SECTION 2.0
PROJECT DESCRIPTION

This section describes the project location and environmental setting, project objectives and characteristics, and the discretionary actions and approvals required for implementation of the proposed Tijuana River Valley Wetlands Mitigation Project.

2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The proposed project site, which consists of approximately 60 acres, is located within the city of San Diego, California (see Figure 2-1). The site is located immediately south of the Tijuana River, approximately 0.5 miles west of Hollister Street and 0.25 miles north of Monument Road (see Figure 2-2).

The project site is located on county of San Diego (county) Assessor’s Parcel Number 663-011-12. The land is owned by the county and is being used by the Water Authority under a cooperative agreement between these agencies. The site is located within the Tijuana River Valley Regional Park (TRVRP) and has a relatively long history of management for agricultural production purposes. It is bordered by rural, agricultural, and undeveloped lands mostly within the TRVRP.

Currently, the project site is occupied by agricultural fields. These fields are leased by the county to local farmers. Anticipating the proposed project, the current lease agreements include a termination clause that requires a 365-day termination notice. Access to the site is via Monument Road and/or Hollister Street. Unimproved dirt access roads traverse the property from east to west and north to south, making vehicular access to all areas of the property possible.

The entire northern boundary of the site includes a broad, approximately 10-foot-high earthen berm that prevents flood flows within the Tijuana River from entering the project site. A man-made detention basin is located immediately south of this berm and west of Smuggler’s Gulch, adjacent to the project site. The remainder of the project site includes relatively flat agricultural fields that are disked on an annual basis, and ruderal habitat dominated by non-native plants.

Project site topography consists of flat, lowland agricultural fields associated with the Tijuana River Valley that range from approximately 25 feet above mean sea level (AMSL) on the eastern portion of the site to approximately 19 feet AMSL in the southwest portion of the site. Site photographs are included in Figures 2-3 and 2-4.

Surrounding land uses, as shown in Figure 2-5, consist primarily of land within the TRVRP. This land is characterized by agricultural fields, equestrian facilities, rural housing, riparian woodland and disturbed habitats, and areas disturbed by dumping, off-road activities, berming, and flooding. Smuggler’s Gulch, an approximately 16-foot wide drainage channel that directs
tributary drainage into the Tijuana River, is located east of the proposed project site. Approximately 0.5 mile to the west of the project site are the Tijuana River National Estuarine Research Reserve (TRNERR) and Border Field State Park. A portion of the proposed project is located within the eastern boundary of the TRNERR. The Pacific Ocean is located approximately 2 miles to the west. Immediately north of the project site are the Tijuana River and Multi-Species Conservation Open Space, as identified in the Tijuana River Valley Local Coastal Program Land Use Plan. The United States-Mexico International Border is approximately one mile south of the project site, and Interstate 5 (I-5) is approximately 1.5 miles to the east.

2.2 PROJECT OBJECTIVES

The overall goal of the proposed project is to provide ACOE and CDFG wetlands creation credits that are required to offset wetlands impacts resulting from approved or future Water Authority capital improvement projects, such as the Emergency Storage Project (ESP) and Carryover Storage Project (CSP), or future capital improvement projects and maintenance activities. These capital improvement projects include but are not limited to creation of new water storage facilities, new water pipelines, relining or rehabilitating older pipelines, new flow control structures, and improved patrol road stream crossings.

Specific project objectives for the Tijuana River Valley Wetlands Mitigation Project are as follows:

1. Complete the 2001 cooperative agreement between the county of San Diego and the Water Authority, including providing approximately 32 net acres of ACOE/CDFG wetland mitigation credits for planned and future Water Authority capital improvement projects and operation and maintenance activities in the Tijuana River Valley.

2. Create a surface water hydrologic connection to the Tijuana River that provides effective flow across the site and that would provide the conditions for the development of self-sustaining three parameter wetlands subject to ACOE jurisdiction.

3. Develop a Mitigation Banking Agreement.

4. Implement a wetlands mitigation site that is compatible with the Tijuana River Valley Flood Control Study, referred to as the Two Alternatives Report (BSI 1994).

5. Implement a wetlands mitigation site that is compatible with the city’s MSCP land use designation and Local Coastal Program.

6. Implement a wetlands mitigation site that is in conformance with the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project.

7. Create a wetland site that provides replacement functions and values prior to or concurrent with ESP/CSP and other Water Authority project impacts.
A description of how each of these project objectives is satisfied by the proposed project is presented below.

2.2.1 Project Objective 1: Complete the 2001 cooperative agreement between the county of San Diego and the Water Authority, including providing 32 net acres of ACOE/CDFG wetland mitigation credits for planned and future Water Authority Capital Improvement Projects and operation and maintenance activities.

The cooperative agreement between the county and the Water Authority (dated August 8, 2001) allows for county-owned land in the Tijuana River Valley and elsewhere to be used as a mitigation bank to offset the impacts resulting from current and future Water Authority capital improvement projects. The agreement states that the county will make a good faith effort to ensure that 32 acres of the required mitigation is located within the Tijuana River Valley. The proposed project would achieve 32.3 net acres of mitigation credits. The total site is 60 acres, with 40 of those acres proposed to be restored to native wetlands mitigation habitat. Of the 60 acres, approximately 27.7 acres contain berms, trails and buffers areas, and a 5-acre soil disposal area, leaving a remainder of 32.3 acres for wetland mitigation credits.

The agreement also states that the county shall maintain and hold fee title to the Tijuana River Valley Property and restrict the property’s use through an appropriate restriction, dedication, open space or conservation easement, or other easement or condition of title as may be necessary to preserve the property for permanent open space and habitat conservation.

Additionally, as part of the agreement, the county of San Diego is to provide long-term management of the mitigation site once the site has reached established success criteria and satisfied conditions contained in the Mitigation Banking Agreement.

2.2.2 Project Objective 2: Create a surface water hydrologic connection to the Tijuana River that provides effective flow across the site and that would provide the conditions for the development of three parameter wetlands subject to ACOE jurisdiction.

It is imperative that the water from the Tijuana River flow across the project site during two-year storm events or greater, thereby creating a surface hydrologic connection to the Tijuana River. This hydrology would support healthy wetlands that can provide flood capacity and water treatment functions, and in turn, would compensate for ACOE-jurisdictional wetlands that the Water Authority is expected to impact by developing its capital improvement projects. In order to be considered ACOE-jurisdictional wetlands, the wetlands must possess a significant nexus to navigable and/or permanent waters of the U.S. according to the Joint ACOE/Environmental Protection Agency (EPA) Guidance document in response to Rapanos v. United States and Carabell v. United States (ACOE and EPA, 2007).
2.2.3 Project Objective 3: Develop a Mitigation Banking Agreement

A mitigation banking agreement would be negotiated to define the framework for the wetlands bank. The banking agreement would be negotiated with, and approved by, CDFG, ACOE, and USFWS. Development of the banking agreement is important in order to establish the wetlands as mitigation credits for future Water Authority projects. Additional information is provided in Section 2.3.1.

