



San Luis Rey Wetland Restoration/ Mitigation Bank Project

Final Mitigated Negative Declaration

June 2014

Prepared for:
City of Oceanside
Planning Department
300 North Coast Highway
Oceanside, CA 92054

Prepared by:
HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard, Suite 200
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**San Luis Rey Wetland Restoration/Mitigation Bank Project
Final Mitigated Negative Declaration**

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SECTION I

PREFACE

PREFACE

This is a Final Mitigated Negative Declaration (MND), prepared pursuant to the California Environmental Quality Act (CEQA), addressing potential environmental impacts associated with the implementation of the San Luis Rey Wetland Restoration/Mitigation Project in the City of Oceanside. The Draft MND was circulated for a 30-day public review period that concluded on October 28, 2013. Three comment letters and one individual e-mail were received and responses to the comments are provided following this preface in Section II.

This Final MND consists of four sections:

- I. Preface. The preface summarizes the Final MND process and Final MND contents.
- II. Responses to Comments. This section addresses comments on the Draft MND received during the public review period. Each comment letter has been scanned and individual comments bracketed with corresponding responses in a side-by-side format.
- III. Initial Study. This section contains the revised Initial Study based on comments received during the public review period. All edits utilize "strikeout/underline" formatting so the reader can differentiate between original and revised text.
- IV. Mitigation Monitoring and Report Program. This section contains the Mitigation Monitoring and Report Program (MMRP) for the proposed project.

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SECTION II

RESPONSE TO COMMENTS

COMMENTS

RESPONSES



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



October 23, 2013

Mr. Richard Greenbauer, Senior Planner
City of Oceanside
300 N. Coast Highway
Oceanside, California 92054

Subject: Comments on the Draft Negative Declaration for the San Luis Rey Wetland Restoration/ Mitigation Bank Project, City of Oceanside (SCH #2013091081)

Dear Mr. Greenbauer:

The California Department of Fish and Wildlife (Department) has reviewed the Draft Mitigated Negative Declaration (DMND) for the San Luis Rey Wetland Restoration/Mitigation Bank Project, dated September, 2013. The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines Section 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines Section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq.) and Fish and Game Code Section 1600 et seq. The Department also administers the Natural Community Conservation Planning Program (NCCP). The City of Oceanside (City) is a participant in the NCCP through the development of its Multiple Habitat Conservation Program Subarea Plan (SAP).

The proposed project is a restoration of approximately 1,800 linear feet of the San Luis Rey River within the City. The total project site encompasses approximately 150 acres, most of which is existing agricultural fields. On the project site, a long history of agricultural uses has resulted in a significant narrowing of the river corridor and the establishment of non-native invasive plant species in the remaining river channel. The proposed project would excavate over 700,000 cubic yards of fill material from the river channel and restore its original dimensions, making it comparable to the river channel dimensions immediately upstream and down-stream. The excavated fill material would be placed on adjacent remaining agricultural fields. No State or federally-listed threatened or endangered species were detected on-site; however, the least-Bell's vireo (LBV) and California gnatcatcher are present in adjacent habitat areas. Designated federal Critical Habitat for these two species, as well as the arroyo toad and southwestern willow flycatcher, encompass all or a portion of the 56-acre restoration site. This restoration project is being carried out to establish a State and federally authorized mitigation bank.

We offer the following specific comments and recommendations to assist the City in avoiding, minimizing, and adequately mitigating project-related impacts to biological resources, and to ensure that the proposed project is consistent with all applicable requirements of the Department's Mitigation/Conservation Banking Program, and the City's SAP.

1. The Department is supportive of the proposed restoration project and has been actively engaged with the Project Proponent in reviewing the development plan and in creating a

Conserving California's Wildlife Since 1870

A-1 Comment noted. No response required.

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RESPONSES

Mr. Richard Greenbauer, Senior Planner
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- formal mitigation banking agreement. The project will restore a more natural contour to the river and re-establish native wetland habitats in a location that is currently a narrow human-made channel dominated by invasive exotic plant species. It is also anticipated that certain sensitive species may again occupy the site as the restoration proceeds. This project will support the City's SAP by helping it reach its biological conservation goals, will provide mitigation opportunities for development projects needing wetland mitigation in northern San Diego County, and will establish a fully funded long-term management program for the site.
2. Figure 10 of the DMND indicates that a portion of Fill Site #4 is located within the 100-year floodplain. Since this area is currently susceptible to the 100-year flood with associated erosion problems, how will depositing additional soil within the 100-year floodplain not be susceptible to the same problem? This soil will not be compacted but used for on-going agricultural activities. How will the restoration area be protected from significant erosion from Fill Site #4 under high flood conditions? Can the placement of fill material on Fill Site #4 avoid the designated 100-year floodplain?
 3. On page 31 of the Biological Assessment (Appendix C) it states that "...an unnamed tributary located between proposed soil placement sites 4 and 5 represents suitable breeding habitat for the species (i.e., least Bell's vireo). This unnamed tributary is dominated by riparian forest and scrub vegetation." It is unclear from the DMND whether protocol surveys for LBV, or other sensitive species, were conducted on this tributary in the course of the biological assessment of the project site. Please clarify the status of listed or other sensitive species on this tributary drainage.
 4. Placement of fill material during the LBV breeding season on Fill Sites # 4 and #5, which about potential LBV breeding habitat in the river tributary, should be subject to mitigation measures listed as BIO-5 for vegetation clearance. Noise impacts from fill placement adjacent to potential LBV breeding habitat need to be avoided and/or minimized, as these types of impacts can impact LBV breeding success. Preconstruction surveys of this area should precede any placement of fill adjacent to the drainage way.
 5. The unnamed drainage way between Fill Sites #4 and #5 is crossed by an existing dirt road. It appears from the aerial photos in the DMND that this road crossing is supported by one or more culverts. Will this dirt road crossing of the drainage way require modification to support the use of heavy earth-moving equipment to transport fill material? If so, impacts to the drainage way should be assessed and any necessary mitigation described. Also, this potential impact should be included in the Project Proponent's Streambed Alteration Agreement notification to the Department, and any impacts minimized and mitigated.
 6. Page 3 of the Initial Study (IS), paragraph 3. The IS states that a conservation easement will be placed over the Restoration Area after restoration construction is complete. Under the mitigation banking requirements for the project, a conservation easement will be required to be placed over the site before any wetland mitigation credits are released for sale. The bank is formally established when the banking agreement is signed by the bank sponsor and Department (along with other agency signatories), a conservation easement is recorded, and financial assurances for construction and performance of the restoration is provided. All of these actions occur before actual project construction.
 7. The project site currently has a large amount of rip-rap material incorporated into the berms that border the channelized San Luis Rey River. Where will this rip-rap be deposited once it is removed from the restored river channel?

A-1
 cont..

A-2

A-3

A-4

A-5

A-6

A-7

A-2 First, it should be noted that all fill materials being removed from the Restoration Site are non-compacted agricultural soils currently located within the designated FEMA 100-year floodplain. Soil relocated within the 100-year floodplain was minimized to the maximum extent possible with only a small portion of the soils being relocated within the 100-year floodplain. Grading of the Soil Placement Sites was carefully engineered to reduce runoff and erosion. A Conditional Letter of Map Revision (CLOMR) has been completed and submitted. As part of the CLOMR, a sediment transport analysis was conducted to evaluate the potential impact of the proposed project on sediment transport behavior in the project area. For this analysis the sediment transport module was run in HEC-RAS for a moderately large event (10-year) and for the 100-year flood. The results of this analysis suggest that post-project sediment transport conditions are similar to existing conditions and will not lead to excessive erosion and sedimentation, and that predicted amounts of erosion and deposition on site are in line with what would be expected for sand-bed systems under natural conditions.

A-3 Protocol level surveys were not conducted. General wildlife surveys were conducted to note wildlife use and map potential habitat in 2010 and 2011. Habitat assessments for least Bell's vireo (LBV) and southwestern willow flycatcher were also conducted for the project. The Biological Assessment prepared for the project contained in Appendix B identified the tributary as potentially suitable habitat for LBV and southwestern willow flycatcher. It is assumed that due to the presence of suitable breeding habitat adjacent to the project, that these species have the potential to occur in these adjacent suitable habitats.

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- A-4 Grading of the soil placement sites is considered a construction activity and therefore, subject to Mitigation Measure BIO-5, and as such, if grading activities commence adjacent to potential LBV breeding habitat within the LBV breeding window, *“...a pre-construction survey will be conducted no more than three (3) days prior to project initiation to ensure that no impacts to nesting birds occur. Should vireo, flycatcher or gnatcatcher nests or breeding activity be documented within (if vegetation has not been removed) or adjacent to the project site, then appropriate measures will be implemented including, but not be limited to, monitoring during clearing, excavation or planting to ensure that no impacts to the breeding individuals occur, temporary designation of the breeding site as an ESH, and/or delaying/restricting project related activities within a buffer zone (determined by the project biologist in coordination with the Agencies based on location and topography) until nesting and fledging is complete.”*
- A-5 The culverted crossing between sites 4 and 5 has been determined by the engineers working on the project to be adequate to support earth moving equipment. However, steel plates may be placed over the bridge as an additional precaution.
- A-6 This paragraph has been revised to more accurately describe the process. Please refer to page 3 of the Initial Study contained in Section III of this Final MND.
- A-7 Much of the “rip-rap” is native rock that was salvaged from the floodplain during agricultural practices, and used to armor the dikes. The rock will be relocated within the project to provide structural patch richness. Some rock will be placed strategically to prevent the restored channel from re-occupying the formerly straightened alignment. If any non-native material is found within the rip-rap (such as concrete), it will be removed from the restoration site and deposited at a Class II landfill or other disposal location.

COMMENTS

RESPONSES

Mr. Richard Greenbauer, Senior Planner
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October 23, 2013
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- A-8 [8. Pages 24-25 of the DMND, BIO-2 Environmental Awareness Program. This program should also discuss State-listed species, the California Endangered Species Act, and the Streambed Alteration Agreement Program requirements.

If you have questions regarding our comments, please contact David Lawhead of the Department at (858) 627-3997 or David.Lawhead@wildlife.ca.gov.

Sincerely,



Gail K. Sevens
Environmental Program Manager
California Department of Fish and Wildlife

ec: David Lawhead, CDFW-R5
Shanti Santulli, ACOE-Carlsbad
Stephanie Ponce, CDFW-R5

A-8 Mitigation Measure BIO-2 has been revised to include this language. Please refer to page 25 of the Initial Study contained in Section III of this Final MND.

COMMENTS

RESPONSES



San Diego County Archaeological Society, Inc.

Environmental Review Committee

24 October 2013

To: Mr. Richard Greenbauer, Senior Planner
Planning Division
City of Oceanside
300 North Coast Highway
Oceanside, California 92054

Subject: Draft Mitigated Negative Declaration
San Luis Rey River Wetland Restoration/Mitigation Bank
D12-00004

Dear Mr. Greenbauer:

I have reviewed the subject DMND on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the initial study, DMND and Appendix D, we agree with the impact analysis and mitigation measures as proposed.

Thank you for including SDCAS in the public review of this project's environmental documents.

Sincerely,


James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: Affinis
SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

B-1 Thank you for your review and concurrence with the proposed mitigation measures for the Draft Initial Study Mitigated Negative Declaration for the San Luis Rey Wetland Restoration/Mitigation Bank.

COMMENTS

RESPONSES

SAN LUIS REY BAND OF MISSION INDIANS

*1889 Sunset Drive • Vista, California 92081
760-724-8505 • FAX 760-724-2172
www.slrmissionindians.org*

October 28, 2013

Mr. Richard Greenbauer
Senior City Planner
Planning Division
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

**VIA ELECTRONIC MAIL
RGreenbauer@ci.oceanside.ca.us**

**RE: COMMENTS ON THE NOTICE OF INTENT TO ADOPT A MITIGATED
NEGATIVE DECLARATION FOR THE SAN LUIS REY RIVER
WETLAND RESTORATION/MITIGATION BANK (D12-00004)**

Dear Mr. Greenbauer:

We, the San Luis Rey Band of Mission Indians ("Tribe"), have received and reviewed the City of Oceanside's ("City's") Notice of Intent to Adopt a Mitigated Negative Declaration ("MND") and all of its supporting documentation as it pertains specifically to the protection and preservation of cultural resources that may be located within the parameters of the San Luis Rey River Wetland Restoration/Mitigation Bank Project ("Project's") property boundaries. After our review, the Tribe believes that with the incorporation of additional measures of mitigation for cultural resources as proposed in this comment letter, the Project should be allowed to proceed as planned.

As you are aware, we are a San Diego County Tribe whose traditional territory includes the current cities of Oceanside, Carlsbad, Vista, San Marcos and Escondido, as well as the communities of Fallbrook and Bonsall. The Tribe is resolute in the preservation and protection of cultural, archaeological and historical sites within all these jurisdictions.

It is the Tribe's understanding that the Project consists of 64 acres of property in Oceanside that is commonly referred to as the "Singh Property." The property is located along the San Luis Rey River. We further understand that the proposed project would encompass 58 of the 64 acres of wetlands, riparian floodplain, and upland buffer habitat while also providing compensatory mitigation to offset lost aquatic resource functions and services. The Tribe is in favor of this project; however, we are concerned about the possible destruction of cultural resources without additional protective measures being put in place prior to any restoration or rehabilitative actions. Our history is entwined with the topography of the San Luis Rey River and the areas that surround it.

C-1 Comments noted.

COMMENTS

RESPONSES

I. NATIVE AMERICAN MONITORS MUST BE ALLOWED TO FULFILL THEIR RESPONSIBILITIES AS PROTECTORS AND PRESERVATIONISTS OF OUR NATIVE AMERICAN CULTURAL RESOURCES

As stated earlier, the Tribe is in favor of a majority of the proposed Cultural Resource Mitigation Measures as stated within the Project's MND. However, some of the mitigation measures proposed do, in the Tribe's opinion, require some clarification and amendment prior to the approval of a Final MND for this Project.

A. Native American Monitors And Archaeological Monitors Should BOTH Be Treated With Respect For Their Training And Experience And Should Have Joint Authority To Temporarily Divert And/or Halt Construction Activities.

In mitigation measure CUL-4, it states that "the monitor shall have authority to temporarily halt or redirect grading within 100 feet of the find while the cultural resources are documented and assessed." Archaeologists and Native American monitors are trained to perform different analysis of cultural resources. For instance, in the case of determining the significance of isotopes we believe adamantly that any determination as to whether the deposits are "non-significant" should be left to the archaeologist and the Native American monitor and that both should agree on the deposit's insignificance. Both entities should agree due to the fact that each professional weighs the deposits differently based on their training and beliefs. An archaeologist looks at the deposits value for research purposes and its scientific worth. Whereas, a Native American monitor looks at the deposits importance as it relates to its religious significance and cultural relevance. Each opinion is equally important and both should be taken in equal consideration. Hence, it is the Tribe's request that Native American monitors be accorded the same amount of respect for their training and professional opinions in regards to the identification and protection of cultural resources as the archaeologist and that the Luiseño Native American and archaeological monitors be given joint-authority to divert or halt ground disturbing operations when cultural resources are discovered so each may access the nature and significance of such find. Therefore, the language of CUL-4 should be amended to state the following, "the archaeological and Native American monitors both shall have authority to temporarily halt or redirect grading within 100 feet of the find while the cultural resources are documented and assessed by both monitors."

B. The Tribe Must Be Consulted If A Significant Cultural Resource And/or Unique Archaeological Resource Is Discovered During Ground Disturbing Activities.

If a significant cultural resource and/or unique archaeological resource are unearthed during ground disturbing activities for this Project, the Tribe respectfully requests that they be notified and consulted with in regards to the respectful and dignified treatment of those resources. The Tribe's preference will always be for avoidance and that the resource be protected and preserved in perpetuity. If however, a data recovery plan is authorized by the City as the

C-2 The language of Mitigation Measure CUL-4 has been amended as requested. Please refer to page 31 of the Initial Study contained in Section III of this Final MND.

C-3 Mitigation Measure CUL-4 has been amended as follows: *"If significant resources are encountered, the Native American monitor will be notified, and the resources will be handled consistent with CUL-6 and CUL-7 provided below."* Please refer to page 31 of the Initial Study contained in Section III of this Final MND.

COMMENTS

RESPONSES

Lead Agency, the Tribe respectfully requests that as a condition of any authorization, the Tribe be consulted regarding the drafting and finalization of any such recovery.

In addition, when cultural resources are discovered during the Project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may in their discretion, collect said resources and provide them to the Tribe for respectful and dignified treatment in accordance with the Tribe’s cultural and spiritual traditions.

C. Any analysis performed on cultural resources and any report generated from said analysis should be provided to the San Luis Rey Band of Mission Indians

CUL-6 requires that (1) an analysis be performed on any cultural material found and (2) a report shall be prepared detailing the methods and results of the monitoring program. The Tribe does not oppose this mitigation measure, in general; however, if the cultural materials found are determined to be those of ancestral remains and/or associated burial goods, funerary goods or grave goods, no analysis should be required by the City or performed by the contracted archaeologist.

