Draft Supplemental Environmental Assessment

City of Poway Hazardous Tree Removal (Phase 2)

HMGP 4382-199-012 City of Poway, California June 2024



Federal Emergency Management Agency Region 9 U.S. Department of Homeland Security 1111 Broadway, Suite 1200 Oakland, CA 94607



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Acronyms and Abbreviations

BMP Best Management Practice

CAGN coastal California gnatcatcher

Cal OES California Governor's Office of Emergency Services

CDFW California Department of Fish and Wildlife

CFR Code of Federal Regulations

CFWO Carlsbad Fish and Wildlife Office

DBH Diameter at Breast Height

EA Environmental Assessment

EO Executive Order

EPA U.S. Environmental Protection Agency

ESA Endangered Species Act

FEMA Federal Emergency Management Agency

FONSI Finding of No Significant Impact

HMGP Hazard Mitigation Grant Program

LBV Least Bell's vireo

NEPA National Environmental Policy Act

PBO Programmatic Biological Opinion

PEA Programmatic Environmental Assessment

ROW right-of-way

SEA Supplemental Environmental Assessment

SWFL Southwestern Willow Flycatcher

USACE U.S. Army Corps of Engineers

USFWS U.S. Fish and Wildlife Service

SECTION 1. Introduction

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide federal financial assistance to the City of Poway (City or Subapplicant), through the California Governor's Office of Emergency Services (Cal OES or applicant), for a wildfire risk mitigation project. The project would be funded under FEMA's Hazard Mitigation Grant Program (HMGP). The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. FEMA's HMGP provides funds to eligible state and local governments, federally recognized tribal governments, and nonprofit organizations to help implement long-term hazard mitigation measures to reduce the loss of life and property due to natural disasters.

The City is proposing to reduce fire fuel loads along two of their main evacuation routes, just west of Espola Road, in San Diego County, California (Proposed Action). The Proposed Action would include the strategic thinning and removal of hazardous trees along 4.6 miles of right-of-way (ROW) along Twin Peaks Road and Espola Road, as well as within the 20.88-acre Green Valley Open Space Area. Thinning and removal of hazardous trees would create natural fuel breaks, reduce wildfire severity, increase clearance zones around residences, and provide for safer passage of both civilian and public safety vehicles along the corridors during wildfire evacuation. The approximate central latitude and longitude coordinates for the project are 32.995303, -117.02401.

1.1. Scope of Document

FEMA is required to evaluate and consider potential environmental impacts before funding or approving actions and projects. FEMA prepared this draft Supplemental Environmental Assessment (SEA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations [CFR] Parts 1500 to 1508), U.S. Department of Homeland Security Instruction 023-01-001, FEMA Instruction 108-01-1, and NEPA implementing procedures. In 2014, FEMA prepared the *Final Programmatic Environmental Assessment* (PEA) for Recurring Actions in Arizona, California, and Nevada and the 2019 Supplemental Environmental Assessment to the Final Programmatic Environmental Assessment for Recurring Activities in Arizona, California, and Nevada to streamline compliance with NEPA for hazard mitigation projects. The scope of the Proposed Action exceeds the limits set within the PEA; therefore, FEMA is required to prepare an SEA. FEMA intends to use this SEA to (1) analyze potential environmental impacts of the Proposed Action and alternatives, including a No Action alternative, that may be beyond the scope covered in the PEA, and (2) determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI).

This SEA evaluates the range of potential environmental impacts if the Proposed Action is implemented and evaluates the applicability of the PEA. Although the type of work proposed under the Proposed Action would largely fall under the range of actions evaluated in PEA Section 2.4.3, Constructing a Water Crossing, Section 2.5.1, Mechanical or Hand-Clearing of Vegetation, and Section 2.5.2, Herbicidal Treatments, the Proposed Action would involve the temporary installation

of channel crossings for the purpose of equipment access, the potential use of herbicides and vegetation removal within 50 feet of a waterbody, operation of heavy mechanized equipment within 200 feet of a waterbody, and work outside of the dry season. The U.S. Geological Survey National Hydrography Dataset (NHD) indicates that there are unnamed ephemeral watercourses within the project area (Figure 1-1). In addition, the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory wetlands mapper identifies freshwater forested/shrub wetlands within the project area. However, this mapping is based on satellite imagery and a margin of error is inherent when using this imagery (USFWS 2024). During a field survey conducted in August 2021, only a single aquatic feature and no wetland features were identified within the project area (Dudek 2022a, 2022b). Survey findings indicated that the aquatic feature in the project area is generally intermittent in nature. This unnamed, intermittent channel generally follows the NHD mapped features in Figure 1-1. Because of the location of the proposed vegetation removal activities in relation to the location of unnamed, intermittent channel, there is no feasible alternative to avoid all work within 50 feet of a waterbody or avoid the use of heavy mechanized equipment within 200 feet of a waterbody. In addition, due to the potential presence and avoidance of impacts on threatened and endangered bird species within the project area, there is no feasible alternative to limit work to the dry season.

Based on the presence of the unnamed, intermittent channel within the project area, the need to work within 50 feet of a waterbody, the need to operate heavy mechanized equipment within 200 feet of a waterbody, and the need to conduct work outside the dry season, the Proposed Action would not be able to conform to the best management practices (BMPs) required for coverage by the PEA (Appendix C). The following BMPs from the PEA would not be implemented under the Proposed Action:

- PEA BMP #1 (Water Resources): No work within 50 feet of a wetland or waterbody.
- PEA BMP #2 (Water Resources): For work between 50 and 200 feet of a wetland or waterbody:
 - Hand tools (chainsaws, brush cutters, and other hand tools) would be used to create a
 gradation of vegetation density by removing approximately 50 percent of the vegetation
 farthest from wetlands and perennial waterbodies, and 33 percent of the vegetation at
 closer distances to wetlands and perennial waterbodies.
- PEA BMP #1 (Special Status Species): Construction should generally occur during the dry season (April 15 to October 15).

Therefore, the Proposed Action would result in impacts not described in the PEA and require additional environmental mitigation measures to minimize potential temporary impacts on the intermittent channel during vegetation removal activities. This SEA evaluates the potential impacts of the Proposed Action that have not been previously disclosed.

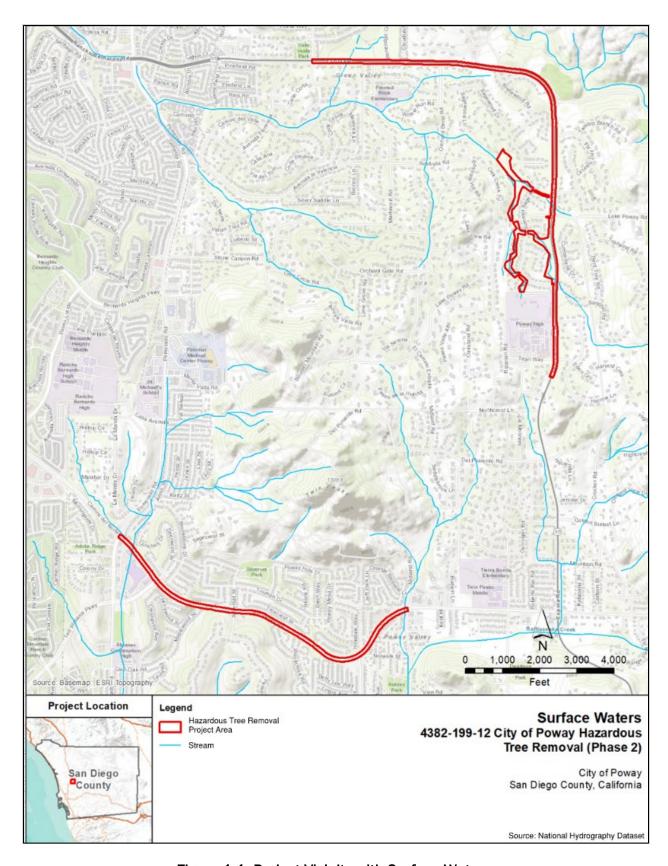


Figure 1-1. Project Vicinity with Surface Waters

1.2. Purpose and Need for the Action

The purpose of the FEMA HMGP is to provide funding to state, local, tribal, and territorial governments to implement projects that reduce or permanently eliminate future risk to lives and property from natural hazards before and during the recovery from a federally declared disaster. The purpose of the Proposed Action is to reduce hazards related to wildfire within the City of Poway.