2.2.4 Project Objective 4: Implement a Wetlands Mitigation Site that is Compatible with the Tijuana River Valley Flood Control Study, Referred to as the Two Alternatives Report (BSI 1994)

The Tijuana River Valley Wetlands Mitigation Project is part of an overall mitigation strategy to provide wetlands mitigation credits for planned and future Water Authority Capital Improvement Projects. The project is compatible with and does not preempt implementation of the Two Alternatives Report (BSI 1994) for the Tijuana River Valley, which investigated options for flood control and protection of infrastructure in the Valley. Refer to Section 2.3.4 for additional information.

2.2.5 Project Objective 5: Implement a Wetlands Mitigation Site that is Consistent with the City’s MSCP Land Use Designation

The MSCP Subarea Plan is specifically designed to facilitate the implementation of a regional habitat preserve while allowing “take” of endangered species or habitats at the individual project level (city of San Diego 1997). The city’s Multi Habitat Planning Area (MHPA) and lands within it have been designated for conservation of biological resources considered sensitive by the resource agencies and by the city of San Diego. The entire project area is located within the MHPA.

The MSCP Subarea Plan’s overall goal for the Tijuana River Valley is to develop a “broad natural floodplain containing riparian and wetland habitats” and to “intermix the natural habitat with compatible agricultural, recreational, and water quality activities” (city of San Diego 1997). The proposed project is consistent with this goal, as it contributes to the development of wetland habitats and is compatible with surrounding uses.

2.2.6 Project Objective 6: Implement a Wetlands Mitigation Site that is in Conformance with the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project

Proposed trail alignments have been designed to be consistent with the county’s approved trail system. All trail connections proposed in the county trail system would be provided by the proposed project. Additional details on trails are provided below in Section 2.3.2.
2.2.7 Project Objective 7: Create a Wetland Site that Provides Replacement Functions and Values Prior to or Concurrent with ESP/CSP and Other Water Authority Project Impacts

There is a logistical obligation for the Water Authority to implement wetlands mitigation prior to or concurrently with impacts associated with the combined ESP/CSP projects at the San Vicente Dam and Reservoir site. Wetland impacts are expected to occur at the San Vicente Dam and Reservoir site in 2009, with the majority of the wetland impacts occurring after 2012. The Wetlands Mitigation project has a proposed start date of September 2009, and the site would have several years of wetland vegetation growth in anticipation of the majority of the wetland impacts at San Vicente Reservoir occurring after 2012. The ESP/CSP projects would have increased wetlands mitigation requirements, extended duration of adverse affects to biological resources, and additional project expense if the implementation of Wetlands Project is substantially delayed.

2.3 PROJECT CHARACTERISTICS

The proposed conceptual mitigation design, as developed for the project’s Conceptual Wetlands Mitigation Plan (2008; refer to Appendix B), is shown in Figure 2-6. The goal of this wetlands mitigation project is to provide ACOE and CDFG wetlands creation credits that are required to offset wetlands impacts created by Water Authority Capital Improvement Projects. ACOE wetlands creation requires the establishment of three environmental parameters that define ACOE jurisdiction under the Clean Water Act: hydric soils, surface hydrology, and hydrophytic vegetation. In addition, the wetlands must possess a significant nexus to navigable and/or permanent waters of the U.S. according to the Joint ACOE/Environmental Protection Agency (EPA) Guidance document in response to Rapanos v. United States and Carabell v. United States (ACOE and EPA, 2007). To achieve this goal, the project site is designed to provide effective flood flow and frequent inundation to the greatest extent practicable to create ACOE jurisdictional wetlands.

The proposed project would create approximately 40 acres of native wetlands mitigation habitat and native transitional uplands habitat on the 60-acre project site. The plant palette would provide southern willow scrub, mulefat scrub, freshwater marsh, Cottonwood-Willow Woodland, and Transitional Upland species. The full plant palette details are provided in Appendix B. The remaining 16 acres of non-wetlands would be covered with fill in the form of new flood protection berms and a soil disposal site and trail buffer areas that would be omitted from the total mitigation credits. Approximately 3.66 acres currently support existing disturbed wetlands that must be graded to establish a hydraulic connection to the river that is critical to successful wetlands habitat creation and the establishment of new ACOE jurisdictional area. These temporary impacts would be mitigated on site. As a result, of the approximately 40 acres
of native wetlands that would be created, but only approximately 32.3 acres of new wetlands creation credit would be available as banked credits for Water Authority use, as shown in Figure 2-7 and Table 2-1.

### Table 2-1
**Acreage Summary**

<table>
<thead>
<tr>
<th>Overall Site</th>
<th>60 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage of on-site berms, trails, buffers, and 5-acre soil disposal area, non-credit wetlands</td>
<td>27.7 acres</td>
</tr>
<tr>
<td>Remaining acreage available for mitigation credits (60 minus 27.7 acres)</td>
<td>32.3 acres</td>
</tr>
<tr>
<td>ESP/CSP mitigation credits</td>
<td>19 acres</td>
</tr>
<tr>
<td>Remaining acreage available as mitigation bank*</td>
<td>13.3 acres</td>
</tr>
</tbody>
</table>

*Acreage could change during evaluation and finalization of the mitigation banking agreement*

Of the 32.3 acres of wetlands creation credit available to the Water Authority, 19 credits (1 credit equals 1 acre) is projected for use to mitigate impacts created by the Emergency Storage Project (ESP) and Carryover Storage Project (CSP). The remaining acres of credit will be placed in a formal mitigation bank to be used to mitigate impacts resulting from future Water Authority capital improvement projects, maintenance, and operations activities. The calculation of net mitigation credits is shown in Table 2-2. There would be approximately 4.16 acres of excess wetlands acres created by this project that are not designated as project mitigation or assigned mitigation credits to any agency at this time.