In addition, any and all analysis performed on our cultural resources and any and all reports generated from said analysis should be provided to the San Luis Rey Band of Mission Indians. All reports should also be held in confidentiality by the City.

D. When suspected Native American remains are unearthed, those remains should remain in situ and protected until the Most Likely Descendant can be determined by the Native American Heritage Commission.

Lastly, if Native American remains and/or associated burial goods are unearthed during the Project, and prior to a Most Likely Descendant being determined by the Native American Heritage Commission, it is the Tribe’s request that the ancestral remains be kept *in situ* (in place), or in a secure location in close proximity to their discovery and that a forensic anthropologist perform their analysis of the remains on-site in the presence of a Luiseño Native American monitor. Any transportation of the ancestral remains would be considered by the Tribe as disrespectful and undignified treatment. Therefore, the Tribe requests that in addition to the strict adherence to the protocol stated in the California Health and Safety Code Section 7050.5 and California Public Resource Code Section 5097.98, that CUL-5 be modified accordingly in the Final MND to reflect that if Native American remains are suspected and discovered, the Native American remains shall be kept in situ, or in a secure location in close proximity to where they were found, and that the analysis of the remains occur only on-site in the presence of a Luiseño Native American monitor.

C-4 Mitigation Measure CUL-6 was amended to state: *“If cultural resources are encountered, recovered artifactual materials shall be cataloged and analyzed, and a report shall be completed describing the methods and results of the monitoring and data recovery program. If the resources are determined to be those of ancestral remains and/or associated burial goods, funerary goods or grave goods, the Native American monitor shall be consulted ”* Please refer to page 31 of the Initial Study contained in Section III of this Final MND.

C-5 The Restoration Project involves relocating approximately 600,000 cubic yards of historic fill material that was placed in the river channel and utilized for agricultural purposes for several decades. Any cultural resources or Native American remains which are unearthed during construction of the Restoration Project will have likely originated from another local source. Accordingly, CUL- 5 was amended to also state: *“If any human remains are discovered, construction will be stopped within 100 feet of the find and the County Coroner shall be contacted. If Native American remains are suspected, the remains shall be kept in situ, or in a secure location within close proximity to where they were found, and the analysis of the remains occur only in the presence of a Luiseño Native American monitor. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.”*

COMMENTS

RESPONSES

II. ONLY "CLEAN FILL" SHOULD BE UTILIZED DURING THIS PROJECT

C-6 The Tribe is opposed to any undocumented fill being used during the proposed development. In the event the "fill" will be imported into the Project area, the Tribe requests that any proposed use of fill be clean of cultural resources and documented as such. It has been a practice of many in the construction profession to utilize fill materials that contained cultural resources from other "unknown" areas thereby contaminating the potential cultural landscape of the area being filled. This type of fill material is unacceptable. Moreover, if the fill material is to be utilized from areas within the Project boundaries, then we ask that that fill be analyzed and confirmed by an archeologist and/or Luiseño Native American monitor that such fill material does not contain cultural resources. A requirement that fill material be absent of any and all cultural resources should therefore be included as an additional mitigation measure of the Final MND.

III. CONCLUSION

C-7 The San Luis Rey Band of Mission Indians appreciates this opportunity to provide the City of Oceanside with our comments on the San Luis Rey River Wetland Restoration/Mitigation Bank. The Tribe hopes the City will adopt the mitigation measures for Cultural Resources as herein requested and that they will appear in the Final MND. As always, we look forward to working with the City to guarantee that the requirements of the CEQA are rigorously applied to this Project and all projects. We thank you for your continuing assistance in protecting our invaluable Luiseño cultural resources.

Sincerely,



Merri Lopez-Keifer
Tribal Legal Counsel

cc: Melvin Vernon, Tribal Captain
Carmen Mojado, Secretary of Government Relations and President of Saving Sacred Sites

C-6 No fill is being imported for the project; all material being relocated within the project boundaries will be the subject of monitoring activities during its excavation, pursuant to Mitigation Measures CUL-4, -5, -6, and -7 as amended above.

C-7 Comment noted.

COMMENTS

RESPONSES

From: diane nygaard [mailto:dandd2@peoplepc.com]
Sent: Friday, October 25, 2013 2:44 PM
To: Richard Greenbauer
Subject: Comments on MND D12-00004 SLR River Wetland Restoration/Mitigation Bank

Mr Greenbauer

Please reply to confirm timely receipt of these comments on the MND for the SLR River Wetland Restoration/Mitigation Bank project.

Preserve Calavera recognizes the value of creating a local wetland mitigation bank, and to do so in a way that will benefit a significantly impaired waterbody. Hopefully we will see more projects like this.

The following are a few areas where we think further clarification is needed :

- Wildlife movement

Section 14.d really only discusses a single fish species. Rivers and creeks typically provide opportunities for avian and terrestrial species movement, even when such areas are part of active agricultural use. Also note that section 4.3.1.3 Agricultural Exclusion Zone of the Draft SAP says “ Any discretionary action will require an assessment of wildlife movement and habitat linkages across the property and the project shall be designed to maintain or enhance such movement corridors and habitat linkages.” The completed project certainly will comply but the concern is the interim time period. We recommend adding to BIO -1 that the project biologist will also monitor for potential impacts to wildlife movement and take corrective action if needed. In some cases we have found this an issue. For example, where site security measures included night lighting that was excessive and caused light spillover across a broad movement corridor. Having the monitor consider potential impacts assures that these are considered throughout project construction.

- Designation of bank habitat acres and monitoring system

Mitigation banks identify acres by habitat type so that subsequent debits can be charged against the habitat type. No details of such final credits have been identified- it just says the end acres will include wetland, transitional and upland habitat. Please explain the process that will be used to determine final acre credits from the restoration, whether there will be a formal banking agreement with the WLA's and how future debits against the bank will be managed.

D-1 Mitigation Measure BIO-1 was revised as requested. Please refer to page 24 of the Initial Study contained in Section III of this Final MND.

D-2 The applicant is currently in the process of establishing a formal mitigation bank through the Interagency Review Team (IRT), chaired by the U.S. Army Corps of Engineers (USACE). The City is not a responsible agency with regard to the mitigation bank establishment. The Interagency Review Team (IRT) will provide regulatory review, approval, and oversight of the bank. The details regarding the final credits and management will be a part of the bank instrument - the formal agreement between the bank owners and regulators establishing liability, performance standards, management and monitoring requirements, and the terms of bank credit approval. The bank instrument will identify the number of credits available for sale and will require the use of ecological assessment techniques to certify that those credits provide the required ecological functions.

COMMENTS

RESPONSES

D-3

- What is "predetermined service area"

The MND says the bank will be used to mitigate for impacts in the "predetermined service area" but has not said what the boundaries of this service area are.

Thank you for considering these comments.

Diane Nygaard
On behalf of Preserve Calavera

D-3 The Service Area is the geographic area in which permitted impacts can be compensated for at the particular mitigation bank. As stated above, the City is not a responsible agency with regard to the mitigation bank establishment or the determination of the Service Area. The IRT provides regulatory review, approval, and oversight of the bank, and this area is determined during the IRT bank process. However, a map of the current Draft of the Service Area is included with this response for informational purposes (see Attachment A following this comment).

COMMENTS

RESPONSES

Attachment A



WILDLANDS
 San Luis Rey Mitigation Bank



DRAFT - Service Area for Waters of the U.S. Impacts

WILDLANDS
 San Luis Rey Mitigation Bank



DRAFT - Service Area for Waters of the State Impacts

SECTION III

INITIAL STUDY



INITIAL STUDY City of Oceanside California

1. **PROJECT:** San Luis Rey Mitigation Bank (Project)
2. **LEAD AGENCY:** City of Oceanside (City)
3. **CONTACT PERSON & PHONE:** Richard Greenbauer, 760-435-3519
4. **PROJECT LOCATION:** Approximately 150 acres, a portion of which is commonly referred to as the "Singh Property" on the north side of Highway 76/Mission Avenue, south of North River Road, and northeast of Mission Vista High School along San Luis Rey River, in the eastern portion of the City of Oceanside (Project Area; see Figure 1, *Regional Location Map*, and Figure 2, *Aerial Site Plan with City of Oceanside General Plan Land Use Designations*). As shown in Figure 2, the Project Area includes the Restoration Area (approximately 56 acres) and several Soil Placement Sites (approximately 93 acres), for a total project area of approximately 150 acres.
5. **APPLICANT:** Wildlands SLR Holdings I, LLC (Wildlands)
6. **GENERAL PLAN DESIGNATION:** Agriculture (A) north of river; Residential Estate B (EB-R) on remainder of site (see Figure 2)
7. **ZONING:** Agriculture (A) north of river; Agriculture-Equestrian Overlay (A-EQ) on remainder of site
8. **PROJECT DESCRIPTION:** The proposed Project involves the restoration of a riparian river corridor and floodplain along a portion of the San Luis Rey River. The Restoration Area is currently utilized for agriculture and was converted to this use by channelizing and confining the river within farm berms, and the placement of fill within the river's historic corridor and floodplain to create farm fields. Despite the farm berms and the fill, the Restoration Area remains within the 100-year floodplain and is subject to periodic flooding. Implementation of the Project would require the removal of the fill, and its relocation to adjacent farm fields and agricultural areas. The Restoration Area within the floodplain would be permanently protected with a conservation easement or other restriction which would prohibit future development activities (see Figure 3, *Preliminary Concept Plan*, and Figure 4, *Schematic Cross Section*). The Project is intended to provide a designated area for compensatory mitigation that may be required by federal, state, and local agencies as compensation for unavoidable impacts to wetlands as a result of other actions approved by such agencies. Due to its location within the San Luis Rey River floodplain and the implementation of successful riparian restoration projects located immediately up and down stream, the Restoration Area has a high potential for success. Therefore, the property has been identified by several state and federal agencies as a high priority restoration site.

Project Goals

The following goals have been identified for the proposed Project:

1. Restore self-sustaining fluvial processes onsite.
2. Improve the existing riparian habitat and restore a riparian floodplain thereby improving habitat values. Restoration of the floodplain could potentially provide habitat for state and federally listed species including arroyo toad, least Bell's vireo, and southwestern willow flycatcher.
3. Improve the channel design to accommodate current and future flood flows.
4. Realign the San Luis Rey River through the site.
5. Grade the site to remove the berms along both sides of the river and remove approximately 684,000 to 730,000 cubic yards of historic fill from the floodplain. The historic fill would be relocated to adjacent fields and agricultural areas to facilitate ongoing agricultural uses.

6. Abandon several agricultural wells located within the floodplain. The associated utility corridors to these wells and any other unnecessary utility corridors also would be abandoned or relocated.
7. Permanently protect the site as a conservation area through recordation of a conservation easement or other restrictive covenant approved by the respective approving agencies on the property.

Project Characteristics

Restoration of the river corridor and floodplain would require the excavation and relocation of approximately 684,000 – 730,000 cubic yards of historic fill currently present within the farm field floodplain (the Restoration Area) to other fields and agricultural property within the Project Area. Overall, the Project cut and fill is balanced on site. Farming activities have added soil amendments and fertilizer to this fill material to improve the growing conditions for various crops.

Along with relocation of the historic fill, rehabilitation of the river corridor would require the removal of riprap and invasive species such as the non-native invasive giant reed (*Arundo donax*). Several groundwater wells used for agricultural purposes and a water/fertilizer mixing station located in the floodplain would also be decommissioned as a result of the Project.

The farm fields to which the historic fill materials would be relocated have been identified as “Soil Placement Sites” as shown on Figure 5, *USGS Topographic Map and Potential Soil Placement Sites*. These sites were identified to ensure analysis of all potential locations for the purpose of environmental analysis in this Initial Study (IS), and associated technical appendices. Information on parcel acreage and approximate amount of farm soils which would be relocated from the proposed Restoration Area and to each Soil Placement Site is shown in Table 8-1, *Summary of Project Area Parcels and Proposed Grading Quantities - Restoration Area and Soil Placement Sites*. Soil would be placed in a manner that would result in an overall reduction in erosion and runoff below current conditions in compliance with City and San Diego Regional Water Quality Control Board (RWQCB) requirements.

Description	Action	Parcel Identification	Property Owner	Estimated Grading Quantities (CY)	General Plan Designation (No Changes)	Zoning (No Changes)
Restoration Area						
	Removal	122-130-33; -35; -37; -39; -41	Wildlands	684,000 – 730,000	A, EB-R	A-EQ
Soil Placement Sites*						
1	Placement	157-150-63	SPMC	52,000	EB-R	A-EQ
2	Placement	157-150-63	SPMC	53,000	EB-R	A-EQ
4	Placement	122-130-31	SPMC	295,000	A, EB-R	A
5	Placement	122-130-31	SPMC	80,000	A	A
7	Placement	122-130-32; -34	SPMC	233,000	A	A
<i>Subtotals</i>				684,000 – 730,000		

Source: *Wildlands 2012*

* Soil Placement Sites 3 and 6 were originally considered by the project but have been removed from the Project description, as they are no longer under consideration.

Wildlands = Wildlands SLR Holdings I, LLC

SPMC = Singh Property Management Company

APN = Assessor's Parcel Number

CY = cubic yards

General Plan Designations: A = Agricultural, EB-R = Estate B Residential

Zoning Designations: A = Agricultural, -EQ = Equestrian Overlay

The removal of fill material and subsequent grading of the Restoration Area would allow for the reintroduction of self-sustaining river processes and would result in the re-establishment of wetland riparian habitat within the river floodplain. Restoration would modify the current channelized, straightened, and confined river, and restore it to a wider, shallower, sinuous and braided corridor. The existing channel has a trapezoidal form with an artificially low width:depth ratio. The channel would be relocated with a width:depth ratio that is appropriate to its setting and location in the watershed. The rehabilitated channel would be allowed to migrate within the restored floodplain area, as is typical for sand-bed braided channels in this portion of the San Luis Rey River area. This would support a wide range of aquatic and riparian processes that do not occur under existing farming conditions. For example, channel shifts between the main channel and the side channels would periodically deposit fresh sediment on channel bars and floodplain areas, creating patches for mulefat, willows and other riparian species to colonize. At the same time, floods and localized scour would disturb and remove older patches of riparian vegetation. The combined effect of these processes would be a riparian corridor with a more diverse complex of different ages and types of vegetation, with more ecological niches than the existing farm fields.

Restoration design would include connections to existing drainages located in the southern and northern portions of the Project Area. Large woody debris or boulders may be considered for placement in the restoration landscape if the hydrologic analysis indicates the structures would direct flows to off-channel locations, provide complexity, and encourage river migration within the floodplain.

Upon completion of earthmoving activities the Restoration Area would be planted with a combination of native species cuttings, nursery grown plants and seed. Irrigation may be required during the plant establishment period; however, irrigation would not be required after plant establishment. A conservation easement or other restrictive covenant approved by the respective approving agencies would be recorded on the site ~~upon approval of the mitigation bank after construction~~, and no development of the Restoration Area would be allowed in the future.

It is anticipated that construction of the Project would occur in one phase beginning in 2013 or 2014, depending on timing of Project approvals and receipt of permits. Initial earthmoving activities would include excavating soils from the Restoration Area starting as early as December 1. Modification of the existing channel would include removal of riprap and invasive species; this work would occur during the dry season (between April 15 and October 15). Planting and seeding would begin at the end of construction and would likely occur between November 15 and March 15 to take advantage of the winter rains. Construction activities would be conducted using heavy equipment which may include tractors, scrapers, bulldozers, skiploaders, backhoes, excavators, and water trucks. The Restoration Area would continue to be farmed in the interim period prior to Project construction; however, farming activities within the Restoration Area would cease shortly before implementation of construction. The relocation of fill on the Soil Placement Sites would be sequenced in such a way as to limit the down time of each individual Soil Placement Site. After placement of the soils, agricultural activities may resume outside the Restoration Area, while the Restoration Area would be protected in perpetuity by a conservation easement or other or other restrictive covenant approved by the respective approving agencies.

Site access would continue to be provided from existing unimproved dirt roads off of North River Road, and via existing improved driveways off of Highway 76 and Singh Way, at the Singh Property Management Company tomato processing plant located on the adjacent property to the south.

9. SURROUNDING LAND USE(S) & PROJECT SETTING:

A. Surrounding Land Uses

The site is located in a predominantly agricultural and open space/conservation area; however, residential, institutional, and commercial properties are located within a mile of the site. Nearby land uses include:

- North: North River Road and tomato fields
- South: Singh Property Management Company agricultural processing plant, parking lots and State Route 76/San Luis Rey Mission Expressway
- East: Existing Restoration Site and San Luis Rey River
- West: Mission Vista High School, existing Restoration Area, and San Luis Rey River

A farming equipment storage yard is located offsite near the southwestern corner of the Restoration Area. Several completed restoration projects are located along San Luis Rey River floodplain immediately upstream and downstream of the site and another restoration project is located southeast of the site (Figure 6, *Nearby Restoration Projects*). Nearby publicly-owned and restoration/habitat lands are shown in Figure 7, *Conserved and Public Properties*.

