 100-year flood hazard area that would impede or redirect flood flows. Impacts would be less than significant.

iii. **No Impact**. The proposed project would not create or contribute additional runoff, nor would it provide additional sources of polluted runoff. The proposed project would not add impervious surfaces to the site that could increase runoff. In addition, the proposed project is located along the Otay River and there are no storm drain facilities given the land is undeveloped. The proposed project would remove spoil piles, berms, and pits to restore the area to the desired hydrologic functions. In addition, the construction area would be treated for nonnative species and revegetated with native species such as sage scrub and cactus scrub. These improvements to the vegetative cover are expected to result in improved hydrology and flood capacity, bio-filtration, and sediment and toxicant trapping. As a result, the proposed project would not provide additional sources of polluted runoff. No impacts would occur.

d) **No Impact**. The project site is within the floodway and flood zone (A and AE) associated with the Otay River, according to the Federal Emergency Management Agency's Flood Insurance Rate Map 06073C2177G. The project site is not within a tsunami zone given its distance from the Pacific Ocean. The project site is within a potential seiche zone from inundation of the upstream dam. The City of Chula Vista General Plan shows the project site is within the Savage Dam potential zone of dam inundation (City of Chula Vista 2015). Savage Dam is a 149-foot dam operated by the City of San Diego to store water from the San Diego Aqueduct. The original dam failed in 1916 and was subsequently reconstructed in 1919. Since its reconstruction, Savage Dam has experienced 27 spill events in 11 of the water years from 1919 to 2015. The proposed project would improve hydrological conditions because the it would re-establish primary and secondary flow channels, low and high flood terraces, and native transitional habitat. The created channels would connect to the up- and downstream existing mainstem and would include a low and high terrace along with sandy bar complexes and would be designed to accommodate flood events. In particular, the active low floodplain is intended to accommodate a 10-year flood event, while the high floodplain would likely correspond to a 25-year event, with larger events inundating the entire valley floor with water rising into the upland areas as needed. In addition, the proposed project would remove flow-impeding features left behind by the sand mining operation, including existing berms, cobble rows, and sediment piles, and would result in stabilized banks and channels that would result in a reduction in sediment load from the restoration site compared to existing conditions. No pollutants would be located on site that could be released during inundation. As a result, the proposed project would not risk release of pollutants due to project inundation. No impacts would occur.

e) **Less-than-Significant Impact**. As discussed in threshold X.a, the proposed project is subject to the Construction General Permit and requires the development and implementation of a SWPPP and various types of BMPs to control the discharge of pollutants. The SWPPP requires BMPs to provide sediment and erosion control, waste-handling measures, and non-stormwater management. The SWPPP would be implemented by a Qualified SWPPP Practitioner to ensure all BMPs are implemented correctly to protect water quality. The City would review the SWPPP and ensure that it meets the requirements of the Construction General Permit, the City's Municipal Permit, and the City's Storm Water Manual. The proposed project would comply with the Groundwater Dewatering Permit and would be required to maintain compliance with the effluent limitations applicable to the receiving water and implement the monitoring and reporting program requirements to ensure that applicable water quality objectives are maintained in the receiving water. As such, the proposed project is not anticipated to conflict with or obstruct implementation of a water quality control plan.

As discussed in threshold X.b, the proposed project would not result in groundwater pumping or include sources of impervious surface that would impede groundwater recharge. The restoration of the channels could intercept shallow groundwater from the alluvium layer, which would subject shallow groundwater to small losses from evaporation and transpiration. However, the groundwater would not be expected to cause a significant drawdown in groundwater levels because the invasive, nonnative trees would be removed and replaced with native vegetation that requires less water and the restoration of the floodplain would improve the flood banks allowing for stormwater during rain events to flow onto the upland areas and potentially recharge the basin. Therefore, the proposed project would not conflict with or obstruct a sustainable groundwater management plan. Impacts would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	**X**
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	**X**	☐	☐

Comments:

a) **No Impact.** Implementation of the proposed project would not physically divide an established community. The proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails, the addition of protective fencing, and the inclusion of educational kiosks. No structures that could divide an established community are proposed. Therefore, the proposed project would not physically divide an established community, and no impacts would occur.

b) **Less-than-Significant Impact with Mitigation Incorporated**. The proposed project would enhance, rehabilitate, and re-establish hydrological processes, vegetation communities, and wildlife habitats associated with the Lower Otay River watershed. The proposed project consists of the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the entire proposed project limits. Implementation of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project. The project site is designated as Open Space Preserve by the City of Chula Vista General Plan and is zoned Residential by the City of Chula Vista's Zoning Code. Other applicable planning documents include the Brown Field Municipal Airport Land Use Compatibility Plan, Otay Ranch Phase 1 and 2 Resource Management Plan (RMP), Otay River Watershed Management Plan (WMP) (Aspen Environmental Group 2006), Draft Otay River Watershed Special Area Management Plan (SAMP), City of Chula Vista Greenbelt Master Plan, and OVRP Concept Plan and Trail Guidelines. The following describes the proposed project's consistency with these plans.

Chula Vista General Plan

In 2005, the Chula Vista City Council approved an updated General Plan that guides the City's future growth and development through 2030. This plan, last amended in 2017, is complemented by more detailed planning documents for discrete elements and regions within the City. Of particular relevance is the Otay Ranch General Development Plan (GDP) (City of Chula Vista 2019), which was approved by the City of Chula Vista and County of San Diego as part of the Sub-Regional Plan in 1993 and updated through 2018. The Otay Ranch GDP planning area covers three separate land parcels covering almost 10,000 acres in the City. The Otay Ranch GDP is an integrated policy document, combining the requirements of the City of Chula Vista and the County of San Diego. It identifies the land use pattern and intensities for the Otay Ranch community (including the Villages) as well as environmental, economic, and social goals, objectives, and policies. Implementation of the proposed project would restore and enhance the Otay River Valley and would be consistent with the General Plan Open Space Preserve designation for the site in both the Chula Vista General Plan and the Otay Ranch GDP.

Brown Field Municipal ALUCP

According to the *Brown Field Municipal Airport Land Use Compatibility Plan* (San Diego County Airport Land Use Commission 2010a), the proposed project is within Review Area 2 of the Brown Field Municipal Airport's Airport Influence Area. Review Area 2 consists of airspace protection and/or overflight notification areas. In addition, overflight notification documents are required in locations within Review Area 2.[10] According to the airport land use compatibility plan, limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. The proposed project site also sits within the FAA Part 77 Airspace Protection Height Notification Boundary for the airport. FAA Part 77 height restrictions within the project site vary from 876.3 feet above mean sea level farthest away from the airport to 676.3 feet above mean sea level. As previously mentioned, the proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails. Therefore, the proposed project does not include features that would surpass any of the height restrictions as part of the FAA Part 77 airspace protection and would not create the potential for airport navigational hazards. The proposed project would comply with regulations outlined within the *Brown Field Municipal Airport Land Use Compatibility Plan*.

Otay River Watershed Management Plan and Special Area Management Plan

Over the past decade, two key documents have been created for the Otay River watershed: the Otay River WMP (Aspen Environmental Group 2006) and the SAMP. In 2006, the County of San Diego, with partial funding from a Proposition 13 grant, prepared the WMP in collaboration with the U.S. Army Corps of Engineers (USACE), RWQCB, CDFW, City of Chula Vista, City of Imperial Beach, and Port of San Diego. That same year, a SAMP for the Otay River watershed in San Diego County was initiated with the County of San Diego as a facet of the County's broader watershed management program and following a species conservation planning effort. Although no final SAMP framework was developed, USACE compiled the extensive data and analyses in a geospatial database and summary report (USACE 2016) that are available resources to inform decision-making processes, i.e., permitting and mitigation.

SAMPs are intended to strike a balance between aquatic resources and reasonable economic development and uses in the watershed or region in which they are developed. Together, these two documents provide a framework program that is consistent with the local general plans (County and City), the San Diego RWQCB National Pollutant Discharge Elimination System Permit, and the County of San Diego MSCP. They also represent a proactive watershed planning and permitting approach that identified the areas within the watershed of "low value" that are more suitable for development and areas of "high value" that should be protected.

The WMP includes implementation strategies to ensure the protection of existing beneficial uses and natural resources, including methods to monitor, maintain, and/or enhance existing water quality levels using non-structural and structural BMPs. In addition, recommendations for appropriate aquatic resource enhancement and monitoring programs are provided in the WMP. Implementation of the proposed project would restore and enhance the Otay River Valley within the limits of the project boundaries and would be not only consistent with the WMP but would facilitate the largest restoration recommendation in the WMP.

Otay Ranch Phase 1 and 2 Resource Management Plan

The Otay Ranch Phase 1 and Phase 2 RMP is a comprehensive planning document that addresses the preservation, enhancement, and management of sensitive natural and cultural resources and is designed to be the functional equivalent of the County of San Diego Resource Protection Ordinance for Otay

[10] An *Overflight Notification* informs property owners that the property is subject to aircraft overflight, aircraft noise exposure, and other airport-related impacts. No restrictions on the height of objects, requirements for marking or lighting of objects, or access to the property for these purposes are included in an Overflight Notification. An Overflight Notification serves only as buyer acceptance of overflight conditions.

Ranch. Phase 1 of the RMP provides overall objectives and policies that guide implementation and designated the 11,375-acre preserve to protect and enhance the multiple resources present within Otay Ranch. Phase 2 of the RMP, which was updated in 2018, encompasses a series of tasks that must be performed over time to implement the program. The goal of the RMP is "to establish a permanent preserve within Otay Ranch to protect and enhance biological, paleontological, cultural and scenic resources, maintain biological diversity, and promote the survival and recovery of native species and habitats." Phase 2 includes additional studies that have been or will be performed, including a Vernal Pool Study, Wildlife Corridor Study, Raptor Study, and Resource Identification and Mapping. Additional tasks are identified in the document to acknowledge their importance, including development of an Otay Valley Riparian Habitat Restoration Plan, Demonstration Agricultural Plan, and OVRP Active Use Plan.

The proposed project would not only be in compliance with RMP Phase 1 but would help to implement policies and tasks identified in RMP Phase 2. The proposed project would accomplish this in part by developing and implementing a Development Plan, including the development of all associated technical studies, which require approval from USFWS, USACE, CDFW, and RWQCB, as well as the City of Chula Vista (CEQA compliance). These documents and approvals can be used to achieve the identified "Otay Valley Riparian Habitat Restoration Plan." Other policies that are implemented within the project area include, but are not limited to, Policy 5.2 and tasks that include maintenance of existing high-quality resources, implementation and monitoring of restoration activities, and implementation of maintenance activities such as removal of exotic plant species (weeds). In summary, the proposed project is in compliance with these plans by designing and funding a portion of the Otay River Valley restoration in the watershed, facilitating restoration opportunities downstream, and funding long-term maintenance and monitoring for five parcels in the Otay River Valley, including an approximately 300-acre parcel owned by HomeFed.

City of Chula Vista Greenbelt Master Plan

The Greenbelt Master Plan provides guidance and continuity for planning open space and constructing and maintaining trails that encircle the City of Chula Vista. The plan's primary purpose is to provide goals and policies, trail design standards, and implementation tools that guide the creation of the Greenbelt system. The Greenbelt system is composed of a series of open space segments connected by a multi-use trail extending through each segment from the channelized Sweetwater River, along golf courses and banks of the Otay Lakes, following the Otay River Valley to the Chula Vista Bayfront.

The proposed project would implement improvements to a portion of the existing dirt roads and trails identified within the OVRP East/Otay Ranch Village Greenway Segments. The trail improvement elements of the proposed project would be consistent with goals and policies of the Greenbelt Master Plan that aim to provide connected open space areas around the City and to enhance and protect native biological and sensitive habitats. The proposed project would also support establishment of a Greenbelt system that ensures public access utilizing existing fire roads, access roads, and/or utility easements for the trail system when possible and limiting the use of multi-use trails to non-motorized uses except for motorized wheelchairs and utility, maintenance, and emergency vehicles. To ensure all trail improvements are consistent with the City's Greenbelt Master Plan, **Mitigation Measure LU-1** is required. **Mitigation Measure LU-1** would ensure the Greenbelt trail is accommodated through identification of a realistic corridor and installation of trail signage, split-rail fencing, and educational kiosks while avoiding any sensitive resources. The existing roads and trails would be moved or modified as needed to avoid road ponds and protect the San Diego fairy shrimp (*Branchinecta sandiegonensis*) and the proposed project's restoration areas. The proposed project would also focus solely on those trails that interact with the restoration effort and would not preclude the future implementation of other new or upgraded trail facilities identified in the City of Chula Vista Greenbelt Master Plan. The Greenbelt trail may be moved or modified as needed to avoid road ponds, protect the San Diego fairy shrimp, and protect the restoration area.

