

Draft Biological Technical Report for the East Valley Parkway and Midway Drive Drainage Improvement Project, City of Escondido, California

4 IMPACTS ANALYSIS

The purpose of Section 4 is to describe the direct, indirect, and cumulative impacts of the proposed project on special-status biological resources. The significance determinations for proposed or potential impacts are described in Section 4.

4.1 Definition of Impacts and Significance

Impacts to vegetation communities, special-status plants, and special-status wildlife, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of “significant” effect is not possible, because the significance of an activity may vary with the setting; however, Appendix G of the CEQA Guidelines lists questions to be answered for evaluating potential environmental impacts of a project CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have a significant cumulative effect on the environment. Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, or (5) substantially reduce the number or restrict the range of a rare or endangered plant or animal.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G environmental checklist, which states that a project could potentially have a significant effect if it:

- Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

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- Interferes substantially with the movement of an native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impedes the use of native wildlife nursery sites;
- Conflicts with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or
- Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Based upon the project description (Section 1.2), short-term and long-term direct impacts, indirect impacts , and cumulative impacts are defined as follows:

Direct Impacts are caused by the Project and occur at the same time and place as the Project. Any alteration, disturbance, or destruction of biological resources that would result from Project-related activities is considered a direct impact. Direct impacts would include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species.

Indirect Impacts may occur later in time or at a place that is farther removed from the Project than direct impacts, but indirect impacts are still attributable to Project-related activities. Examples of indirect impacts include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Cumulative impacts refer to the combined environmental effects of the proposed Project and other past, present, and reasonably foreseeable future projects. CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts refer to the incremental impacts from two or more projects when considered together. When analyzed separately, the impacts may be minor; however, when analyzed together, they could be considered significant over a period of time.

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4.2 Direct Impacts

4.2.1 Vegetation Communities and Land Cover Types

Direct impacts were quantified by overlaying the proposed impact footprint onto the biological resources map and evaluating the impacts by vegetation community. Temporary and direct impacts associated with this Project would result from the construction of the reinforced concrete box culverts and storm drain pipeline and the construction of the new stormwater inlets within the concrete-lined channel. Implementation of the proposed Project would result in temporary, direct impacts totaling 49.6 acres to developed land, landscape/ornamental land, and the concrete-lined channel. While the Project components (reinforced concrete box culverts/pipe and stormwater inlets) are considered permanent, these components will be constructed in-kind and the work areas will be restored to pre-existing conditions. Table 5 provides a summary of these impacts.

**Table 5
Direct Impacts to Vegetation Communities and Land Cover Types and Mitigation
Required**

General Vegetation Community/Land Cover Category (Holland/Oberbauer)	Vegetation Community/Land Cover Type	Impacts (acres)	Mitigation Ratio	Mitigation Required
<i>Native Vegetation Communities</i>				
N/A	N/A	N/A	N/A	N/A
Disturbed or Developed Areas (10000)	Developed Land	48.4	0:0	N/A
	Landscaping/Ornamental	0.5	0:0	N/A
	Concrete-Lined Channel	0.7	0:0	N/A
Total		49.6	-	0

Developed and landscaping/ornamental land provide little native habitat value and foraging opportunities for wildlife, and therefore, impacts to these land cover types would not be significant. Concrete-lined channels present onsite are considered a potential aquatic resource jurisdictional to the ACOE and CDFW and impacts to these potential aquatic resources are discussed in Section 4.2.2, *Aquatic Resources*.

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4.2.2 Aquatic Resources

The construction of the new stormwater inlets into Escondido Creek may directly impact potential aquatic resources. Direct removal, fill, and hydrological interruption of potential aquatic resources would be considered a direct impact. However, these impacts would not be considered significant because the overall project is designed to make improvements to the drainage system. Project impacts to potential aquatic resources are temporary because there is no loss of jurisdictional waters as the concrete-lined channel would be restored to its original function.

Project impacts to the concrete-lined channel bank would not impact sensitive riparian vegetation communities; therefore, it is not anticipated that mitigation in the form of revegetation or replacement habitat will be required. Table 6 summarizes the Project impacts to potential aquatic resources.