In consultation with the wildlife agencies, the Water Authority is preparing a Natural Communities Conservation Plan and Habitat Conservation Plan (NCCP/HCP) to conserve and mitigate impacts to covered species caused by the Water Authority’s future capital improvement projects, and operations and maintenance activities. The proposed project, together with an existing Water Authority wetland creation site at Lux Canyon Creek in the city of Encinitas, and a future wetlands creation site along the San Luis Rey River west of Interstate 15, are proposed in the draft NCCP/HCP to form the wetland/riparian conservation/mitigation components of the Water Authority’s NCCP/HCP. The draft NCCP/HCP is expected to be available for public review in mid 2009.
### Table 2-2
Net Mitigation Credits

<table>
<thead>
<tr>
<th>Site Feature Description</th>
<th>Feature Acreage</th>
<th>Net Mitigation Credits Remaining (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Site</td>
<td>60.70</td>
<td>60.70</td>
</tr>
<tr>
<td><strong>Non-wetlands Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Berms</td>
<td>5.96</td>
<td>54.74</td>
</tr>
<tr>
<td>New Berms</td>
<td>4.48</td>
<td>50.26</td>
</tr>
<tr>
<td>Soil Disposal Site</td>
<td>5.00</td>
<td>45.26</td>
</tr>
<tr>
<td>Hiking and Equestrian Trail in 20-foot Trail Buffer</td>
<td>0.77</td>
<td>44.49</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>16.21</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Non-Credit Wetlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Wetlands to Remain (protected in place)</td>
<td>0.40</td>
<td>44.09</td>
</tr>
<tr>
<td>Mitigation for on-site dSWS &amp; OC impacts (2:1)</td>
<td>7.32</td>
<td>36.77</td>
</tr>
<tr>
<td>Mitigation for off-site erodible berm extension (3:1 &amp; 2:1)</td>
<td>0.31</td>
<td>36.46</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>8.03</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SDCWA Wetlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESP (actual) Project Mitigation</td>
<td>8.90</td>
<td>27.56</td>
</tr>
<tr>
<td>CSP (proposed) Project Mitigation</td>
<td>10.10</td>
<td>17.46</td>
</tr>
<tr>
<td>Mitigation Bank Credits</td>
<td>13.30</td>
<td>4.16</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>32.30</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### ACREAGE SUMMARY
- Total Non-Wetlands Features: 16.21
- Total Non-Credit Wetlands (on-site wetland impact areas, mitigation for on- and off-site impacts, existing wetlands to remain): 8.03
- Total SDCWA Wetlands: 32.30
- Total Excess Wetlands Credit: 4.16
- **TOTAL**: 60.70

The project would establish a permanent surface connection to the Tijuana River, expand the functional floodplain to the south of the river and west of the Smuggler’s Gulch Channel, and provide a system of pedestrian/equestrian trails connected to existing trail segments located throughout the TRVRP, TRNERR, and Border Field State Park.

The mitigation site would be designed and built to grade elevations that are consistent with the Tijuana River flow gradient. Sediment transport through this system would be expanded to include the mitigation bank area as water flows into and out of the site. It is anticipated that features such as sandbars, braided flow channels, debris racking, cut banks, and slip faces would develop. These features are viewed as typical riparian features, and are compatible with the proposed mitigation bank habitat. This compatibility is demonstrated by the city of San Diego wetland mitigation site for the emergency pilot channel, located immediately north of the proposed project site (Figure 2-6).

Creation of wetlands habitat on the project site would include installation of an above ground, temporary irrigation system, installation of container plantings, willow cuttings, and native seed
mix application. To alleviate trash deposition on site, a series of three vegetation baffles have been designed for installation in the northeast part of the site (Figure 2-6).

2.3.1 Mitigation Banking Agreement

As introduced in Project Objective No. 3, a mitigation banking agreement would be negotiated to define the framework for the banking of wetland mitigation credits. The banking agreement would be negotiated with, and approved by, CDFG, ACOE, and USFWS. The county of San Diego would also be signatory since it owns the land and has agreed to perform long-term management. Development of the banking agreement is important in order to establish the wetlands as mitigation credits for future Water Authority projects. Credits that are not immediately allocated to satisfy a wetland mitigation obligation would be held for future use. It is anticipated that the agreement would define the following issues as related to the proposed project:

1. Wetlands creation and enhancement credits to be available for use by the Water Authority.

2. Wetlands credits drawn from the wetlands mitigation bank would be valid mitigation for Water Authority project impacts. Mitigation credits from the proposed project as well as other Water Authority mitigation banks would be drawn from the nearest bank for any given Water Authority project until the credits are exhausted, and credits would then be drawn from the next nearest bank. The Water Authority proposes the bank to serve a set of covered typical projects and activities as well as conditionally eligible activities in both San Diego County and the aqueduct system serving San Diego County from Diamond Valley Reservoir and Skinner Reservoir in Riverside County. However, the wetland mitigation bank’s service area and project scope would be determined in negotiations with the California Department of Fish and Game (Regions 5 and 6, or Habitat Conservation Branch) as well as other agencies, with the resource agencies; however, the Water Authority proposes the bank to serve any Water Authority project in San Diego county and the aqueduct system serving San Diego County from Diamond Valley Reservoir and Skinner Reservoir in Riverside County.

3. A Habitat Management Plan (HMP) would be prepared that defines a program of in-perpetuity management activities that is designed to maintain functions and values within the mitigation bank to defined standards. The approved HMP would be implemented by the county of San Diego Parks Department as part of the TRVRP and would be consistent with Final Area Specific Management Directive for the Tijuana River Valley (June 28, 2007).

4. An estimate of wetlands mitigation bank management costs would be prepared to determine the level of effort that would be necessary for the long-term management of
the proposed project. Long-term management of the proposed project would be implemented by the county of San Diego.

### 2.3.2 Access and Trails

To minimize disturbance to the developing vegetation communities and wildlife species which would colonize it, the mitigation site would be generally off limits to use by the public. However, a multi-purpose (pedestrian, equestrian and bicyclists) trail network would be open to the public, which would connect to existing equestrian and hiking trails within the Tijuana River Valley. Exceptions would be during unusually high water flow in the valley, and for multi-purpose trails that are subject to storm event closures. The proposed trail alignments have been designed to be consistent with the county’s approved trail system. New trails would be constructed at the top of the relocated river berm, providing an all-weather east-west multi-purpose trail (Figure 2-6). Where trails are routed through the mitigation site, a buffer area running along each side of the trail would be designated and the trail and trail maintenance would be a permissible use in any conservation easement. The trail and any designated buffer area would not be counted as mitigation credits. Top of berm trails would be of a suitable width for small vehicles to travel in order to provide access for the U.S. Customs and Border Protection (CBP) agents. The existing Cathedral Trail that is aligned through existing river floodway would have one short section relocated by the proposed project. The new river berm trail would connect at the east end of the proposed project site to the proposed trail at Smuggler’s Gulch, which is proposed to run atop the existing berm. On the west end of the project site, the berm trail would connect with the existing river berm and trail. The trail realignment and the wetlands mitigation design are consistent with the location of the bridge that is proposed to span the pilot channel in the EIR for the Tijuana River Valley Regional Parks Trails and Habitat Enhancement Project.