Otay Valley Regional Park Concept Plan and Trail Guidelines

The OVRP is in the southern portion of San Diego County, 4 miles north of the United States/Mexico International Border. It is a 13-mile linear park, covering more than 8,000 acres and crossing three jurisdictions: City of San Diego, City of Chula Vista, and County of San Diego. It encompasses the core of the Otay River Valley from South San Diego Bay to the Otay Lake Reservoirs and is under private, semi-private, and public land ownership. The OVRP Concept Plan provides for the protection of ESAs and important cultural resources in the open space core of the OVRP; identifies areas adjacent to the open space for active and passive recreational development opportunities; includes a trail system with staging areas, viewpoints, and overlooks and connections to adjacent public lands and trails; and envisions two interpretive centers for environmental and educational programs. The OVRP Trail Guidelines focuses on the development of the trail system within the park and provides guidelines for development, management, and maintenance of this trail system.

The proposed project has identified trail corridors in compliance with the OVRP Concept Plan. Improvements would include installation of wood split-rail fencing that would help to minimize trespassing from trail users who would otherwise be unaware of the sensitivity of the habitat restoration area as well as signage that would indicate the general sensitivity of the restoration site and provide wayfinding. In addition, educational kiosks would be installed at key viewing locations within the disturbed areas near the existing dirt roadway to help inform the readers of the importance of the restoration site. The existing roads and trails would be moved slightly to accommodate the installation of the fencing and signage while also avoiding road ponds that support San Diego fairy shrimp. Only disturbed areas would be used to designate the narrow trail corridor or pathway. The proposed project would include at least two improved trail crossings to facilitate the connection of tributaries to the mainstem Otay River, including an unnamed drainage north of the river as well as Salt Creek. The trails would be installed as part of the restoration effort but are expected to be installed after the major earthwork in the river is complete. Installation would include recontouring of existing trails for proper drainage, select material placement, focused rock sills, strategic fencing and boulder placement, and signage and educational kiosk implementation. The proposed project would be consistent with goals and policies to site and develop park features and facilities; be consistent with the requirements and guidelines of the MSCP and all federal, state, and local policies; encourage recreational uses as buffers between the Open Space/Core Preserve Area and new private development; and encourage development standards for new roads across the Otay River to minimize impacts on habitat and wildlife movement as well as trail connectivity. The proposed project would also comply with the OVRP Trail Guidelines for education, design and layout, erosion control, signage, fencing, and kiosks; also, to ensure the proposed improvements are consistent with the OVRP Trail Guidelines, **Mitigation Measure LU-1** is required. As with the considerations taken into account regarding the City of Chula Vista Greenbelt Master Plan, the intent of this component of the proposed project is to ensure the OVRP Concept Plan is accommodated as part of the proposed project and to not preclude the future implementation of the OVRP Concept Plan in the project area.

The proposed project would restore and enhance hydrologic and sediment transport processes and native habitats in the Otay River Valley as well as provide City of Chula Vista Greenbelt Master Plan and OVRP Concept Plan trail improvements and has been designed to be in compliance and alignment with the goals and policies of the documents mentioned above. Therefore, with mitigation, the proposed project would not conflict with any applicable land use plan, policy, or regulation, and impacts would be less than significant.

Mitigation:

Mitigation Measure LU-1: Trail Improvements Consistent with Applicable City of Chula Vista Greenbelt Master Plan and Otay Valley Regional Park Trail Guidelines

All applicable trail guidelines from the City of Chula Vista's Greenbelt Master Plan and Otay Regional Park Trail Guidelines shall be shown on all applicable grading plans as details, notes, or as otherwise appropriate. All proposed designs for signage and fencing will be submitted to the City to verify consistency with the above mentioned guidelines. Finally, installation of all trail-related improvements will be subject to inspection by the City to confirm the improvements were constructed in accordance with the approved designs.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
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**	☐

Comments:

a) **Less-than-Significant Impact**. Implementation of the proposed project would not result in the loss of availability of a known mineral resource. Valuable mineral resources to the region and state that are also present in the City of Chula Vista include sand, gravel, and crushed rock resources. These are collectively known as construction aggregate. According to General Plan Figure 9-4, most of the project site is in a portion of the Otay River Valley that has been identified as a Mineral Resource Zone (MRZ)-2 area (City of Chula Vista 2015). This is an area where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists (City of Chula Vista 2015). The Otay River Valley is known to contain significant deposits of construction-quality sand reserves, and sand mining activities took place on the project site from 1982 to 1985. However, Nelson and Sloan Materials ceased its operations in 1985 because it was unable to complete new permitting processes required for in-stream mining. Since that time, the project site has been relatively unaltered and left in a highly disturbed state. It has also been designated as Open Space Preserve and delineated within the jurisdiction of the Chula Vista MSCP Preserve where the long-term vision for the entire preserve area, including the project site, is to cease mining, extraction, and processing activities altogether (City of Chula Vista 2015). Therefore, because mining activities at the project site ceased three decades ago and the future plans for the Chula Vista MSCP Preserve are to cease mining-related activities altogether, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Impacts would be less than significant.

b) **Less-than-Significant Impact**. Implementation of the proposed project would not result in the loss of availability of a locally important mineral resource. As discussed above under threshold XII.a, although the project site is within a portion of the Otay River Valley that has been identified as an MRZ-2 area for construction aggregate resources and mining activities have occurred on the project site in the past, no such activities have occurred on site in the last three decades and there are no plans to commence such activities in the future. Furthermore, the project site is designated as Open Space Preserve per the General Plan and is within the planning boundaries for the Chula Vista MSCP Preserve, which has long-term goals to cease mining-related activities altogether within the entire preserve. Moreover, because the proposed project does not include the construction of physical structures, it would not preclude access to such resources in the future. Therefore, the proposed project would not 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, and impacts would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	**X**	☐
b) Generate excessive groundborne vibration or groundborne noise levels?	☐	☐	**X**	☐
c) Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact.** Temporary traffic volume increases due to construction worker commutes, deliveries, and haul truck trips would not increase noise levels on local roadways by a significant amount. Noise levels associated with construction activities are predicted to be well below the 75-A-weighted-decibel (dBA) threshold set by the San Diego County Code, and construction noise would only occur during the permitted hours of 7 a.m. to 7 p.m., Monday through Friday. In addition, ongoing routine maintenance and monitoring activities would generate very low noise levels. Construction noise would be temporary and, as such, would not cause any permanent increases in ambient noise levels. After completion of the restoration process, the proposed project is not anticipated to generate any operational noise or significant vehicular traffic.

Existing Conditions

The closest noise-sensitive receptors to the proposed project are High Tech High Chula Vista (a public charter school serving approximately 600 students in grades 9 through 12), Otay Lakes County Park, George Bailey Detention Facility, and Richard J. Donovan Correctional Facility. Otay Lakes County Park also contains one residence used by the park ranger and staff. All of these noise-sensitive locations are shielded from the Otay River Valley floor to various degrees by the intervening topography.

In order to document the existing noise levels, three short-term measurements were obtained near the project site (see Figure 13) on October 23, 2015, for the 2016 Otay River Restoration Project HMMP and Initial Study (IS)/Mitigated Negative Declaration (MND) (City of Chula Vista 2016). These locations were selected to document the ambient noise levels at the nearest noise-sensitive receptors, as well as at the project site itself. Ambient noise levels were not directly measured at High Tech High Chula Vista or the Richard J. Donavan Correctional Facility because they are farther from the project site than the other measurement locations. However, it can reasonably be assumed that ambient noise levels at High Tech High Chula Vista would be at least as high as those measured at Otay Lakes County Park; this is considered to be a conservative assumption because the school is in a more developed area than the park and would be exposed to higher ambient noise levels. It can also be assumed that ambient noise levels at the Richard J. Donavan Correctional Facility would be at least as high as those measured at the George Bailey Detention Facility due to their proximity to one another. Each short-term measurement was conducted over a period of approximately 20 minutes. Noise measurements indicate that the average noise levels at these locations range from approximately 39 to 48 dBA

equivalent sound level (L_{eq}) (1-hour average noise level). Additional details and a summary of the measurement results are provided in Table 2-9. Field noise survey sheets are included in the technical attachment *Noise Field Sheets and Construction Noise Analysis for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021e) to this document.

Table 2-9. Existing Ambient Noise Levels in Study Area

Location Number, Location Description (date, time)	Measured Noise Levels, dBA							
	L_{eq}	L_{min}	L_{90}	L_{50}	L_{25}	$L_{8.33}$	$L_{1.67}$	L_{max}
ST-1: Otay Lakes County Park (10/23/2015, 11:39 a.m.–12:05 p.m.)	40.9	32.7	34.4	37.2	40.5	45.7	48.7	54.9
ST-2: South of the Otay Water Treatment Plant, adjacent to proposed project site (10/23/2015, 12:54 p.m.–1:20 p.m.)	39.3	26.5	27.9	31.9	38.8	44.5	47.9	58.5
ST-3: George Bailey Detention Facility (10/23/2015, 10:02 a.m.–10:56 a.m.)	47.5	38.2	40.5	44.1	47.2	51.1	56.6	63.7

Notes: ST= short-term; dBA = A-weighted sound level, the sound pressure level in decibels as measured using the A weighting filter network, which de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear; L_{eq} = equivalent sound level, the average of the sound energy occurring over the measurement period; L_{max} = maximum sound level; L_{min} = minimum sound level; L_{xx} = percentile-exceeded sound level, the sound level exceeded for a given percentage of a specified period (e.g., L_{25} is the sound level exceeded 25% of the time, and L_{50} is the sound level exceeded 50% of the time)

The project site and High Tech High Chula Vista are within the City of Chula Vista. The Otay Lakes County Park, George Bailey Detention Facility, and Richard J. Donovan Correctional Facility are in unincorporated San Diego County. Because the study area spans both municipalities, the noise standards for both are considered in the discussion and analyses, below.

Construction

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction workers who commute to the site and trucks that transport equipment and materials would incrementally increase noise levels on access roadways. The proposed project is anticipated to generate up to 20 daily vehicle round trips. This includes up to eight daily haul truck round trips associated with removal of vegetative debris during hours of construction activity, two daily vendor/delivery truck round trips, and 10 daily vehicle round trips associated with worker commutes. Worker commutes would access the site using Interstate 805, Main Street, and Wiley Road. Trucks, primarily hauling materials to the Otay Landfill (at the northern terminus of Maxwell Road), would access the site using Maxwell Road, Main Street, and Wiley Road. Noise impacts associated with construction worker commutes and truck trips would be less than significant for the following reasons:

- According to the *Traffic Analysis Report* (Chen Ryan Associates 2015) prepared for the 2016 Otay River Restoration Project HMMP and IS/MND (City of Chula Vista 2016), average daily traffic volumes on Main Street are in excess of 39,000 vehicles per day. The 20 daily vehicle round trips generated by the proposed project would add 40 daily vehicles to the average daily traffic. This would represent a very minor increase (much less than 1 percent), resulting in a negligible increase in average traffic noise levels.
- There are no noise-sensitive receptors within 1,000 feet of Wiley Road. This large distance, combined with the low number of project-generated vehicle trips, would result in extremely low average traffic noise levels at the closest noise-sensitive receptors to Wiley Road.
- Up to eight daily truck round trips would be generated on Maxwell Road. Although there could be a relatively high single-event noise level associated with each truck trip (e.g., passing trucks at 50 feet could generate up to 76 dBA), the truck pass-by at any single location would be very brief

and the contribution of project-generated truck traffic to average noise levels (such as the daily Community Equivalent Noise Level) would be low due to the extremely low truck traffic volume.

The second type of short-term noise impact is related to noise generated from construction equipment. Project construction is anticipated to last a total of approximately 24 weeks. Chapter 19.68 of the City of Chula Vista Municipal Code provides the noise control ordinance of the City of Chula Vista, but it is noted that construction/demolition activities are exempted from the City's exterior noise standards. However, Chapter 17.24 of the City of Chula Vista Municipal Code prohibits the operation of construction equipment in residential zones on weekdays between 10:00 p.m. and 7:00 a.m., and on weekends between 10:00 p.m. and 8:00 a.m. Chapter 4, Sections 36.408 and 36.409, of the San Diego County Code set limits on the level and duration of noise that may be produced by construction equipment. Section 36.408 prohibits the operation of construction equipment on any day between 7 p.m. and 7 a.m., or at any time on a Sunday or a holiday. Section 36.409 provides thresholds for noise levels produced by construction equipment when operated during the permitted hours; it states the following:

> Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

All project-related construction activities would occur on weekdays between the hours of 7:00 a.m. and 5:00 p.m. As such, the proposed project's construction noise would be exempt from the City of Chula Vista's exterior noise standards. For this reason, and to provide a consistent analysis at each of the closest noise-sensitive receptors, all construction noise levels are calculated and assessed based on the County's 8-hour L_{eq} standard of 75 dBA.