B. Project Setting

The Project Area consists of the proposed Restoration Area, plus the adjacent farm field and agricultural area Soil Placement Sites. The Restoration Area is relatively flat, bisected into a northern and southern area by the crossing of the San Luis Rey River. Topographically, the Project Area slopes from east to west. Site elevations range from a high of approximately 150 feet mean sea level (MSL) in the farm field Soil Placement Sites to a low elevation of 110 feet MSL in the Restoration Area and 98 feet MSL in the river channel (see Figure 5). Both the northern and southern areas of the Project Area slope slightly toward the river. Surface drainage also flows toward the river from both the north and south.

The Project Area is currently being farmed or is used to support the farming operations and historically has been used for agricultural purposes, with the most recent crop type being vine-ripened tomatoes. The Project Area is primarily characterized as active cultivated agricultural lands both north and south of the San Luis Rey River. The tomato fields are irrigated by a network of water wells, underground water pipes and powered pumps that are located inside and outside the Project Area. Four groundwater wells (Wells 1- 4) used for agricultural purposes are located within the Restoration Area and would be decommissioned as a part of the restoration project. Agricultural ditches are found within and along the edges of the agricultural fields. These ditches drain to the river from areas within and outside the Project Area. Existing unimproved roads provide access to the northern portion of the site off of North River Road. The southern portion of the site is accessed via the recently constructed Singh Way and its signalized intersection at Highway 76. The existing Singh Property Management Company driveway is located within Soil Placement Site 1; after soil has been placed here, the driveway would be rebuilt in the same location, but elevated between three and five feet above its current elevation. An existing privately-owned and culverted crossing of the river is located immediately downstream of the Restoration Area providing north-south access across the river for farming activities and would not be altered with this Project.

The entire approximately 1,800-foot reach of the San Luis Rey River bisecting the Restoration Area has been channelized. The channelized riverbanks were constructed using fill reinforced with boulders and riprap size rocks. The river bottom is freshwater marsh habitat, which is dominated by bulrush (*Scirpus* sp.) and cattail (*Typha* sp.). Flowing surface water is present in places. The banks of the armored channel are dominated by the invasive giant reed (*Arundo donax*). Figure 8, *Vegetation Communities*, Figure 9, *Wetland Delineation*, and Figure 10, *100-Year Floodplain*, show the existing biological and floodplain characteristics of the site.

10. OTHER REQUIRED AGENCY APPROVALS:

A. Federal, State, and Local Approvals:

- Clean Water Act (CWA) Section 401 Water Quality Certification – Regional Water Quality Control Board (RWQCB)
- CWA Section 402 Notice of Intent (NOI) for Coverage under a National Pollutant Discharge Elimination System (NPDES) Statewide Construction General Permit – State Water Resources Control Board (SWRCB)
- CWA Section 404 Nationwide Permit (includes Endangered Species Act consultation and National Historic Preservation Act consultation) – U.S. Army Corps of Engineers (ACOE)
- Conditional Letter of Map Revision and Letter of Map Revision (CLOMR and LOMR) – Federal Emergency Management Agency (FEMA)
- Development Plan Approval (includes grading plan, landscape/restoration plan, and storm water mitigation plan) – City
- Streambed Alteration Agreement – California Department of Fish and Wildlife (CDFW)

11. PREVIOUS ENVIRONMENTAL DOCUMENTATION:

N/A

12. CONSULTATION:

A. Federal, State, and Other Local Agencies:

- ACOE
- CDFW
- FEMA
- NMFS
- Native American Heritage Commission (NAHC)
- RWQCB
- SHPO
- SWRCB
- USFWS

13. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The Project would not affect any environmental factors resulting in a Potentially Significant Impact. A summary of the environmental factors potentially affected by this Project, which have been mitigated to levels of less than significant, include:

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geological |
| <input checked="" type="checkbox"/> Hazards | <input type="checkbox"/> Water | <input type="checkbox"/> Land Use & Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Utilities Systems | | |

14. ENVIRONMENTAL CHECKLIST

This section analyzes the potential environmental impacts which may result from the proposed Project. For the evaluation of potential impacts, the questions in the Initial Study Checklist (Section 2) are stated and answers are provided according to the analysis undertaken as part of the Initial Study. The analysis considers the Project’s short-term impacts (construction-related), and its operational or day-to-day impacts. For each question, there are four possible responses. They include:

1. No Impact. Future development arising from the Project’s implementation will not have any measurable environmental impact on the environment and no additional analysis is required.
2. Less Than Significant Impact. The development associated with Project implementation will have the potential to impact the environment; these impacts, however, will be less than the levels or thresholds that are considered significant and no additional analysis is required.
3. Potentially Significant Unless Mitigated. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the Project’s physical or operational characteristics can reduce these impacts to levels that are less than significant.
4. Potentially Significant Impact. Future implementation will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
14.1 AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Have a substantial adverse effect on a scenic vista?* **Less Than Significant Impact**. The Project Area, and extent of the San Luis Rey River within City boundaries, is designated as “Visual Open Space” by the Environmental Resource Management Element of the City’s General Plan. The Project proposes the restoration of the floodplain wherein the Restoration Area would be revegetated with native habitat and returned to historic floodplain contours. In the long term, this transition from the current agricultural uses would benefit the San Luis Rey River corridor, and would be consistent with the Visual Open Space designation in the General Plan. Implementation of the Project may result in temporary visual effects during construction, consisting primarily of the presence of construction equipment, additional signage, and warning markers on roadways, which would cease upon Project completion. Therefore, a less than significant impact is anticipated to occur.

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* **No Impact.** No scenic resources, including trees, rock outcroppings or historic buildings are situated onsite. The site is not located along a State-designated scenic highway. The State Scenic Highway Mapping System identifies SR 76, which runs just south of the Project Area, as an “Eligible State Scenic Highway – Not Designated” (Caltrans 2012). The Project does not propose any actions that would damage scenic resources along SR 76 should it be designated as scenic in the future. No impact is anticipated to occur.
- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?* **Less Than Significant Impact.** Project implementation would result in a temporary change of appearance within the Project Area during the construction period, during which construction equipment, signage, vehicles, and soil movement would be visible to nearby residents and persons traveling along area roadways. Upon completion of construction, however, the transition to a restored wetland habitat is anticipated to have a beneficial effect to the visual character and quality of the site. A less than significant impact is anticipated to occur.
- d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* **Less Than Significant Impact.** The Project does not propose the use of any lighting or reflective materials that could result in adverse effects to day or nighttime views in the area. Implementation of the Project may result in temporary sources of light and/or glare during construction, consisting primarily of the presence of construction equipment, additional signage, and warning markers on roadways. If temporary lighting is used, it would be used consistent with the Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation Plan (“SAP”), requiring night lighting to be of the lowest illumination necessary for human safety, selectively placed, shielded, and directed away from natural habitats. These sources would be removed upon Project completion. Therefore, a less than significant impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
14.2 AGRICULTURAL RESOURCES. Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA. Resources Agency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the*

*California Resources Agency, to non-agricultural use? **Less Than Significant Impact.*** No Williamson Act contracts apply to the Project Area – the previous Williamson Act contract expired on December 31, 2003. The State Department of Conservation's Farmland Mapping and Monitoring Program maps identify both "Unique Farmland" and "Farmland of Statewide Importance" within the Project Area (State 2008). The majority of the Project Area would continue to be utilized for agricultural purposes with the exception of the 56-acre Restoration Area. The Restoration Area is currently in active agricultural use, primarily for the production of vine-ripened tomatoes. However, the Restoration Area is located within the 100-year floodplain of the San Luis Rey River, which has been channelized and artificially filled to accommodate agricultural activities since the 1940s (ESA 2011). The channelized portion of the San Luis Rey River has not been engineered, and the field in the Restoration Area frequently floods and washes out, requiring re-grading/rebuilding. The proposed Project would restore this field to its historical function of a sustainable riparian floodplain, and the relocation of the excavated soil to the adjacent Soil Placement Sites to the benefit of the agricultural uses there. Because the majority of the Project Area would remain in agriculture and the soils removed from the Restoration Area would benefit adjacent agricultural uses, a less than significant impact to farmland is anticipated to occur.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract? **Less Than Significant Impact.*** No Williamson Act contracts apply to the Project Area – the previous Williamson Act contract expired on December 31, 2003. The site is zoned as "Agricultural" (A) and "Agriculture with Equestrian Overlay" (A-EQ) by the City Zoning Code. According to the City's zoning code, one of the specific purposes of the "A" district is to "provide a suitable classification for large-scale agricultural and mining operations and related open space uses" (City 1992, as amended). The proposed Project, resulting in open space restoration, would be consistent with this purpose. Soil would be transferred from the Restoration Area to the Soil Placement Sites. Therefore, a less than significant impact is anticipated to occur.
- c) *Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production? **No Impact.*** The Project Area consists of lands in current agricultural use, and with a channelized section of the San Luis Rey River. There are no designated forest lands or timberlands within the Project vicinity. Therefore, no impact is anticipated to occur.
- d) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? **No Impact.*** As previously stated, and as illustrated on Figure 2, the Project proposes the restoration of 56 acres of the San Luis Rey River floodplain to its historical extent, and would relocate fill material into the surrounding properties to support continued agricultural activities. The Project does not propose any uses which would preclude continued use of agricultural lands for agricultural purposes beyond the Restoration Area itself. Thus, implementation of the Project would not result other changes to the environment which could result in conversion of farmland to non-agricultural use. Therefore, no impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
14.3 AIR QUALITY. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate an air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under the applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Conflict with or obstruct implementation of the applicable air quality plan?* **No Impact.** The San Diego Air Pollution Control District (SDAPCD) is required, pursuant to the federal Clean Air Act (CAA), to reduce emissions of criteria pollutants for which the San Diego Air Basin (SDAB) is in nonattainment. Strategies to achieve these emissions reductions are developed in the Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP), prepared by the SDAPCD for the region. Both the RAQS and SIP are based on SANDAG population growth projections, as well as land use designations and employment projections included in general plans for those communities located within the County of San Diego, including the City of Oceanside.

A project would be inconsistent with the RAQS/SIP if it results in population and/or employment growth that exceed growth estimates for the area. The only emissions associated with the proposed Project would be associated with construction of the Project. General estimated basin-wide construction-related emissions are included in the SDAPCD emission inventory (which, in part, forms the basis for the air quality plans cited above) and are not expected to prevent attainment or maintenance of the ozone and particulate matter standards within the SDAB. Construction impacts related to air quality plans for these pollutants from the proposed Project are presently estimated and accounted for in the emission inventory. Therefore, no impact is anticipated to occur.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?* **Potentially Significant Unless Mitigated.** In general, air quality impacts are the result of emissions from operation of motor vehicles and short-term construction activities. Upon completion of Project construction activity, no operational activity associated with the proposed Project is expected to occur. As such, potential impacts are limited to short-term emissions associated with construction activities. An Air Quality/Greenhouse Gas Technical Study prepared for the Project analyzed potential construction-related emissions (HELIX 2012a) and is included in Appendix A. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources. The proposed Project is subject to SDAPCD Rule 55 – Fugitive Dust Control. This requires that the Project take steps to restrict visible emissions of fugitive dust beyond the property line. Visible emissions are defined by the SDAPCD as the dust emissions (or any contaminants) for periods aggregating more than three minutes in any period of 60 consecutive minutes which is darker in shade than that designated as

Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines. Compliance with Rule 55 would limit any fugitive dust (PM₁₀ and PM_{2.5}) that may be generated during scraping and earthmoving activities. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55 percent reduction of particulate matter. In addition to on-site watering features, other construction best management practices outlined below would be implemented as part of the project design. Emission estimates have been prepared for the Project's construction work in order to evaluate the Project's emissions. Emission estimates were based on emission factors from the CARB's OFFROAD Model and equipment ratings and load factors provided by the Project applicant.

Off-Road Equipment

The Project applicant provided a list of construction equipment estimated for the proposed Project, which is listed in Table 14-1 below. The list included the equipment operating specifications, such as the equipment model, horsepower, level of air pollution reduction technology installed, load factor, engine manufacturing year, and estimated number of hours that the equipment would be in use during construction. Based on the information from the list, proposed uses of scrapers (tractor scrapers) would include loading, hauling, dumping, and spreading of loose soil materials. The haul distance (zone of operation), the load volume, and the type and grade of surface traveled on are the primary factors in determining the amount of soil material handling and corresponding generations of fugitive dust emissions. The equipment mix is meant to represent a reasonably conservative estimate of construction activity.

**Table 14-1
ESTIMATED CONSTRUCTION EQUIPMENT**

Year	Model	Description	Air Pollution- Reduction Technology Tier	Horse- power	Hours to Complete Project	Load Factor	Engine Year
2009	Cat 965B	Tractor	3	0	1,200	2	2009
2008	Ktec 1231	36 CY Pull Scraper	-	-	1,200	-	-
2008	Cat 965B	Tractor	3	500	1,200	0.72	2008
2007	Ktec 1231	36 CY Pull Scraper	-	-	1,200	-	-
2008	Case STX 485	Rubber-tired Tractor	3	485	1,200	0.72	2008
2007	Ktec 1231	36 CY Pull Scraper	-	-	1,200	-	-
2009	Cat 965B	Tractor	3	500	1,200	0.72	2009
2008	Ktec 1231	36 CY Pull Scraper	-	-	1,200	-	-
2007	Cat 965B	Tractor	3	500	1,200	0.72	2007
2007	Ktec 1231	36 CY Pull Scraper	-	-	1,200	-	-
2008	Cat D6T	Dozer	3	200	1,200	0.64	2008
2008	Cat D8T	Dozer	3	310	1,200	0.64	2008
2007	Peterbilt	Water Truck	3	300	1,200	0.50	2006
2007	CAT	Compactor	3	240	600	0.64	2007
2008	Cat 321 DL	Excavator	3	148	1,000	0.57	2008

Source: HELIX 2012a

Fugitive Dust Emissions

Construction activities are a source of fugitive dust (also known as PM₁₀ and PM_{2.5}) emissions that may have a substantial temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working within the Project vicinity. Fugitive dust emissions are associated with land clearing, scraping, cut and fill operations, and off-road equipment travel on unpaved surfaces. Additionally, fugitive dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions.

Fugitive dust from grading and construction is generally expected to be short-term and would cease upon Project completion. Fugitive dust material is most often comprised of inert silicates, rather than complex organic particulates released from combustion sources, which are the most harmful to health. Dust which is larger than 10 microns generated by such activities usually becomes a local nuisance rather than a serious health problem. However, a serious health concern is the amount of PM₁₀ generated as a result of fugitive dust emissions. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM₁₀ and PM_{2.5} emissions from construction activities (HELIX 2012a). A Mitigation Monitoring and Reporting Program (MMRP) has been prepared and is included in Section IV, Appendix B.

Construction Best Management Practice

The proposed Project is subject to SDAPCD Rule 55 – Fugitive Dust Control. This requires that the Project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit any fugitive dust (PM₁₀ and PM_{2.5}) that may be generated during earthmoving activities. To account for dust control measures in the calculations, it was assumed that the active roads and farm placement locations would be watered at least two times daily, resulting in an approximately 55 percent reduction of particulate matter. In addition to onsite watering features, other construction best management practices outlined below would be implemented as part of the Project design.

1. Prior to grading, the following measures shall be included in the notes on the grading plan and implemented during construction, to the satisfaction of the City Engineer.
 - a. Adhere to best management practices, which shall include the application of water on disturbed soils and replanting disturbed areas as soon as practical.
 - b. During construction activities, construction equipment shall be properly maintained to ensure proper timing and tuning of engines.
 - c. The contractor shall adhere to all San Diego Air Pollution Control District (SDAPCD) Rules and Regulations.
 - d. If feasible, the contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board.
2. Construction vehicles shall drive 20 mph or less on unpaved surfaces within the Project Area.
3. Wheels and undercarriages of haul trucks shall be cleaned prior to entering public roadways. If necessary, access to all public streets from which site access is taken shall be swept on a daily basis to prevent dirt from being carried from the site. The goal is to keep vehicles from pulverizing dirt into fine particles.
4. Dirt trackout control devices shall be installed and maintained where paved and unpaved travel routes intersect at public streets.

5. Signage shall be placed in visible areas on the Project Area with a name and telephone number to call for complaints related to fugitive dust. The calls shall be responded to in a timely manner.
6. A dust control plan shall be prepared for the Project and submitted to the City of Oceanside prior to earthwork activity.
7. Construction equipment shall meet California Air Resources Board—certified off road vehicle requirements.