### 2.3.3 Berms

Removal of the existing berms located along the northern boundary of the project site would be required to re-establish the site’s surface hydrology connection to the Tijuana River. Existing river berms would be relocated to facilitate the proposed flooding of approximately 40 acres of agricultural fields. A portion of the existing river berm would remain to better route effective water flow across the site, provide topographic variation for trail users, and provide limited wildlife refuge during larger storm events. The relocated berms would be constructed to a top of berm elevation that provides flood protection equal to the level of protection provided by the existing berms. Minor grading within the on-site agricultural fields would be required to create an appropriate gradient that is necessary to convey floodwater through the site and return the water to the river. An approximately 3.63-acre area would be graded at the northeast side of the project, where water would flow from the existing Tijuana River flood channel into the proposed site (Figure 2-6). This area is north of the river berm, and supports moderate to degraded quality wetlands vegetation. Impacts to these existing wetlands are proposed to be offset by creation of
new wetlands within the project site (for more information, refer to Section 3.4, Biological Resources).

2.3.4 Off-Site Improvements – Berm Extension

An off-site component of the Tijuana River Valley Wetlands Mitigation Project is the approximately 100-foot extension of the city of San Diego erodible berm. The erodible berm was originally constructed for flood control purposes in accordance with the Two Alternatives Report (BSI 1994). The proposed berm is an extension of an earthen berm structure that was built and is maintained by the city of San Diego as part of flood control facilities in the Tijuana River Valley (Figure 2-8). The proposed berm extension would close off a low flow channel that has become established immediately downstream of the erodible berm in order to maintain the flow of up to 5-year flood events in the southern channel. The effect of the berm extension would be to enhance the hydrology of the proposed wetlands mitigation site, a necessary project element as identified by Chang (2008).

The Two Alternatives Report (BSI 1994) analyzed various flood control options following severe flood events in 1993. As documented in a city of San Diego Manager’s Report (city of San Diego 1995), the Tijuana Valley Task Force selected a final alternative that

“…consists of the eventual removal of all existing berms in the valley that act as impediments to flow in the floodway and enhancing and causing to be permanent the two channels that currently exist. The first and primary channel is a pilot channel that the city constructed in 1993 through the riparian woodland area downstream of the Hollister Street Bridge. The second channel was created by the January 1993 flood and acts as an overflow channel for flood events that would exceed the capacity of the pilot channel.”

One element of the adopted alternative includes the following improvement:

An erodible berm be designed and constructed across the mouth of the northerly channel such that flows in the old southern channel are maximized and flows not enter the northern channel until necessary to reduce flooding.

On an unknown date between 2000 and 2005, a small channel formed immediately downstream of the Hollister Street bridge and the city’s “erodible berm” allowing low flow water to re-enter the northern channel. Consistent with the manager’s report and the adopted flood control alternative, the pilot channel and erodible berm are intended to be maintained by the city as flood control features.

The proposed berm would be located immediately downstream of the Hollister Street bridge (Figure 2-8). The berm would connect to the west end of the existing erodible berm and extend
northwest along the county of San Diego property boundary approximately 150 feet to connect with higher ground on the same property parcel. The top of berm elevation would be 25 feet AMSL. At this elevation, flood waters would overtop the berm for flood events greater than the 5-year flood event (Chang 2007), thus achieving the goal of maintaining smaller flood events in the primary southern pilot channel.

The berm dimensions would provide for a five-foot top width and 1.5:1 side slopes. The berm extension would be constructed from materials excavated from the Water Authority wetlands mitigation project site including soil and/or concrete debris. The berm would be armored with open-cell articulating concrete block mats or ungrouted riprap that would protect the berm from eroding during overtopping flood events.

2.3.5 Construction

Construction of the project is anticipated to extend approximately nine months, beginning in the fall of 2009. The various components of the construction process and their anticipated approximate durations are identified below, based on calendar working days.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization</td>
<td>7 days</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>14 days</td>
</tr>
<tr>
<td>Berm removal</td>
<td>35 days</td>
</tr>
<tr>
<td>Site grading</td>
<td>30 days</td>
</tr>
<tr>
<td>Irrigation</td>
<td>30 days</td>
</tr>
<tr>
<td>Planting/seeding</td>
<td>24 days</td>
</tr>
<tr>
<td>Plant establishment period</td>
<td>120 days</td>
</tr>
<tr>
<td>Total days/months</td>
<td>260 days / 8.7 months</td>
</tr>
</tbody>
</table>

Construction of the project would entail use of various vehicles and equipment. For the duration of the project, there would be one flatbed utility truck and approximately ten pick-up trucks. Mobilization and demobilization would require 16 truck trips to bring heavy equipment onto the site. This would be performed with low-boy trucks to haul grading equipment. During site preparation, one CAT D-6 dozer, one CAT 966 loader, two end dump trucks, and approximately four chainsaws would be needed to clear the site of organic vegetation and debris and haul the material off site. One CAT 375 excavator, one CAT 988 loader, one CAT 966 loader, one vibrating screener, and six end dump trucks would be used to remove existing berms. All equipment would operate on site, except the end dump trucks which would haul material off site.
One CAT D-6 dozer and two CAT 657 scrapers would be needed during grading activities. During the irrigation, planting/seeding, and plant establishment periods, approximately ten pick-up trucks and one flat-bed utility truck would be utilized. In addition, two gas powered augers would be used for planting and a hydroseed truck would be used for the seed application.

The Water Authority would require temporary restrictions on use of existing trails only as necessary to protect public safety. The Tijuana River Valley Equestrian Association (TRVEA), CBP, local residents, area public officials, and other interested parties would be notified of the project components, schedule, impacts to recreational uses, and suggested alternative park areas and trails that may be used during construction.

All vegetation within the grading limits would be removed with bulldozers except for selected isolated native trees to be protected in place. Removal of some surface soils currently laden with trash and debris would be required, as well as creation of a berm segment along the west property boundary, and creation of on-site trail segments that would connect to existing off-site county trails. Other items related to the construction of the proposed project include the removal of existing on-site abandoned farm buildings, abandoned electricity poles, abandoned groundwater wells, and disassembled and non-functional water well pump facilities. Night work may be required in certain instances due to rain delays or other forms of schedule delay. In the event that night work is necessary, the Water Authority would obtain the appropriate permits or approvals.