Construction-related noise was analyzed based on the Federal Highway Administration's Roadway Construction Noise Model (Federal Highway Administration 2008), which predicts average noise levels (L_{eq}) at nearby receptors by analyzing the type of equipment, usage factor, number of hours in a workday, distance from source to receptor, ground type, and presence or absence of intervening shielding between source and receptor.

The anticipated equipment needed for each phase of construction is shown in Table 2-10. The distances used in the modeling were the acoustical average distances from the project site to nearby noise-sensitive receptors. The acoustical average distance is calculated by multiplying the shortest distance by the farthest distance and then taking the square root of the product. The topography of the project area provides shielding for nearby noise-sensitive receptors. However, shielding effects due to topography were not considered in this analysis in order to provide a conservative estimate of noise levels at receptor locations. It is also noted that the construction equipment used on any given day could be mobile across the entire project site. Therefore, actual noise levels during construction would vary depending on the relative distance from a given receptor to the current construction activities.

The results of the analysis at the closest noise-sensitive receptors are provided in technical attachment *Noise Field Sheets and Construction Noise Analysis for the Otay Trails and Mitigation Bank Expansion Project* (ICF 2021e) and summarized in Table 2-10. Figure 13 shows the locations of the noise-sensitive receptors in relation to the project site.

At all four receptor locations, the predicted noise level associated with construction activities would be well below the 75 dBA threshold set by the San Diego County Code. Because the noise would occur during the permitted hours of 7 a.m. to 7 p.m. and would be well below the 75 dBA threshold, the impact would be less than significant.

Table 2-10. Predicted Construction Noise Levels at Noise-Sensitive Receptors

Phase	Expected Equipment Needed (Number needed)	Estimated L_{eq}(h), dBA			
		Receptor 1: High Tech High Chula Vista (6,300 feet*)	**Receptor 2: Otay Lakes County Park (3,900 feet*)**	**Receptor 3: George Bailey Detention Facility (6,000 feet*)**	**Receptor 4: Richard J. Donovan Correctional Facility (4,700 feet*)**
Phase 1: Site Preparation / Clearing	Bulldozer (2)	34	39	34	37
	Haul Truck (1)				
	Loader (1)				
	Grader (1)				
	Excavator (2)				
	Water Truck (3)				
Phase 2: Grading and Site Finish	Bulldozer (3)	37	42	37	40
	Haul Truck (4)				
	Loader (1)				
	Grader (1)				
	Excavator (2)				
	Grizzly Screen (1)				
	Water Truck (3)				

* Acoustical average distance to construction site
L_{eq}(h) = hourly equivalent noise level

Implementation of the proposed project would result in a short-term, temporary increase in ambient noise levels in the project vicinity associated with construction equipment. Table 2-10 shows that construction noise levels are predicted to range from approximately 34 to 42 dBA (L_{eq}) at the closest noise-sensitive receptors. Average (L_{eq}) ambient noise levels at the George Bailey Detention Facility and Otay Lakes County Park are provided in Table 2-9. As discussed under *Existing Conditions*, above, ambient noise levels at High Tech High Chula Vista can conservatively be assumed to be the same as those measured at Otay Lakes County Park, and ambient noise levels at the Richard J. Donavan Correctional Facility can be assumed to be the same as those measured at the George Bailey Detention Facility. Predicted construction noise levels at the George Bailey Detention Facility, Richard J. Donavan Correctional Facility, and High Tech High Chula Vista are below the existing ambient noise levels at those locations, and the impact would be less than significant. Predicted construction noise levels at the Otay Lakes County Park would range from being 2 dB below (Phase 1) to 1 dBA above (Phase 2) the measured ambient noise level at that location. While construction noise would be minimally audible at the park during Phase 2 of construction, the overall impacts would be less than significant because construction noise would only occur during the permitted hours of 7 a.m. to 7 p.m. and the noise levels would be well below the County's standard of 75 dBA (8-hour L_{eq}). Therefore, impacts related to temporary ambient noise level increases would be less than significant.

Construction noise would be temporary and, as such, would not cause any permanent increases in ambient noise levels. Therefore, all permanent noise impacts related to construction would be less than significant.

Project Operation

Following completion of the construction phases, ongoing routine maintenance and monitoring, which would include trash, debris, and weed removal and could include the use of line trimmers, chainsaws, and skid steers, would continue. Due to the low levels of activity, the large distances to the closest

noise-sensitive receptors, and the low volume of traffic associated with commuting workers and dumpster hauling during routine maintenance and monitoring, noise impacts would be less than significant.

After completion of the restoration process, the proposed project is not anticipated to generate any operational noise or significant vehicular traffic. Therefore, all permanent noise impacts would be less than significant.

b) **Less-than-Significant Impact.** Groundborne vibration generated by construction activities would be well below the applicable criteria for perceptibility, and operation of the proposed project would not include any new activities or equipment that would generate perceptible groundborne vibration levels.

Heavy construction equipment has the potential to produce groundborne vibration levels that would be perceptible to people in the surrounding area. Section 19.68 of the Chula Vista Municipal Code defines the vibration perception threshold to be a motion velocity of 0.01 inch per second (in/sec). The County of San Diego does not provide any quantitative vibration standards or thresholds. Therefore, all construction vibration levels are calculated and assessed based on the City's threshold of 0.01 in/sec.

Based on the anticipated construction equipment list for the project, the worst-case vibration levels would be associated with the operation of heavy earthmoving equipment such as excavators and bulldozers. Based on data published by the California Department of Transportation (California Department of Transportation 2013), similar heavy equipment items (large bulldozers) produce peak particle velocity (PPV) vibration levels of 0.089 in/sec at a distance of 25 feet.

Vibration levels from construction equipment attenuate as they radiate from the source. The equation to determine vibration levels at a specific distance states that:

(*Equation 1*) $PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$

where PPV_{ref} is the PPV at a reference distance of 25 feet, and D is the distance from the equipment to the sensitive receptor (California Department of Transportation 2013). The value of 1.1 is determined based on the soil conditions at the project site and was chosen to represent hard soil to provide a conservative estimate of vibration levels. Using this equation, Table 2-11 summarizes the estimated vibration levels at the closest sensitive receptors to the project site and compares them to the City's vibration perception threshold.

Table 2-11. Construction Vibration Levels at Sensitive Receptors

Receptor	Distance to Closest Earthmoving Equipment (ft.)	Predicted Vibration level, PPV (in/sec)	Vibration Perception Threshold (in/sec)	Exceeds Vibration Perception Threshold?
Receptor 1: High Tech High Chula Vista	4,600	0.0003	0.01	No
Receptor 2: Otay Lakes County Park	1,900	0.0008	0.01	No
Receptor 3: George Bailey Detention Facility	3,800	0.0004	0.01	No
Receptor 4: Richard J. Donovan Correctional Facility	3,100	0.0004	0.01	No

Vibration levels at nearby sensitive receptors are predicted to be well below the City's vibration perception threshold of 0.01 in/sec, and the impact would be less than significant.

c) **Less-than-Significant Impact.** The closest private airstrip to the project site is John Nichol's Field Airport, which is over 3 miles northeast of the project site. The closest public airport to the project site is the Brown Field Municipal Airport, which is approximately 2 miles southwest of the project site. Brown Field Municipal Airport accommodates both general aviation aircraft and military aircraft. The project site is outside of the 60-decibel Community Noise Equivalent Level contour as illustrated in Exhibit III-1 in the *Brown Field Municipal Airport Land Use Compatibility Plan* (San Diego County Airport Land Use Commission 2010b). Therefore, the impact is considered less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	**X**
b) Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	**X**

Comments:

a) **No Impact**. The proposed project would not construct any homes or businesses, extend roads, or involve the addition of any growth-inducing infrastructure. As such, impacts would not be considered substantially growth-inducing either directly or indirectly, and no impacts would occur.

b) **No Impact**. The proposed project is located in the Otay River Valley where no housing or residential uses occur. Therefore, the proposed project would not displace any people and would not require the construction of replacement housing elsewhere. No impacts would occur.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. 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 public services:				
a) Fire protection?	☐	☐	☐	**X**
b) Police protection?	☐	☐	☐	**X**
c) Schools?	☐	☐	☐	**X**
d) Parks?	☐	☐	**X**	☐
e) Other public facilities?	☐	☐	☐	**X**

Comments:

a) **No Impact.** The proposed project consists of the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the entire proposed project limits. No buildings or habitable structures that may require fire protection services are proposed. Moreover, once operational, the proposed project would be similar to the existing condition in terms of the need for fire protection services. Therefore, the proposed project would not result in increased demand requiring the need for new or physically altered fire protection facilities, and no impacts would occur.

b) **No Impact.** The proposed project consists of the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the entire proposed project limits. No buildings or habitable structures that may require police protection services are proposed. Moreover, no people would reside on the project site. Once operational, the proposed project would be similar to the existing condition in terms of the need for police protection services. Therefore, the proposed project would not result in increased demand requiring the need for new or physically altered police protection facilities, and no impacts would occur.

c) **No Impact.** The proposed project would not result in adverse impacts on schools. Physical impacts on school facilities and services are usually associated with population in-migration and growth, which increases the demand for schools. The proposed project would have no effect on population growth and school demand. Therefore, the proposed project would not result in increased demand requiring the need for new or physically altered school facilities, and no impact would occur.

d) **Less-than-Significant Impact**. The proposed project would not result in adverse impacts on parks. Physical impacts on parks are usually associated with population in-migration and growth, which increase the demand for and use of parks. The proposed project would have no effect on population growth, although it is possible that use of onsite trails could increase slightly due to the proposed trail improvements and improved habitat available to view from the trail. This slight increase in trail use would not substantially degrade the existing trails. Therefore, the proposed project would not result in increased demand requiring the need for new or physically altered park facilities, and any related impact would be less than significant.

e) **No Impact**. The proposed project would not result in adverse impacts on other public facilities. As discussed above, physical impacts on public services are usually associated with population in-migration and growth, which increase the demand for public services and facilities. The proposed project would not increase the local population. Therefore, the proposed project would not result in increased demand requiring the need for new or physically altered public facilities, and no impacts would occur.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) 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 have an adverse physical effect on the environment?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact**. The proposed project would not increase the use of existing neighborhood and regional parks. An increase in the use of existing parks and recreational facilities typically results from an increase in housing or population in an area. The proposed project would not result in an increase in housing or residents in the project vicinity; however, it is possible that the proposed trail improvements and enhanced and restored habitat may bring additional trail users to the project site and Otay Lakes County Park to view the project site. Any potential increase would be minimal, however, because trails, dirt roads, and unofficial trails already exist currently and are already in use. The proposed project's improvements, aimed at preventing disturbance to the restoration area, would not increase the use of existing recreation facilities such that substantial physical deterioration of recreation facilities would occur. Therefore, impacts on recreation would be less than significant.

b) **Less-than-Significant Impact.** The proposed project does not include recreational facilities or require the construction or expansion of such facilities. The proposed project consists of the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the entire proposed project limits. Although it is possible that use of the trails would increase slightly due to the proposed trail improvements and improved habitat, the slight increase in trail use would not result in a substantial impact on recreational facilities because dirt roads and unofficial trails are already present and able to accommodate pedestrian, bicycle, and equestrian traffic. Therefore, the proposed project would not require the construction or expansion of recreational facilities such that a significant and adverse physical effect on the environment would occur. As a result, impacts on recreation would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	**X**	☐
b) Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	**X**	☐
c) Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	**X**
d) Result in inadequate emergency access?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact.** There are no transit lines, bus stops, transit stations, or transit facilities within a 0.25-mile radius of the project site. There are also no bicycle or pedestrian facilities within the project site. In addition, construction activities are not expected to result in a significant increase in traffic volumes. There are dirt roads within the project site that are used by SDG&E and the United States Border Patrol. SDG&E and the United States Border Patrol would be consulted prior to any temporary road closures. The proposed project would not require any modifications or closures to the public right-of-way. Construction of the proposed project is anticipated to occur in a single phase over approximately 24 weeks, beginning in the fall of 2020 and completing in spring of 2021. A maximum of eight haul truck round trips are expected to occur during a peak construction day to remove trash, invasive plant material, and construction debris from the project site to local county landfills in the area, such as the Otay Landfill. The Otay Landfill is approximately 3 miles west of the proposed project site. It is anticipated that trips to the landfill would exit the project site via Wiley Road, head west on Main Street, and then head north on Maxwell Road to access the landfill. Trucks would then return to the project site via the same route. According to the City of Chula General Plan, Land Use and Transportation Element (2005), Wiley Road is classified as a "Gateway Street (6 Lane)" east of State Route 125 and a "4 Lane Major" and "6 Lane Prime" west of State Route 125. Wiley Road eventually turns into Main Street, which is classified as a "6 Lane Prime." Maxwell Road is unclassified. Table 2-12 below describes the City's street segment performance standards and volumes for each classification mentioned above.