Extreme heat and drought and wildfire pose significant hazards to the City of Poway and its residents. The Proposed Action area is located in a Very High Fire Hazard Severity Zone, according to the Fire Hazard Safety Zone Viewer (Cal Fire 2024). Much of the area within the City of Poway's borders is considered a high fire hazard environment, and historically, fires have burned periodically throughout the City and adjacent areas (San Diego County 2023). In 2003, the Cedar Fire, driven by Santa Ana winds, burned 7,000 acres and destroyed 53 homes throughout the city. The Witch Creek Fire of October 2007 resulted in 7,247 burned acres, more than 7,000 evacuations, and 90 destroyed homes within the City of Poway. In recent years, local air support and mutual aid assistance has increased significantly, helping to prevent small fires from spreading to become out of control wildland fires (San Diego County 2023).

With an increase in population in the City comes an increase of homes in the "wildland urban interface" areas. There are approximately 1,054 structures and 3,288 residents in the vicinity of the project area that depend on Twin Peaks Road and Espola Road for access and evacuation. Twin Peaks Road provides east and west access at the center of the City and Espola Road is an essential corridor between the southeastern portion of Poway and areas to the north. The two corridors serve as supplemental evacuation routes for State Route 67, which is a designated evacuation route for residents in Ramona, an unincorporated community east of the City of Poway. The project is needed to reduce the risk of loss of life and structural and environmental damage associated with wildfires.

SECTION 2. Alternatives

2.1. No Action Alternative

The No Action alternative is described in PEA Section 2.1, *No Action Alternative*. Under the No Action alternative, FEMA financial assistance would not be provided to the City to implement the Proposed Action. It is assumed that, without FEMA financial assistance, the City would be fiscally unable to implement the Proposed Action. The No Action alternative would not meet the purpose and need of the project.

2.2. Proposed Action

The Proposed Action would create natural fuel breaks, reduce wildfire severity, increase clearance zones around residences, and provide for safer passage of both civilian and public safety vehicles along the treated corridors during wildfire evacuation. The Proposed Action would occur along 4.6 miles of ROW along Twin Peaks Road and Espola Road, as well as within the 20.88-acre Green Valley Open Space Area. Approximately 2,500 invasive, non-native trees would be removed, and an additional 3,900 trees would be trimmed or pruned, including invasive, non-native saplings that make up the understory. The Proposed Action would be implemented over a 13-month period anticipated to begin in 2024. Vegetation clearing/trimming would occur between September 16 and March 14 in known or potential vireo or flycatcher habitat, and between September 1 and February 14 in known or potential gnatcatcher habitat, to avoid the nesting seasons for each species. If vegetation clearing/trimming is necessary during the nesting seasons, a qualified biologist will perform a minimum of three focused surveys on separate days to determine the presence of vireo, flycatcher, or gnatcatcher nest building activities, egg incubation activities, or brood rearing activities within 500 feet of vegetation clearing/trimming.

The following proposed activities when they would occur more than 50 feet from a wetland or waterbody are adequately covered in the PEA and are not evaluated further in this SEA:

- Removal of invasive, non-native trees and vegetation
- Removal of dead or severely diseased native trees and vegetation
- Reduction of invasive, non-native trees and vegetation in the understory
- Mastication and chipping of vegetative cuttings and waste
- Herbicide treatment of small invasive, non-native saplings

The following activities in the Proposed Action have not been adequately described in the PEA; therefore, this SEA will evaluate the potential effects of the following activities:

Mechanical and hand-clearing of vegetation within 50 feet of a waterbody or wetland

- Mechanical clearing of vegetation within 200 feet of a wetland or waterbody
- Herbicide treatment of small invasive, non-native saplings within 50 feet of a wetland or waterbody
- Temporary channel crossings for equipment access
- Work outside of the dry season (April 15 to October 15)

Figure 1-1 shows the proposed project activities in relation to the surrounding surface water features. Each activity is described in more detail below.

2.2.1. MECHANICAL AND HAND-CLEARING OF VEGETATION

Many of the trees within the project area are weakened and diseased, which has been exacerbated by drought conditions, disease, and insect infestation. Based on the arborist report prepared in Phase 1 for the City, the Proposed Action would remove 2,711 invasive, non-native trees (between 4 inches to 99 inches in diameter at breast height [DBH]) and associated vegetation, as well as trimming and pruning limbs and other maintenance of approximately 3,904 trees, with the objective of significantly reducing potential fire intensity. The project would also include understory fuel reduction to reduce the volume of invasive, non-native tree saplings (trees less than or equal to 4 inches DBH). Vegetation removal would primarily target invasive, non-native trees (e.g., eucalyptus [Eucalyptus spp], pepper trees [Schinus molle], tamarisk [Tamarix ramosissima], palms [Phoenix spp. and Washingtonia spp.], and giant reed [Arundo donax]) and understory vegetation (e.g., pampas grass [Cortaderia selloana]). Only dead or severely diseased native trees (including arroyo willow [Salix lasiolepis], California sycamore [Platanus racemosa], coast live oak [Quercus agrifolia], and California walnut [Juglans californica]) and vegetation would be removed.

Green Valley Open Space

Within the Green Valley Open Space site, invasive, fire-prone trees and dense understory vegetation would be removed to reduce fuel loads and disrupt potential fuel ladders. These actions would simultaneously relieve existing desirable tree communities from competition with invasive vegetation and encourage the overall health of the open space. Crews would fell trees with chainsaws, pruning saws and pruning shears, and an aerial lift. Heavy equipment would include crew trucks, bucket trucks, chippers; a rubber tracked skid steer with a forestry head for chip-mulch mastication of vegetation, a tracked excavator with a forestry head for chip-mulch mastication of vegetation, a wheeled loader, and 40-yard dumpsters. Trees identified for removal would be felled using industry-standard logging methods and would be mulched on-site to reduce erosion and store beneficial nutrients and carbon on-site. Felled trees may also be transported to designated staging areas to be chipped, and then spread or hauled away via dump truck or 40-yard dumpster. All trees would be cut to ground level, and stumps and root systems would be retained in place to maintain soil integrity.

At the Green Valley Open Space Area, temporary ground disturbance for access and staging would occur. Of the 20.88-acre project area, 2.51 acres are proposed for access and 1.69 acres are

proposed for temporary staging, totaling 4.2 acres of temporary ground disturbance for access and staging. Existing access and temporary staging would be in pre-existing disturbed areas. No alterations to channel bed(s), bank(s), or adjacent water courses are proposed or anticipated before, during, or after the completion of the Proposed Action. The City would follow the fire management guidelines of the Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan to ensure it is maintaining the biological integrity of open spaces.

While the PEA covers the mechanical and hand-clearing of vegetation, the Proposed Action includes work within 50 feet of an intermittent channel and the use of heavy mechanized equipment within 200 feet of a waterbody, which is not consistent with the BMPs of the PEA. The Green Valley Open Space Area contains a single surface water feature, an unnamed, intermittent channel. The work within 50 feet of the intermittent channel, which flows through the Green Valley Open Space Area, would include hand crews, hand tools, chainsaws, ropes, cables, winches, cranes, and other such grappling tools. Project work would be monitored by an on-site biologist to verify stream courses are protected throughout the project. The biological monitor would have the authority to stop work activities and would ensure that turbidity, sedimentation, and the release of materials such as dust or construction runoff are controlled and that spill control measures are enacted properly. Equipment would be limited to the top of bank and away from surface waters, except where channel crossings would occur to provide access to the project area on the other side of the channel (see Section 2.2.3).