Existing power poles extending north from Monument Road would be protected in place up to the southern limit of the mitigation project. An existing private water mainline that enters the east side of the wetland mitigation site from an existing off-site point-of-connection to the east would be relocated along the southern berm to the water source for agriculture and mitigation site temporary irrigation.

To protect existing wetlands and other environmentally sensitive areas that are to be avoided during construction, temporary orange construction fencing would be installed along the edge of the limits of construction adjacent to sensitive habitat. This fencing would be installed prior to grading activity and berm removal.

The project is designed to balance cut and fill, therefore, no soil export is anticipated. However, concrete rubble within the existing berms may be trucked off site, or be processed on site and recycled to construction material businesses, or used to protect the berm extension. Processing the materials may involve an on-site crushing operation that reduces concrete rubble to the constituent elements such as concrete and aggregates, and would then be trucked off site. Alternatively, these materials may be exported via trucks and processed off-site. The volume of this material is unknown and number of truck trips needed to transport the material off site.
cannot be estimated at this time. Temporary staging of equipment, materials and supplies would occur on the project site.

Construction access to the project site would be via Hollister Road, Monument Road, and the Saturn Boulevard right of way north of Monument Road. Access to the berm extension site is shown in Figure 2-8. Staging for the berm extension component would be located on the 60-acre project site.

Construction of the off-site berm extension would require a dewatering process. The dewatering process would require installation of two temporary dikes to be constructed of sandbags and placed by hand as shown in Figure 2-8. Once assembled, the interior area would be pumped of all standing water. Pumped water would be piped to an at-grade desilting tank. The pipe end would be fitted with a desilting sock to filter large debris and sediment from the water. The desilting tank would allow smaller sediment particles to settle to the bottom of the tank before the water exits through an overflow pipe and discharged into the Tijuana River pilot channel. The discharge pipe also would be fitted with a desilting sock to reduce the velocity of discharge to a non-erosive velocity. It is anticipated that the initial dewatering would require approximately one week to complete. Dewatering pumping would continue through the berm construction process that is anticipated to require four additional weeks. After completion of the berm construction, the temporary dikes would be removed from the wetlands area.

2.3.6 Maintenance

As identified in Section 2.3, creation of wetlands habitat on the project site would include installation of an aboveground, temporary irrigation system, installation of container plantings, willow stakes, wattles comprised of willow and arrowweed, and a native seed mix application. The project would be monitored and maintained for 5 years or until the mitigation site reaches pre-set performance criteria, whichever comes first. Maintenance may include remedial actions such as reseeding, replanting and adjustments to the maintenance regime to promote attainment of the ultimate performance criteria during the 5-year establishment period. Upon achieving the specified performance criteria, the site would transition into the long-term management program as defined in the approved Habitat Management Plan (HMP), Tijuana River Valley Regional Park Area Specific Management Directives (ASMD) and managed by the San Diego County Department of Parks and Recreation in perpetuity as open space within the San Diego county TRVRP.

Maintenance would occur 14 times in the first year, then 12, 10, 8, and 6 times in subsequent years. All of the trips would involve pick-up trucks, and maintenance would include the use of approximately four gas-powered weed whips per visit.
Potential on-site debris accumulation would be reduced by the installation of vegetated baffles using wetland species such as arrowweed and sandbar willow. The growth character of this vegetation would act to filter debris before entering the main mitigation site. Debris accumulation on these vegetated baffles would serve to divert flow back into the pilot channel and maintain existing flow and deposition patterns that are currently present in the river.

Trash would be removed from the site by hand during maintenance visits. Maintenance activities shall be conducted monthly during the 120-day establishment period and years one and two of the project, every other month for year three, and quarterly for years four and five. Trash and inorganic debris washed or blown onto the mitigation site would be removed regularly. Deadwood and leaf litter of native trees and shrubs would not be removed. Downed logs and leaf litter provide valuable micro-habitats for invertebrates, reptiles, small mammals, and birds. In addition, the decomposition of deadwood and leaf litter is essential for the replenishment of soil nutrients and minerals.

Trash removal from the vegetation baffles would be conducted as part of a 5-year maintenance period. The amount of trash that is collected in these baffles is expected to decline over the 5-year maintenance period as the vegetation becomes dense and mature. Crews would walk to and from the staging area in the eastern part of the site to conduct maintenance activities, including trash removal.

Long-term trash removal procedures and costs would be included in the HMP, but are expected to be similar to those described above for the 5-year maintenance program. Temporary impact areas located north of the northern berm would remain subject to county management and maintenance, and are not included as part of the project’s long-term management.

If performance criteria are not met for all or any portion of the mitigation project or if the final success criteria are not met, the project biologist and the Water Authority shall prepare an analysis of the cause(s) of failure within the appropriate annual report and, if determined necessary by ACOE, CDFG, or FWS, propose remedial action for agency approval. If the mitigation site has not met the performance criteria by the end of the 5-year, long-term maintenance and monitoring period, the Water Authority’s maintenance and monitoring obligations would continue until contingency measures are negotiated and implemented to bring the mitigation site into compliance with the established standards, or until applicable regulatory agencies grant final mitigation project acceptance as completed.

2.3.7 Monitoring

Construction monitoring would occur throughout the construction period. Monitoring time may increase or decrease as required by field conditions and construction activities. During construction, the environmental monitor(s), via the Water Authority Construction Manager,
would have authority to stop work in situations where biological and archeological resources, not authorized to be impacted, are in imminent danger of impacts from adjacent construction activities. Each site visit would be documented in a site observation report that would note construction activities relating to the enhancement plan and any project deficiencies. After installation of plants, the environmental monitor would conduct a minimum of four formal site observations during the 120-day plant establishment period.

It is anticipated that the project would undergo five years of biological monitoring to ensure that appropriate wetland hydrology is created and the vegetation communities meet their intended resiliency structure, complexity and biological function. The biological monitor would conduct on-site maintenance monitoring visits to document project performance and provide recommendations for remedial measures, as needed. Monitoring would require four trips during the 120-day plant establishment period and five trips per year through the five-year monitoring period. Each monitoring visit would include a qualitative assessment of maintenance work, an assessment of habitat development and hydrology, and would include project guidance to help ensure each year’s success criteria are met. All biological monitoring would be performed in accordance with the resource agency requirements and the conceptual plan. Biological monitoring will include collection of qualitative and quantitative data as described in detail in Appendix B. If the project achieves its success standards sooner than five years, the establishment, maintenance, and monitoring would be discontinued, and the site would be managed and maintained per provisions in the Habitat Management Plan ASMD and project HMP.