Table 2-12. Street Segment Performance Standards and Volumes

Street Classification	Acceptable LOS	Acceptable Volume (ADT)
Prime Arterial	C	50,000
Major Street (six lanes)	C	40,000
Major Street (four lanes)	C	30,000
Gateway Street (six lanes)	D	61,200

ADT = average daily traffic; LOS = level of service

A traffic analysis was conducted in December 2015 for the 2016 Restoration Project (Chen Ryan Associates 2015). The traffic analysis assumed a construction base year under Year 2020 conditions with construction trip generation rates similar to those of the proposed project. The traffic analysis was based on 20 total daily vehicle trips for construction workers and six total daily vehicle truck trips per day during the peak of project construction. The proposed project assumes 20 total daily construction worker trips (10 round trips) and 20 total daily vehicle truck trips (10 round trips) per day during the peak of project construction. The results of the 2015 traffic study found that all the intersections within the study area were anticipated to operate at acceptable level of service (LOS) D or better under Year 2020 conditions. Because the trip generation rates used in the traffic study are similar to those of the proposed project, it is expected that all the intersections within the proposed project area would also operate at acceptable LOS D or better under Year 2020 conditions. Post construction, the proposed project is not anticipated to generate any additional vehicular traffic except for periodic maintenance. This would include a maximum of one round trip per day for an operational worker. Therefore, the proposed project is not anticipated to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

b) **Less-than-Significant Impact.** State CEQA Guidelines §15064.3(b) generally requires CEQA documents for land use and transportation projects to evaluate impacts of such projects on vehicle miles traveled. This guideline applies prospectively and is effective statewide as of July 2019. As a restoration and recreation project, the proposed project would not generate substantial operational vehicular traffic and thus would not generate additional vehicle miles traveled. Short-term traffic associated with project construction is not anticipated to significantly affect the traffic levels of the surrounding areas or cause congestion, as construction vehicles would be mainly contained on site and would be present temporarily. Additionally, according to the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018), projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

   As described above in threshold XVII.a, a maximum of eight haul truck round trips are expected to occur during a peak construction day to remove trash, invasive plant material, and construction debris from the project location to local county landfills in the area, such as the Otay Landfill. The Otay Landfill is approximately 3 miles west of the proposed project site. A maximum of 10 round trips per day would be attributed to construction workers traveling to and from the project site. Additionally, there would be a maximum of two round trips per day for vendor/delivery truck trips. Therefore, there would be a total of 20 daily round trips from construction worker trips and truck trips during a peak construction day. Considering this is a temporary, minor increase in daily trips that would cease after the 24-week construction period, impacts are considered to be less than significant. Additionally, the number of trips associated with construction of the proposed project is below the Office and Planning and Research's threshold of significance of 110 trips per day. Post construction, the proposed project is not anticipated to generate any additional vehicular traffic except for periodic maintenance. This would include a maximum of one round trip per day for the operational worker. As described in threshold XVI.b, the proposed project would not require the construction or expansion of recreational facilities and, therefore, would not increase the number of visitors traveling to the site. As such, impacts related to vehicle miles traveled would be less than significant.

c) **No Impact.** The proposed project would include project features such as not allowing construction vehicles and equipment to park or stop along Wiley Road or using flag personnel to ensure the continued flow of traffic, which would ensure that the proposed project would not result in increased hazards or incompatible uses. No change to the local circulation network, including a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), are proposed. Therefore, no impact would occur.

d) **Less-than-Significant Impact.** The proposed project would not impair emergency access to the project site. Traffic in the surrounding areas is anticipated to be minimal and limited to onsite construction-related equipment entering and exiting the project area. The proposed project would not result in any substantial traffic queuing along Main Street or any other roadway with access to and from the site and would not allow any construction vehicles or equipment to park or remain stationary within the roadway. Moreover, the proposed project does not include any characteristics (e.g., permanent road closures, long-term blocking of road access) that would physically impair or otherwise interfere with emergency access in the project vicinity. All large construction vehicles entering and exiting the site would be guided by personnel using signs and flags to direct traffic. All access points, storage, and staging areas would be located in a manner that has the least impact on vehicular and pedestrian traffic. Any closures of access roads would be conducted in coordination with the Border Patrol, utility entities, the County and City of San Diego, and others. Implementation of the proposed project would not result in inadequate access for the Border Patrol or any other entity. Because no habitable structures or buildings are proposed and the proposed project would only improve the existing onsite natural habitat, emergency access would be adequate. Project features such as not allowing construction vehicles and equipment to park or stop along Wiley Road, using flag personnel to ensure the continued flow of traffic, and complying with programs, rules, and regulations for emergency response would ensure that the proposed project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Mitigation:

No mitigation is required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	**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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	**X**	☐	☐

Comments:

a) **No Impact.** A records search at the South Coastal Information Center was conducted for the proposed project to determine if tribal cultural resources are present within the project site. No tribal cultural resources that are listed in or eligible for listing in the CRHR were identified during the records search; however, tribal cultural resources are not typically recorded. Additionally, a Sacred Lands File search of the project area was obtained from NAHC. No sacred lands were identified by NAHC. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the CRHR or in a local register of historical resources, and no impact would occur.

b) **Less-than-Significant Impact with Mitigation Incorporated.** Pursuant to California Public Resources Code Section 21080.3.1 (Assembly Bill 52), California Native American tribes traditionally and culturally affiliated with the project area can request notification of projects in their traditional cultural territory. No tribes have requested notification from the City of Chula Vista. However, in the event that a tribal cultural resource is unexpectedly identified during the course of the proposed project, and the City determines that the project may cause a substantial adverse change to a tribal cultural resource, the City will rely on mitigation measures described in the Public Resources Code that, if the City determines to be feasible, may avoid or minimize the significant adverse impacts (Public Resources Code Section 21084.3 (b)). Therefore, **Mitigation Measure TCR-1** is the standard mitigation set forth in Assembly Bill 52.

Mitigation:

Mitigation Measure TCR-1: Protection of Resources

In the event that a tribal cultural resource is unexpectedly identified during the course of implementation of the proposed project, and the City of Chula Vista determines that the proposed project may cause a substantial adverse change to a tribal cultural resource, the City of Chula Vista will work with the consulting tribe(s) to employ one or more of the following standard mitigation measures.

1. Avoidance and preservation of the resources in place including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria
2. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    i. Protecting the cultural character and integrity of the resource
    ii. Protecting the traditional use of the resource
    iii. Protecting the confidentiality of the resource
    iv. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places
3. Protecting the resource

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	**X**
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	**X**	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	**X**
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	**X**	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	**X**

Comments:

a) **No Impact.** As described in the Project Description, the proposed project would involve habitat and hydrological process restoration and the creation, modification, and expansion of trails. No new permanent water or wastewater facilities, or the expansion of existing facilities, are proposed. Under existing conditions, the proposed project site does not drain to the municipal storm drain system and would not contribute to the City's stormwater drainage network. The proposed project would not require the relocation or construction of any electric power, natural gas, or telecommunications facilities. Therefore, no impact would occur.

b) **Less-than-Significant Impact.** The proposed project is within the Otay Water District (OWD) service area (Otay Water District 2019). OWD is a member agency of the San Diego County Water Authority, which is responsible for the supply of imported water into San Diego County through its membership with Metropolitan Water District of Southern California. OWD's water service area is generally located within the south-central portion of San Diego County and includes approximately 126 square miles (CH2M 2016). OWD serves a wide spectrum of communities including southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, eastern City of Chula Vista, East Lake, Otay Ranch, and Otay Mesa areas. The proposed project would not require significant water supplies, as there is no development of land uses proposed that would require the long-term use of water supplies. Temporary watering would occur during implementation of the proposed project as a method to control dust and during the planting and

establishment phase. No groundwater wells or pumps are included as part of the proposed project. A temporary irrigation system was put in place as part of the 2016 Restoration Project and would be reused for the proposed project.

OWD meets all of its potable water demands with imported water from the San Diego County Water Authority from Pipeline Number 4 of the Second San Diego County Aqueduct and from the 36-inch Jamacha Pipeline that are owned and operated by the San Diego County Water Authority. OWD has established a goal to sustain a 10-day outage of supply from the Water Authority Pipeline Number 4 at any time of the year without a reduction in service level. OWD seeks to obtain this level of supply reliability through the development of alternative water supplies, through agreements with neighboring water districts, and through treated water storage. For emergency events longer than the 10-day aqueduct shutdowns noted previously, OWD will utilize emergency supplies developed by the Water Authority's Emergency Storage Project. OWD also has two sources of recycled water supply: OWD's Ralph W. Chapman Water Recycling Facility and the City of San Diego's South Bay Water Reclamation Plant (CH2M 2016)

According to OWD's 2015 Urban Water Management Plan Update, both the San Diego County Water Authority and Metropolitan Water District of Southern California have determined in their respective Urban Water Management Plans that they will be able to meet projected demands through 2040, which include potable water demands for OWD. Therefore, in turn, OWD predicts that it is capable of meeting potable water demands through 2040 (CH2M 2016). Approximately 90 percent of OWD's customers are single-family residences, and much of the anticipated development in OWD's service area is expected to be single-family residential. OWD's actual water demands for 2015 as compared to actual water demands for 2010 are shown in Table 2-13, and Table 2-14 shows OWD's projected potable water demands through 2040.

It is estimated the proposed project would require approximately 10.8 million gallons,[11] or 33.1 acre-feet, of water during construction for dust control and 41.4 million gallons,[12] or 127.1 acre-feet, of water during maintenance and monitoring. Given that the proposed project's water demand would be temporary and would make up less than 0.1 percent of OWD's total projected water demand through 2040, it is anticipated OWD would have sufficient water supplies to serve the proposed project, and new or expanded entitlements and resources would not be required. Therefore, impacts would be less than significant.

Table 2-13. Demands for Potable Water in 2010 and 2015: Actual

Use Type	Level of Treatment When Delivered	2015 Actual Volume (acre-feet)	2010 Actual Volume (acre-feet)
Single Family	Drinking Water	16,641	17,165
Multi-Family	Drinking Water	3,403	3,605
Commercial	Drinking Water	2,675	2,243
Industrial	Drinking Water		
Institutional	Drinking Water	2,026	1,867
Landscape/Irrigation	Drinking Water	4,121	3,732
Losses	Drinking Water	920	1,854
Other	Drinking Water	513	709
Total		30,299	31,175

[11] Estimated 24 weeks (120 working days) with three 2,000-gallon water trucks utilizing 15 loads each per day.
[12] Estimated 5 gallons per plant planted (total of 120,000 plants) per week from April to November for 2 years.

Table 2-14. Demands for Potable Water: Projected 2020, 2025, 2030, 2035, and 2040

Use Type	2020 volume (acre-feet)	2025 volume (acre-feet)	2030 volume (acre-feet)	2035 volume (acre-feet)	2040 volume (acre-feet)
Single Family	17,072	19,806	20,752	20,649	23,224
Multi-Family	5,557	6,732	7,342	7,585	8,837
Commercial	6,578	7,949	8,654	8,924	10,378
Industrial					
Institutional					
Landscape/Irrigation	4,400	4,600	4,700	4,900	5,200
Near Term Annexations	2,973	2,973	2,973	2,973	2,973
Other	470	470	470	470	470
Total	37,050	42,530	44,891	45,501	51,082

c) **No Impact.** The proposed project would not involve the development of land uses that would generate wastewater. The project proposes habitat and hydrological process restoration and the creation, modification, and improvement of trails and would not require wastewater services such that capacity would need to be expanded to support the project. During site preparation activities, a portable toilet may be provided. The toilet would be hauled away and the waste disposed of at an approved facility in accordance with solid waste laws. As such, no project impacts would occur related to wastewater treatment requirements.

d) **Less-than-Significant Impact.** Waste and recycling disposal in the City of Chula Vista are provided by private companies. Recyclable materials are transferred to third-party providers, and municipal solid waste, commercial waste, and non-hazardous industrial waste are transported to the Otay Landfill, located at 1700 Maxwell Road, Chula Vista, CA 91911. The Otay Landfill is estimated to reach capacity in the year 2027 (Otay Landfill 2019).

The project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste goals. The proposed project would not significantly affect the capacity of a landfill or require the expansion of local infrastructure by accommodating the proposed project's solid waste disposal needs.

During site preparation and removal of invasive species, green waste would be generated and completely removed from the project sites and disposed of at the closest acceptable landfill or composting facility in San Diego County. Except for routine maintenance associated with ensuring the health of the vegetation, the proposed project would not generate waste of any kind once operational. Therefore, the proposed project would have no impact related to solid waste.

e) **No Impact.** The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. See threshold XIV.d. Green waste would be disposed of in accordance with applicable statutes and regulations. Only small amounts of green waste would be generated once the proposed project is operational and such waste would only be related to ensuring the health of the vegetation. Therefore, no impact would occur.