Espola and Twin Peaks Roads

A qualified tree contractor would conduct tree removal activities along Espola Road and Twin Peaks Road. Crews would fell trees using chainsaws, pruning saws and shears, and an aerial lift. Heavy equipment to be used would include bucket trucks, chippers, stump grinders, and haul trucks. Heavy equipment would be stationed and used on existing paved public roadways adjacent to trees targeted for removal. All work would occur from the roadside or City ROW, including tree removals within the prescriptive easement along Twin Peaks Road. No access to private yards would be required. All trees would be cut close to ground level, and stumps would be ground flush with the existing grade. No grading, excavation, ground-disturbing activities, or road construction activities would be conducted. Motorized equipment and chippers would be used to move, and process cut material, or to mulch it on-site before it is removed by truck to an off-site staging or disposal facility.

While the PEA covers the mechanical and hand-clearing of vegetation, the proposed work within 50 feet of an intermittent channel and heavy mechanized equipment operated within 200 feet of a waterbody is not consistent with the BMPs of the PEA. An unnamed, intermittent channel flows underneath Espola Road. While heavy equipment would be limited to the existing paved roadway, three trees are identified for removal within 50 feet of the channel.

Tree Removal

For tree removal work, no stump removal is proposed. Stumps would be ground flush with existing terrain leaving the root system in place for ground stability. Trees would be felled and removed utilizing a variety of techniques and common methods in accordance with standard City of Poway

Public Works Department tree removal procedures. Trees would be directionally felled in the traditional method into open areas when given the opportunity, with consideration of environmental impacts (such as not impacting native trees or vegetation). In more restrictive areas, depending on the height of the tree and available ground area, trees would either be tethered high, using an aerial lift, to be felled in a suitable direction, or would be topped and dropped incrementally using the aerial lift. Motorized equipment and chippers would be used to move and process the cut material or mulch it on-site at one of the identified material/processing staging areas. Chipped material would be used on-site for habitat purposes or used in open spaces/parks throughout the City. Felled trees not suitable for mulch would be chipped/loaded into a green waste, 40-yard dumpster, to be hauled to a compost facility. Additional clearing methods may include the use of a tracked excavator with low ground pressure tracks and a forestry head, where affected trees would be mulched in place. Palm fronds would be loaded into a 40-yard dumpster to be landfilled, as they are not recyclable. Felled trees not chipped, mulched, recycled, or landfilled would be donated to wood recycling organizations. Environmental monitors would verify that environmental and permitting objectives are met, as well as ensuring protection of sensitive species.

2.2.2. HERBICIDE TREATMENTS

While the PEA covers the use of glyphosate-based herbicides, the proposed use of herbicide within 50 feet of a waterbody is not consistent with the BMPs of the PEA. Roundup Custom with the added surfactant, Magnify, would be used in and around the intermittent channel in the project area. This would not be the primary method of invasive plant removal but would be used for incidental removal of invasive broad leaf and sapling non-native trees too small to mechanically remove. To minimize potential impacts on the intermittent channel from the use of herbicides, herbicide applications would (1) be limited to spot spraying, (2) comply with San Diego County agricultural laws and regulations, (3) be performed by a qualified applicator consistent with labeling instructions, (4) follow Title 3 California Code of Regulations Sections 6000-6984, (5) only occur during the dry season, and (6) not occur during or within 24 hours of rain events. Roundup Custom is labeled for use in lakes, ponds, streams, and other aquatic areas by the U.S. Environmental Protection Agency (EPA).

2.2.3. CHANNEL CROSSINGS

Channel crossings within the Green Valley Open Space Area would be needed to cross the unnamed, intermittent channel to provide access to the project area on the other side of the channel. All temporary access crossings would be low-impact and would utilize the natural curvature and contours of the channel within the work area. Crossing a channel section with equipment would be limited to places where no other access solution exists and would occur using one of the following methods:

- If conditions allow, an excavator or crane would be used to temporarily place a steel plate from top of bank to top of bank, spanning the channel.
- High-density flexible rubber mats would be hand-placed on the bottom of the channel and bank following the natural contours of the channel and channel bank. Mats would be placed

temporarily to provide an adequate barrier to avoid any channel contact or disturbance by equipment and provide a suitable crossing for essential equipment.

The location of crossings would be jointly determined by the City of Poway and a biological monitor. Temporary crossings would be removed when tree removal and trimming activities are complete, and access is no longer necessary.

The purpose of water crossings covered under the PEA is to repair, restore, or replace public or privately owned facilities damaged by disasters, and provide temporary facilities during such repairs, restorations, or replacements. However, the purpose of the temporary crossings for this project would be to provide equipment access for hazard mitigation. While used for a different purpose, these types of temporary crossings would be similar to and have similar impacts as the crossings described in Section 2.4.3 of the PEA, *Constructing a Water Crossing*.

The affected environment and environmental consequences associated with the Proposed Action are consistent with the affected environment and environmental consequences described in the PEA for all resource areas except water and biological resources. However, the Proposed Action includes work within 50 feet of an intermittent channel, the use of heavy mechanized equipment within 200 feet of a waterbody activities, the use of herbicide within 50 feet of a waterbody, and work outside of the dry season, which are not consistent with the BMPs of the PEA and, therefore, not considered in the PEA. This section supplements the PEA and describes the additional environmental consequences potentially associated with the Proposed Action. Mitigation, minimization, and avoidance measures that are stipulated in the PEA or that are appropriate for the Proposed Action, based on the results of the impact analysis in the SEA, are discussed in Section 4, Best Management Practices, Minimization, and Mitigation Measures, of this SEA. The effects of the No Action alternative for all resource areas are described in the PEA and are not reiterated in this document.

The affected environment and environmental consequences for water and biological resources are described in this section to supplement the information in the PEA. However, wetlands are not discussed further because a field survey conducted in 2021 did not identify any wetland features within the project area (Dudek 2022a, 2022b). When possible, quantitative information is provided to establish potential impacts, and the significance of potential impacts is based on the criteria listed in **Table 3.1**. The project area generally includes the treatment area and access and staging areas needed to implement the Proposed Action.

Table 3.1. Evaluation Criteria for Potential Impacts

Impact Scale	Criteria	
None/Negligible	The resource area would not be affected, or changes or benefits would be either nondetectable or, if detected, would have impacts that would be slight and local. Impacts would be well below regulatory standards, as applicable.	
Minor	Changes to the resource would be measurable, although the changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse impacts.	
Moderate	Changes to the resource would be measurable and have either localized or regional-scale impacts/benefits. Impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse impacts.	

Impact Scale	Criteria
Major	Changes would be readily measurable and would have substantial consequences on a regional or local level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse impacts would be required to reduce impacts, but long-term changes to the resource would be expected.

3.1. Water Resources

3.1.1. SURFACE WATER

Existing Conditions

Water resources include surface water, groundwater, wetlands, and stormwater regulated under the Clean Water Act (33 United States Code [U.S.C.] 1251 et seq.). The Subapplicant consulted with the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board, and the California Department of Fish and Wildlife (CDFW) at a roundtable meeting on February 9, 2021, to confirm jurisdictional interest and determine whether any additional information or notifications are needed from the resource agencies prior to implementing project activities for the Green Valley Open Space Area. The City of Poway received confirmation from USACE, on July 14, 2022, that a Department of the Army permit is not required for the removal of vegetation. The proposed channel crossings may require a USACE Nationwide Permit. The Subapplicant would be required to coordinate with the USACE to determine whether any permit authorization is needed and obtain required permits for the channel crossings.

The Subapplicant conducted a field survey and informally mapped aquatic resources within the project area (Dudek 2022a, 2022b). Approximately 1.23 acres of potential non-wetland waters of the United States were identified in the project area, including the unnamed, intermittent channel that flows through the Green Valley Open Space Area and underneath Espola Road. Based on conditions observed in the field, the intermittent channel is the only aquatic resource within the project area.

Impacts of the Proposed Action

Under the Proposed Action, work within the intermittent channel or on the channel banks could result in minor impacts on surface water quality from vegetation removal activities, herbicide use, and placement of the channel crossings. Within and along the channel banks, reducing vegetation that holds soil in place could result in erosion and sedimentation into the intermittent channel. However, vegetation removal would be limited to invasive, non-native trees and understory vegetation and dead or severely diseased native trees; the healthy native vegetation would remain. In addition, trees and vegetation would be cut to the ground and stumps may be ground down to the surface level or treated, but roots would be left in place to provide soil stability. If any tree material or debris lands in or around channel areas, that material and debris would be removed.