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Table 6
Direct Impacts to Aquatic Resources

Type of Jurisdictional Waters	Type of Habitat ¹	Cowardin Classification ²	Impacts to Aquatic Resources (acres/linear feet)
Jurisdictional Waters of the U.S. (USACE, RWQCB)			
Escondido Creek: Non-wetland Waters	Developed/concrete-lined channel	Riverine intermittent streambed, seasonally flooded, excavated	0.11/385
Escondido Creek: Non-wetland Waters (Federal 3-parameter Wetland Below OHWM)	Freshwater Marsh	Riverine intermittent streambed, vegetated, seasonally flooded, excavated	-
Grand Ave Channel, Non-wetland Waters	Developed/concrete-lined channel	Riverine intermittent streambed, seasonally flooded, excavated	-
<i>Subtotal Jurisdictional Waters of the U.S.</i>			<i>0.11/385</i>
Jurisdictional Waters of the State (CDFW)			
Escondido Creek, Concrete-lined Channel	Developed/concrete-lined channel	Riverine intermittent streambed, seasonally flooded, excavated	0.71/385
Escondido Creek, Freshwater Marsh	Freshwater Marsh	Riverine intermittent streambed, vegetated, seasonally flooded, excavated	-
Grand Ave Channel, Concrete-lined Channel	Developed/concrete-lined channel	Riverine intermittent streambed, seasonally flooded, excavated	-
<i>Subtotal Jurisdictional Waters of the State</i>			<i>0.71/385</i>
Grand Total Jurisdictional Waters			0.71/385

¹ Oberbauer *et al.* 2008.

² Cowardin *et al.* 1979.

4.2.3 Special-Status Plants

No special-status plant species were observed within the Project study area, and there are no sensitive plant species that were determined to have high or moderate potential to occur within the study area. Therefore, the implementation of the proposed Project would not directly impact special-status plant species.

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4.2.4 Special-Status Wildlife

One special-status wildlife species, white-faced ibis, was detected during the biological reconnaissance survey. Three individuals of this species were observed only within the Project buffer area, outside of the Project impact area. Additionally, only foraging habitat occurs in the freshwater marsh in the Project study area outside of the impact area, and no nesting habitat occurs on or near the Project study area. The suitable foraging habitat adjacent to the Project work impact area occurs in a relatively small area compared to the entire length of Escondido Creek, and it is expected that foraging birds use the entire channel to forage. Therefore, implementation of the proposed Project would not directly impact this species.

4.2.5 Nesting Birds

Most native nesting birds are protected under the MBTA (16 U.S.C. 703–712), and nesting raptors are afforded additional protection under CFGC Section 3503.5. Direct impacts to active nests protected under the MBTA and/or CFGC Section 3503.5 would be considered significant. Pre-construction nesting bird surveys are adequate to ensure avoidance of impacts to active nests and reduce potential impacts to less than significant.

4.2.6 Wildlife Corridors and Habitat Linkages

The study area does not occur within a BCLA of the Escondido Subarea Plan. Project work areas and the surrounding study area buffer do not function as a wildlife corridor due to lack of any suitable habitat located in the work areas and the intense urban development within the Project footprint, restricting the movement of wildlife through the area. Therefore, implementation of the proposed Project would not directly impact wildlife corridors and habitat linkages.

4.3 Indirect Impacts

4.3.1 Vegetation Communities and Land Covers

The proposed Project footprint occurs in previously developed areas (roads and the concrete-lined channel); therefore, long-term indirect impacts to vegetation communities/land covers, such as an increase in human presence beyond the current extent, are not expected to occur.

Native vegetation communities occur adjacent to the Project impact areas. Potential short-term indirect impacts that could affect the native vegetation communities that occur adjacent to the Project impact area are described as follows:

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Fugitive Dust. Excessive dust can decrease the vigor and productivity of vegetation through effects on light penetration, photosynthesis, respiration, and transpiration, as well as increased penetration of phytotoxic gaseous pollutants and increased incidence of pests and diseases.

Increased Human Activity. Construction of the proposed Project would temporarily increase human activity in the area, which may contribute to an increase in litter to areas outside of the Project impact area.

Restricting equipment and vehicles to Project impact areas and limiting vehicle speed to 15 miles per hour, minimizing impacts outside of the Project footprint by clearly delineating the work areas with construction fencing, providing biological monitoring to assist crews in minimizing indirect impacts, implementing best management practices, and designing construction activities to avoid or minimize new disturbance would reduce potential indirect impacts to less than significant.

4.3.2 Aquatic Resources

Potential indirect impacts on aquatic resources could include adverse effects of fugitive dust, changes in hydrology resulting from construction, and exposure to contaminants associated with construction activities. Potential indirect impacts that could affect the jurisdictional aquatic resources are described as follows:

Fugitive Dust. Excessive dust can settle on surface water, affecting aquatic communities and contributing to the nutrient loading of the surface water ecosystem. This contamination risks aquatic life and may impact downstream resources by making water unsafe for consumption or recreational use.

Changes in Hydrology. Construction could result in hydrologic and water-quality-related impacts adjacent to and downstream of the construction area. Hydrologic alterations include changes in flow rates and patterns, which may affect adjacent downstream aquatic, wetland, and riparian vegetation communities.