Mitigation:

No mitigation is required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	**X**	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	**X**	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?	☐	☐	**X**	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	**X**	☐

Comments:

a) **Less-than-Significant Impact.** An emergency plan describes a comprehensive emergency management system that provides for the planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. The County of San Diego, including the City of Chula Vista, uses the Operational Area Emergency Operations Plan to respond to major emergencies and disasters. The plan identifies a broad range of potential hazards and a response plan.

According to Annex Q, Evacuation, primary evacuation routes identified in the plan consist of the major interstates, highways, and primary arterials within San Diego County (County of San Diego 2018). The primary evacuation route closest to the project site is State Route 125, which is approximately 0.8 mile west of the project site. However, as noted in the plan, specific evacuation routes would be determined based on the location and extent of the incident and would include as many predesignated transportation routes as possible (County of San Diego 2018).

In addition to the Operational Area Emergency Operations Plan, the proposed project would be required to comply with applicable requirements set forth by the County of San Diego Office of Emergency Services' Emergency Operations Plan, Chula Vista Police Department, and City of Chula Vista Fire Department, such as requirements related to evacuation during wildfires. The Office of Emergency Services provides coordination of emergency response at the local level in the event of a disaster, including wildland fires. This emergency response coordination is facilitated by the Operational Area Emergency Operations Center and responding agencies to the proposed project, the Chula Vista Police Department, and City of Chula Vista Fire Station No. 3. Furthermore, development of trails and access roads on the project site would be conducted in coordination with the U.S. Border Patrol to ensure the proposed project provides adequate access.

The proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails, the addition of protective fencing, and the inclusion of educational kiosks in an area surrounded by open space with no major arterials immediately adjacent. Therefore, construction and operational activities conducted on the project site would not impair the implementation of any local emergency response plans and the effectiveness of emergency response personnel. Additionally, the proposed project would support establishment of a Greenbelt system that limits the use of multi-use trails to non-motorized uses except for motorized wheelchairs and utility, maintenance, and emergency vehicles, making emergency response in the project area more effective. Impacts would be less than significant.

b) **Less-than-Significant Impact.** CAL FIRE's Fire Hazard Severity Zone Maps evaluate the likelihood that an area will burn over a 30- to 50-year period. These maps are used to inform building construction standards on building permits; natural hazard disclosure at time of sale; defensible space clearance around buildings; and property development standards such as road widths, water supply, and address signs. These maps are also used in city and county general plans. The project site is within both High Fire Hazard Severity Zones and VHFHSZs in San Diego County's Local Responsibility Area (CAL FIRE 2009a, 2009b).

   The proposed project involves the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails, the addition of protective fencing, and the inclusion of educational kiosks. Proposed project improvements could introduce new potential ignition sources in high fire hazard areas in the form of vegetation from restoration activities, vehicles, and small machinery for invasive species removal. The Otay Ranch GDP and Chula Vista's General Plan require development projects to develop firebreaks and fuel modification plans. Because the proposed project would not construct any homes or businesses or extend roads, the proposed project does not require a firebreak or fuel modification plan. However, all activities under the proposed project would be required to comply with applicable construction and design standards that ensure the incorporation of fire prevention features.

   Although fire can be a potential threat in some areas of the proposed project site, the proposed project does not include housing or commercial development and would not draw a substantial amount of people during construction activities. Impacts would be less than significant.

c) **Less-than-Significant Impact.** As discussed above, the project site is in a Local Responsibility Area and fire hazard severity zone designations in the project site range from high fire hazard to very high fire hazard. The proposed project consists of the expansion of the Original Mitigation Bank and the creation, modification, and expansion of trails within the entire proposed project limits. Implementation of the proposed project could occur in VHFHSZs mapped by CAL FIRE (discussed above). If implementation of the proposed project would occur within a VHFHSZ, the proposed project would comply with the policies of the City of Chula Vista General Plan, the County of San Diego Operational Area Emergency Operations Plan, and the County of San Diego's Multi-Jurisdictional Local Hazard Mitigation Plan. Impacts would be less than significant.

d) **Less-than-Significant Impact.** As discussed in more detail in Section VIII, *Geology, Soils, and Paleontological Resources*, and Section X, *Hydrology and Water Quality*, construction and operation of the proposed project would comply with general plan policies that would specify design requirements to minimize risk of exposure to geologic and hydrologic hazards, including flooding, landslides, runoff, and drainage changes. Furthermore, the proposed project would comply with the County of San Diego's Multi-Jurisdictional Local Hazard Mitigation Plan, which includes strategies to reduce the loss of life, personal injury, and property damage that can result from disasters, including wildfire. As discussed in thresholds X.c.ii and iv, the proposed project would result in an incremental improvement to drainage patterns over existing conditions and would not affect flooding off site. Therefore, the proposed project would not substantially alter the existing drainage pattern of the restoration site or area or result in a substantial increase in the rate or amount of surface runoff in a manner that would result in flooding on or off site. Therefore, impacts would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. CITY THRESHOLDS: Will the proposal adversely impact the City's Threshold Standards?				
A) Library The City shall construct 60,000 gross square feet (GSF) of additional library space, over the June 30, 2000 GSF total, in the area east of Interstate 805 by buildout. The construction of said facilities shall be phased such that the City will not fall below the citywide ratio of 500 GSF per 1,000 population. Library facilities are to be adequately equipped and staffed.	☐	☐	☐	**X**
B) Police a) Emergency Response: Properly equipped and staffed police units shall respond to 81 percent of "Priority One" emergency calls within seven (7) minutes and maintain an average response time to all "Priority One" emergency calls of 5.5 minutes or less. b) Respond to 57 percent of "Priority Two" urgent calls within seven (7) minutes and maintain an average response time to all "Priority Two" calls of 7.5 minutes or less.	☐	☐	☐	**X**
C) Fire and Emergency Medical Emergency response: Properly equipped and staffed fire and medical units shall respond to calls throughout the City within 7 minutes in 80% of the cases (measured annually).	☐	☐	☐	**X**
D) Traffic The Threshold Standards require that all intersections must operate at a Level of Service (LOS) "C" or better, with the exception that Level of Service (LOS) "D" may occur during the peak two hours of the day at signalized intersections. Signalized intersections west of I-805 are not to operate at a LOS below their 1991 LOS. No intersection may reach LOS "E" or "F" during the average weekday peak hour. Intersections of arterials with freeway ramps are exempted from this Standard.	☐	☐	**X**	☐
E) Parks and Recreation Areas The Threshold Standard for Parks and Recreation is 3 acres of neighborhood and community parkland with appropriate facilities/1,000 population east of I-805.	☐	☐	☐	**X**

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
F) Drainage	☐	☐	☐	**X**
The Threshold Standards require that storm water flows and volumes not exceed City Engineering Standards. Individual projects will provide necessary improvements consistent with the Drainage Master Plan(s) and City Engineering Standards.				
G) Sewer	☐	☐	☐	**X**
The Threshold Standards require that sewage flows and volumes not exceed City Engineering Standards. Individual projects will provide necessary improvements consistent with Sewer Master Plan(s) and City Engineering Standards.				
H) Water	☐	☐	**X**	☐
The Threshold Standards require that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth and that water quality standards are not jeopardized during growth and construction.				
Applicants may also be required to participate in whatever water conservation or fee off-set program the City of Chula Vista has in effect at the time of building permit issuance.				

Comments:

A. **No Impact.** The proposed project would not adversely affect the City's threshold standards for libraries. As discussed in Sections XIV, *Population and Housing*, and XV, *Public Services*, the proposed project would not induce substantial population growth or increase the demand for public facilities, including library services. Therefore, no impacts on library facilities would occur.

B. **No Impact.** The proposed project would not adversely affect the City's threshold standards for police. As discussed in threshold XV.b, the proposed project would not result in an increased demand requiring the need for new or physically altered police protection facilities. No buildings or habitable structures that may require police protection services are proposed. Moreover, no people would reside on the project site. Once operational, the proposed project would be similar to the existing condition in terms of the need for police protection services. Therefore, the proposed project would not adversely affect emergency response times for police, and no impacts would occur.

C. **No Impact.** The proposed project would not adversely affect the City's threshold standards for fire and medical. As discussed in threshold XV.a, the proposed project would not result in an increased demand requiring the need for new or physically altered fire protection facilities. No buildings or habitable structures that may require fire protection services are proposed. Moreover, once operational, the proposed project would be similar to the existing condition in terms of the need for fire protection services. Therefore, the proposed project would not adversely affect emergency response times for fire and medical units, and no impacts would occur.

D. **Less-than-Significant Impact.** As described in threshold XVII.a, construction activities of the proposed project are not expected to result in a significant increase in traffic volumes or delay. Construction of the proposed project is anticipated to occur in a single phase over approximately 24 weeks, beginning in the fall of 2020 and completing in spring of 2021. A maximum of eight haul truck round trips are expected to occur during a peak construction day to remove trash, invasive plant material, and construction debris from the project site to local county landfills in the area, such as the Otay Landfill. The Otay Landfill is approximately 3 miles west of the proposed project site. It is anticipated that trips to the landfill would exit the project site via Wiley Road, head west on Main Street, and then head north on Maxwell Road to access the landfill. Trucks would then return to the project site via the same route. According to the City of Chula General Plan, Land Use and Transportation Element (2005), Wiley Road is classified as a "Gateway Street" east of State Route 125 and a "4 Lane Major" and "6 Lane Prime" west of State Route 125. Wiley Road eventually turns into Main Street, which is classified as "6 Lane Prime." Maxwell Road is an unclassified roadway. Table 2-12, as shown in threshold XVII.a, describes the street segment performance standards and volumes. A maximum of 10 construction workers would be coming to/from the project site during a peak construction day. It is assumed that all construction worker traffic will access the proposed project from Interstate 805, head east on Main Street, and access the project site via Wiley Road. Additionally, there would be a maximum of two round trips per day for vendor/delivery truck trips. Therefore, during a peak construction day, there would be a maximum total of 20 round trips occurring.

   As mentioned above, a traffic analysis was conducted in December 2015 for the 2016 Restoration Project (Chen Ryan Associates 2015). The traffic analysis assumed a construction base year under Year 2020 conditions with construction trip generation rates similar to those of the proposed project. The traffic analysis was based on 20 total daily vehicle trips for construction workers and six total daily vehicle truck trips per day during the peak of project construction. The proposed project assumes 20 total daily construction worker trips (10 round trips) and 20 total daily vehicle truck trips (10 round trips) per day during the peak of project construction. The results of the traffic study found that all the intersections within the study area were anticipated to operate at acceptable LOS D or better under Year 2020 conditions. Because the trip generation rates used in the traffic study are similar to those of the proposed project, it is expected that all the intersections within the proposed project study area would also operate at acceptable LOS D or better under Year 2020 conditions. Post construction, the proposed project is not anticipated to generate any additional vehicular traffic except for periodic maintenance. This would include a maximum of one round trip per day. No impact related to operational traffic would result with implementation of the proposed project. As such, overall impacts of the proposed project on traffic of the surrounding area would not significantly affect any of the study intersections evaluated and no operational impacts would result.

E. **No Impact.** The proposed project would not adversely affect the City's threshold standards for parks and recreation areas. As discussed above, the proposed project would not result in an increase in housing or residents in the project vicinity that would result in increased demand for parks and recreation areas. No impact would occur.

F. **No Impact.** The project site does not drain to the municipal storm drain system and would not contribute to the City's stormwater drainage network. The project site is within the Otay River Valley, and implementation of the proposed project would involve restoration and enhancement of the hydrology of the river and channels and native habitat within the project boundaries. The proposed project would not generate additional stormwater flows or volumes. In fact, the proposed project would serve to improve existing hydrological conditions and would slightly decrease 100-year flood elevations in the project vicinity. Therefore, the proposed project would not exceed City Engineering Standards, and no impacts would occur.

G. **No Impact.** The proposed project would not adversely affect the City's threshold standards for sewer flows. As discussed in Section XIV, *Utilities and Service Systems*, the proposed project would not generate any sewer wastewater, and no impacts would occur.

H. **Less-than-Significant Impact.** As discussed above in Sections X, *Hydrology and Water Quality*, and XV, *Public Services*, the proposed project is not growth-inducing and would not violate any water quality standards. The proposed project would affect water storage, treatment, or transmission facilities, and impacts would be less than significant.