Other monitoring is identified below in Section 2.4. In addition, monitoring is identified as mitigation for various environmental impacts identified in Section 3.0.

2.4 GENERAL CONDITIONS/STANDARD SPECIFICATIONS AND PROJECT DESIGN FEATURES

The relevant sections of the latest Water Authority’s General Conditions and Standard Specifications will be incorporated in the project’s construction contract. The selected contractor must implement the project per the contract and associated Water Authority approved construction plans and specifications. In addition, project-specific design features are identified in order to minimize or avoid environmental impacts. These standard specifications and project design features have been grouped by issue area. Note that they are not exhaustive, and that other construction specifications or design features could be developed that are as effective as those listed. Additional detail regarding standard construction practices can be found in the appropriate sections of the Water Authority’s General Conditions and Standard Specifications.
2.4.1 Recreation

**Standard Specifications**

There are no general conditions or standard specifications applicable to recreation.

**Project Design Features**

Roads and trails within the TRVRP that are within the area affected by the proposed project would be closed or access restricted as necessary during construction to avoid potential safety conflicts between construction activities and recreational activities. All road and trail closures and restrictions would be well marked and alternative routes would be identified at closure points, if available. Local equestrian rental businesses would be provided with maps of alternate trails and trail closures and restrictions that can be reproduced and provided to horse rental clients. All roads and trails within the area affected by the proposed project would be restored to existing conditions, or better, following construction.

2.4.2 Water Resources

**Standard Specifications**

*General Conditions and Standard Specifications* Section 02140 – Dewatering (1.04): Comply with the latest adopted Regional Water Quality Control Board Waste Discharge requirements. Obtain authorization, as required, prior to discharge of groundwater, and comply with the sampling, testing, monitoring, and reporting requirements specified therein.

*General Conditions and Standard Specifications* Section 02140 – Dewatering (3.01): Dispose of water in such a manner as to cause no injury or nuisance to public or private property, or be a menace to the public health. Dispose of the water in accordance with applicable regulatory agency requirements. Prevent disposal of sediments from the soils to adjacent lands or waterways by employing necessary methods, including settling basins. Locate settling basins away from watercourses to prevent silt-bearing water from reaching the watercourse during flow regime. Where excavations may obstruct the natural flow of a watercourse, implement measures to control and dispose of the surface water that will not adversely affect water quality or beneficial uses of the watercourse. Divert watercourse flows around excavation areas by constructing barriers, temporary culverts, new channels or other appropriate means. Do not allow water containing mud, silt or other pollutants from aggregate washing or other construction activities to enter a watercourse or be placed in locations that may be subjected to high storm flows.

*General Conditions and Standard Specifications* Section 02270 – Temporary Erosion Control (1.01): For projects with soil disturbances of one acre or more, comply with the National
Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity, General Permit No. CAS000002 and requirements included herein.

General Conditions and Standard Specifications Section 02270 – Temporary Erosion Control (3.01): Grade disturbed surfaces to provide positive drainage and prevent ponding of water. Surface water shall be controlled to prevent water damage or deposition of sediment to all adjoining and downstream properties. Install silt fences, sedimentation ponds, sandbag dikes, stabilized construction entrances and any other erosion control measure to minimize sediment escape from the construction site and to maintain runoff quality in compliance with the General Permit. Prevent construction sediment from entering any streams, ponds or drainage facilities. Erosion and sedimentation control measures shall remain in place until such time that the site of work is prepared for permanent drainage and erosion control measures. Remove temporary erosion and sediment control measures so as not to interfere with permanent drainage, erosion control and revegetation.

General Conditions and Standard Specifications Section 02940 – Revegetation (3.05): Continuously control erosion as specified herein and in accordance with measures shown on the Plans or the SWPPP. Erosion control measures shall be implemented and maintained throughout the warranty period.

Project Design Features

Prior to the start of ground disturbing activities, the Water Authority’s construction contractor will prepare a SWPPP, subject to Water Authority approval by appropriate agencies, to reduce or eliminate pollutants during and after construction is complete. The plan will identify all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with construction activity (storm water discharges from the construction site); identify non-storm water discharges; identify structural and/or treatment control Best Management Practices (BMPs) that are to be implemented in accordance with a time schedule to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction; and develop a maintenance schedule for permanent or post-construction BMPs that would “to the maximum extent possible” reduce or eliminate pollutants after construction is completed.

Detailed BMPs to prevent hazardous materials impacts to water quality will be included in the project SWPPP. Standard industry measures include, but are not limited to the following:

- Storage of a minimal amount of hazardous materials on site and restriction of storage/use locations to areas at least 50 feet from storm drains and watercourses.
- Use of covered and/or enclosed facilities for all hazardous materials storage.
• Maintenance of accurate written inventories and labels for all stored hazardous materials.
• Use of berms, ditches and/or impervious liners (or other applicable methods) in material storage and vehicle/equipment maintenance areas to provide a containment volume of 1.5 times the volume of stored/used materials to prevent discharge in the event of a spill.
• On-site storage of absorbent and clean-up materials where they are readily accessible.
• Proper location and maintenance of trash and wastewater facilities.
• Posting of regulatory agency telephone numbers and a summary guide of clean-up procedures in a conspicuous location at or near the job site trailer.
• Regular (at least weekly) monitoring and maintenance of hazardous material use/storage facilities and operations to ensure proper working order.
• Implementation of a Storm Water Sampling and Analysis Strategy (SWSAS) program pursuant to regulatory guidelines.

The grading/construction contractor will conform to applicable NPDES General Groundwater Extraction and Waste Discharge Permit criteria prior to disposal of extracted groundwater. While specific BMPs to address potential water quality concerns from disposal of extracted groundwater will be determined based on site-specific parameters, they will likely include the following types of standard industry measures derived from the NPDES Permit text and applicable agency/industry sources:

• Use of erosion prevention and sediment control devices for applicable conditions.
• Testing, filtering (e.g., with gravel and filter fabric media) and/or treating (e.g., by conveyance to a municipal wastewater treatment plant) of extracted groundwater prior to discharge, if required for NPDES permit conformance.
• Removal of groundwater for treatment and disposal by a licensed operator, if required for NPDES permit conformance.