Construction Equipment Exhaust Emissions

Construction emissions were calculated using information provided by the Project applicant and calculation formulas published by the SCAQMD and CARB. Diesel truck and worker vehicle emission rates were obtained from the CARB's EMFAC2007 emission factor model. Equipment emission factors were obtained from the CARB's OFFROAD2007 model. The emission calculations were estimated based on the equipment operating onsite for ten hours on a peak day (worst case scenario). The analysis used in this document is consistent with CARB guidance and emission calculation methodology. The emissions presented in Table 14-2 are the maximum daily emissions for the duration of the construction calendar year.

Table 14-2 ESTIMATED CONSTRUCTION EQUIPMENT EXHAUST CRITERIA POLLUTANT EMISSIONS						
Maximum Daily Construction	Criteria Pollutant Emissions (pounds/day)					
	CO	ROG	NO_x	SO_x	PM₁₀	PM_{2.5}
Equipment Exhaust	65.81	18.50	188.45	0.22	7.13	6.55

Source: HELIX 2012a

Fugitive Dust Emissions

A typical production cycle for a scraper consists of six operations, (1) loading, (2) haul traveling, (3) dumping and spreading, (4) turning at the dump site, (5) return travel, and (6) turning and positioning to load. A scraper is better than a dozer because of its travel-speed advantage and it is better than a truck because of its fast load time, typically less than one minute. Another advantage of the scraper is that it can spread its own load and quickly complete the dump cycle. Similar to other grading equipment, scraper activities can generate a large quantity of fugitive dust emissions.

Particulate emission rates for the scraper materials handling (loading and unloading) activity and fugitive dust from equipment traveling on unpaved surface were obtained from the SCAQMD's 1993 *CEQA Air Quality Handbook*. The emission rates for material handling depend on the amount of materials being handled (in tons), the moisture content of the materials (in percent) and the mean wind speed (in mph). For this Project, it was assumed that excavated dirt has a moisture content of 15 percent and the average wind speed would be assumed to be less than 12 mph. The water content of soil usually is expressed as the percentage of the dry weight of the soil volume. The soil on the river bank is usually more saturated than the soil in the desert. With 15 percent relative saturation at the low end of moisture content value range for the soil moisture content in riverbed, the assumed value of 15 percent was selected for the proposed Project site. The soil haul route distances were estimated based off of information provided by the Project applicant, which indicates that the average distance (point A to B) from the center of area from which soil would be hauled (point A) to the center of the area to which soil would be hauled (point B), ranges from 0.25 to

0.5 miles, resulting in a round-trip distance of 0.50 to one mile. A round-trip distance of 0.75 mile was assumed for Project analysis (HELIX 2012a).

Emission rates for fugitive dust resulting from construction equipment and vehicle travel on unpaved surfaces were obtained from the SCAQMD's 1993 *CEQA Air Quality Handbook*. The emission rates from a vehicle depend on the rainfall conditions of the Project area, the number of wheels the vehicle has, the vehicle's weight, its speed of travel, and the silt loading of the road. For this Project, average SDAB rainfall conditions (34 days per year) were assumed, as well as a maximum allowable vehicle speed of 20 mph and a silt loading of 8.5 percent. It is important to note that controlling the speed of the scraper would play an important role in reducing the fugitive dust emissions. Detailed emission calculations for fugitive dust emissions from equipment travel over unpaved surfaces are provided in the Air Quality/Greenhouse Gas Technical Study (HELIX 2012a).

The emission factors used are based on standard emission factors widely used in impact assessments throughout the United States and accepted by the USEPA, CARB, and the SCAQMD. The emission factors are from a variety of sources including manufacturers' specifications (Note: Contractors usually lease heavy duty equipment from the manufacturers or their manufacturers licensed dealers. Under State of California law, all off-road equipment are required to comply with the state emission control regulations and be labeled with CARB's Equipment Identification Numbers (EINs). Also, as part of the lease agreement with the equipment dealers, the off-road equipment will be tuned to the required engine specifications), regulatory emission limits, and the most common being the USEPA Publication AP-42. This publication is continually updated and revised by the USEPA to yield the most accurate emission factors feasible, and is used by regulatory agencies in the U.S. to estimate emissions from proposed and existing sources. AP-42 defines an emission factor as "a representative value (emphasis in the original EPA AP-42 *Air Pollutant Emission Factor* document) that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of the pollutant."

Establishing an emission factor for a source type is only one part of the ambient air quality impact analysis. Additional assumptions are made, including assuming that the equipment operates at maximum capacity to help ensure that the assessment represents the maximum impact. The maximum capacity assumption is coupled with the worst-case meteorological period. Finally, the maximum impact point anywhere beyond the facility boundary is assessed which is typically found at the property or fence line. This combination of maximum load, worst-case meteorology, and maximum impact point yields an extremely conservative (i.e., over-estimate) of the fugitive dust impact from the scraper activities. Accordingly, even if the actual emission factor for an emitting device varies from the published value, such variability would not change the overall conclusions of the assessment.

The emissions from material handling activities and fugitive dust emissions from vehicles traveling on unpaved surfaces are presented in Table 14-3.

Emission Source	Maximum Daily		Annual Average	
	PM₁₀ Emissions (lbs/day)	PM_{2.5} Emissions (lbs/day)	PM₁₀ Emissions (tons/year)	PM_{2.5} Emissions (tons/year)
Material Handling	1.70	1.70	0.10	0.10
Fugitive Dust (Unpaved Surface)	200.78	25.30	12.05	1.52

Source: HELIX 2012a

Construction Worker Vehicular Emissions

In addition to emissions from construction equipment, construction worker personal vehicles would also emit pollutants. The predicted 3,900 worker-days would result in 3,900 round trips to/from the construction site, or 7,800 one-way trips to the construction site. Given the Project Area's location in Northern Coastal San Diego County from which construction workers would likely commute, it is conservatively assumed that the average one-way construction worker commute to the construction site would have a distance of 40 miles. Therefore, the conservative estimate for the total number of construction worker vehicle-miles driven under the proposed Project is 312,000; the maximum daily number of miles driven would be 2,240. The maximum daily construction worker vehicle trip criteria pollutant emissions are provided in Table 14-4 below.

Table 14-4 CONSTRUCTION WORKER VEHICLE TRIP ESTIMATED CRITERIA POLLUTANT EMISSIONS (Maximum Daily)						
Vehicle Miles	CO Emissions (lbs/day)	ROG Emissions (lbs/day)	NO_x Emissions (lbs/day)	SO_x Emissions (lbs/day)	PM₁₀ Emissions (lbs/day)	PM_{2.5} Emissions (lbs/day)
2,240	15.89	1.67	1.59	0.02	0.20	0.13

Source: HELIX 2012a

Total Estimated Construction Emissions

Tables 14-5 and 14-6 summarize the total estimated construction emissions.

Table 14-5 CRITERIA POLLUTANT CONSTRUCTION EMISSION SUMMARY (Maximum Daily)						
Emissions Source	CO Emissions (lbs/day)	ROG Emissions (lbs/day)	NO_x Emissions (lbs/day)	SO_x Emissions (lbs/day)	PM₁₀ Emissions (lbs/day)	PM_{2.5} Emissions (lbs/day)
Construction Equipment	65.81	18.50	188.45	0.22	7.13	6.55
Worker Vehicles	15.89	1.67	1.59	0.02	0.20	0.13
Material Handling	-	-	-	-	1.70	1.70
Fugitive Dust	-	-	-	-	200.78	25.30
TOTAL	81.7	20.17	190.04	0.24	209.81	33.68
Significance Threshold	550	75	250	250	100	55
Significant Impact?	No	No	No	No	Yes	No

Source: HELIX 2012a

Table 14-6 CRITERIA POLLUTANT CONSTRUCTION EMISSION SUMMARY (Annual Average)						
Emissions Source	CO Emissions (tons/yr)	ROG Emissions (tons/yr)	NO_x Emissions (tons/yr)	SO_x Emissions (tons/yr)	PM₁₀ Emissions (tons/yr)	PM_{2.5} Emissions (tons/yr)
Construction Equipment	3.75	2.15	10.74	0.00	0.41	0.36
Worker Vehicles	1.10	0.12	0.11	0.00	0.01	0.01
Material Handling	-	-	-	-	0.10	0.10
Fugitive Dust	-	-	-	-	12.05	1.52
TOTAL	4.85	2.27	10.85	0.00	12.57	1.99
Significance Threshold	100	13.6	40	40	15	10
Significant Impact?	No	No	No	No	No	No

Source: HELIX 2012a

As illustrated in Tables 14-5 and 14-6, emissions of CO, ROG, NO_x, SO_x, and PM_{2.5} related to construction equipment exhaust emissions, workers vehicles exhaust emissions, and material handling emissions would be below the significance thresholds. However, PM₁₀ emissions related to fugitive dust emissions from vehicles traveling on unpaved surfaces would exceed the significance threshold, and would be considered a potentially significant impact during short-term construction activity only. Mitigation measures for controlling the fugitive dust emissions would be required (HELIX 2012a). As discussed above, controlling the speed of the equipment would help reduce the fugitive dust emissions. There are several options that the Project applicant can thereby choose to reduce the fugitive dust emissions, as summarized below:

- a) For tractors pulling only one scraper carriage: 7 mph (adhering to this speed limit would result in a 7.89 minute trip to traverse the expected 0.92 mile average haul route distance [round trip])
- b) For tractors required to pull two scraper carriages: 8 mph (adhering to this speed limit would result in a 6.90 minute trip to traverse the expected 0.92 mile average haul route distance [round trip])
- c) The calculation of fugitive dust (PM₁₀) from unmitigated proposed project earth-moving activities assumes a 55 percent reduction from uncontrolled levels to simulate rigorous watering of the site to ensure proposed project compliance with SDAPCD Rule 55. The construction contractor shall further reduce fugitive dust emissions to 90 percent from uncontrolled levels. The construction contractor shall designate personnel to monitor the dust control program and to order increased watering or other dust control measures, as necessary, to ensure a 90 percent control level.

The mitigated fugitive dust emissions from tractor-scraper traveling on unpaved surfaces are presented in Table 14-7.

Table 14-7 MITIGATED FUGITIVE DUST EMISSIONS	
Mitigation Scenarios	PM₁₀ Emissions (lbs/day)
7 mph limit with single scraper per tractor	93.72
8 mph limit with double scraper per tractor	86.68
Watering Site three times daily	59.23

Source: HELIX 2012a

As illustrated in Table 14-7, the mitigated short-term PM₁₀ fugitive dust emissions would be lower to approximately 59.23 to 93.72 lbs/day (from 200.78 lbs/day). The reduction in speed limits of the tractor-scraper operations would reduce PM₁₀ fugitive dust emissions by approximately 56 percent. Watering the site three times per day would reduce fugitive dust emissions by 90 percent. As a result, implementing any of these three measures would mitigate short-term fugitive dust emissions from tractor-scraper equipment traveling on unpaved surfaces to below the significance threshold, and would be considered a less than significant impact.

Mitigation Measures:

- AQ-1 In order to reduce fugitive dust emissions to below a level of significance, the Project shall implement one of the following dust control measures as described in the following scenarios. Alternatively, the Project shall implement alternative measures, subject to approval by the City, that result in equal or greater reductions to fugitive dust emissions.

Mitigation Scenario 1: The Project shall increase the number of scraper carriages to each tractor loading such that each tractor can pull two scraper carriages, reducing the total number of tractor round-trips, and the daily maximum PM₁₀ fugitive dust emissions to 171.54 lbs/day (from 200.78 lbs/day). The doubling of the scraper carriages would reduce PM₁₀ fugitive dust emissions by 15 to 20 percent to an emission level below SCAQMD limits.

- Or -

Mitigation Scenario 2: The Project shall reduce the maximum speed limit of the tractor-scraper from 20 mph down to 7 or 8 mph. (For reference, if the tractor-scraper equipment is operating at 20 mph speed limit maximum then the average time to complete the scraper production cycle would average approximately 2.76 minutes per trip to traverse the estimated 0.92 mile average haul route distance [round trip]). The average time to complete the trip may increase while the PM₁₀ fugitive dust emissions would decrease by approximately 50 percent to an emission level below SCAQMD limits.

- Or -

Mitigation Scenario 3: The third option would be to water the site three times per day. According to the Western Regional Air Partnership's Fugitive Dust Handbook (WRAP 2006) watering the site three times per day pursuant to Rule 55 would reduce fugitive dust emissions by 90 percent.

- c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?* **Potentially**

Significant Unless Mitigated. The SDAB is considered a nonattainment area for the 8-hour NAAQS for O₃; and for the CAAQS for O₃, PM₁₀, and PM_{2.5}. An evaluation of Project-related construction emissions of nonattainment pollutants is presented above under Response 14.3b. Without mitigation, the Project's contribution to cumulative impacts associated with PM₁₀ would be during the short-term construction phase only. However, upon compliance with Mitigation Measure AQ 1, and the MMRP ~~attached as Appendix B~~, a less than cumulatively considerable impact is anticipated to occur.

- d) *Expose sensitive receptors to substantial pollutant concentrations?* **Less Than Significant Impact.** The greatest potential for toxic air contaminant (TAC) emissions would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks during construction, and the associated health impacts to sensitive receptors. The proposed Project Area is currently active farm fields bisected by the channelized San Luis Rey River; however, the nearest residences are farmworker housing located adjacent to Soil Placement Site #4 and a residential subdivision approximately 800 feet south of the Project Area, across Mission Avenue. Additionally, Mission Vista High School is located southwest of the Project Area.

Construction activities are sporadic, transitory, and short-term in nature, and once construction activities have ceased, so too have emissions from construction activities. Diesel particulate matter (DPM) is not included as a criteria pollutant; however, it is recognized by the state of California as containing carcinogenic compounds. DPM would be emitted from heavy equipment used in the construction process. The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined in the California Air Pollution Control Officers Association (CAPCOA) Air Toxics "Hot Spots" Program Risk Assessment Guidelines (CAPCOA 1993). The SDAPCD recommends an incremental cancer risk threshold of 10 in a million. "Incremental Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 70-year lifetime would contract cancer based on the use of standard risk-assessment methodology. The Project would require the extensive use of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure (ATCM) for in-use diesel construction equipment to reduce diesel particulate emissions. Total construction of the proposed Project would last less than one year, after which time Project-related TAC emissions would cease. A majority of the TAC emissions would occur during scraping activities from tractor-scraper equipment. Thus, the proposed Project would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual TAC emissions and corresponding cancer risk are anticipated after construction. As such, the exposure of Project-related TAC emission impacts to sensitive receptors (including Mission Vista High School and nearby residential development) during construction are anticipated to be less than significant (HELIX 2012a).

- e) *Create objectionable odors affecting a substantial number of people?* **Less Than Significant Impact.** The only source of odor anticipated from Project construction would be exhaust emissions from the diesel equipment and haul trucks. Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. During construction, diesel equipment operating at various locations on the site may generate some nuisance odors; however, due to the temporary nature of construction, odors associated with Project construction would cease at the completion of construction period. As such, Project construction would not cause an odor nuisance, and a less than significant odor impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
14.4 BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the USFWS? **Potentially Significant Unless Mitigated.*** A Biological Assessment (BA) was prepared for the proposed Project (Cadre 2012), and included a literature search of the biological resources of the Project Area and vicinity (inclusive of Restoration Area, access and staging areas, and Soil Placement Sites), database reviews through the California Natural Diversity Database (CNDD) and California Native Plant Society (CNPS), and site surveys conducted on May 27 and November 8, 2011. The Biological Assessment is included in Appendix-BG. The BA identified the federally listed species and critical habitats known to occur within the vicinity of the Project Area, as shown in Table 14-8, *Listed and Proposed Species Potentially Occurring Within/Adjacent to Project Area.*

Table 14-8 LISTED AND PROPOSED SPECIES POTENTIALLY OCCURRING WITHIN/ADJACENT TO PROJECT AREA			
Species (Scientific Name)	Listing Status*	General Habitat Description	Comments
Plants			
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE, CNPS 1B.1	Perennial herb, sandy loam, clay substrates, disturbed area, chaparral, coastal sage scrub, grasslands and vernal pools. April – October bloom	Species not detected during June 2011 (Wildlands 2011a) survey of existing berms and focused sensitive surveys conducted in spring 2002 (Caltrans 2008).
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT, SE, CNPS 1B.1	Perennial herb, clay substrates, chaparral, coastal sage scrub, grasslands and vernal pools. March – June bloom	Not expected to occur within the Project Area based on a lack of suitable habitat/soils and overall disturbed nature of the Project Area. USFWS critical habitat located approx. 1,000 ft southeast of Project Area as shown in Figure 10, <i>San Diego Ambrosia Critical Habitat</i> .
Amphibians			
Arroyo toad (<i>Anaxyrus californicus</i>)	FE, SSC, CH	Shallow, slow moving active and braided stream channels with sandy substrates for breeding, bench and terrace habitats for foraging and aestivation, willow scrub, coastal sage scrub and riparian/oak woodlands	No breeding habitat was documented within the Project Area. High quality habitat is located immediately up and downstream of the Project Area within the San Luis Rey River flood-prone area. Occasional use of the site for foraging and movement and burrowing during the breeding season is expected.
Birds			
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT, SSC, CH	Resident, nonmigratory species, open coastal sage scrub habitat associations generally dominated by California sagebrush below 1,000 ft elevation.	No suitable habitat located within Project Area. However coastal California gnatcatchers were documented immediately adjacent to the Project Area on a slope dominated by coastal sage scrub (west of soil placement site 2, south of Restoration Area) in 2003 and 2006 (USFWS GIS Database 2011a).