Mitigation:

No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXII. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) Does the project have the potential to substantially 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, substantially 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 that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	**X**	☐	☐

Comments:

a) **Less-than-Significant Impact with Mitigation Incorporated**. As discussed in Section V, *Biological Resources*, and in the BRR, the ultimate goal of the proposed project is to restore the Otay River and surrounding natural communities and create an ecologically functional, self-sustaining wetland that is resilient to a range of natural disturbances (e.g., drought, flood) within the project area. Temporary impacts associated with the proposed project would result from two restoration activities: habitat restoration (habitat enhancement and rehabilitation) and grading (for habitat establishment and re-establishment). A relatively small amount of permanent impacts would occur from the creation of new trails, which would include grading, and from work (channel armoring) on at least two existing stream crossings. All habitat restoration and establishment/re-establishment impacts are considered temporary because the proposed project is a restoration activity, and any affected area would be restored with native vegetation, ultimately leading to a net gain in viable habitat and native plant communities as well as overall improvement in river conditions. Impacts on special-status plant and wildlife species would be mostly avoided and minimized through avoidance as part of the proposed project's design. Potentially significant impacts on special-status plants and wildlife would be reduced to less than significant through implementation of proposed project mitigation measures discussed herein (**Mitigation Measures BIO-1** through **BIO-11**). Therefore, the proposed project would not degrade the quality of the environment or reduce sensitive or special-status plant or wildlife species' populations, communities, or ranges.

As described in Section VI, *Cultural Resources*, no existing structures or buildings occur within the project boundary and, therefore, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource. Furthermore, despite the paucity of

archaeological deposits identified within the project area during previous surveys, there is the potential for cultural resources eligible for the CRHR to occur within the project site. Potential impacts on eligible resources could occur from these proposed activities if ground disturbance occurs within cultural resource boundaries. However, in order to reduce or minimize impacts on cultural resources, the proposed project would incorporate **Mitigation Measures CUL-1** through **CUL-3**. As part of the mitigation measures, the proposed project would establish ESAs around areas of artifact concentration and prohibit ground-disturbing activities and avoid impacts in the ESAs **(Mitigation Measure CUL-1**). In addition to establishing ESAs, areas of archaeological and tribal monitoring would be established within an existing cultural resources boundary but in areas where no artifact concentrations were identified during survey efforts. Ground-disturbing activities occurring within MAs will require the presence of an archaeological monitor.

The ESAs and MAs would be incorporated into the cultural resources treatment and monitoring plan (**Mitigation Measure CUL-2**) and would be made available to non-archaeological staff for scheduling purposes. In addition, given the prehistoric archaeological sensitivity of the proposed project area, and in order to minimize impacts on prehistoric resources, the proposed project would incorporate **Mitigation Measure CUL-3**. Therefore, with implementation of **Mitigation Measures CUL-1** through **CUL-3**, impacts on important California history or prehistory would be less than significant.

b) **Less-than-Significant Impact**. A cumulative impact would occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. The City of Chula Vista identified seven individual projects within the City to be considered for cumulative impacts because of the proximity to the project site. The projects are described below and shown on Figure 14 (see Attachment 1 for all figures).

- **University Park & Innovation Center**, located within Otay Ranch, on Hunter Parkway, east of highway 125, south of Birch Road. This project proposes development of approximately 383.8 acres in the Otay Ranch community in the City of Chula Vista as a university site with a mix of retail and residential land uses that transition to open space areas south of the project site toward the Otay River Valley. This development is composed of two properties: the Main Campus Property (approximately 353.8 acres) and the Lake Property (approximately 30 acres). The project has been approved and construction is anticipated through 2030.
- **University Village Ten**, located east of Highway 125 and south of Hunte Parkway, north of Wiley Road. This development proposes 691 single-family dwelling units and 1,049 multi-family dwelling units. The project site is 363.4 acres. The project has been approved and construction is anticipated from 2023 through 2029.
- **University Village Nine**, located within Otay Ranch east of Village Eight West and Highway 125. This development proposes 266 single-family dwelling units, 3,734 multi-family dwelling units, 1,500,000 square feet of commercial, 5.0 acres of community purpose facilities, 19.8 acres dedicated to school property, 27.5 acres of park land, 85.0 acres of industrial/research technology park, and 50.0 acres for the future University site. The project has been approved and construction is anticipated through 2030.
- **University Village Eight East**, located within Otay Ranch, west of Highway 125, south of Rock Mountain Road. This development proposes 963 single-family dwelling units, 2,597 multi-family dwelling units, and 20,000 square feet of commercial on 576 acres. The project has been approved and Section Planning Area and Tentative Map Amendments are currently under review. Construction is anticipated through 2024.
- **Millenia**, located within Otay Ranch, west of Highway 125, south of Rock Mountain Road. This development proposes 2,983 multi-family dwelling units and 3,487,000 square feet of office/commercial on 207 acres. The project has been approved and is currently under construction. It is assumed the project would still be under construction during implementation of the proposed project.

- **University Village Eight West**, located within Otay Ranch south of Santa Luna Street. This development proposes 621 single-family dwelling units, 1,429 multi-family dwelling units, 300,000 square feet of commercial land use, 5.8 acres of community purpose facilities, 31.6 acres dedicated to school property, and 27.9 acres of park land. The project has been approved and Section Planning Area and Tentative Map Amendments are currently under review. Construction is anticipated through 2030.
- **University Village Four**, located within Otay Ranch west of Village 8 West and east of Wueste Road. This development proposes 73 single-family dwelling units and 277 multi-family dwelling units on 166 acres. The project has been approved and entitlement and commencement of construction is expected shortly. It is assumed the project would still be under construction during implementation of the proposed project.

As discussed in Sections I through XX, the proposed project would not result in any significant impacts. Resource areas where the proposed project could potentially contribute to cumulative impacts are discussed for the resources below; however, the proposed project would not result in a cumulatively considerable impact for the following reasons.

Aesthetics

As described in the University Village Project Final Environmental Impact Report for Village Four, Village Eight East, Village Eight West, Village Nine, Village Ten, and the University Park and Innovation Center, the impacts on aesthetics and landform alteration as a result of these projects would contribute to a significant and unavoidable cumulative impact. Development of the cumulative projects would result in the permanent alteration of the cumulative projects' area from undeveloped rolling hills to high-density urbanized uses (City of Chula Vista 2014).

The visual setting of the proposed project site includes the valley floor of the Otay River Valley, which is designated as a scenic resource and Open Space Preserve by the City of Chula Vista General Plan. As described in Section I, *Aesthetics*, the proposed project would not result in an adverse effect on a scenic vista due to the short-term, phased nature of construction activities associated with the creation, modification, and expansion of trails and mitigation bank expansion. In addition, the trail improvements proposed as part of the proposed project would be implemented in compliance with the City of Chula Vista Greenbelt Master Plan and the OVRP Concept Plan. Furthermore, the proposed project would not substantially damage any scenic resources along a scenic highway, and once completed would enhance the visual quality of the site. Therefore, although implementation of the cumulative projects listed above would contribute to a significant and unavoidable cumulative impact, the proposed project would result in beneficial aesthetic impacts and thus would not contribute to the existing cumulatively significant impact.

Agriculture and Farmland Resources

None of the cumulative project sites are designated for agricultural uses by either the City of Chula Vista General Plan or Zoning Code. Therefore, development of these projects would not contribute to or create a cumulatively significant impact related to agricultural resources.

As described in Section II, *Agricultural Resources*, the proposed project is within and adjacent to areas of Farmland of Local Importance and Grazing Land per Farmland Mapping and Monitoring Program data for San Diego County. There are approximately 89.1 acres of Farmland of Local Importance and 39.9 acres of Grazing Land identified within the proposed project site. However, the project site and the surrounding area are designated as Open Space Preserve by the City of Chula Vista General Plan and zoned Residential by the City of Chula Vista's Zoning Code, and no agricultural activities occur in the area. The proposed project would not result in the conversion of existing Farmland of Local Importance and would not involve significant changes in the existing land use. Therefore, the proposed project would not contribute to or create a cumulatively significant impact.

Air Quality

The cumulative study area for air quality is the San Diego Air Basin (defined as all of San Diego County). The San Diego Air Basin is currently designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The designations are a result of emissions generated by past and present projects, and will continue to be influenced by reasonably foreseeable future projects. Cumulative impacts could result if a project exceeds established thresholds for pollutants for which the region is designated as nonattainment. In addition, if a project does not exceed established pollutant thresholds and is determined to have less-than-significant impacts at the project level, it may still contribute to a significant cumulative air quality impact if emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

All of the cumulative projects (#1 through #7) would contribute varying amounts of criteria pollutant emissions, which, when combined with the proposed project, could exceed established thresholds and thus result in a cumulatively significant impact on air quality. Given the rural nature of the project area and the short duration of construction for the proposed project, it is not anticipated that extensive construction or operation of cumulative projects would occur while the proposed project is being constructed. Possible cumulative impacts on air quality as a result of construction activities in the area would be addressed by compliance with SDAPCD rules and regulations, which apply to all construction projects. As discussed in Section III, *Air Quality*, the proposed project would not result in construction or operational emissions that would exceed SDAPCD's trigger levels and, therefore, would not negatively affect regional air quality. Because both the proposed project's construction and operational emissions would be well below the SDAPCD trigger levels, the proposed project would not contribute to any significant cumulative impacts related to the nonattainment status for O_3, PM_{10}, or $PM_{2.5}$. Therefore, the proposed project's pollutant emissions contribution would not be cumulatively considerable.

Biological Resources

Cumulative impacts occur when biological resources are either directly or indirectly affected to a minor extent as a result of a specific project, but the project-related impacts are part of a larger pattern of similar minor impacts. The overall result of these multiple minor impacts from separate projects is considered a cumulative impact on biological resources.

Development of the cumulative projects listed above would likely include both direct and indirect significant and unavoidable permanent and temporary impacts on biological resources. In 2005, the City of Chula Vista updated the Otay Ranch General Development Plan, which was originally approved in 1993 along with its Program Environmental Impact Report (EIR) (City of Chula Vista 2019). The General Development Plan followed the adoption of the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 2003b) in 2003 and the Otay Ranch Resource Management Plan in 1996, as updated in 2018 (RECON 2018), and was therefore compliant with the regulations set forth in the plans; the General Development Plan was further amended in 2013 and recently updated in 2019 (City of Chula Vista 2019). In 2005, the City of Chula Vista prepared an EIR for the City's General Plan, which addressed amendments to the Otay Ranch General Development Plan; the EIR was updated in 2012 (City of Chula Vista 2012). Because compliance with the City of Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan reduces significant impacts on biological resources, including by use of biological mitigation measures required for development projects, the impacts of the General Development Plan were found to not be significant (due to impacts being self-mitigated by implementation of General Plan Objectives and Policies).

The University Village Project Final EIR (which included a portion of Village Four, Village Eight East, and Village Ten), the Village Four Final EIR, the University and Innovation District Final EIR, and the Eastern Urban Center Final EIR identified significant unavoidable impacts on biological

resources in Otay Ranch due to loss of sensitive plant species, loss of habitat for special-status wildlife species, loss of sensitive vegetation communities, loss of jurisdictional waters, and indirect impacts from increased human presence and temporary construction-associated activities (City of Chula Vista 2014, Dudek 2018, HELIX 2018, City of Chula Vista 2009). However, these impacts would be mitigated through sensitive species-specific mitigation measures, conveyance of preserve lands to the City of Chula Vista for acres of jurisdictional and sensitive species habitats impacted, along with habitat restoration, as required by the Otay Ranch Resource Management Plan and City of Chula Vista MSCP Subarea Plan. Wetlands mitigation is also expected as conditions of wetlands permits, and temporary construction areas would be revegetated with native species. The conveyance program, coupled with habitat restoration, is intended to conserve a greater or equal amount of sensitive vegetation types within Otay Ranch.

In a regional context, the Otay Ranch Preserve Resource Management Plan provides CEQA mitigation for development of less sensitive areas within the areas proposed for development on Otay Ranch. Therefore, the proposed project design must demonstrate conformance with the conservation goals and preserve boundaries of the General Development Plan, Resource Management Plan, and City of Chula Vista MSCP Subarea Plan. As described in the BRR, the proposed project is consistent with the conservation goals and preserve boundaries of the GDP, RMP, and City of Chula Vista MSCP Subarea Plan. The proposed project is mostly limited to the grading, revegetation, and restoration/enhancement of the project area associated with restoration of the Otay River and surrounding natural communities. The proposed project would result primarily in temporary impacts on sensitive species' use of the area; very limited permanent impacts would occur from a small amount of natural habitat conversion to maintained trails and armored stream crossings. The proposed project vicinity is immediately surrounded by extant undeveloped land, the existing resources of which would not significantly change during the time that the proposed project is active. In addition, the mitigation bank restoration project adjacent to and upstream of the proposed project (i.e., 2016 Restoration Project composed of the Original Mitigation Bank and Pre-Bank areas) will also be improving the function and quantity of natural habitats for special-status or sensitive species, riparian habitats, and sensitive vegetation communities in the vicinity. The proposed project would comply with all regulatory requirements as appropriate, per **Mitigation Measure BIO-1**. Temporal loss of habitat for listed species, in particular, may be addressed during Section 7 consultation and the extent to which the upstream river restoration project has begun to provide for habitat functions and values during the timeframe for the restoration enhancement activities envisioned in the proposed project. Implementation of **Mitigation Measures BIO-2** through **BIO-5** and **BIO-11** would further minimize impacts on special-status species, sensitive habitats, and jurisdictional resources. Overall, the proposed project, with mitigation measures incorporated, would result in a site with permanent net gains in special-status and sensitive species' habitats and functions and values of jurisdictional wetlands and waters; therefore, impacts would not be cumulatively significant when considered in conjunction with those of the cumulative projects described above.