2.4.3 Biological Resources

Standard Specifications

*General Conditions and Standard Specifications* Section 02110 – Clearing and Grubbing (3.02): Conduct clearing and grubbing operations in a manner that will preserve and protect vegetation beyond the limits of clearing and grubbing. No filling, excavating, trenching or stockpiling of materials shall be permitted within the drip line of the protected vegetation. The drip line is defined as a circle drawn by extending a line vertically to the ground from the outermost branches of the vegetation. To prevent soil compaction within the drip line area, no equipment will be permitted within this area. Prior to the start of clearing and grubbing, schedule and attend
a site observation visit with the Engineer to verify existing conditions and the location of environmentally sensitive areas. Erect protective fencing or environmental flagging around environmentally sensitive areas and along the rights-of-way as shown on the Plans and as directed by the Engineer during the site observation visit. Maintain fencing and flagging in good condition for the duration of the work.

*General Conditions and Standard Specifications* Section 02940 – Revegetation (3.05): Monitor for erosion within revegetation areas and provide measures to prevent gullies, rill and sheet erosion, and silt deposition from occurring. Erosion control shall emphasize prevention. Repair erosion as required and include redirection or dissipation of the water source and recontouring of soil, followed by seeding, mulching, or planting. Strategically placed and secured straw wattles, hay bales or sandbags may be used to dissipate water sources. Do not use invasive exotic species for erosion control.

**Project Design Features**

As stipulated in the Conceptual Wetlands Mitigation Plan (2008a), a biological monitor will monitor project implementation and assess impact avoidance opportunities. Native vegetation disturbance will be limited to the construction zones as indicated by flagging. Equipment staging and refueling areas will be located away from sensitive habitat and natural drainages. All staging areas shall be accessible to Water Authority, the project biologist, and appropriate regulatory agencies, subject to applicable safety protocol.

Prior to the commencement of construction, the limits of grading will be clearly delineated by a survey crew prior to brushing, clearing, or grading. The biological monitor will check the grading limits before initiation of construction grading. The contractor(s) will be responsible to mitigate impacts to sensitive biological resources beyond those identified in this report or any subsequent reports that occur as a result of construction activities.

*Prior to the start of clearing and grubbing, both the Project Biologist and Engineer shall attend a site observation visit to verify existing conditions and the location of environmentally sensitive areas.*

Activities will be prohibited within drainages (other than those that may occur within an approved construction zone), including staging areas, equipment access, and disposal or temporary placement of excess fill.

Erosion and siltation into off site areas during construction will be minimized. The contractor will prepare an erosion control plan. The construction supervisor will be responsible for ensuring that the erosion control plan is developed and implemented.
Appropriate post-construction fencing and signage will be installed to prohibit access and avoid potential impacts to sensitive resources adjacent to the site. This fencing would adhere to the Fencing and Gates recommendations provided in the ASMD, and fence locations would be approved by the Project Biologist prior to installation. Fencing would be installed at the edge of sensitive habitat areas prior to the beginning of vegetation clearing and grading.

Lighting (if used) will be directed away from any native habitat and will consist of low-sodium or similar lighting equipped with shields to focus light downward on the appropriate subject.

Operation of machinery adjacent to Tijuana River and associated waterways and wetland vegetation communities adjacent or on site will be minimized to avoid damage to existing biological resources except as shown on construction drawings and in allowable impact areas. Machinery refueling and or servicing must take place at designated staging areas.

No dumping of debris or stockpiling of soil will occur in or near the Tijuana River floodplain except in areas designated on the construction drawings and as shown in Figure 3 of the Conceptual Wetlands Mitigation Plan.

Construction access to the site will be limited to existing paved and approved roads/ routes.

Native habitat areas adjacent to the mitigation site will be avoided with machinery at all times.

Fire abatement equipment must be present on site when machinery is being operated.

Non-native and/or invasive plant species present within the project area will be removed in a manner that limits the potential spread of seeds or rhizomes to adjacent areas of undisturbed native habitats. Soils containing the seeds and/or rhizomes of non-native and invasive species will be moved within the dry season if possible to prevent their spread to adjacent habitat areas or areas downstream of the project site through the water column. Plants with windborne seeds will be clipped and bagged prior to site grading.

The proposed project will include regular site maintenance including removal of or treatment of non-native and invasive plant species throughout the project site for a minimum of five years after installation. A management plan will be established and funded for the mitigation bank that will provide site management in-perpetuity to ensure that the site is not dominated by non-native or invasive plant species.

A SWPPP shall be developed to address potential impacts to water quality during construction, and a Water Quality Management Plan will be developed if required to ensure that impacts to water quality on a long-term basis will be avoided and minimized. All project grading will be subject to the typical restrictions and requirements that address erosion and runoff, including the federal Clean Water Act, National Pollution Discharge Elimination System (NPDES), and preparation of a SWPPP.
The SWPPP would contain a site map showing the construction site perimeter, temporary roadways, general topography both before and after construction, and drainage patterns across the project. The SWPPP would list BMPs that the project would use to protect storm water runoff and the placement of those BMPs. General BMPs include erosion controls, sediment controls, tracking controls, wind erosion control, non-storm water management, and materials and water management. Additionally, the SWPPP would contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there were a failure of BMPs.

Any planting stock used will be inspected by a qualified biologist to ensure that it is free of pest species that may invade natural areas, including, but not limited to, Argentine ants, fire ants, and other pests. Any planting stock that is infested would not be allowed within restoration areas or within 300 feet of native areas unless documentation is provided to the Wildlife Agencies, that these pests already occur in the native areas around the project site. The stock would be quarantined, treated, or disposed of according to best management principles by qualified experts in a manner that precludes invasions into native habitat.

Prior to issuance of a Notice to Proceed (NTP), the Assistant Deputy Director (ADD) Environmental Designee of the city of San Diego’s Entitlements Division shall verify that Mitigation Measures for Biological Resources have been included in entirety on the submitted construction documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements.” In addition, the requirements for a Preconstruction Meeting shall be noted on all construction documents.

Prior to the commencement of work, a Preconstruction Meeting shall be conducted and include the city of San Diego’s Mitigation Monitoring Coordination (MMC) Section, Resident Engineer, Project Archaeologist and Biologist, Applicant and other parties of interest.

Evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

Pursuant to Section 1600 et seq. of the State of California Fish and Game Code, evidence of compliance with Section 1602 is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.
2.4.4 Cultural Resources

Standard Specifications

There are no general conditions or standard specifications applicable to cultural resources.