Table 14-8 (cont.) LISTED AND PROPOSED SPECIES POTENTIALLY OCCURRING WITHIN/ADJACENT TO PROJECT AREA			
Species (Scientific Name)	Listing Status*	General Habitat Description	Comments
Birds (cont.)			
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE, SE, CH	Migratory species, breeds in riparian scrub habitats including riparian forest habitats with dense understory. Generally arrives in southern California in March and departs as late as September.	Not expected to occur within the Project Area. However, high quality habitat is located immediately upstream and downstream of the Project Area and the southern willow scrub located between soil placement sites #4 and #5 represents high quality habitat. The species has been documented downstream of the Project Area (USFWS 2011a).
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE, SE, CH	Migratory species, breeds in dense riparian forest/woodland habitats along rivers, streams and wetlands. Generally arrives in southern California in May and departs in late September.	Not expected to nest within the Project Area. However, the southern cottonwood willow riparian forest extending up and downstream of the Project Area and the southern willow scrub located between soil placement sites 4 and 5 represent moderate to high quality transitional and breeding habitat. The species has been documented downstream of the Project Area during surveys conducted in 2005 (3,500ft from Project Area) (USFWS 2011a).
Light-footed clapper rail (<i>Rallus longirostris levipes</i>)	FE, SE	Coastal salt and brackish marsh dominated by cordgrass and pickleweed	Not expected to occur within Project Area based on a lack of suitable habitat. Historical record of species at Guajome County Park (1-mile southwest of Project Area) extirpated (CNDDDB 2011).
California least tern (<i>Sterna antillarum browni</i>)	FE, SE	Migratory species breeds in coastal shores, estuarine, tidal mudflat habitats. Generally arrives in southern California in April and departs as late as September.	Not expected to occur within Project Area based on a lack of suitable habitat. Historical records of species at Guajome County Park (1-mile southeast of Project Area) (CNDDDB 2011).
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>)	FC, SE	Migratory species breeds in mature willow and/or cottonwood riparian forests and woodlands in Southern California. Although uncommon, generally arrives in June and departs in September.	Not expected to occur within Project Area based on a lack of suitable habitat. However, high quality habitat occurs both up and downstream of the Project Area within the San Luis Rey River floodprone area (southern cottonwood willow riparian forest). Historical observations at Guajome Lake in 1992 and San Luis Rey River near Bonsall in 1978 (Unitt 2004).

Table 14-8 (cont.) LISTED AND PROPOSED SPECIES POTENTIALLY OCCURRING WITHIN/ADJACENT TO PROJECT AREA			
Species (Scientific Name)	Listing Status*	General Habitat Description	Comments
Mammals			
Stephens's kangaroo rat (<i>Dipodomys stethpensi</i>)	FE, ST	Sparse coastal sage scrub, California buckwheat scrub and grasslands	Not expected to occur within Project Area based on a lack of suitable habitat. Historical observation noted north of Project Area in area now highly disturbed by continuous agricultural activity and considered extirpated (CNDDDB 2011).
Fish			
Southern California Steelhead (<i>Oncorynchus mykiss</i>)	FE, SE	Anadromous species spawning in freshwater with sandy/gravel substrates.	No suitable spawning habitat located within Project Area. However, species may migrate through Project Area during high flows. Existing vegetation within channelized reach of San Luis Rey River within Project Area would prevent migration during low flows.

Source: Cadre 2012

*Status: - Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS) List 1B.1- Rare, threatened, or endangered in California and elsewhere.

*Critical Habitat (CH) - Study Area is located within a United States Fish and Wildlife Service designated critical habitat unit, but does not necessarily mean that primary constituent elements are present.

As described in Table 14-8, above, the federally endangered San Diego ambrosia, federally threatened thread-leaved brodiaea, federally endangered light-footed clapper rail, federally endangered California least tern, and federally endangered Stephens' kangaroo rat are not expected to occur within the Project Area based on existing site conditions and current known distribution of the species. Therefore, no impact to these species is anticipated to occur. The following describes remaining potentially impacted species, as well as avoidance measures for activities that may result in direct and/or indirect impacts to these species. Additional potential biological species and habitat impacts are discussed in the Biological Assessment (BA) was prepared for the proposed Project (Appendix **GB**).

Plants

The majority of the Project Area is extensively disturbed and no federally listed plant species are expected to occur. Focused botanical surveys were conducted in June 2011, during which no sensitive plants were documented. Critical Habitat for the federally endangered San Diego ambrosia is located to the southeast of the site as shown in Figure 11 (Cadre 2012).

Wildlife

Figure 12 identifies the locations of previously documented sensitive wildlife species sightings.

Arroyo Toad (*Anaxyrus californicus*)

Project implementation is not expected to result in a direct impact on the arroyo toad. The Project Area does not represent suitable breeding habitat, and based on the disturbed condition of the site (not suitable aestivation habitat), the species is only expected to occasionally utilize the site for foraging and/or movement (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant. Project implementation would not result in indirect impact to the arroyo toad. In fact, the proposed Project would result in potential benefits to the species by creating natural low flow channels utilized for breeding, movement routes, and restoring buffer terrace habitats utilized for foraging and aestivation (Cadre 2012).

Coastal California Gnatcatcher (*Polioptila californica californica*)

Project implementation would not result in the direct impact to the coastal California Gnatcatcher, as no suitable habitat for this species is located within the Project Area. Project implementation could result in temporary, indirect impacts to the coastal California gnatcatcher known to occur adjacent to the southwestern Project Area boundary, as a result of noise during excavation and/or soil transportation (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant.

Least Bell's Vireo (*Vireo bellii pusillus*)

Project implementation is not expected to result in the direct impact to the least Bell's vireo, as no high quality suitable habitat for the least Bell's vireo is located within the Project Area. Although the invasive *Arundo donax* has been documented to be utilized by the species in the region, all vegetation clearing is proposed to occur outside of the migratory and breeding season for the species in this region (Cadre 2012). Project implementation could result in temporary, indirect impacts to least Bell's vireo known to occur adjacent to the Project Area boundary as a result of initial vegetation clearing within the active channel, noise during excavation and/or soil transportation (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

Project implementation is not expected to result in direct impacts to the southwestern willow flycatcher, as no suitable high quality habitat for this species is located within the Project Area. Although the invasive *Arundo donax* has been documented to be utilized by the species in the region, all vegetation clearing is proposed to occur outside of the migratory and breeding season for this species. Project implementation could result in temporary, indirect impacts to the southwestern willow flycatcher known to occur in the vicinity of the Project Area, as a result of initial vegetation clearing within the active channel, noise during excavation and/or soil transportation (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant.

Yellow-Billed Cuckoo (*Coccyzus americanus*)

Project implementation would not result in direct impacts to the yellow-billed cuckoo, as no suitable habitat for this species is located within the Project Area. Project implementation could result in temporary, indirect impacts to the yellow-billed cuckoo which is potentially present in the vicinity of the Project Area, as a result of initial vegetation clearing within the active channel or noise during

excavation and/or soil transportation (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant.

Southern California Steelhead (*Oncorhynchus mykiss*)

Project implementation is not expected to have a direct impact on the Southern California Steelhead, as the 1,800-foot reach of the San Luis Rey River that bisects the site does not currently represent suitable spawning or rearing habitat. However, the reach does represent a potential migration route during high flows (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant. Project implementation is not expected to have an indirect impact to the Southern California Steelhead. In fact, the Project would result in potential benefits to the species by creating natural low flow/braided channels for movement and restoring the geomorphology and associated substrates needed for successful spawning, rearing and movement through this reach of the San Luis Rey River (Cadre 2012).

Federally Designated Wildlife Critical Habitat

All USFWS critical habitat designations for federally listed species known or potentially present within the region of the Project Area were reviewed. Portions of the Project Area are located within designated critical habitat for three federally endangered or threatened species (Cadre 2012):

Arroyo Toad

The majority of the Project Area is located within USFWS critical habitat designated for the arroyo toad, Unit 14: Lower and Middle San Luis Rey River Basin as shown in Figure 13, *Arroyo Toad Critical Habitat*. Critical Habitat Unit 14 includes the San Luis Rey River floodprone area extending from the La Jolla Indian Reservation downstream to the confluence with Guajome Creek near the City of Oceanside (Cadre 2012).

Coastal California Gnatcatcher

The Project Area borders USFWS critical habitat designated for the coastal California gnatcatcher, Unit 3: North San Diego County Multiple Habitat Conservation Plan (NSD MHCP) as shown in Figure 14, *Coastal California Gnatcatcher Critical Habitat*. Critical habitat Unit 3 includes approximately 17,000 acres within the NSD MHCP planning area in northwestern San Diego County within the cities of Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista (Cadre 2012).

Least Bell's Vireo

The majority of the Project Area is located within USFWS critical habitat designated for the least Bell's vireo as shown in Figure 15, *Least Bell's Vireo Critical Habitat*. Critical habitat has been designated within the San Luis Rey floodprone area extending from the Pala Indian Reservation downstream to the confluence with Interstate 5 (Cadre 2012).

Southwestern Willow Flycatcher

The approximately 1,800-foot reach of the San Luis Rey River (active channel) that bisects the Project Area is located within USFWS critical habitat designated for the southwestern willow flycatcher, coastal California recovery/San Diego Management Unit as shown in Figure 16, *Southwestern Willow Flycatcher Critical Habitat*. The western segment of this management unit extends primarily within the San Luis Rey River floodprone area extending from the Pauma Country Club downstream to the confluence with Interstate 5 (Cadre 2012).

Although the proposed Project would result in the temporary disturbance of USFWS designated critical habitats for three federally endangered or threatened species, the current heavily disturbed conditions within the Project Area are not representative of primary constituent elements for any of the species. The proposed Project would result in the restoration of wetland and riparian habitats resulting in a net gain in high quality habitat for both sensitive and common species known from the region.

Mitigation Measures:

Wildlands has committed to implement conservation measures (BIO-1 through BIO-6) to avoid and minimize potential adverse effects to the gnatcatcher, vireo, flycatcher, and arroyo toad and its designated critical habitat, to an insignificant level. These measures support the USFWS concurrence with the Corps of "not likely to adversely affect" determination for the vireo, flycatcher, gnatcatcher, and arroyo toad and its designated critical habitat with regard to the Corps proposed action to issue a permit under section 404 of the Clean Water Act to facilitate project construction.

Wildlands is also working with CDFW, City of Oceanside, and RWQCB on various entitlements/approvals/permits. Any conservation measures agreed upon pursuant to these additional approvals will be implemented in addition to, or in lieu of the conservation measures identified in BIO-7 through BIO-9.

BIO-1 Project Biologist

A project biologist approved by the Corps and USFWS (Agencies) and CDFW, as appropriate, will be on site during project implementation to ensure that all avoidance and minimization measures are adhered to and unintended impacts to arroyo toad, vireo, flycatcher, and gnatcatcher and their habitats are avoided. At least two (2) weeks prior to project initiation, the name(s), permit numbers, resumes, and at least three (3) references for the project biologist will be submitted to the Agencies. The project biologist must be familiar with federally threatened or endangered species and habitats potentially occurring within the region of the project site. Project related activities will not be initiated prior to receiving Agency approval. The project biologist will be responsible for ensuring compliance with the project description (including all conservation measures) to minimize and avoid impacts (incidental take) to federally threatened and/or endangered species. The project biologist will have authorization to halt/suspend all activities until appropriate corrective measures have been completed and will also be required to report violations immediately to the Agencies. The project biologist's responsibilities will include but not be limited to:

1. Advise all project-related staff (contractors) on the appropriate implementation of the conservation measures.
2. Be available to supervise and monitor biological resource compliance efforts in areas requiring avoidance or containing suitable habitat for federally endangered species.
3. Be available to monitor installation of all Best Management Practices (BMPs), Environmentally Sensitive Habitat (ESH) fencing (BIO-3.1), and arroyo toad exclusionary fencing (BIO-4.1).
4. Halt any and all activities in any area when a potential unauthorized incidental "take" of an endangered species may or has occurred.
5. Inspect active project site where federally listed species habitat is present or adjacent to work area to ensure compliance with all conservation measures for the duration of the proposed action. Monitor project site as appropriate but not less than once a week for compliance with all conservation measures.
6. Conduct initial Environmental Awareness Program (BIO-2) for all project-related staff.
7. Conduct species specific monitoring (BIO-4, BIO-5).
8. Notify the Agencies of any noncompliance with any conservation measure and complete project reporting (BIO-6).
- ~~8.9.~~ Monitor for potential impacts to wildlife movement and take corrective action if needed.

BIO-2 Environmental Awareness Program

The designated biological monitor will develop and implement an environmental awareness program for all project-related staff (contractors). All employees, contractors, and subcontractors who will work on the project will participate in the program. The environmental awareness program will include but not be limited to a description of all federally endangered species and their habitats potentially occurring within the region of the project site, the general provisions of the federal Endangered Species Act (Act), the need to adhere to the provisions of the Act, the penalties associated with violating the Act, and the general measures that are being implemented to conserve the listed species as they relate to the project. This program will also discuss State-listed species, the California Endangered Species Act, and the Streambed Alteration Agreement Program requirements. A handout will be provided to all staff illustrating all focal species and listing contact information and procedural instructions, if detected. A training acknowledgement form will be signed by all staff participating in the project indicating that they have received training and will abide by the guidelines and conservation measures.

BIO-3 General Measures to Avoid and Minimize Impacts to Listed Species and Arroyo Toad Critical Habitat

1. The Applicant will install temporarily ESH fencing (with silt barriers) around the limits of project impacts (including construction staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Fencing will be installed in a manner that does not impact habitats to be avoided. The Applicant will submit to the Agencies for approval, at least 5 days prior to initiating project impacts, the final plans for initial clearing and grubbing of habitat and project construction. These final plans will include photographs that show the fenced limits of impact and all areas (including riparian/wetland or coastal sage scrub) to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of the Agencies. Temporary construction fencing will be removed upon project completion.
2. At least thirty (30) days prior to initiation of construction related activities, grading plans will be submitted to the Agencies, U.S. Environmental Protection Agency (EPA), California Department of Fish and Wildlife for review. The plans will include preconstruction photographs of the project site.
3. Employees will strictly limit their activities, vehicles, equipment, and materials to the designated temporary impact areas and designated staging areas. No personnel or equipment will be allowed to enter areas designated as ESH areas.
4. To avoid attracting predators, work areas will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the project site.
5. No pets will be allowed in the project site.
6. All equipment maintenance, staging, and dispensing of fuel, oil, or coolant, will occur within a predetermined staging area. Fueling and maintenance of trucks and other vehicles will occur within a predetermined staging area. Equipment will be checked for leaks prior to operation and repaired as necessary.
7. The mitigation bank will be planted as early as possible following completion of grading/excavation activities adjacent to ESH areas. Specifically, BMP's to address erosion and excess sedimentation will be incorporated into the project plans. Measures that will be implemented during excavation, hauling, spreading and restoration efforts may include (but will not be limited to) the use of silt fencing, gravel bags, hay bales, fiber rolls, and protective velocity dissipaters at drainage outlet points.
8. Herbicides used in exotic species control during long-term maintenance activities will be currently approved by the EPA for use in wetlands, and no herbicide will be applied to native vegetation. The herbicide should be tinted with a biodegradable dye to facilitate visual control of spray.

BIO-4 Arroyo Toad Impact Avoidance and Minimization Measures

1. Prior to initiation of vegetation clearing or project construction, fencing will be installed around each segment of the project site adjacent to suitable arroyo toad upland and/or breeding habitat to exclude arroyo toads from the project site. The fence will consist of fabric or plastic at least 2 feet high, staked firmly to the ground with the lower one foot of material stretching outward along the ground and secured with a continuous line of gravel bags. No digging or vegetation removal will be associated with the installation of this fence and all materials will be removed when the project is complete. Ingress and egress of equipment and personnel will use a single access point to the site. This access point will be as narrow as possible and will be closed off by exclusionary fencing when personnel are not on the project site. Where they overlap, the arroyo toad exclusionary fence can be combined with the ESH fencing in BIO-3.1.
2. Prior to mitigation bank construction, but after exclusionary fencing has been installed, at least 3 surveys for arroyo toads will be conducted within the fenced area by the Agency-approved project biologist specified in BIO-1. Surveys will be conducted during the appropriate climatic conditions during the appropriate time of day or night to maximize the likelihood of encountering arroyo toads. If arroyo toads are found within the project site during the surveys, all work will cease and the Agencies will be notified to reinstate section 7 consultation.