Cultural Resources

The geographic scope of the cumulative cultural resources analysis includes the seven projects described above. As discussed above and in technical attachment *CEQA Cultural Resources Technical Report, Otay River Restoration Project* (ICF 2021d), impacts on historical resources may include both direct (i.e., physical) and indirect (i.e., noise and visual) impacts. No documented historical or tribal resources are known to exist within the project boundary. Therefore, no direct impacts on these resource types are anticipated. It is unknown whether any historical resources exist outside of the project boundary, both within and outside the sites of the seven projects listed above. The purpose of the proposed project is to restore and enhance the Otay River floodplain to its pre-late-twentieth century conditions. This is anticipated to result in no long-term change to existing noise conditions and minimal change to existing visual conditions. Construction-related visual and noise impacts would be minimal and temporary. Therefore, the proposed project would not contribute to a significant cumulative indirect impact on historical resources.

Impacts on archaeological resources tend to be limited to those that would directly compromise an archaeological resource's physical integrity—a key element of the significance of these resources. Therefore, a project would be unlikely to contribute to a significant cumulative impact on an archaeological resource if it were located entirely outside of the project's construction footprint.

Artifacts associated with eight previously recorded cultural resources were identified within the project site as well as two previously recorded isolated artifacts and four newly identified isolated artifacts. The isolated artifacts are not eligible for the CRHR (Public Resources Code SS5024.1, Title 14, Section 4852) under any of the required criteria.

None of the eight relocated cultural resources have been formally evaluated for their eligibility for listing in the CRHR. In accordance with guidance from the California Office of Historic Preservation, the unevaluated sites must be considered eligible for the CRHR. Therefore, for the purposes of this project, these sites are assumed to be eligible for the CRHR. However, in order to reduce or minimize impacts on eligible cultural resources, the proposed project would incorporate **Mitigation Measures CUL-1** through **CUL-3** to reduce impacts to a less-than-significant level. Therefore, the proposed project would not contribute to a significant cumulative impact on any known archaeological resources.

As with archaeological resources, impacts on cemeteries and paleontological resources tend to be limited to those that would directly compromise their physical integrity. As no previously documented cemeteries or paleontological resources are located within the project footprint, the project would not contribute to a significant cumulative impact on any known resources.

Energy

The study area for cumulative energy impacts is San Diego County, within which all project-related electricity, fuel, and natural gas consumption would occur. It is anticipated that implementation of the proposed project, as well as cumulative development in the area, would comply with applicable state and local energy efficiency and conservation regulations. As discussed in Section VII, the proposed project would use a minimal amount of energy during construction and operation, and would also comply with existing state and local plans regarding energy. Therefore, the proposed project in conjunction with cumulative development is not expected to result in the inefficient or wasteful use of large amounts of energy or conflict with existing state and local plans related to energy efficiency. Consequently, the proposed project would not result in a cumulatively considerable contribution to significant energy impacts.

Geology and Soils

Development in a seismically active region can put people and structures at risk from a wide range of earthquake-related effects. The existing level of seismic risk exposure represents a significant cumulative impact. However, the proposed project is not expected to draw a substantial amount of people, either during project activities or permanently; therefore, the project site would remain similar to existing conditions. Furthermore, no structure intended for human occupation (or otherwise) would be built; therefore, potential risk to people would be extremely limited and there would be no potential for impacts on property. Although construction activities could exacerbate soil erosion conditions by exposing soils and adding water to the soil from irrigation during construction, compliance with permit requirements and implementation of **Mitigation Measure BIO-1** would result in less-than-significant impacts related to soil erosion during construction activities. As such, the proposed project would not contribute considerably to the existing cumulative impact related to seismic hazards.

Greenhouse Gas

GHG emissions and climate change are exclusively cumulative impacts; there are no non-cumulative GHG emissions impacts from a climate change perspective. Climate change is the result of cumulative global emissions. No single project, when considered in isolation, can cause climate change because a single project's emissions are not of a sufficient quantity to change the radiative balance of the

atmosphere. Because climate change is the result of GHG emissions and GHGs are emitted by innumerable sources worldwide, global climate change will have a significant cumulative impact on the natural environment as well as human development and activity. As such, GHGs and climate change are cumulatively considerable, even though the contribution may be individually limited. Therefore, the cumulative study area is worldwide. The project-level analysis conducted for the proposed project in essence analyzes the cumulative contribution of project-related GHG emissions.

All of the cumulative projects would contribute varying amounts of GHG emissions, which, when combined with the proposed project, would be considered cumulatively significant. As discussed under threshold IV.a, because the proposed project's total annual GHG emissions from construction (amortized over 30 years) and operations would be well below the 900 $MTCO_2e$ screening level threshold recommended by the California Air Pollution Control Officers Association, the proposed project would not generate GHG emissions to a level that would be cumulatively considerable. Additionally, as discussed under threshold IV.b, the proposed project would not conflict with the City's CAP or CARB's 2017 Climate Change Scoping Plan, as none of the measures outlined in the plans are directly applicable to the proposed project. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment. The proposed project's contribution to cumulative GHG emissions would be less than cumulatively considerable.

Hazards and Hazardous Materials

The hazardous materials geographic study area considered for cumulative impacts consists of the area that could be affected by the proposed project and the areas affected by other projects whose activities could directly or indirectly affect the proposed activities on the project site or nearby. In general, only projects occurring adjacent or very close to the project site are considered due to the limited potential impact area associated with the release of hazardous materials into the environment.

There are several residential, commercial, and industrial development projects planned to be constructed to the north and to the west of the project site. These include the University Villages Project for Village Four, Village Eight East, Village Eight West, Village Nine, Village Ten, and the University Park and Innovation Center. Although construction of these cumulative projects would involve the handling of hazardous materials such as fuel, solvents, chemicals, and oils, it is expected that such handling would be compliant with applicable regulations. Furthermore, these materials are typically used in construction projects and would not represent the transport, use, and disposal of acutely hazardous materials. Any releases would be localized and cleaned up after they occur. Additionally, the proposed project would not cumulatively contribute to hazardous materials or hazardous impacts in the region because it would comply with all federal, state, and local regulations, the details of which are discussed in Section IX, *Hazards and Hazardous Materials*, concerning the handling of hazardous materials and/or waste.

As mentioned in Section IX, the southern portion of the proposed project site is within the Brown Field Bombing Range FUDS. The Brown Field Bombing Range was identified in the EnviroStor database as being part of the Department of Toxic Substances Control's Site Cleanup Program with a status of *Inactive – Needs Evaluation* (as of July 2018). Construction of the proposed project could create a significant hazard to construction workers or the environment by exposing or encountering any remaining unearthed UXO, MEC, and MDs. However, implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts to less-than-significant levels by determining if water or sediment contamination is present, remediating any contaminated soils if posing a risk to human health, and clearing all UXO within the area; therefore the proposed project would not contribute to cumulative hazardous materials or hazardous impacts.

Hydrology and Water Quality

For purposes of the cumulative effects analysis, the geographic context for the impacts relative to water quality and hydrology include portions of the Otay River receiving runoff from these projects. This is defined as the Otay River between Wueste Road and Otay Lakes County Park.

The cumulative projects have the potential to affect hydrology and degrade water quality through the introduction of stormwater pollutants. Construction activities could mobilize sediment via stormwater runoff that would affect the Otay River. Sediment and sediment-bound pollutants have the potential to degrade water quality in the Otay River. Hazardous materials from construction equipment could be accidentally released during construction of these projects, and discharge of these materials to surface water could adversely affect water quality, endanger aquatic life, and/or result in a violation of water quality standards.

All projects would be required to adhere to the Construction General Permit, which requires the elimination or reduction of non-stormwater discharge off site. Each project would be required to develop a site-specific SWPPP and implement stormwater BMPs to control stormwater pollution from construction activities. Through adherence to the Construction General Permit, these projects would have a less-than-significant cumulative impact on hydrology and water quality. Other impacts related to the creation of new impervious surfaces from cumulative projects could have an effect on hydrology and water quality; however, the proposed project would not create new impervious surfaces and would not contribute to cumulative effects on runoff. In fact, the proposed project is designed to enhance, rehabilitate, and re-establish hydrological processes and vegetation communities within the Lower Otay River Watershed that would be self-sustaining and could adjust to dynamic natural processes.

As described in Section X, *Hydrology and Water Quality*, the proposed project's drainage and water quality impacts would be limited primarily to the site preparation and planting phase when ground disturbance would occur. Construction activities that have the potential to affect water quality would be required to adhere to the General Construction Permit, which requires the development and implementation of a SWPPP by a Qualified SWPPP Developer, the elimination or reduction of non-stormwater discharge off site into storm drainage systems or other water bodies, and the implementation of BMPs. This would result in a less-than-significant impact on water quality. Therefore, because water quality would not be adversely affected by the proposed project, the proposed project's contribution to cumulative hydrology and water quality impacts would not be cumulatively considerable.

Land Use and Planning

The geographic scope for cumulative impacts related to land use and planning is the City as a whole, surrounding land uses, and the boundaries of the applicable habitat conservation plans. The projects listed above could result in a cumulative impact when combined with the impacts of the proposed project; however, all of the cumulative projects were (or are being) developed in accordance with the underlying land use designations and would not divide established communities. Furthermore, the cumulative projects would not conflict with habitat conservation plans because adequate mitigation has been provided, including implementation of the proposed project mitigation site. Therefore, the impacts of the cumulative projects on land use and planning would not be cumulatively significant.

As discussed in Section XI, *Land Use and Planning*, the project site would not divide an established community, nor would it conflict with the Chula Vista General Plan, Brown Field Municipal Airport Land Use Compatibility Plan, Otay River WMP and SAMP, Otay Ranch Phase 1 and 2 RMP, City of Chula Vista Greenbelt Master Plan, or OVRP Concept Plan and Trail Guidelines. The project site would also be consistent with the Open Space Preserve designation by the City of Chula Vista General Plan. The project site is zoned Residential by the City of Chula Vista's Zoning Code, and it is consistent with this zone because it would leave the project site in a generally undeveloped state. Other applicable planning documents include the MSCP.

The proposed project is consistent with each of these plans as explained in detail under Section XI. Specifically, to ensure all trail improvements would be designed consistent with the City's Greenbelt Master Plan and the OVRP Concept Plan and Trail Guidelines, **Mitigation Measure LU-1** is required. Therefore, because the proposed project would not result in a significant land use and planning impact after mitigation and, furthermore, because a significant cumulative land use impact is not present from past, present, and reasonably foreseeable future projects, the proposed project's cumulative contribution would not be cumulatively significant.

Mineral Resources

The geographic scope for cumulative impacts related to mineral resources is the area of the City designated as MRZ-2. The projects listed above could result in a cumulative impact when combined with the impacts of the proposed project given that the boundaries of the Village Eight East and Village Ten projects would overlap within an area designated as MRZ-2. However, as described in the University Villages Project Final Environmental Impact Report (City of Chula Vista 2014) and similar to the proposed project, the majority of the overlapping area is within the Chula Vista MSCP Preserve and any development would be required to comply with applicable regulations. In addition, only a small portion of planned development from these projects would overlap with the MRZ-2 zone, which include a community park, portions of the associated access and emergency access roads, and two water quality basins and associated access road. As determined in the University Villages Project Final Environmental Impact Report (City of Chula Vista 2014), these uses would not preclude potential future extraction, and under the MSCP projects would still have the option of extracting aggregate prior to development. Therefore, because only a small portion of development would overlap with the MRZ-2 zone and the potential for future extraction would not be precluded, the impacts of the cumulative projects would be less than cumulatively significant.

As discussed in Section XII, *Mineral Resources*, the project site is in a portion of the Otay River Valley that has been identified as an MRZ-2 zone and was previously the location of sand mining activities between 1982 and 1985. However, operations ceased in 1985 and the site has been left in a highly disturbed state. The project site is also designated as Open Space Preserve and delineated within the jurisdiction of the Chula Vista MSCP Preserve where the long-term vision for the entire preserve area, including the project site, is to cease mining, extraction, and processing activities altogether (City of Chula Vista 2015). Therefore, because mining activities at the project site ceased three decades ago and the future plans for the Chula Vista MSCP Preserve are to cease mining-related activities altogether, implementation of the proposed project would not result in the loss of valuable mineral resources and would not contribute to a cumulatively significant impact.