Project Design Features

Prior to issuance of a Noticed to Proceed (NTP), the Assistant Deputy Director (ADD) Environmental Designee of the city of San Diego’s Entitlements Division shall verify that Mitigation Measures for Biological Resources have been included in entirety on the submitted construction documents and contract specifications, and included under the heading, “Environmental Mitigation Requirements.” In addition, the requirements for a Preconstruction Meeting shall be noted on all construction documents.

Prior to the commencement of work, a Preconstruction Meeting shall be conducted and include the city of San Diego’s Mitigation Monitoring Coordination (MMC) Section, Resident Engineer, Project Archaeologist and Biologist, Applicant and other parties of interest.

No project design features related to cultural resources are proposed.

2.4.5 Geology and Soils

Standard Specifications

General Conditions and Standard Specifications Section 02270 – Temporary Erosion Control (1.01): For projects with soil disturbances of one acre or more, comply with the most recently adopted National Pollution Discharge Elimination System NPDES General Permit for Storm Water Discharges Associated with Construction Activity, General Permit No. CAS000002 and requirements included herein.

General Conditions and Standard Specifications Section 02270 – Temporary Erosion Control (3.01): Grade disturbed surfaces to provide positive drainage and prevent ponding of water. Surface water shall be controlled to prevent water damage or deposition of sediment to all adjoining and downstream properties. Install silt fences, sedimentation ponds, sandbag dikes, stabilized construction entrances and any other erosion control measure to minimize sediment escape from the construction site and to maintain runoff quality in compliance with the General Permit. Prevent construction sediment from entering any streams, ponds or drainage facilities. Erosion and sedimentation control measures shall remain in place until such time that the site of work is prepared for permanent drainage and erosion control measures. Remove temporary erosion and sediment control measures so as not to interfere with permanent drainage, erosion control and revegetation.
Project Design Features

No project design features related to geology and soils are proposed.

2.4.6 Air Quality

Standard Specifications

General Conditions and Standard Specifications Section 01560 – Temporary Controls (1.03): Perform continuous dust abatement measures in accordance with the San Diego Air Pollution Control District’s regulations to prevent construction from producing dust in amounts harmful to persons or animals or causing a nuisance to persons or animals living nearby or occupying buildings in the vicinity of the work. Use water or dust prevention to control dust.

General Conditions and Standard Specifications Section 01560 – Temporary Controls (1.05): Keep all public and private roads used for ingress and egress in a clean and neat condition. Take measures, as necessary, to prevent the tracking or accumulation of materials on roads. Sweep or wash all loose materials and mud from equipment before entering the road. Provide street sweeping services when requested by the Engineer.

General Conditions and Standard Specifications Section 01560 – Temporary Controls (1.10): Comply with all applicable federal, state, county, and city laws and regulations concerning the prevention and control of air pollution. Perform construction activities and operate equipment in a manner which will minimize atmospheric emissions or discharges of air contaminants. Do not operate equipment or vehicles that show excessive emissions of exhaust gases on the site.

General Conditions and Standard Specifications Section 02200 – Earthwork (3.01): Prevent dust from damaging crops, orchards, cultivated fields, and dwellings, or causing a nuisance to persons. Dust control measures shall be in effect for the duration of the project.

Project Design Features

No project design features related to air quality are proposed.

2.4.7 Noise and Vibration

Standard Specifications

General Conditions and Standard Specifications Section 01560 – Temporary Controls (1.11): Comply with all local sound control and noise level rules, regulations, and ordinances which apply to any work performed pursuant to the Contract. Equip each internal combustion engine used for any purpose on the job or related to the job with a muffler of a type recommended by the manufacturer. Do not operate internal combustion engines on the project without said
muffler. Noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks and transient equipment that may or may not be owned by the Contractor. Avoid the use of loud sound signals in favor of light warnings except where required by safety laws for the protection of personnel.

**Project Design Features**

No project design features related to noise are proposed.

### 2.5 DISCRETIONARY ACTIONS AND APPROVALS

The Water Authority is the Lead Agency for the proposed project. Project construction will require the approval of the Water Authority’s Board of Directors. Responsible and Trustee Agencies that may take actions approving the proposed project are presented in *Table 2-3*.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Fish and Wildlife Service</td>
<td>Section 7; Mitigation Banking Agreement</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>Section 404 Nationwide Permit; Mitigation Banking Agreement</td>
</tr>
<tr>
<td>San Diego Regional Water Quality Control Board</td>
<td>Section 401 Water Quality Certification or Waiver (in association with the 404 permit); Mitigation Banking Agreement</td>
</tr>
<tr>
<td>California Department of Fish and Game</td>
<td>Section 1602 Streambed Alteration Agreement; Mitigation Banking Agreement</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>Encroachment Permit; Coastal Development Permit; Site Development Permit; Street Vacation; <em>Right of Entry Permit</em></td>
</tr>
<tr>
<td>County of San Diego</td>
<td>Habitat Management Plan; Mitigation Banking Agreement</td>
</tr>
</tbody>
</table>
Tijuana River Valley Wetlands Mitigation Project - EIR
Regional Map

FIGURE 2-1
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Legend

- Wetlands Mitigation Site (60.7 Ac.)

Project Site

SOURCE: USGS 7.5 Minute Series, Imperial Beach Quadrangle
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Photo 1: View looking southeast from the northern site boundary toward proposed soil disposal site and staging area

Photo 2: View looking east toward existing onsite structures, from the project site's northwest corner
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Photo 3: View looking south from northern project boundary toward Spooner's Mesa

Photo 4: View looking northeast at onsite agriculture toward the Tijuana River from the onsite southern berm
Tijuana Slough National Wildlife Refuge
Border Field State Park
Goat Canyon
Smuggler's Gulch

NOLF Imperial Beach
Tijuana River North Channel (Overflow)

Surrounding Uses
02,000

Project Site
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FIGURE

Tijuana River Valley Wetlands Mitigation Project - EIR
Conceptual Mitigation Acreage Layout

EXISTING BERM TO REMAIN

NEW BERM

EXISTING WETLANDS PROTECTED IN PLACE

TEMPORARY IMPACT AREA

EXISTING WETLANDS PROTECTED IN PLACE

EXISTING BERM TO REMAIN

- Proposed Equestrian & Pedestrian Trail
- Project Site
- SDCWA Wetlands-ESP/CSP Project Mitigation (19.00 Ac.)
- SDCWA Wetlands-Mitigation Bank (13.30 Ac.)
- Excess Wetlands Credit (4.16 Ac.)
- Non-Credit Wetlands (8.03 Ac.)
- Non-Wetlands Features (16.21 Ac.)