BIO-5 Vireo, Flycatcher and Gnatcatcher Impact Avoidance and Minimization Measure

All vegetation clearing will be conducted between September 15 and February 15 to avoid potential direct and/or indirect impacts to breeding vireo, flycatcher or gnatcatcher. In the event vegetation clearing and/or construction activities (excavation and/or restoration efforts) must occur within the vireo, flycatcher or gnatcatcher breeding season, then a pre-construction survey will be conducted no more than three (3) days prior to project initiation to ensure that no impacts to nesting birds occur. Should vireo, flycatcher or gnatcatcher nests or breeding activity be documented within (if vegetation has not been removed) or adjacent to the project site, then appropriate measures will be implemented including, but not be limited to, monitoring during clearing, excavation or planting to ensure that no impacts to the breeding individuals occur, temporary designation of the breeding site as an ESH, and/or delaying/restricting project related activities within a buffer zone (determined by the project biologist in coordination with the Agencies based on location and topography) until nesting and fledging is complete.

Reporting

1. The project biologist will submit monthly updates and a final report to the Agencies within 60 days of project completion documenting that authorized temporary impacts were not exceeded and general compliance with all conservation measures.
2. The final report will summarize the results of the monitoring efforts and include recommendations to further reduce potential impacts to sensitive species, if applicable. As previously stated, the Agencies will also be notified if any listed species are found within or adjacent to the project site. The date, specific location (Global Positioning System coordinates), approximate size, age, and health of the individual will be recorded and provided in both hard copy and digital format to the Agencies within thirty (30) days of the observation.
3. The Service will be notified if any listed species are found injured or dead. A written notification would also be prepared after verbal notification to the Service. The report would include the date, time and location of the discovered animal/carcass, cause of injury or death, and any other pertinent information. All dead and preserved specimens will be submitted to educational/research institutions with the appropriate federal permits.

BIO-6 California Steelhead Impact Avoidance and Minimization Measures

1. Water diversion construction (including filtering system) within the project site will be initiated after May 1 and removed by November 30. This construction season is when the southern California steelhead is not expected to occur within the project site. Following completion of project-related activities, all water diversion materials will be removed and flows will be restored to natural conditions.
2. A preconstruction survey will be conducted immediately prior to initiation of project-related activities within the San Luis Rey River to determine presence/absence of the southern California steelhead. Project-related activities conducted within or adjacent to the San Luis Rey River will not be initiated until the species has been documented absent from the Study Area.
3. Avoid working in actively flowing water, where feasible.
4. Any shallow or deep aquatic habitat including existing pools, riffles and plunge pools will be retained and/or restored within the project site, where feasible.
5. The exclusionary/ESH fencing proposed to traverse the up and downstream segments of the San Luis Rey River would be breached to allow for migration no later than November 30.
6. The date, time of observation, specific location (GPS coordinates), approximate size, age, and health of all individuals observed will be recorded and provided to the NMFS within thirty days of the documentation in both hard copy and digital format.

BIO-7 Nesting Bird Impact Avoidance and Minimization Measures

Impacts to nesting bird species are prohibited under the MBTA. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Suitable nesting bird habitat has been documented within and immediately adjacent to the project site. Therefore, to remain in compliance with the MBTA, nesting bird surveys will be conducted and avoidance and minimization measures consistent with BIO-5 will be implemented.

BIO-8 Water Quality/General Impact Avoidance and Minimization Measures

1. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas outside of Waters of the U.S. within the project limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering Waters of the U.S. and shall be shown on the grading plans. Fueling of equipment shall take place within existing disturbed areas greater than 100 feet from Waters of the U.S. Contractor equipment shall be checked for leaks prior to operation and repair as necessary.
2. "No fueling zones" shall be established within a minimum of 100 feet from the San Luis Rey River.
3. Any project related spills of hazardous materials shall be reported to appropriate entities including but not limited to the City of Oceanside, Corps, USFWS, CDFW, and Regional Water Quality Control Board (RWQCB) and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
4. Any planting stock to be brought onto the project site for restoration shall be first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including, but not limited to, Argentine ants, fire ants, and other insect pests. Any planting stock found to be infested with such pests shall not be allowed on the project site or within 300 feet of natural habitats. The stock shall be quarantined, treated or disposed of according to best management principles by qualified experts in a manner that precludes invasions into natural habitats.
5. Any temporary irrigation installed for the restoration area shall be used for the shortest duration possible.

6. Public access to the project site shall be prohibited. Fencing may be required to keep unauthorized personnel from trespassing.
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service? **Less Than Significant Impact.*** According to the BA, due to past and current agricultural activities at the site, few, if any, natural undisturbed habitats remain onsite. The Project Area is primarily characterized as active cultivated agricultural lands, ruderal, disturbed, developed, ornamental and non-native grassland habitats located both north and south of an approximately 1,800-foot reach of the San Luis Rey River as shown in Figure 8, *Vegetation Communities* and summarized in Table 14-9, *Project Area Vegetation Communities Acreage Totals*. The entire reach of the San Luis Rey River bisecting and located within the Project Area has been channelized (rip/rap and earthen berm) and is characterized as freshwater marsh habitat. The banks of the incised channel are inundated with the invasive *Arundo donax*.

Vegetation Community	Acres* (AC)	Temporary Impacts* (AC)
Agricultural Fields	140.50	137.98
Freshwater Marsh	3.64	3.46
<i>Arundo donax</i> – Invasive	2.92	2.92
Ornamental Planting	1.01	1.01
Developed	0.58	0.58
Southern Cottonwood Willow Riparian Forest	0.43	0.00
TOTAL	149.08	145.95

Source: Cadre Environmental 2012

Direct Impacts

The only sensitive natural vegetation communities occurring within the Project Area are freshwater marsh and southern cottonwood willow riparian forest. The southern cottonwood willow riparian forest would not be impacted as a result of the Project. The freshwater marsh habitat would be impacted temporarily, but would be enhanced and become part of the restored riparian floodplain habitat. Therefore, there would be no net loss of riparian or other sensitive vegetation communities as a result of the project. Therefore, a less than significant impact is anticipated to occur.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Less Than Significant Impact.*** Refer to Response 14.4b. The Project would result in a net gain of jurisdictional wetland habitat and would be required to apply for, and comply with, a Section 404 Permit from the ACOE. Therefore, a less than significant impact is anticipated to occur.
- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? **Potentially Significant Unless Mitigated.*** Refer also to Response 14.4a. Project implementation is not expected to have a direct impact on the Southern California Steelhead, as the 1,800-foot reach of the San Luis Rey River that bisects the site does not currently represent suitable spawning or rearing habitat. However, the reach does represent a potential migration route during

high flows (Cadre 2012). Mitigation measures have been identified to reduce potential impacts to a level of less than significant. Project implementation is not expected to have an indirect impact to the Southern California Steelhead. In fact, the Project would result in potential benefits to the species by creating natural low flow/braided channels for movement and restoring the geomorphology and associated substrates needed for successful spawning, rearing and movement through this reach of the San Luis Rey River (Cadre 2012). Upon implementation of Mitigation Measure BIO 7, impacts to migratory fish would be less than significant.

Impacts to nesting migratory bird species are prohibited under the MBTA. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations (CFR) Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Suitable nesting bird habitat has been documented within and immediately adjacent to the proposed action area. The Project Area is located adjacent to a vegetation (Southern Cottonwood Willow Riparian Forest) favored by several resident and migratory raptor species. (Cadre 2012). Therefore, to remain in compliance with the MBTA, mitigation measures have been identified to reduce potential impacts to a level of less than significant.

Mitigation Measures

BIO 9 Prior to conducting any proposed actions during the breeding season (February 15 to September 15), the monitoring biologist shall conduct a pre-construction survey/surveys to identify any active migratory bird nesting locations in and near the Project area no more than three days prior to Project initiation. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. If the biologist finds an active nest within or adjacent to the action area, determines that the nesting species is protected, and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone from the nest. Any active nests observed during the survey shall be mapped on a recent aerial photograph including documentation of GPS coordinates. Only specified activities (if any), as approved by the qualified biologist, shall take place within the buffer zone until the nest is vacated.

Surveys for active raptor nests shall be performed in all adjacent habitats and trees no more than three days prior to commencement of any activities during the raptor nesting season generally extending from February 1 to June 30. Active raptor nests observed during the survey shall be mapped on a recent aerial photograph including documentation of GPS coordinates. Restrictions on activities shall be required in the vicinity of the nest until the nest is no longer active as determined by the qualified biologist. The qualified biologist shall determine an appropriate buffer zone around a nest to allow activities to proceed while minimizing disturbance to the active nest. Once the nest is no longer active, the proposed action may proceed within the buffer zone. Impacts to active raptor nests shall be avoided.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?* **No Impact.** The Project would require review and approval by the City prior initiation of construction. Further, vegetation removed during construction would be re-established upon completion of construction. Therefore, no impact is anticipated to occur.
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* **No Impact.** The entire Project area is located within the Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation Plan ("SAP"). The purpose of the SAP is to contribute to regional biodiversity and the viability of rare, unique or sensitive biological resources throughout the City and the larger region. The Project would help meet several of the goals and objectives included in the

SAP, such as conserving the region’s biodiversity; proactively mitigating and minimizing impacts to sensitive species and their habitats; protecting and managing functional ecological communities; and maintaining functional habitat linkages and wildlife corridors. The proposed Project is subject to permitting approval by the USFWS (Biological Opinion) and CDFW (Streambed Alteration Agreement), the agencies responsible for protection of federal and state sensitive species, respectively. As no Project activity would be able to occur without receipt of these approvals, no impact would occur. Refer also to Response 14.4a, above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.5 CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of CEQA?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of CEQA?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of CEQA?* **Potentially Significant Unless Mitigated.** A Cultural Resources Survey Report was prepared for the Project Area (Affinis 2011) and is included in Appendix D_C. The report was based on an archeological survey of the Project Area conducted by Affinis and Native American monitors from Saving Sacred Sites and the San Luis Rey Band of Luiseno Mission Indians, as well as a search of the NAHC Sacred Lands File and outreach to interested tribes. Based on the survey, no historic or archaeological resources were found. Known historic sites in the area include the Rancho Guajome land grant site located approximately one-third mile southwest of the site, and Mission San Luis Rey located approximately three miles southwest of the site. The report also identifies the potential for encountering historical archeological features on the north side of the river where a homestead was present by the early 1940s. Further, the Project Area is located in an alluvial setting, and there are 15 archeological sites recorded within a one-mile radius of the site. There is, therefore, potential to encounter subsurface cultural resources during ground-disturbing activities. The Cultural Resources Report recommends that due to the cultural sensitivity of the area and the alluvial setting, a monitoring program should be implemented for the Project. Implementation of the following mitigation measures would reduce potential archeological, cultural, or historic resource impacts to less than significant:

Mitigation Measures:

CUL-1 Prior to implementation of the monitoring program and prior to beginning any grading, a pre-excavation agreement shall be developed between the appropriate Native American group (assumed to be the San Luis Rey Band of Luiseño Mission Indians) and the Project applicant.

CUL-2 The qualified archaeologist and the Native American representative shall attend the pre-construction meeting with the Project applicant and contractors to explain the requirements of the monitoring program.

- CUL-3 An archaeologist or a Native American monitor shall be onsite during grading and other ground-disturbing activities; given the extremely disturbed nature of the Project Area, it is not anticipated that full-time monitoring would be necessary; a monitoring schedule shall be developed between the archaeological Principal Investigator, Native American representative, and the Project applicant.
- CUL-4 If cultural resources are encountered, the archaeological and Native American monitors both shall have the authority to temporarily halt or redirect grading within 100 feet of the find while the cultural resources are documented and assessed by both monitors. If significant resources are encountered, ~~they~~ the Native American Monitor will be notified, and the resources will be handled consistent with CUL-6 and CUL-7 provided below.
- CUL-5 If any human remains are discovered, construction will be stopped within 100 feet of the find and the County Coroner shall be contacted. If Native American remains are suspected, the remains shall be kept in situ, or in a secure location within close proximity to where they were found, and the analysis of the remains will occur only in the presence of a Luseño Native American monitor. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.
- CUL-6 If cultural resources are encountered, recovered artifactual materials shall be cataloged and analyzed, and a report shall be completed describing the methods and results of the monitoring and data recovery program. If the resources are determined to be those of ancestral remains and/or associated burial goods, funerary goods or grave goods, the Native American monitor shall be consulted. Copies of analyses performed on cultural resources and reports generated from said analyses shall be provided to the San Luis Rey Band of Mission Indians in addition to the City.
- CUL-7 Artifacts collected (if any) shall be curated with accompanying catalog to current professional repository standards or the collection shall be repatriated to the San Luis Rey Band.
- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to ' 15064.5 of CEQA? **Potentially Significant Unless Mitigated.*** See Response 14.5a. A Cultural Resources Survey Report prepared for the Project Area identified no cultural or archeological resources on the site, and anticipates no impacts to cultural resources as a result of Project implementation (Affinis 2011). Implementation of Mitigation Measures CUL-1 through CUL-7 would reduce potential impacts to archeological resources to less than significant.
- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **No Impact.*** A Cultural Resources Survey Report prepared for the Project Area identified the floodplain portion of the Project Area, which is the majority of the site, as underlain by late Holocene active alluvium deposits (Affinis 2011). These deposits are considered to have low potential for fossils. Small upland portions of the site are underlain by Cretaceous tonalite deposits, which are not considered fossil-bearing (Affinis 2011). Therefore, no impacts to paleontological resources are anticipated.
- d) *Disturb any human remains, including those interred outside of formal cemeteries? **Potentially Significant Unless Mitigated.*** See Response 14.5a. There are no known human remains on the subject property and there is no record of use of the property as a cemetery or burial ground (Affinis 2011). The Project Area has previously been subject to significant ground moving activities and intense utilization, and it is therefore not anticipated that human remains would be encountered during construction of the proposed Project. Although discovery of human remains is not anticipated, if such remains were encountered during Project construction, Section 7050.5 of California Health

and Safety Code requires that construction stop, and the County Coroner be notified. Based on consultation with the preparer of the Cultural Resources Report, construction does not have to stop across the whole site, just in the vicinity of the human remains. A radius of 100 feet from the find would be an adequate distance within which construction must stop (pers. comm. Affinis 2012). If the remains were Native American, the procedures outlined in CEQA Section 15064.5 (d) and (e) would be followed, and a MLD notified. Implementation of Mitigation Measure CUL-5 would reduce potential impacts to human remains to less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.6 GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving (i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, or based on other substantial evidence of a known fault (Refer to DM&G Pub. 42)?; or, (ii) strong seismic ground shaking?; or, (iii) seismic-related ground failure, including liquefaction?; or, (iv) landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the 1994 UBC, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

1) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. **No Impact.** A Geologic Investigation prepared for the Project Area, contained in Appendix E, identified no known “active,” “potentially active,” or “inactive” fault traces as defined by the California Geologic Survey (CGS) (Geocon 2012). The closest known active faults are the Newport-Inglewood and Rose Canyon Fault, located approximately 12 and 13 miles west of the site, respectively. The CGS considers a fault seismically active when evidence suggests seismic activity within roughly the last 11,000 years. The CGS included portions of the Rose Canyon fault within an Alquist-Priolo Earthquake Fault Zone, but the Project Area is not located within these areas. Further, the Project, does not propose the development of any structures. Therefore, no impact is anticipated to occur.*

- 2) *Strong seismic ground shaking? **No Impact.*** As is the case in all of Southern California, some risk of earthquakes does occur at the Project Area. There are 11 known active faults within 50 miles of the Project Area. The closest known active faults are the Newport-Inglewood and Rose Canyon Fault, located approximately 12 and 13 miles west of the site, respectively, and are the dominant sources of potential ground motion. Earthquakes that might occur on the Newport-Inglewood and Rose Canyon Fault Zones or other faults within southern California and northern Baja California are potential generators of significant ground motion at the site. Seismic activity is considered to be likely at the Project Area because of the well-delineated fault lines through San Diego County. The Project does not propose the development of any structures, and is required to comply with the City's Seismic Hazard Mitigation Ordinance, grading, and other engineering standards regarding the excavation and placement of fill soil materials. Therefore, no impact is anticipated to occur.
- 3) *Seismic-related ground failure, including liquefaction? **No Impact.*** Liquefaction typically occurs when a site is located in a zone with seismic activity, on site soil is cohesionless, groundwater is encountered within 50 feet of the surface, and soil relative densities are less than approximately 70 percent. The Geologic Investigation prepared for the Project identified some deposits within the Restoration Area as potentially liquefiable. The site was also identified within a liquefiable zone based on a County of San Diego Hazard Map (Geocon 2012). The Project does not propose the development of any habitable structures or settlement sensitive improvements and is required to comply with the City's Seismic Hazard Mitigation Ordinance, grading, and other engineering standards, inclusive of those recommended in the Geotechnical Investigation (Geocon 2012) prepared for the Project, regarding the excavation and placement of fill soil materials. Therefore, no impact is anticipated to occur.
- 4) *Landslides? **No Impact.*** Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. According to the Geologic Investigation prepared for the Project Area, no evidence of landslides was identified in the Project area. Further, the Project is required to comply with the City's grading and site stabilization requirements regarding the excavation and placement of fill soil materials. Therefore, no impact is anticipated to occur.
- b) *Result in substantial soil erosion or the loss of topsoil? **Potentially Significant Unless Mitigated.*** Post construction requirements and construction requirements are addressed separately here.