Noise

There are several residential, commercial, and industrial development projects planned to be constructed to the north and west of the project site. The projects listed would not be completed and occupied prior to the completion of construction activities of the proposed project. Therefore, they would not be affected by construction noise from the proposed project. Depending on the construction sequence and timing of the related projects, it is possible that their construction could overlap with that of the proposed project and the combined noise levels could affect the nearest noise-sensitive receptors to the project site (High Tech High Chula Vista, Otay Lakes County Park, George Bailey Detention Facility, and Richard J. Donovan Correctional Facility). Because some of the related projects are adjacent to existing noise-sensitive receptors, short-term noise levels could be high and it is possible that a cumulative construction noise impact could occur under this scenario. However, as described in Section XIII, *Noise*, the noise level contribution from the proposed project would be 42 dBA or less. Compared to the established threshold of 75 dBA (based on the San Diego County Code), this represents a negligible increase in the overall noise level.[13] Therefore, the proposed project's contribution to any significant construction noise impacts would not be cumulatively considerable and

[13] 75 dBA + 42 dBA = 75.002 dBA

the impact would be less than significant. In addition, proposed project construction would only occur within the daytime hours permitted by the San Diego County Code and the Chula Vista Municipal Code, so there would be no contribution to construction noise outside of the permitted hours.

As noted in Section XIII, *Noise*, construction traffic volumes would be very low and the contribution to overall traffic noise levels would be negligible. The same would be true under a cumulative construction scenario, so there would be no cumulatively considerable contribution from proposed project construction traffic and the impact would be less than significant.

The other type of potential cumulative impact that could occur would be as a result of related projects being developed and creating noise-sensitive receptors in closer proximity to the proposed project than the existing receptors in the area. The Otay Ranch Village Ten would be the closest development to the proposed project site and would develop noise-sensitive residences. The routine periodic maintenance and monitoring of the proposed project could occur after completion of Otay Ranch Village Ten or other cumulative projects. Noise from these activities could affect the cumulative projects. Following completion of the construction phases, routine maintenance and monitoring could include the use of line trimmers, chainsaws, and skid steers. Given the nature of the work and the equipment used, it is assumed that this activity would be treated as construction under the local municipal code and would be subject to the same construction-related noise standards. Therefore, the associated threshold of 75 dBA 8-hour L_{eq} is considered appropriate for assessing potential impacts. At close range there could be relatively high short-term noise levels associated with the use of chainsaws or skid steers (e.g., a chainsaw and skid steer at 50 feet could generate noise levels up to 77 and 75 dBA 1-hour L_{eq}, respectively). However, given the size of the project site, the average distance to neighboring receivers would be much greater than 50 feet and the use of mechanized equipment in proximity to any individual receptor is anticipated to be brief. As a result, the contribution to long-term average noise levels would be low and would not exceed the threshold of 75 dBA 8-hour L_{eq}.

The use of a skid steer during the maintenance and monitoring of the proposed project would produce PPV vibration levels of approximately 0.003 in/sec at a distance of 25 feet. The predicted vibration levels associated with maintenance and monitoring activities would therefore be well below the City of Chula Vista's vibration perception threshold of 0.01 in/sec. None of the related project operations propose substantial sources of groundborne vibration in the proposed project vicinity, so there would be no cumulative increase in overall vibration levels and the levels would remain below the threshold. Therefore, construction vibration impacts would not be cumulatively considerable.

Noise-sensitive locations have the potential to be affected by temporary traffic volume increases on local roadways due to worker commutes and truck trips associated with routine periodic maintenance and monitoring of the restoration site. The proposed project is anticipated to generate a total of two daily vehicle round trips during maintenance and monitoring. This volume would be negligible when compared to existing traffic volumes on local roads and even less noticeable when compared to the level of growth and traffic that would be generated by the related projects themselves. Therefore, maintenance and monitoring traffic and would not result in any significant noise impacts along affected roadways and the impact would not be cumulatively considerable.

As described in Section XIII, after completion of the restoration process, the proposed project is not anticipated to generate operational noise or vibration, or additional vehicular traffic. Therefore, upon completion, the proposed project would not contribute to cumulative operational noise or vibration levels in the project vicinity, and the impact would not be cumulatively considerable.

Public Services

The cumulative projects would increase population in the surrounding area, which would subsequently increase the use of existing parks and potentially create a demand for additional parkland. Similar to other development projects in the City, the cumulative projects would be required to comply with the parkland requirements in the Chula Vista Municipal Code and Public Facilities Finance Plan for the provision of parks and would ensure that cumulatively considerable impacts would not occur.

As discussed in Section XV, *Public Services*, the proposed project would not induce population growth that could increase the demand for and use of parks. However, it is possible that use of onsite trails could increase slightly due to the proposed trail improvements and improved habitat available to view from the trails. This slight increase in trail use would not substantially degrade the existing trails. Therefore, the proposed project would not contribute to a cumulatively significant impact or create a new cumulatively significant impact related to the provision of park facilities.

Recreation

Cumulative impacts related to recreational facilities would be the same as those described above for park facilities under *Public Services*.

Transportation

Impacts of the proposed project in relation to vehicle miles traveled were evaluated as part of Section XVII, *Transportation*, which concluded that direct impacts would not exceed vehicle miles traveled standards and a less-than-significant impact would result. The traffic analysis was focused on nearby roadway segments along Wiley Road, Main Street, and Maxwell Road. Furthermore, Section XXI, *City Thresholds*, found that all the intersections within the study area were anticipated to operate at LOS D or better under Year 2020 conditions.

Temporary construction-related trips would result in a minimal increase in trips on the surrounding roadway network. As discussed in Section XVII, traffic associated with project construction would not comprise more than 20 total daily construction worker trips (10 round trips) and 20 total daily vehicle truck trips (10 round trips) per day during the peak of project construction, and all intersections and roadway segments within the project study area are projected to operate at LOS D or better. Therefore, no cumulative impacts would result. The adjacent roadway network would be able to accommodate the anticipated additional construction trips, and project construction traffic, in combination with other cumulative projects, is not anticipated to have a cumulative impact along any of the study intersections evaluated. Furthermore, the proposed project would not generate substantial operational vehicular traffic and thus would not generate additional vehicle miles traveled. Therefore, the proposed project would not contribute to a cumulatively significant impact or create a new cumulatively significant impact related to construction traffic.

Once construction is complete, the road and access conditions would be unchanged, and long-term traffic associated with any maintenance would not differ from the current situation. As discussed in Section XXI, post construction, the proposed project is not anticipated to generate any additional vehicular traffic except for periodic maintenance. There would be no operational cumulative impact.

Tribal Cultural Resources

Impacts on tribal cultural resources may include both direct (i.e., physical) and indirect (i.e., noise and visual) impacts. No documented tribal cultural resources are known to exist within the project site. Therefore, no direct impacts on tribal cultural resource types are anticipated. The proposed project is anticipated to have no long-term change to existing noise conditions and minimal change to existing visual conditions. Therefore, no indirect impacts are anticipated on tribal cultural resources. With implementation of **Mitigation Measure TCR-1**, the proposed project would not result in significant cumulative impacts related to tribal cultural resources.

Utilities and Service Systems

The proposed project's contribution to an increased need for utilities and service systems is considered in the context of the seven cumulative projects. If constructed, these projects would cumulatively contribute to impacts on water and solid waste. However, public agencies and utilities are given an opportunity to respond to inquiries for information regarding the potential increase in demand for services. Furthermore, development fees are assessed on a project-by-project basis to mitigate the increased demand on public services and utilities.

Significant cumulative impacts would occur if the other projects would overburden utilities and service systems and the agencies would be unable to provide adequate services, thereby resulting in significant combined impacts related to the need for the development of new facilities. However, as noted above, the proposed project's water demand would be temporary and amount to less than 0.1 percent of OWD's total projected water demand through 2040 for water during construction and maintenance and monitoring. Therefore, the proposed project's incremental contribution to water demand is considered less than cumulatively considerable, and impacts on water supply would be less than cumulatively considerable.

The proposed project would generate a minimal amount of waste and, therefore, is not expected to affect any of the six landfills in the County. As such, the proposed project's contribution to this cumulative impact would be less than significant. The proposed project and the other cumulative projects would comply with State and local waste-reduction policies; therefore, the proposed project would not result in a cumulative impact on County landfills.

Wildfire

The potential for wildfire represents a hazard where development is adjacent to open space or near wildland fuels or designated fire severity zones. New development located in any fire hazard severity zone within State Responsibility Areas, any VHFHSZ within Local Responsibility Areas, or any wildland-urban interface fire area can put people and structures at risk.

There are several residential, commercial, and industrial development projects planned to be constructed to the north and west of the project site. These include the University Villages Project for Village Four, Village Eight West, Village Nine, Village Ten, Millenia, and the University Park and Innovation Center. These project sites are located in VHFSZs within a Local Responsibility Area. Similar to the proposed project, if any of the related projects would occur within a High Fire Hazard Severity Zone or VHFHSZ, they must comply with the policies of the City of Chula Vista General Plan, the County of San Diego Operational Area Emergency Operations Plan, and the County of San Diego's Multi-Jurisdictional Local Hazard Mitigation Plan. Furthermore, any development constructed in any fire hazard severity zone within State Responsibility Areas and any VHFHSZ within Local Responsibility Areas must comply with the California Government Code Section 65302 minimum requirements for building materials and construction methods to improve exterior wildfire exposure protection.

As mentioned in Section XX, *Wildfire*, the proposed project does not include housing or commercial development and would not draw a substantial amount of people during construction activities. As such, the proposed project would not contribute considerably to the existing cumulative impact related to wildfire hazards.

c) **Less-than-Significant Impact with Mitigation Incorporated**. Based on the analysis above, the proposed project could have environmental effects related to hazards and hazardous materials that could cause adverse effects on human beings. However, implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, as provided in Section XIX, *Hazards and Hazardous Materials*, would reduce project-related significant impacts to less-than-significant levels. Therefore, after implementation of **Mitigation Measures HAZ-1** and **HAZ-2**, the proposed project would result in a less-than-significant environmental impact on human beings.

Mitigation:

Implement **Mitigation Measures BIO-1** through **BIO-11, CUL-1** through **CUL-3, HAZ-1** through **HAZ-2, LU-1, and TCR-1.**

XXIII. PROJECT REVISIONS OR MITIGATION MEASURES:

Project mitigation measures are contained in Section F, *Mitigation Necessary to Avoid Significant Impacts*, and Table 1, Mitigation Monitoring and Reporting Program, of Mitigated Negative Declaration IS-21-0004.

XXIV. AGREEMENT TO IMPLEMENT MITIGATION MEASURES

By signing the line(s) provided below, the Applicant and/or Operator stipulate that they have each read, understood and have their respective company's authority to and do agree to the mitigation measures contained within the Mitigated Negative Declaration, IS-21-0004, and will implement same to the satisfaction of the Environmental Review Coordinator. Failure to sign below prior to posting of this Mitigated Negative Declaration with the County Clerk shall indicate the Applicant and/or Operator's desire that the project be held in abeyance without approval and that the Applicant and/or Operator shall apply for an Environmental Impact Report.

Cheryl Goddard, Senior Planner

Printed Name and Title of Applicant
(or authorized representative)

Cheryl Goddard Digitally signed by Cheryl Goddard
DN: cn=Cheryl Goddard, o=City of Chula Vista, ou, email=cgoddard@chulavistaca.gov, c=US
Date: 2021.11.24 09:43:35 -08'00'

Signature of Applicant
(or authorized representative)

11/24/2021
Date

N/A

Printed Name and Title of Operator
(if different from Applicant)

N/A

Signature of Operator
(if different from Applicant)

Date

XXV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated," as indicated by the checklist on the previous pages.

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

XXVI. DETERMINATION:

On the basis of this initial evaluation:

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 the mitigation measures described on an attached sheet have been added to the project. A **Mitigated Negative Declaration** will be prepared. ■

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 significant effect(s) 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, if the effect is a "potentially significant impacts" or "potentially significant unless mitigated." 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, there **will not** be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. An addendum has been prepared to provide a record of this determination. ☐

Cheryl Goddard Digitally signed by Cheryl Goddard DN: cn=Cheryl Goddard, o=City of Chula Vista, ou, email=cgoddard@chulavistaca.gov, c=US Date: 2021.11.24 09:45:17 -08'00'

11/24/2021

Cheryl Goddard
Senior Planner
City of Chula Vista

Date

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TECHNICAL STUDIES

The following technical studies were used to prepare this Initial Study:

ICF 2021a. *Estimates of Air Pollutant/GHG Emissions and Energy Consumption for the Otay Trails and Mitigation Bank Expansion Project*. November

ICF. 2021b. *Otay Trails and Mitigation Bank Expansion Project Biological Resources Report, 2021 Update*.

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