Use of the herbicide Roundup Custom could result in the release of herbicide into the intermittent channel. To minimize potential impacts on waterways from the use of herbicide, herbicide application would conform to the conditions described in Section 2.2.2.

The use of vehicles and heavy equipment for vegetation removal within or near the intermittent channel through the Green Valley Open Space Area and under Espola Road and for placement of the channel crossings in the Green Valley Open Space Area would pose the risk of hazardous leaks and spills into the intermittent channel. To minimize potential impacts, work within 50 feet of the intermittent channel and channel banks in the Green Valley Open Space Area would include hand tools, chainsaws, ropes, cables, winches, and other such grappling tools and be monitored by a biological monitor. Where necessary, a crane may be used to remove vegetation and place channel crossing aides such as steel plates and high-density flexible rubber mats. The vehicles and heavy equipment used for vegetation removal within 50 feet of the channel that flows under Espola Road would be limited to operating from existing paved surfaces. The Subapplicant would also prepare a Spill Prevention and Pollution Control Plan to address the emergency cleanup of any hazardous material and the plan would be available on-site. Machinery and equipment used during work would be serviced, fueled, and maintained on uplands to prevent contamination to surface waters. Fueling equipment and vehicles would be kept more than 200 feet away from waterbodies. All hazardous materials would be stored in upland areas, in storage trailers or shipping containers designed to provide adequate containment. Project work would be monitored by an on-site biologist to verify stream courses are protected throughout the project. The biological monitor would have the authority to stop work activities and would ensure that turbidity, sedimentation, and the release of materials such as dust or construction runoff are controlled and that spill control measures are enacted properly.

It is anticipated that a permit would not be required for vegetation removal activities because vegetation management activities such as cutting and mowing vegetation or using herbicides are not regulated by USACE. However, the Subapplicant would be required to coordinate with USACE to determine whether any permit authorization is needed for the channel crossings.

Long-term impacts are not anticipated because vegetation removal equipment and vehicles would be removed following project activities and the roots of cut vegetation would be left intact to provide soil stability and avoid long-term erosion within the area.

Comparison of Impacts to the PEA Scope

The impacts of the Proposed Action related to surface water would be similar to the impacts evaluated in the PEA. The Water Resources BMP #1 and BMP #2 and Special Status Species BMP #1, described in Appendix C of the PEA (List of Typical Best Management Practices), specifies that work must not be conducted within 50 feet of a waterbody, heavy mechanized equipment must not be used within 200 feet of a waterbody, and work must be limited to the dry season. However, vegetation removal activities, including the application of herbicides, and placement of the channel crossings associated with the Proposed Action would take place outside of the dry season, within 50 feet of a waterbody, and heavy mechanized equipment would be operated within 200 feet of a waterbody. These activities have the potential to result in short-term impacts related to increased

erosion and pollution at the project site that could runoff into the unnamed, intermittent channel. Because the Water Resources BMP #1 and BMP #2 and Special Status Species BMP #1 in Appendix C of the PEA (List of Typical Best Management Practices) are not feasible for the Proposed Action, additional project-specific measures have been identified above and listed in Section 4.1, *Water Resources*, to reduce short-term water quality impacts during project implementation. These measures would replace the Water Resources BMP #1 and BMP #2. The Proposed Action would result in minor short-term adverse impacts on surface water from vegetation removal activities, herbicide use, and placement of the channel crossings, which would be minimized and managed through the implementation of additional project-specific measures listed in Section 4.1.

3.1.2. FLOODPLAINS

Existing Conditions

EO 11988, Floodplain Management, requires federal agencies to minimize occupancy and modification of floodplains. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. The Proposed Action is primarily in areas designated as Zone X, an area of minimal flood hazard, as identified on Flood Insurance Rate Map Panels 06073C1093G, 06073C1094G, 06073C1356G, and 06073C1357G, dated May 16, 2012. A portion of the Green Valley Open Space Area is located within the floodplain in special flood hazard areas designated as Zone AE and a regulatory floodway, as identified on Flood Insurance Rate Map Panel Number 06073C1094G, dated May 16, 2012 (Figure 3-1) (FEMA 2012).

Impacts of the Proposed Action

FEMA uses an 8-Step analysis to evaluate potential effects on and mitigate effects to floodplains in compliance with EO 11988 and 44 CFR Part 9. An initial public notice for Major Disaster Declaration FEMA-4382-DR-CA was published on September 10, 2018, at https://www.fema.gov/disaster-federal-register-notice/public-notice-9. FEMA will issue a final notice as part of the SEA public notification process in accordance with 44 CFR 9.8 and 9.12 and as described in Section 6 of this SEA. Under the Proposed Action, vegetation would be removed within the floodplain. The removal of invasive, non-native trees and plants and the removal of diseased or dying native plants within the floodplain would reduce the fire risk in the area. Native plantings and healthy trees would be left in place to maintain the natural functions of the floodplain. The use of herbicides could result in the discharge of pollutants into the floodplain; however, to minimize potential impacts on waterways from the use of herbicides, herbicide application would conform to the conditions described in Section 2.2.2. The project would not include any grading or filling and would not adversely affect the floodplain.



Figure 3-1. Floodplains

As discussed in Section 3.1.1., work within or near the intermittent channel through the Green Valley Open Space Area would pose the risk of hazardous leaks and spills into the floodplain. To minimize potential impacts, work within 50 feet of the intermittent channel and channel banks would be monitored by a biological monitor with stop-work authority to ensure that turbidity, sedimentation, and the release of materials such as dust or construction runoff are controlled; spill control measures are enacted properly; and the intermittent channel is protected. Where necessary, a crane may be used to remove vegetation and place channel crossing aides such as steel plates and high-density flexible rubber mats. The Subapplicant would also prepare a Spill Prevention and Pollution Control Plan to address the emergency cleanup of any hazardous material and the plan would be available on-site. Machinery and equipment used during work would be serviced, fueled, and maintained on uplands to prevent contamination to surface waters. Fueling equipment and vehicles would be kept more than 200 feet away from waterbodies. All hazardous materials would be stored in upland areas in storage trailers or shipping containers designed to provide adequate containment. Hazardous materials may be used within the floodplain and the floodway, but they would not be stored there.

The Proposed Action would result in minor short-term adverse impacts on floodplains from vegetation removal activities and herbicide use, which would be minimized and managed through the implementation of additional project-specific measures listed in Section 4.1.

Comparison of Impacts to the PEA Analysis

The impacts of the Proposed Action related to floodplains would be similar to the impacts evaluated in the PEA. The project would result in short-term modification of a floodplain, and a short-term increase in erosion within a floodplain. The Proposed Action would not result in any adverse, long-term impacts related to occupancy or modification of the floodplain. The proposed vegetation removal would result in beneficial impacts on the floodplain by reducing fire risk and improving the health of natural vegetation in the area. Implementation of PEA BMPs and project-specific measures outlined in Section 4.1, *Water Resources*, would minimize runoff impacts during implementation of the Proposed Action. Therefore, potential adverse impacts of the Proposed Action on floodplains would be minor.

3.2. Biological Resources

3.2.1. TERRESTRIAL AND AQUATIC HABITAT

Existing Conditions

The project area comprises three distinct sites—Twin Peaks Road, Espola Road, and the Green Valley Open Space Area—all of which are in an urbanized portion of the City of Poway. The immediate vicinity of the project sites is characterized by residential and commercial development, roads, open greenspace, schools, and ornamental landscaping. Based on biological surveys conducted in 2021, four vegetation communities, or land cover types, occur within the Twin Peaks Road and Espola Road portions of the project area and eight vegetation communities, or land cover types, occur within the Green Valley portion of the project area (Dudek 2022a, 2022b). These vegetation communities

and land cover types, as well as their corresponding acreages within each project site, are shown in **Table 3.2**.