Soil Placement Sites 4, 5 and 7 are used for farming today, and would continue to be utilized for farming when the Project is complete. Soil placement grades in these areas have been designed using Low Impact Design (LID) criteria to collectively reduce runoff and sediment transport, while maintaining the viability of the current farm practices (ESA/PWA 2013). The LID criteria incorporated into the Project include:

- Conserving existing natural drainage features;
- Minimizing imperviousness (there are no impervious surfaces being constructed);
- Maximizing infiltration by placing soil with moderate slopes and incorporating as many flat surfaces as possible; and
- Retaining and slowing runoff through grading design, also by placing soil with moderate slopes and incorporating as many flat surfaces as possible.

Utilizing the Rational Method and the Universal Soil Lose Equation (USLE) to calculate and compare pre and post project runoff and erosion, the results clearly show that runoff and erosion from the farm field Soil Placement Sites would be significantly decreased upon completion of the Project.

Additionally, the current farm operation is enrolled in the San Diego Region Irrigated Lands Group (SDRILG), which facilitates agricultural operation compliance with San Diego RWQCB regulations. At the completion of the Project, the farm operation would continue to maintain compliance with all applicable agricultural requirements as implemented through the SDRILG. Incorporating these LID measures and continuing to manage the farm operation consistent with the requirements of the San Diego RWQCB would reduce soil erosion and the loss of topsoil in Placement Sites 4, 5, and 7 post construction.

Soil Placement Sites 1 and 2 would continue to be used to support the current farm operation, but would not retain their enrollment in the SDRILG. As such, in addition to incorporating LID elements noted above, these sites have incorporated vegetated buffers into their design as a post construction BMP. Incorporating these LID measures and incorporating vegetated buffers into the grading plan would reduce soil erosion and the loss of topsoil in Placement Sites 1 and 2.

The Project would relocate soil from the floodplain onto the surrounding farm fields, and then replant the Project with a mosaic of native wetland riparian species. Removing this soil from the floodplain and revegetating the Project footprint would reduce soil erosion and the loss of topsoil.

Grading during the construction phase of the Project would relocate soils and temporarily increase the potential for soils to be subject to wind and water erosion. The contractor would be required to comply with standard engineering practices for erosion control. Implementation of the following mitigation measure would reduce potential soil erosion impacts to less than significant during construction:

Mitigation Measures:

GEO-1 A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and submitted for review and approval prior to issuance of grading permit. The SWPPP shall outline methods that shall be implemented during construction to control erosion from graded or cleared portions of the site, including but not limited to straw bales, sandbags, soil binders, diversion fences, desilting basins, etc. The Plan shall be prepared in accordance with the City's grading ordinance, the City's water quality ordinance, the latest NPDES Statewide Construction General Permit, and to the satisfaction of the City Water Quality Engineer.

- c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?* **No Impact.** No landslide areas have been identified or are anticipated to occur onsite or in the immediate site vicinity. Potential for encountering groundwater and/or liquefaction are addressed under Response 14.6a.3, above. The Project would be required to comply with standard engineering practices and standards.
- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?* **No Impact.** The soil associations at the Project Area consist of artificial fill, compacted fill, topsoil, alluvium and colluviums (Geocon 2012). The Restoration Area is primarily composed of three soil types including Bonsall sandy loam, riverwash, and Tujung sand as described below (Cadre 2012).
1. Bonsall sandy loam, 2 to 9 percent slopes, eroded. This soil is cut by shallow gullies. The rooting depth is 24 to 33 inches. The available water holding capacity is 4 to 5 inches and the erosion hazard is moderate. These types of soils are used for a range of dry farming grain and for flowers. Specifically, this soils type extends north of the San Luis Rey River with the Study Area.

2. Riverwash occurs in intermittent stream channels. The material is typically sandy, gravelly, or cobbly. It is excessively drained and rapidly permeable. Many areas are barren and occupied by scattered sycamores, coast live oak along the terrace habitats. Specifically, this soil type is located within and adjacent to the active channelized region of the San Luis Rey River within the Project Area.
3. Tujunga sand, 0 to 5 percent slopes. This soil type is on alluvial fans and floodplains. Permeability is very rapid and the available water holding capacity is 3 to 4 inches. Roots easily penetrate to a depth of 60 inches. Specifically, this soils type is located south of the San Luis Rey River within the Restoration Area of the Project Area.

The Project design would be subject to review and approval by the City’s Engineering Department prior to initiation of any construction activities. The Project would decommission four agricultural wells within the Restoration Area, relocate power poles in the Restoration Area and Soil Placement Sites 1 and 7, and relocate a transformer associated with the wells and the tomato packing operation in Soil Placement Site 1. No structures are proposed by the Project. Therefore, no impact is anticipated to occur.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?* **No Impact.** The proposed Project does not include the implementation of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.7 GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* **Less Than Significant Impact.** A Greenhouse Gas (GHG) emissions analysis was prepared for the Project (HELIX 2012a) and is included in Appendix A. Emission estimates were prepared for the construction of the Project based on estimates of construction activity and requirements of the Project. The Project would contribute to GHG primarily through the use of diesel-powered construction equipment. There would be no net long-term emissions (permanent sources) of GHG from the proposed Project. The combustion of diesel fuel in off-road construction equipment and on-road vehicles (workers vehicles) would emit greenhouse gases consisting mainly of carbon dioxide (CO₂), along with small amounts of methane (CH₄) and nitrous oxide (N₂O). The estimated construction GHG emissions are provided in Table 14-10.

Table 14-10 GREENHOUSE GAS EMISSIONS – CONSTRUCTION EQUIPMENT AND WORKERS VEHICLES		
Model	Description	CO₂e Emissions (metric tons)
Cat 965B	Tractor	135
Ktec 1231	36 CY Pull Scraper	-
Cat 965B	Tractor	135
Ktec 1231	36 CY Pull Scraper	-
Case STX 485	Rubber-tired Tractor	135
Ktec 1231	36 CY Pull Scraper	-
Cat 965B	Tractor	135
Ktec 1231	36 CY Pull Scraper	-
Cat 965B	Tractor	135
Ktec 1231	36 CY Pull Scraper	-
Cat D6T	Dozer	64
Cat D8T	Dozer	93
Peterbilt	Water Truck	74
CAT	Compactor	44
Cat 321 DL	Excavator	29
Subtotal Construction Equipment (metric tons)		979
Workers Vehicles		155
Total CO₂e Emissions (metric tons)		1,134
Total CO₂e Emissions Amortized Over 30-year Period (metric tons)		37.8

Source: HELIX 2012a

Construction of the proposed Project would emit approximately 1,134 metric tons (MT) per year for the entire construction period. For the construction emissions, the SCAQMD guidance recommends that the emissions be amortized over 30 years and added to operational emissions. Amortized over 30 years, the proposed construction activities would contribute approximately 38 MT per year of CO₂ emissions. Therefore, the estimated CO₂ equivalent emissions associated with the amortized construction activities would be below the screening criteria of 900 MT.

While emissions would be created through the operation of construction equipment including tractor-scraper machinery, river restoration projects such as the proposed Project are expected to become long-term carbon sinks, eventually offsetting emissions from all associated vehicular traffic and short-term operation of construction equipment. Further, the reduction in agricultural activities would greatly reduce current GHG sources such as vehicle traffic, harvesting crops, and water pump operation. Vegetation in wetlands can capture carbon by taking in atmospheric CO₂, converting it to plant mass through photosynthesis, and then sequestering the carbon in the inundated soils that form as plant matter decomposes.

In addition, the California Climate Action Registry (CCAR) is underwriting the development of research to help quantify the GHG balance in river-influenced wetland systems. Rates of sequestration and emission depend upon many factors, including plant species, depth and duration of inundation, and the age of the wetlands. There are too many variables to accurately estimate the amount of carbon the wetlands would sequester, but based on the current understanding of these systems, the restored wetlands are anticipated to be a significant carbon sink. Because the construction-related emissions would be temporary, and the Project is expected to be a net carbon sink, a less than significant impact would occur (HELIX 2012a).

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?* **Less than Significant Impact.** As discussed above under Response 14.7a, Project implementation is expected to result in a net increase in carbon storage. A short term increase in GHG emissions would occur during construction, but a significant increase in wetlands acreage is expected to result in net carbon storage over the lifetime of the Project. Thus, the proposed Project would not conflict with any plans, policies or regulations aimed at reducing GHG emissions (HELIX 2012a). A less than significant impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.8 HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* **Less Than Significant Impact.** Small amounts of potentially hazardous materials, such as fuel, lubricants, and solvents may be used within the Project Area during construction activities. These materials would be present in relatively small quantities, for as-needed use in maintenance of construction equipment. The transport, use, and disposal of hazardous materials during construction of the proposed Project would be conducted in accordance with applicable state and federal laws. No transport or use of hazardous materials would occur upon completion of construction activities. Therefore, a less than significant impact is anticipated to occur.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?* **Potentially Significant Unless Mitigated.** During Project construction, there is the possibility of accidental release of hazardous substances such as spilling of hydraulic fluid or diesel fuel associated with construction equipment maintenance. The level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials. An MMRP has been prepared for the Project and is included ~~as in Section IV~~ Appendix B. The contractor would be required to use standard construction controls and safety procedures which would avoid and minimize the potential for accidental release of such substances into the environment. As the Project consists of a wetlands restoration project, it would not involve use or upset of hazardous materials upon completion of the construction phase.

A *Phase I Environmental Site Assessment* (Phase I ESA) was conducted for the Restoration Area (Geocon 2011) and is included in Appendix ~~FE~~. This study included a review of a previous Phase II ESA conducted in 2006, and a review of records provided by the County of San Diego, Department of Agriculture, Weights and Measures, historical aerial photographs, interviews with the site owner, and onsite field reconnaissance. This review indicates the site is currently and has historically been used for agricultural purposes dating back to as early as 1953. These uses include the use of insecticides and fungicides containing organophosphorus pesticides and volatile organic compounds (VOCs) from 2008 through 2011. The Phase I indicates the application of these pesticides were done at agronomic rates and consistent with regulatory requirements. As such, residual concentrations of pesticides/herbicides may be present in farm soils. The 2006 Phase II ESA indicated that subgrade soils and groundwater samples contained minor background concentrations of several Chemicals of Potential Concern (COPCs) at concentrations not posing an environmental concern. The *Phase I ESA* compared the 2006 detected background concentrations of COPCs to the current Environmental Screening Levels (ESLs) for ecological receptors, direct exposure to humans, and leaching of contaminants into groundwater. Pursuant to this comparison, the concentrations in the farm soil do not appear to be a threat to direct exposure to humans or ecologic receptors at the site (Geocon 2011). The 2006 Phase I did describe samples, reportedly collected from surface soils within the transformer and filtration plant in the south-central portion of the Restoration Area, where the maximum concentrations of dieldrin and diesel exceed the leaching ESLs that are protective of groundwater. Although no staining was noted during the July 2011 site reconnaissance, the *Phase I ESA* recommended implementation of the following mitigation measures to reduce potential impacts, caused by the relocated placement of filtration plant soils, to a level of less than significant.

Mitigation Measures

- HAZ-1 The top one foot of soil excavated from the area of the filtration plant shall be placed in one of the Soil Placement Sites at a minimum of five feet above groundwater elevation, and five feet from any slope faces, to provide a buffer that would minimize impacts to groundwater. This soil shall be placed to provide a sufficient vertical separation from groundwater.
- HAZ-2 If soil that exhibits evidence of potential petroleum hydrocarbon impacts, or other hazardous materials are encountered during grading, the City Development Services Department and a qualified environmental professional shall be contacted to evaluate said soils, and provide professional recommendations regarding the containment and treatment or disposal of such soils.
- HAZ-3 Excavated soil material is anticipated to be placed on the identified soil placement sites. However, should any excavated material be exported from the Project Area, the material shall be characterized to determine if offsite disposal would be necessary, or if reuse is acceptable.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?* **Potentially Significant Unless Mitigated.** The Project Area is located directly east of and adjacent to Mission Vista High School. The only potential hazards identified onsite by the *Phase I ESA* include dieldrin and diesel in onsite soils within the transformer and filtration plant area (Geocon 2011). These potential contaminants would be contained onsite away from surface water and groundwater contact, and/or handled per the recommendations of qualified professional, as discussed above under Mitigation Measures HAZ-1 and HAZ-2.

During Project construction, there is the possibility of accidental release of hazardous substances such as spilling of hydraulic fluid or diesel fuel associated with construction equipment maintenance. As discussed above under Response 14.8a, the level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials. The contractor would be required to comply with state and federal regulations which avoid and minimize the potential for accidental release of such substances into the environment. Therefore, upon compliance with standard construction controls and safety procedures, and implementation of Mitigation Measures HAZ 1 and HAZ 2, a less than significant impact is anticipated to occur.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?* **Less Than Significant Impact.** As further discussed in the *Phase I ESA* (Geocon 2011), searches of the Project Area and surrounding vicinity were performed through federal, state or locally-listed sites identifying the location and type of known hazardous materials.

Project Area

The address for the parcel directly south of the Project Area, 5780 Mission Avenue (Singh Property Management Company tomato processing plant), is referenced in five databases searched as follows:

- Above Ground Storage Tank (AST) database: 4,010 gallons of unidentified substances.
- San Diego County Hazardous Materials Management Division (San Diego County HMMD) database: Listed as "active" with reported inventory consisting of materials utilized for agricultural and processing activities.
- NPDES database: Construction permit for water discharge which was terminated April 28, 2010.
- California Hazardous Material Incident Reporting System (CHMIRS) database: 1999 incident regarding accidental spill of citric acid.
- California Environmental Protection Agency (CalEPA) HAZNET database: 2008 and 2009 listings for generating and disposing of hazardous waste.

The Phase I ESA indicates that based on the information provided above, and lack of reported incidents or outstanding violations, the potential for the listings associated with the 5780 Mission Avenue address to have impacted the Restoration Area is considered low (Geocon 2011).

Surrounding Vicinity

The database search also included listed properties located less than 1/8 mile from the Restoration Area [1/4 mile for Leaking Underground Storage Tanks (LUST) facilities] as follows:

- The DTSC Envirostor database identified the future Stacco High School Site, located approximately one mile east of the Project Area at the intersection of East Vista Way and Mission Avenue, as “inactive – needs evaluation.”
- The Orphan Summary database lists properties that have incomplete address information and location cannot be accurately plotted. According to the Phase I ESA, this database lists 12 properties which appear to be located greater than one mile from the Restoration Area, with the exception of the Harry Singh and Sons property located on Wilshire Road, approximately 4,600 feet west of the site.
- The San Diego County HMDM database lists Harry Singh and Sons property located on Wilshire Road as “active” with no delinquencies or violations.
- The State Water Resources Control Board (SWRQB) Geotracker database identified no facilities within one mile of the Project Area.
- The State of California Department of Conservation (DOC), Division of Oil, Gas and Geothermal Resources (DOGGR) database: Identified no oil or natural gas production or injection wells within one mile of the Project Area.
- County of San Diego Department of Agriculture, Weights and Measures records request: Identified the Materials Safety Data Sheet (MSDS) submitted for use of hazardous materials at the Harry Singh and Sons tomato processing plant directly south of the site (refer to Response 14.8c, above, for additional discussion).
- SDAPCD records search: No records identified.
- County of San Diego Department of Environmental Health records search: Harry Singh and Sons tomato processing plant, adjacent to the south, cleared violations from 1998 and 1999.