Chemical Pollutants. Chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction-related materials) may affect jurisdictional aquatic resources and downstream resources by contaminating the water, impacting aquatic life and water quality.

Increased Human Activity. Construction of the proposed Project would temporarily increase human activity in the area, which may contribute to an increase in litter to the concrete-lined channel.

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Minimizing impacts outside of the Project footprint by clearly delineating the work areas with construction fencing, providing biological monitoring to assist crews in minimizing indirect impacts, implementing best management practices, and designing construction activities to avoid or minimize new disturbance would reduce potential indirect impacts to less than significant.

4.3.3 Special-Status Plant Species

No special-status plants were observed in the Project study area, and no special-status plant species were determined to have high or moderate potential to occur within the Project study area. Therefore, the implementation of the proposed Project would not directly impact special-status plant species.

4.3.4 Special-Status Wildlife Species and Nesting Birds

Indirect impacts to vegetation communities previously described, such as fugitive dust, may also affect special-status wildlife by decreasing the vigor and productivity of vegetation required for nesting. Wildlife may also be indirectly affected in the short-term by construction-related noise, which can disrupt normal wildlife activities and subject wildlife to higher predation risks. Breeding birds can be affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

Indirect impacts from construction-related noise or human presence may occur to nesting birds if construction occurs during the breeding season (*i.e.*, January 1 through August 31). Nesting birds that would be affected by noise, based on suitable habitat in the project vicinity, may occur up to 100 feet from the project work areas. This impact would be considered a significant impact, absent mitigation. Implementation of appropriate mitigation measures, as discussed in Section 5.4, would reduce these impacts to below significance.

Indirect noise impacts from Project construction would not be expected to affect breeding of the white-faced ibis, since there is no breeding habitat onsite or within 100 feet of the Project impact area, but increased noise may affect roosting and foraging for this species in the Project area. The suitable foraging habitat adjacent to the Project impact area occurs in a relatively small area compared to the entire length of Escondido Creek, and it is expected that foraging birds use the entire channel to forage, therefore indirect noise impacts to this species would not be considered significant.

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4.4 Cumulative Impacts

The Project is located within an urban setting, and no sensitive plants, animals, or vegetation communities would be significantly impacted. Cumulative impacts would not be considered significant if construction guidelines described in Section 4, *Impacts Analysis* and proposed mitigation measures are implemented. Future projects within the Project study area could result in significant impacts to vegetation communities, jurisdictional waters and wetlands, and/or special-status plant wildlife species and nesting birds absent mitigation.

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5 MITIGATION

5.1 Vegetation Communities and Land Covers

No mitigation is required for impacts to vegetation communities and land covers because significant impacts to sensitive vegetation communities are not expected to occur.

5.2 Aquatic Resources

BIO-1 Impacts to potential aquatic resources requires notification to the relevant federal and state agencies. Where it is confirmed through the aquatic resources delineation that potential aquatic resources would be impacted by the proposed Project, the Project proponent shall obtain the required federal and/or state permits from the USACE, RWQCB, and/or CDFW, pursuant to Sections 404 and 401 of the CWA, and Section 1600 et seq. of the CFGC, respectively. Permits are required to be obtained by the applicant before the impact to the resources. Permits may include additional mitigation requirements. No significant area-based mitigation is anticipated since the purpose of the Project is to make improvements to the drainage system and because the concrete-lined channel would be restored to its original function.

5.3 Special-Status Plants

No mitigation is required for impacts to special-status plants because direct and indirect impacts to special-status plants are not expected to occur.

5.4 Special-Status Wildlife and Nesting Birds

BIO-2 Potential impacts to nesting birds will be mitigated through pre-construction nesting bird surveys and appropriate buffers around active nests regulated by the MBTA and CFGC. If construction activity occurs during the breeding season (typically January 1 through August 31), a nesting bird survey must be conducted within the project boundary and a 100-foot buffer within 72 hours prior to construction and daily nesting bird surveys would be conducted during the breeding season. Nesting bird surveys would be required anytime construction begins in a new area outside of a previously surveyed area. If any active nests are detected, the area will be flagged and an appropriate buffer will be placed around the nest as determined by the project biologist, and monitored throughout the nesting cycle. If

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the biologist determines that Project construction is causing a disturbance to the nest (*e.g.*, adult birds appear agitated and are not returning to nest to incubate or feed young), the biologist may halt construction until the nest has fledged. Construction may restart after the biologist has determined that the nest has fledged or is no longer active.

5.5 Wildlife Corridors and Habitat Linkages

Implementation of the proposed Project would not directly impact wildlife corridors and habitat linkages; therefore, no mitigation is required.

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