Table 3.2. Vegetation Communities and Land Cover Types within the Project Sites

Vegetation Community / Land Cover	Approximate Acreage Within the Project Sites			
Twin Peaks				
Coastal Sage Scrub	0.09			
Urban/Developed	2.34			
Eucalyptus Woodland	10.48			
Ornamental	3.94			
Espola Road				
Coastal Sage Scrub	0.05			
Urban/Developed	3.52			
Eucalyptus Woodland	12.61			
Ornamental	7.73			
Green	Valley			
Southern Arroyo Willow Riparian Forest	0.35			
Southern Coast Live Oak Riparian Forest	4.07			
Coast Live Oak Woodland	2.41			
Non-Native Grassland	2.77			
Non-Native Riparian	1.36			
Non-Native Woodland	0.63			
Urban/Developed	0.06			
Eucalyptus Woodland	9.12			

The topography of the Twin Peaks portion of the project area is hilly, the Espola Road portion of the project area is relatively flat, and the Green Valley portion of the project area consists of flat and gently sloped areas interspersed with gullies along drainages where erosion has occurred. The elevation within the overall project area ranges from approximately 535 to 840 feet above mean sea level.

Aquatic habitat within the Twin Peaks and Espola Road portions of the project area is limited to a single intermittent channel that flows through eucalyptus woodland and underneath Espola Road in

the southern portion of the Espola Road project area (Dudek 2022a). Approximately 1.23 acres of non-wetland surface waters and approximately 4.67 acres of CDFW Riparian Habitat occurs within the Green Valley Open Space portion of the project area (Dudek 2022b). Field survey findings indicate that the aquatic feature within the project area is generally intermittent in nature and supports adjacent riparian plant communities (CDFW Riparian Habitat) dominated by southern arroyo willow (Salix lasiolepis) riparian forest, southern coast live oak (Quercus agrifolia) riparian forest, and non-native riparian vegetation.

Terrestrial wildlife observed within the project area during the biological surveys consists of regionally common bird species, including the American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), turkey vulture (*Cathartes aura*), hooded oriole (*Icterus cucullatus*), mourning dove (*Mimus polyglottos*), California towhee (*Melozone crissalis*), lesser goldfinch (*Spinus psaltria*), and Anna's hummingbird (*Calypte anna*). Although no reptiles or amphibians were observed, regionally common species such as the common sideblotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), California toad (*Anaxyrus boreas halophilus*), and Baja California treefrog (*Pseudacris hypochondriaca hypochondriaca*) are reasonably certain to occur within the project area where suitable habitat is present. Similarly, while no mammal species were observed within the project area during the biological surveys, regionally common species such as common raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), and Virginia opossum (*Didelphis virginica*) are expected to occur within the project area.

Impacts of the Proposed Action

Tree removal activities under the Proposed Action would have a minor short-term impact on habitats and wildlife within the project area, owing to increased noise and visual disturbances from equipment use and human activity. Resultant noise and visual disturbances would likely cause wildlife to temporarily leave preferred habitats within and near the project area. The project area is within an area of existing development, and disturbance from the Proposed Action may not appreciably differ from background levels in some areas. Therefore, overall, the Proposed Action would have a minor short-term adverse impact on habitats and wildlife that occur within the project area.

The Proposed Action would involve vegetation management activities within and along existing aquatic features. Where stream crossings are necessary, the biological monitor would ensure that the crossing locations would be selected to minimize adverse impacts on wildlife habitat and they would be conducted in a manner that would minimize disturbance to the existing bed and banks, as described in Section 2.2.3. For these reasons, the Proposed Action would have minor, short-term adverse impacts on aquatic habitats from vegetation removal activities within aquatic features and the installation of stream crossing aides. In the long term, invasive, non-native species would be removed and native vegetation would regenerate, and stream crossing aides would be removed; therefore, there would be no long-term adverse impacts on aquatic habitats occurring within the project area.

In the long term, the Proposed Action would not adversely affect the overall ecology of the project area because although the removal of predominantly dead or dying trees would likely decrease the quality of habitat for some species (e.g., those that rely on dead trees for nesting and food storage), it may increase the quality of habitat for others (e.g., those that forage more effectively under open-canopy conditions or that prefer native plant species). Additionally, the Proposed Action would benefit habitats and wildlife within the project area in the long term by reducing wildfire risk and promoting existing native vegetation communities. Therefore, the Proposed Action would have a minor long-term beneficial impact on habitats and species occurring within the project area.

Use of the herbicide Roundup Custom is not expected to have direct adverse effects on wildlife because the active ingredient, glyphosate, is no more than slightly toxic to birds and is practically nontoxic to fish, aquatic invertebrates, and honeybees (EPA 1993). However, herbicide treatments under the Proposed Action could directly affect non-target plant species by causing mortality and morbidity. Indirect impacts on wildlife could include loss of habitat due to effects on non-target plant species; To minimize these potential impacts, herbicide application would conform to the conditions described in Section 2.2.2. With the implementation of these measures, herbicide treatments under the Proposed Action would have a minor, short-term adverse impact on existing terrestrial and aquatic habitats within the project area and the species that occur therein.

Comparison of Impacts to the PEA Scope

Although the Proposed Action would involve work within 50 feet of waterbodies, including herbicide application and channel crossings, these activities would be monitored by a biological monitor. The herbicide Roundup Custom is approved for use in lakes, ponds, streams, and other aquatic areas, and stream crossing aides would be removed before the completion of the project. Such activities would result in minor short-term adverse impacts on the habitats and species that occur within and along intermittent channels and, as discussed above, would have a minor, long-term beneficial impact on the overall ecology of the project area. These findings are similar to the impact evaluations included in the PEA, which concluded that mechanical or hand-clearing of vegetation would have a minor, short-term impact on overall habitat quality in affected areas, and that herbicide treatment would have a minimal impact, as long as herbicides are only applied by licensed applicators that follow the manufacturer's specifications for use.

3.2.2. THREATENED AND ENDANGERED SPECIES

Existing Conditions

The Endangered Species Act (ESA) of 1973 provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The law requires federal agencies to ensure actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species.

Qualified biologists evaluated the project area for the presence of federally listed species protected under the ESA in March 2023. The evaluation was completed using the Information for Planning and Consultation database and the California Natural Diversity Database (CDFW 2023; USFWS 2023). Based on this evaluation, the following federally listed species have potential to occur within the project area:

- Coastal California gnatcatcher (CAGN) (Polioptila californica californica); threatened
- Least Bell's vireo (LBV) (Vireo bellii pusillus); endangered
- Southwestern willow flycatcher (SWFL) (Empidonax traillii extimus); endangered

The likelihood of these three species to occur within the project area is briefly discussed below. No critical habitat occurs within or near the project area.

Coastal California Gnatcatcher

The CAGN is typically associated with the coastal sage scrub vegetation community. Hence, CAGNs could occur in coastal sage scrub habitats identified within or near portions of the project area. According to the findings of the biological survey conducted in 2021, a single patch of coastal sage scrub habitat occurs along the south side of Twin Peaks Road within 20 to 30 feet of areas where tree removal would occur (Dudek 2022a). Current orthophotography indicates that this patch of coastal sage scrub habitat encompasses approximately 0.6 acre, which is large enough to potentially support CAGN breeding. The biological survey also documented a 0.05-acre patch of coastal sage scrub along the north side of Espola Road within 20 to 30 feet of work areas, along the parking lot for the Blue Sky Ecological Reserve (Dudek 2022a). Surveyors characterized this habitat as being "disturbed" and "highly degraded." Although the project area is primarily surrounded by urban developments, there are large tracts of undeveloped sage scrub habitat in the vicinity that are known to support CAGNs. According to the California Natural Diversity Database, 58 occurrences of the CAGN have been documented within 5 miles of the project area (CDFW 2023). Given the marginal nature of coastal sage scrub habits within the project area, the potential for this species to occur such habitats is low. However, CAGNs are known to inhabit open spaces near where the proposed tree removal activities would occur. Therefore, CAGNs have moderate potential to occur in areas that would be subject to increased noise during project implementation.

Least Bell's Vireo and Southwestern Willow Flycatcher

Both the LBV and the SWFL are obligate riparian breeders. The LBV typically inhabits structurally diverse woodlands along watercourses that feature dense cover, while the SWFL generally inhabits riparian woodlands with a dense canopy and an understory of shrubs or saplings. Based on the findings of biological surveys conducted in 2021, the Green Valley portion of the project area contains riparian vegetation communities, including southern arroyo willow riparian forest and coast live oak riparian forest that could support LBV and SWFL breeding (Dudek 2022b). However, the potential for these species to occur within the project area is considered low, because neither has been detected within the project area and existing riparian habitats consist of relatively narrow corridors surrounded by urban development.

Impacts of the Proposed Action

The Proposed Action could impact the CAGN, LBV, and SWFL through disturbance and habitat modification resulting from vegetation removal activities. Increased human activity and elevated noise from equipment operation and foot traffic within or near riparian corridors or scrub habitats could cause these species to avoid preferred habitats and potentially abandon nesting attempts or active nests. Vegetation clearing/trimming would occur between September 1 and February 14 in known or potential CAGN habitat, and September 16 and March 14 in known or potential LBV or SWFL, to avoid the nesting seasons for each species. If vegetation clearing or trimming is necessary during the nesting seasons, a qualified biologist would perform a minimum of three focused surveys on separate days to determine the presence of CAGN, LBV, or SWFL nest building activities, egg incubation activities, or brood rearing activities within 500 feet of vegetation clearing or trimming. Surveys would begin a maximum of seven days prior to project construction, and a survey would be conducted the day immediately prior to the initiation of work. Additional surveys would be done once a week during vegetation clearing or trimming in the nesting season. The Subapplicant would notify FEMA and the USFWS at least 7 days prior to initiation of the surveys and within 24 hours of locating any CAGN, LBV, or SWFL nests. If an active CAGN, LBV, or SWFL nest is found within 500 feet of vegetation clearing or trimming, the Subapplicant would postpone vegetation clearing or trimming within 500 feet of the nest and contact the FEMA and USFWS for further consultation.

The Proposed Action would result in the removal of vegetation, which could temporarily reduce the availability of foraging and nesting resources for the CAGN, LBV, and SWFL within the project area. However, the Proposed Action is expected to have a minimal impact on the availability of these resources within the project area because vegetation removal would be limited to non-native species and dead vegetation, which are not typically relied upon by CAGN, LBV, or SWFL for foraging or nesting. In the long term, the Proposed Action would likely improve conditions for LBV and SWFL within the project area by removing invasive species (e.g., giant reed) that can form dense stands unsuitable for nesting. Additionally, the Proposed Action would benefit CAGN, LBV, and SWFL and their habitats by reducing wildfire risk and promoting existing native vegetation communities.

Use of the herbicide Roundup Custom is not expected to have direct adverse effects on the CAGN, LBV, or SWFL because studies have reported that glyphosate (the active ingredient in Roundup Custom) has minimal impacts on birds when applied under typical application rates (Rolando et al. 2017). Additionally, herbicide treatment is not expected to indirectly impact these species through habitat loss because herbicide use would be limited to spot spraying of invasive non-native plant species that do not generally support foraging or nesting. To minimize any potential impacts, herbicide application would conform to the conditions described in Section 2.2.2.

As discussed above, the Proposed Action would incorporate measures to avoid potential impacts on nesting CAGNs, LBVs, or SWFLs and would not appreciably reduce the availability of foraging and nesting resources for these species within the project area. However, adverse effects on CAGNs, LBVs, or SWFLs may still occur if increased human activity and elevated noise from vegetation removal activities associated with the Proposed Action displace birds from suitable habitat or otherwise disrupt the normal behavior of individuals occurring in the vicinity. For these reasons, the Proposed Action is expected to have a negligible short-term adverse impact on the CAGN, LBV, and

SWFL. In the long term, the Proposed Action would reduce wildfire risk and promote existing native vegetation communities, which would have a minor beneficial effect on LBV and SWFL.

FEMA determined that the proposed action may affect but is not likely to adversely affect listed species. FEMA consulted with USFWS on November 21, 2023. USFWS concurred with the determination that the project may affect but is not likely adversely affect any federally listed species or destroy or adversely modify designated critical habitat on April 3, 2024.

Comparison of Impacts to the PEA Scope

The PEA requires individual projects to consult, under Section 7 of the ESA, on potential impacts to listed species. The PEA does not provide coverage for species and project-specific potential impacts. The Proposed Action would result in increased human activity and noise that may temporarily impact CAGNs inhabiting sage scrub habitats near the project area. Additionally, the Proposed Action would result in temporary, negligible adverse impacts on riparian habitats that may affect two federally listed species with potential to occur within the project area and that are strongly associated with riparian habitats (i.e., LBV and SWFL). The Proposed Action would incorporate BMPs and avoidance and minimization measures, as described in Section 4, to reduce potential impacts on listed species to an insignificant level. Because the project work would be limited to outside of the threatened and endangered species nesting season, the Proposed Action would not be able to adhere to the PEA Special Status Species BMP #1 that construction should generally occur during the dry season. FEMA initiated informal consultation with USFWS on November 21, 2023, and USFWS concurred with the determination that the Proposed Action would not likely adversely affect the CAGN, LBV, and SWFL on April 3, 2024.

3.2.3. MIGRATORY BIRDS

Existing Conditions

A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. 703-711, protects migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. The project area is in the Pacific Flyway, and numerous bird species have potential to occur in the project area.

Impacts of the Proposed Action

The Proposed Action would result in the removal of dead trees that may provide nesting habitat for cavity-nesting bird species, such as woodpeckers and owls. The Proposed Action also has the potential to result in direct impacts on migratory birds, if active nests in trees or other vegetation are disturbed during the breeding season. However, the Proposed Action would incorporate measures to avoid or minimize impacts on migratory birds. These measures would include scheduling work to avoid the bird nesting season. If work must occur during the nesting season, then (1) pre-activity nesting surveys would be conducted and (2) avoidance buffers would be implemented where nests are detected. Hence, the potential for loss of nests or eggs to result from the Proposed Action would

be minimal. Therefore, the Proposed Action would have negligible short-term impacts on migratory birds.

Comparison of Impacts to the PEA Scope

The PEA evaluates impacts on migratory birds and requires BMPs to be implemented if there is potential for impacts on nesting birds. Because the Proposed Action would implement measures to avoid or minimize impacts on nesting migratory birds, it is consistent with the scope of impacts evaluated in the PEA.

3.2.4. INVASIVE SPECIES

Existing Conditions

EO 13112, Invasive Species, requires federal agencies, to the extent practicable, to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health impacts that invasive species cause. Invasive species prefer disturbed habitats and generally possess high dispersal abilities, enabling them to out-compete native species.

Invasive plant species that are found within the county's park system in the project area include the following: giant reed, tamarisk, eucalyptus, palms, castor bean (*Ricinus communis*), pampas grass, Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), tree tobacco (*Nicotiana glauca*), olive (*Olea europaea*), tree of heaven (*Ailanthus altissima*), and edible fig (*Ficus carica*) (Dudek 2022a, 2022b). Invasive wildlife that occur within the project area include the European starling (*Sturnus vulgaris*), long-horned borer beetles (*Phoracantha* spp.), and polyphagous shot hole borer (*Euwallacea* sp.) (Dudek 2022a, 2022b).

Impacts of the Proposed Action

The Proposed Action would provide minor, long-term benefits related to invasive plant species through the removal of invasive trees and vegetation within the project area via mechanical- or hand-clearing and herbicide treatment. In addition, the Proposed Action would reduce the spread of invasive tree species by promoting the development of existing, native plant communities.

Comparison of Impacts to the PEA Scope

The impacts of the Proposed Action related to invasive species would be similar to the impacts evaluated in the PEA. The EPA-approved herbicide, Roundup Custom, would be used for the removal of targeted invasive species within specific areas and would be applied in a manner consistent with labeling instructions and applicable federal and state regulations. The Proposed Action would apply herbicides and conduct work within 50 feet of waterbodies resulting in more invasive plants being removed than envisioned in the PEA. Therefore, there would be greater benefits than described under the PEA.

3.3. Cumulative Impacts

Cumulative impacts represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.1).

Other projects in the vicinity of the Proposed Action include The Farm in Poway, which is a residential development currently under construction north of the Espola Road project area. The Farm in Poway includes the construction of 160 homes across three phases at 17166 Stoneridge Country Club Lane (City of Poway 2020). Construction began in mid-2022 and is currently underway with work likely to end in 2025 (Lennar 2023; City of Poway 2020). Improvements to Espola Road will be made at the end of project construction and include the widening of the road to the north by 3 feet to accommodate a bike lane, improvements to the San Diego Metropolitan Transit System bus stop, and expansion of the Espola Road and Martincoit Road intersection to a four-way signalized intersection with enhanced crosswalks (City of Poway 2020). The City of Poway released The Farm in Poway Final Environmental Impact Report and signed a Notice of Determination in June 2020, which included mitigation measures that would reduce potential impacts of the project to a less than significant level.

Because the Proposed Action and The Farm in Poway project would be occurring at the same time, there could be some cumulative construction-related impacts, such as increased noise and traffic impacts from lane closures on Espola Road. However, because The Farm in Poway improvements would be limited to the intersection of Espola Road and Martincoit Road and the City would be able to coordinate the timing of each project, it is unlikely that ROW work along Espola Road would occur at the same time as the proposed road improvements associated with The Farm in Poway. If the projects occur close in time, there would be a slightly longer duration of activity along Espola Road. However, both projects would implement BMPs and mitigation measures to reduce impacts to the maximum extent practicable, and impacts would be cumulatively insignificant.

The City would be required to implement all of the conditions in the PEA, including the BMPs found in Appendix C to avoid or minimize potential impacts with the exception of Water Resources BMP #1, Water Resources BMP #2, and Special Status Species BMP #1. The following project specific BMPs and ESA compliance measures have been included to avoid or minimize potential impacts related to water and biological resources applicable to the Proposed Action.

4.1. Water Resources

The Subapplicant would be responsible for reducing potential impacts on water resources from project activities and employing the following minimization measures:

- The Subapplicant will prepare a Spill Prevention and Pollution Control Plan to address the emergency cleanup of any hazardous material and the plan will be available on-site.
- Machinery and equipment used during work will be serviced, fueled, and maintained on uplands
 to prevent contamination to surface waters. Fueling equipment and vehicles will be kept more
 than 200 feet away from waterbodies.
- All hazardous materials will be stored in upland areas in storage trailers or shipping containers designed to provide adequate containment.
- All designated staging will be located more than 200 feet from wetlands and waterways, will be
 outside of floodplain areas, and will be in non-sensitive areas. The assigned staging areas will be
 subject to the City of Poway Best Management Practice Manual NS-9. All areas will be free and
 clear of any sensitive vegetation that might be disturbed or harmed. Equipment staging will use
 the City of Poway's established staging practices.
- No staging of equipment or tools will occur in a floodplain during flood season at the project location, even if staging is only temporary.
- Short-term laydown of hazardous materials for immediate use will be permitted provided the same containment precautions are taken as described for hazardous materials storage. All project materials, wastes, rubbish, and trash will be removed from the site and transported to an authorized disposal area, as appropriate, in compliance with applicable federal, state, and local laws and regulations. No disposal of project materials or debris will occur in a floodplain. No hazardous materials will be left unattended within the floodway.
- Use of herbicides:
 - a. Application will be limited to spot spraying.

- b. Application procedures shall be in accordance with federal, State of California, and County of San Diego regulations for safe management of herbicides.
- c. Application will comply with San Diego County agricultural laws and regulations.
- d. Application will be performed by a qualified applicator consistent with labeling instructions.
- e. Application will follow Title 3 California Code of Regulations Sections 6000-6984: California Code of Regulations.
- f. Herbicides will only be applied in the dry season.
- g. Application will not occur during or within 24 hours of rain events.

4.2. Biological Resources

The Subapplicant would be responsible for reducing potential impacts on biological resources from project activities and employing the following minimization measures:

Terrestrial and Aquatic Habitat

- When working on stream banks or floodplains, disturbance to existing grades and vegetation will be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities will avoid and limit disturbance to sensitive habitats (e.g., stream banks, stream channel, riparian habitat) as much as possible. When possible, existing ingress or egress points will be used or work will be performed from the top of the stream banks.
- Native riparian vegetation will be left in place to the maximum extent practical; willows and cottonwoods (*Populus* spp.) with a DBH of 6 inches or greater may be trimmed but will be left in place where possible.

Threatened and Endangered Species

General BMPs and Avoidance and Minimization Measures

- The Subapplicant will exercise every reasonable precaution to protect federally listed species and their habitats from pollution due to fuels, oils, lubricants, or other harmful materials. Project-related pollutants will be collected and transported to an authorized disposal area, as appropriate, per all federal, state, and local laws and regulations.
- The Subapplicant will store all hazardous materials (e.g., fuel, lubricants, herbicides) in properly designated containers in a storage area with an impermeable membrane between the ground and the hazardous materials. The storage area will be encircled by a berm to prevent the discharge of pollutants to ground water or runoff into the habitats of federally listed species.
- The Subapplicant will develop and implement a fire prevention and suppression plan for all
 activities that have a risk of starting a wildfire. Fire extinguishers are required for all vehicles
 used within or adjacent to undeveloped open spaces.

- The Subapplicant will reduce, to the maximum extent practicable, the amount of disturbance at a site to the absolute minimum necessary to accomplish the project. Project planning must consider not only the effects of the action itself, but also all ancillary activities associated with the actions, such as equipment staging and refueling areas, routes of ingress and egress to the project site, and all other related activities necessary to complete the project.
- All project personnel will be given environmental awareness training by the project's
 environmental inspector or biological monitor before the work commences. The training will
 familiarize all project personnel with the federally listed species that may occur on-site, their
 habitats, general provisions and protections afforded by the ESA, measures to be implemented
 to protect these species, and the project boundaries. This training will be provided within three
 (3) days of the arrival of any new worker.
- As part of the environmental awareness training, project personnel will be notified that no dogs
 or any other pets under control of construction personnel will be allowed in the work areas, and
 that no firearms will be permitted in the construction area, unless carried by authorized security
 personnel or law enforcement.
- A USFWS-approved biological monitor will be present on-site during all activities that may result in encounters with federally listed species. If a biological monitor is needed, the Subapplicant will submit the biological monitor's qualifications to USFWS for approval prior to project initiation. The biological monitor will ensure that all applicable avoidance and minimization measures are implemented during project activities. The biological monitor will also ensure that, to the extent feasible, all vehicles used during project implementation are free of debris that may harbor organisms that could be introduced to the site, such as vegetation or mud from other aquatic areas. The biological monitor will also ensure that turbidity, sedimentation, and the release of materials such as dust or construction runoff are controlled and that spill control measures are enacted properly.
- The biological monitor will have the authority to stop any work activities that could result in potential adverse effects on federally listed species or their habitats.
- The approval request for the USFWS-approved biologist will include, at a minimum:
 - a. Relevant education
 - b. Relevant training concerning the listed species for which approval is requested, including species identification, survey techniques, handling individuals of different age classes, and handling of different life stages by a permitted biologist or recognized species expert authorized by USFWS for such activities
 - c. Summary of field experience conducting requested activities (to include project/research information)
 - d. Summary of biological opinions under which they were authorized to work with the requested species and at what level (such as construction monitoring versus

handling); this will also include the names and qualification of persons under which the work was supervised and the amount of work experience on the actual project

- e. Any relevant professional references with contact information
- Project activities that could affect suitable habitat for federally listed species will be limited to daylight hours during weekdays, leaving a nighttime and weekend period for the species.

Species-Specific Avoidance and Minimization Measures

The following measures are presented in the Subapplicant scope of work or are adapted from those presented in the Carlsbad Fish and Wildlife Office (CFWO) Programmatic Biological Opinion (PBO) (USFWS 2019). Nonapplicable elements of species-specific avoidance and minimization measures from the CFWO PBO have been omitted.

Coastal California Gnatcatcher-Specific Avoidance and Minimization Measures

- To minimize direct effects on nesting CAGNs, all clearing of vegetation within 300 feet of CAGN habitat will occur outside of the CAGN breeding season (i.e., project activities will not occur from February 15 through August 30) to the maximum extent practicable.
- If the breeding season cannot be avoided, a USFWS-approved biologist will conduct a minimum
 of three (3), focused preconstruction nesting bird surveys on separate days prior to vegetation
 removal. If no active nests are found within 500 feet of the area of disturbance, project activities
 may proceed.
- If an active CAGN nest is detected during the preconstruction nesting bird surveys, either work will be suspended until the young have fledged, or until the beginning of the nonbreeding season, or the following will apply:
 - a. An exclusionary buffer will be established around the nest. The buffer distance will be determined by the USFWS-approved biologist considering several factors: presence of natural buffers (vegetation/topography), nest height, location of foraging territory, nature of the proposed activities, and baseline levels of noise and human activity. The buffer may range from 50 feet to over 300 feet in width; AND
 - b. If an exclusion zone is established, a USFWS-approved biologist will monitor the nest during construction for signs of adverse effects including distress/disturbance. If adverse effects are detected, then the USFWS-approved biologist will have the authority to stop all work in the vicinity of the nest and coordinate with USFWS to determine whether additional conservation measures will avoid or minimize effects on the nesting birds. Construction may resume only with approval from USFWS; OR
 - c. The USFWS-approved biologist will continue to monitor the nest and will determine when young have fledged. Once young have left the nest the buffer and exclusion zone may be removed and work within these areas may resume.

Least Bell's Vireo and Southwestern Willow Flycatcher-Specific Avoidance and Minimization Measures

- Project activities will be scheduled to avoid the LBV/SWFL breeding season (March 15 to September 15) to the maximum extent possible.
- In the event that project activities within suitable habitat for LBVs or SWFLs cannot be scheduled
 outside of the breeding season, surveys will be conducted to determine presence or absence of
 these species. The survey protocol used must be approved by USFWS.
- USFWS-approved biologist(s) will be on-site during all activities that may result in encounters with LBVs or SWFLs.
- If a nesting LBV or SWFL is detected within the action area during pre-project surveys, a USFWS-approved biologist will establish a buffer zone around the nest that they deem sufficient to avoid the abandonment of the nest by the adults. USFWS generally recommends a minimum 500-foot buffer around nests where no work is to occur; however, a smaller buffer can be established for LBVs if deemed protective by the USFWS-approved biologist and approved by USFWS. SWFLs are more sensitive to disturbance than LBVs, and therefore a greater buffer may be required. The USFWS-approved biologist must monitor the nests during all project activities immediately adjacent to buffer zones to determine the effects of project activities on nesting LBVs or SWFLs. The USFWS-approved biologist will have the authority to stop work if deemed necessary to protect the nesting birds.

SECTION 5. Agency Coordination, Public Involvement, and Permits

This section provides a summary of the agency coordination efforts and public involvement process for the action alternatives. In addition, an overview of the permits that would be required under the action alternatives is included.

5.1. Agency Coordination

The Subapplicant consulted with USACE, the Regional Water Quality Control Board, and CDFW at a roundtable meeting on February 9, 2021, to confirm jurisdictional interest and determine whether there are any additional information/notifications needed by the resource agencies prior to implementing project activities for the Green Valley Open Space Area. The City of Poway received confirmation from USACE, on July 14, 2022, that a Department of the Army permit is not required for the removal of vegetation. The proposed channel crossings may require a USACE Nationwide Permit. The Subapplicant would be required to coordinate with the USACE to determine whether any permit authorization is needed and obtain required permits for the channel crossings.

FEMA consulted with USFWS on November 21, 2023. USFWS concurred with the determination that the project would not likely adversely affect any federally listed species or destroy or adversely modify designated critical habitat on April 3, 2024. USFWS required the implementation of the avoidance and minimization measures described in Section 4.

5.2. Public Participation

On October 26, 2021, the City of Poway hosted "Poway Tree Talk," an informational meeting about the Hazardous Tree Removal Project. The city gave a 30-minute presentation on the project and then opened the floor for questions. A recording of the community meeting and additional project information can be found on the city's website at https://poway.org/1065/Hazardous-Tree-Removal-Mitigation-Grant (City of Poway 2023).

In accordance with FEMA's NEPA procedures, FEMA is releasing this draft SEA to the public and resource agencies for a 30-day public review and comment period. Comments on this draft SEA will be incorporated into the final SEA, as appropriate. This draft SEA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will take into consideration any substantive comments received during the public review period, to inform the final decision regarding grant approval and project implementation. If no substantive comments are received from the public or agency reviewers, this draft SEA will be adopted as final and a FONSI will be issued by FEMA. If FEMA receives substantive comments, it will evaluate and address comments as part of the FONSI documentation or in a Final SEA.

This draft SEA will be made available on FEMA's website at https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository. The City of Poway will also make the

Agency Coordination, Public Involvement, and Permits

draft SEA available on its website at: https://poway.org/. The comment period for the draft SEA will start when the public notice of SEA availability is published in the *Poway News Chieftan at*https://www.sandiegouniontribune.com/pomerado-news/. A hard copy of the SEA will be available for review at the City of Poway City Hall building at 13325 Civic Center Drive, Poway, CA 92064.

Comments on the draft SEA may be submitted to FEMA at FEMA-RIX-EHP-Documents@fema.dhs.gov (please include "Poway Hazardous Tree Removal" in the subject line). Comments also may be submitted via mail to:

Federal Emergency Management Agency Region 9
Environmental Planning and Historic Preservation
1111 Broadway, Suite 1200
Oakland, CA 94607
Attn: Poway Hazardous Tree Removal Project SEA Comments

5.3. Permits

The City of Poway would be responsible for obtaining any necessary local, state, or federal permits needed to conduct the proposed work. As discussed in Section 3.1.1, a Department of the Army permit would likely not be required.

SECTION 6. Conclusion

Although the specific type of action (vegetation removal) proposed under the Proposed Action does fall within the range of actions evaluated in the PEA, work within 50 feet of a waterbody, operation of heavy mechanized equipment within 200 feet of a waterbody, and work outside of the dry season is proposed, which is inconsistent with the PEA measures to avoid and minimize impacts on water quality, floodplains, and biological resources. The PEA adequately describes the affected environment and the environmental consequences of the No Action alternative for all resource areas, and the effects of the Proposed Action not evaluated in the PEA are described in this SEA. FEMA, CalOES, and the Subapplicant have not identified any public controversy regarding the proposed implementation of the Proposed Action.

The Proposed Action would result in no substantial impacts on the environment beyond those described in the PEA. In addition to the measures described in the PEA, the City of Poway will implement mitigation measures described in Section 4 of this SEA. With the implementation of the applicable BMPs in the PEA and the avoidance and minimization measures specified in this SEA, the Proposed Action would not result in significant impacts.

SECTION 7. List of Preparers

The following is a list of preparers who contributed to the City of Poway Hazardous Tree Removal (Phase 2) Project draft SEA for FEMA. The individuals listed below had principal roles in the preparation of this document. Many others contributed, including senior managers, administrative support personnel, and technical staff, and their efforts in developing this SEA are appreciated.

Federal Emergency Management Agency

Reviewers	Role in Preparation	
Thomas N. Young	Environmental Planning and Historic Preservation Specialist	
Samantha Meyer	Biologist	

CDM Smith

Preparers	Experience and Expertise	Role in Preparation
Fogler, Wilson	Biologist	Biological Resources NEPA Documentation
Gledhill, Greta	Environmental Planner	NEPA Documentation
Lea, Claudia PE, PMP	Project Management	Project Manager
Stenberg, Kate PhD	PhD, Senior Biologist, Senior Planner	Technical Review
Roberts, Jessica	Environmental Planner	NEPA Documentation
Woodruff, Abbie AICP	Environmental Planner	NEPA Documentation

This document was prepared by CDM Smith under Contract No. HSFE60-15-D-0015, Task Order No. 70FA6020F00000037.

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