Based on the distance of the Harry Singh and Sons property located on Wilshire Road from the Project Area, and lack of violations, the potential for this site to have impacted the Project Area is considered low (Geocon 2011). Based on the distance of the future Stacco High School Site from the Project Area, and inactive status listing, the potential for this site to have impacted the Project Area is considered low (Geocon 2011). As discussed above, no other applicable database listings were identified. Therefore, a less than significant impact is anticipated to occur.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?* **No Impact.** The proposed Restoration Area is not located within two miles of a public airport. The closest public airport is the Oceanside Municipal Airport, located approximately seven miles southwest of the Project Area. The site is located just within the outer boundaries of the Federal Aviation Administration (FAA) Height Notification Area, as well as the Airport Influence Area (AIA) for the Oceanside Municipal Airport (ALUC 2010). However, the Project does not propose the development of any structures that could interfere with airport operations or result in a safety hazard for people residing or working in the Project area. Therefore, no impact is anticipated to occur.
- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?* **No Impact.** The proposed Restoration Area is not located within the vicinity of a private airstrip. The closest private airport is the Camp Pendleton MCAS (Munn Field) Airport, located approximately eight miles northwest of the Project Area. The Project Area is located within the Munn Field AIA, and within the “Zone E” compatibility zone (ALUC 2008). However, the Project does not propose the development of any structures that could interfere

with airport operations or result in a safety hazard for people residing or working in the Project area. Therefore, no impact is anticipated to occur.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?* **Less Than Significant Impact.** According to Figure PS-11 of the Public Safety Element of the City's General Plan, an emergency evacuation plan is in place that identifies major streets and thoroughfares to be used for relocation routes in the event of an emergency (City 2002, as amended). Two of the routes identified in this emergency response plan include Highway 76/Mission Avenue and North River Road, both of which are adjacent to the proposed Restoration Area. However, construction of the proposed Project would not prevent the use of these streets in the event of an emergency. No revisions to adopted emergency plans would be required as a result of the proposed Project. Therefore, a less than significant impact is anticipated.
- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?* **No Impact.** The Project does not propose any structures or actions that would expose people or structures to a significant risk of wildland fires. The Restoration Area is located outside of areas mapped as Natural Fire Hazards areas in Figure PS-5 of the Public Services Element of the City's General Plan. Therefore, no impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.9 HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.9 HYDROLOGY AND WATER QUALITY. Would the project:				
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. Result in an increase in pollutant discharges to receiving waters considering water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g. heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
l. Result in significant alternation of receiving water quality during or following construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
m. Could the proposed project result in increased erosion downstream?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
n. Result in increased impervious surfaces and associated increased runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o. Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
p. Tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
q. Tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
r. Have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
s. Have a potentially significant adverse impact on groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
t. Cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
u. Impact aquatic, wetland, or riparian habitat?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Potentially impact stormwater runoff from construction or post construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
w. Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
x. Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.9 HYDROLOGY AND WATER QUALITY. Would the project:				
y. Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
z. Create significant increases in erosion of the project site or surrounding areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Violate any water quality standards or waste discharge requirements?* **Potentially Significant Unless Mitigated.** Based on the nature of the proposed Project (i.e., floodplain/wetland restoration), no potential long-term impacts to water quality would result. In addition, it should be noted that the Project would rehabilitate the river corridor, thereby eliminating water quality impacts associated with periodic flooding and washout of the field within the Restoration Area. As noted in Response 14.6(b) above, the Project design would incorporate construction BMPs, LID elements, and post construction BMPs to decrease runoff, sediment transport and loss of topsoil below current conditions. Overall, the Project would reduce runoff volume and sediment loading from existing conditions.

During Project construction, earthwork would occur within and adjacent to the San Luis Rey River, resulting in the potential for erosion and downstream sediment transport (sedimentation), as well as the accidental discharge of construction-related pollutants such as fuels, lubricants, trash and wastewater (e.g., from portable toilet facilities). Specifically, Project activities during the construction phase would entail relocation of up to approximately 730,000 cubic yards of soil from the Restoration Area, and placement of this material in the identified soil placement sites. Additionally, Project construction would involve the onsite use and storage of pollutant sources as described, with related potential for spills and discharge into downstream receiving waters. While shallow groundwater could potentially be encountered during Project excavation, related water quality concerns would be similar to those described for surface water (i.e., short-term erosion/sedimentation and discharge of construction-related pollutants). Accordingly, the regulatory conformance requirements described below would also address potential Project-related impacts to groundwater quality.

The Project applicant/contractor(s) would be required to obtain and/or maintain conformance with a number of water-quality related permits and approvals prior to commencement of construction, including the following:

- Clean Water Act (CWA) Section 401 Water Quality Certification - Regional Water Quality Control Board (RWQCB)
- CWA Section 402 Notice of Intent (NOI) for Coverage under a National Pollutant Discharge Elimination System (NPDES) Statewide Construction General Permit (Construction General Permit) – State Water Resources Control Board (SWRCB)
- CWA Section 404 Nationwide Permit - U.S. Army Corps of Engineers (ACOE)
- Development Plan Approval (including grading plan, landscape/restoration plan, and storm water mitigation plan) - City
- Streambed Alteration Agreement – California Department of Fish and Wildlife (CDFW)

The principal water quality regulatory standards for proposed Project construction are the NPDES Construction General Permit and related City standards (including the *City of Oceanside SUSMP*, 2010). Associated specific conformance requirements include implementing a Storm Water Pollution Prevention Plan (SWPPP), an associated Construction Site Monitoring Program (CSMP), employee training, and minimum best management practices (BMPs), as well as a Rain Event Action Plan

(REAP) for applicable projects (e.g., those determined to be in higher risk categories during permit processing). Detailed guidance for construction-related BMPs is provided in the Construction General Permit and related City standards, as well as additional sources such as the *Storm Water Best Management Practices Handbooks* (California Stormwater Quality Association [CASQA] 2009). Site-specific BMP requirements for the Project would include appropriate erosion/sediment control measures in both soil excavation and placement areas to avoid/minimize sediment discharge to the San Luis Rey River, as well as applicable efforts to properly transport, use, store and contain other potential pollutant sources. Based on implementation of appropriate BMPs as part of (and in conformance with) the project SWPPP, City SUSMP and other applicable standards, potential water quality impacts from Project implementation would reduce potential impacts to a level of less than significant.

Mitigation Measures

HYD-1 Prior to grading, the applicant will obtain approval of a site-specific Erosion Control Plan from the City Engineering Department in accordance with the City's ordinance. This plan will include a list of best management practices that the contractor will use to ensure that temporarily exposed soils do not leave the work area.

HYD-2 During the construction period, standard BMPs such as proper storage, use and disposal of construction material shall be applied to ensure that all hazardous materials (i.e., construction equipment fuels, oils, etc.) are stored properly and that no hazards occur during this phase of the project. Continual inspection and maintenance of all BMPs shall occur throughout the duration of the construction phase.

- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?* **No Impact.** The Project consists of a floodplain/wetland restoration effort, and would not entail any long-term uses that would potentially deplete groundwater supplies (e.g., withdrawal from wells) or reduce recharge capacity (e.g., installation of impervious surfaces). Some irrigation may be required during the early vegetation establishment period, and then would reduce to zero over time. In addition, the Project would include the abandonment of several onsite wells currently used for agricultural irrigation, with a corresponding reduction of groundwater withdrawal and associated potential impacts related to aquifer depletion. While shallow groundwater could potentially be encountered during Project excavation as previously noted, the Project design is intended to create a restoration/floodplain surface elevation that is at or near historical groundwater levels in the San Luis Rey River vicinity (i.e., to sustain the existing/historic periodic connection between surface flow and groundwater). Accordingly, no substantial excavation below current water tables would occur, and no related impacts to groundwater supply or recharge are anticipated.
- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?* **Less Than Significant Impact.** As described in hydraulic/restoration and hydrologic technical reports prepared for the Project and contained in Appendix G-F (ESA 2011a and 2011b), proposed activities consist of a floodplain/wetland restoration effort that would return an approximately 1,800-foot long segment of the San Luis Rey River to a natural, braided condition and relocate the majority of the soils outside the 100-year floodplain to the surrounding farm fields. Specifically, the described river segment has been previously channelized to provide flood protection for adjacent areas, and would be returned to a braided stream course with a broad and generally level floodplain area, similar to adjacent reaches of the San Luis Rey River. Accordingly, while the described activities would alter current drainage directions/patterns somewhat within the site, the overall drainage course within the river system would be maintained and the proposed changes

would be beneficial in terms of onsite fluvial and hydraulic characteristics. That is, returning the San Luis Rey River to a more natural braided system within the Project area would improve the overall function and “health” of the river system, through efforts such as restoring connectivity between the river and adjacent floodplain areas (including reestablishment of connections to a number of tributary drainages). Soil placement in the surrounding fields would not substantially alter existing drainage patterns and would not alter any stream or river. Based on the described conditions, no significant impacts related to drainage patterns or associated erosion/siltation effects are anticipated from Project implementation.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less Than Significant Impact.*** The Project consists of a floodplain/wetland restoration effort, as described above in Response 14.9(c). Based on the proposed Project design, no increase in the rate or amount of runoff would be generated through activities (e.g., by compaction or construction of impervious surfaces). Soil Placement Site 1 would include relocation of existing electrical infrastructure and placement of soil in the current driveway area; however, as noted in Response 14.9(c) above, once soil is placed in the driveway area it would be rebuilt in the same manner with the same materials, and would not cause an alteration of the existing drainage pattern. One of the identified goals of the Project is “improving the channel design to accommodate current and future flood flows.” Accordingly, the previously referenced hydrologic and hydraulic assessments include analysis of hydraulic conditions based on Federal Emergency Management Agency (FEMA) requirements, through the use of the ACOE Hydraulic Engineering Center (HEC) HEC-2 and HEC-River Analysis System (HEC-RAS) computer models. While the Project would create an expanded floodplain within the restoration area as described, based on the noted modeling the Project *Hydraulic Report and Conceptual Restoration Plan* (ESA 2011a) concludes that:

“Flood inundation extents for [the] conceptual model are similar to the base model within and downstream of the Project Area, while substantially reduced upstream...The overall reduction in flood extents can be attributed to increased storage capacity within the site. The effect of the conceptual design on water surface elevations is marked for the 100-year flood event: the water surface is reduced up to 4 feet upstream..., but remains the same as the base model downstream of the site.”

Based on the described information, no significant impacts related to drainage patterns or associated flooding hazards are anticipated from Project implementation.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Less Than Significant Impact.*** As noted above in Response 14.9(d), the Project consists of a floodplain/wetland restoration effort, and would incorporate a variety of construction BMPs, LID elements, and post construction BMPs to decrease runoff, sediment transport and loss of topsoil below current conditions. The Project has been designed to result in decreased overall runoff compared to existing conditions. Additionally, as outlined above in Response 14.9(a), the Project would not result in any long-term water quality impacts, with potential construction-related water quality effects to be reduced below a level of significance through required conformance with associated regulatory standards. Based on the described considerations, no significant impacts related to increased runoff, the capacity of storm drain systems, or the generation of additional polluted runoff are anticipated from Project implementation.
- f) *Otherwise substantially degrade water quality? **Less Than Significant Impact.*** As described above in Response 14.9(a), potential Project-related water quality impacts would be limited to erosion/sedimentation and discharge of associated pollutants during proposed construction activities. The project has been designed to result in decreased erosion compared to existing conditions. Any

potential impacts during construction would be reduced below a level of significance through conformance with applicable described regulatory standards, with no other potential impacts related to degradation of water quality anticipated.

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?* **No Impact.** The Project is located within the 100-year floodplain, but does not propose any housing. The Project is subject to mandatory review and approval by FEMA of the Project-specific Conditional Letter of Map Revision (CLOMR) process prior to construction and Letter of Map Revision (LOMR) process after construction is complete (as outlined below in Response 14.9h). Accordingly, no impacts related to the placement of housing within a 100-year floodplain would occur.
- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?* **Less Than Significant Impact.** The Project is located within a mapped 100-year floodplain, but does not propose structures that would impede flood flows. As described above in Section 8.0, *Project Description*, one of the primary objectives of the Project is to improve the channel design to accommodate current and future flood flows. The Project is required to submit and receive approval of a CLOMR from FEMA prior to commencement of construction. After restoration is complete, the Applicant would be required by FEMA to submit a LOMR to document constructed conditions. The CLOMR and LOMR would reflect the proposed and constructed hydraulic design of the Project, including the placement of any structures involved in redirection of flood flows. Similarly, the CWA Section 404 permit processed through the ACOE would address the proposed cut and fill (in the case of the Project, excavation and replacement) of materials occurring within Waters of the U.S. In the case of the proposed Project, Waters of the U.S would include the San Luis Rey River channel to the ordinary high water mark (OHWM) on the north and south banks of the river. Compliance with the proposed floodplain map revisions and Section 404 permit conditions would ensure that flood flows meet applicable regulatory requirements, with associated potential impacts therefore anticipated to be less than significant.
- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?* **Less Than Significant Impact.** As described above in Responses 14.9(g) and 14.9(h), the Project does not propose any new housing or structures within the mapped 100-year flood plain, with no associated flood-related hazards. The entire San Luis Rey River corridor below Lake Henshaw is mapped as an inundation area in association with a catastrophic failure of the Lake Henshaw Dam (County of San Diego 2007). Accordingly, under such a scenario the Project Area could be subject to related flooding. No associated significant impacts related to loss, injury or death are anticipated from Project implementation, however, based on the following considerations: (1) large containment structures, such as the Lake Henshaw Dam, are subject to extensive design, geotechnical, engineering, inspection and maintenance requirements pursuant to regulatory standards of the California Department of Water Resources, Division of Safety of Dams, with the probability for a related catastrophic failure therefore considered extremely low; and (2) the Project does not propose any housing, structures or uses within the described inundation zone that would be subject to significant risk of loss, injury or death from dam failure-related flooding.
- j) *Inundation by seiche, tsunami, or mudflow?* **Less Than Significant Impact.** The Project Area is located approximately seven miles inland, and is therefore not subject to impacts from a tsunami. Similarly, the Project Area is not located adjacent, or in close proximity to, any upstream waterbody capable of producing a sizable seiche, with no associated impacts anticipated. While the Project Area is relatively close to several slopes potentially capable of producing mudslides, no associated significant impacts are anticipated based on the following considerations: (1) the noted slopes are generally not large or steep, with any associated mudflow events likely to be minor in extent and range; (2) most nearby slopes support development and/or extensive vegetation, which would reduce the potential for mudflows; (3) all nearby slopes have intervening development or open space areas, reducing the potential for associated substantial mudflow within the Project Area; and

- (4) the Project does not propose any housing, structures or uses within the described inundation zone that would be subject to significant risk of loss, injury or death from mudflows.
- k) *Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g. heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?* **Less Than Significant Impact.** As described above in Response 14.9(a), potential Project-related water quality impacts would be limited to the construction phase, and would include erosion/sedimentation and the potential accidental discharge of related pollutants such as vehicle/equipment fuels and lubricants. All of these potential impacts would be addressed through required conformance with applicable regulatory standards, with potential water quality impacts to be less than significant.
- l) *Result in significant alternation of receiving water quality during or following construction?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f) and 14.9(k), above.
- m) *Could the proposed project result in increased erosion downstream?* **Less Than Significant Impact.** Please refer to Responses 14.9(a) and 14.9(c), above.
- n) *Result in increased impervious surfaces and associated increased runoff?* **No Impact.** As described above in Responses 14.9(d) and 14.9(e), the proposed Project would decrease the rate or amount of runoff from the overall site once construction is complete. There are no impervious surfaces associated with the Project, and the Project has been designed to reduce the amount of runoff below existing conditions.
- o) *Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?* **Less Than Significant Impact.** As described above in Responses 14.9(c) through 14.9(e), and 14.9(n), Project implementation would result in minor (less than significant) changes to drainage patterns; however, no increases in runoff flow rates or volumes would result.
- p) *Tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?* **Less Than Significant Impact.** The most recent (2008-2010) approved Section 303(d) list identifies the following impairment listings for the lower San Luis Rey River (west of I-15): benthic community effects, chloride, enterococcus and fecal coliform bacteria, phosphorus, selenium, sulfates, total nitrogen (as N), total dissolved solids, and toxicity (SWRCB 2010). While the Restoration Area is thus in an area tributary to 303(d) listed waters, no associated significant impacts are anticipated for similar reasons as described above in Response 14.9(a). Specifically, the Project would not generate any substantial long-term pollutants, and would eliminate discharges of agricultural-related pollutants such as fertilizers (e.g., phosphorus and nitrogen) and pesticides (toxicity) from the Restoration Area. The Soil Placement Sites would be graded in such a way as to decrease runoff below current conditions. The agricultural fields where soil is being placed are currently covered and would remain in the San Diego Water Board Irrigated Lands Program Conditional Waiver No. 4. Potential short-term (construction phase) pollutants would consist of sediment and construction-related substances such as vehicle fuels and lubricants, with associated potential impacts to be addressed through required conformance with related regulatory standards. Accordingly, potential impacts related to pollutant discharge into 303(d) listed waters would be less than significant.
- q) *Tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?* **Less Than Significant Impact.** While the Project Area would be tributary to downstream sensitive areas such as riparian and other wetland habitats, associated impacts would be less than significant for similar reasons as noted above in Responses 14.9(a) and 14.9(p).

- r) *Have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k) through 14.9(m), 14.9(p), and 14.9(q), above.
- s) *Have a potentially significant adverse impact on groundwater quality?* **Less Than Significant Impact.** Please refer to Response 14.9(a), above.
- t) *Cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k) through 14.9(m), and 14.9(p) through 14.9(s), above. Based on the referenced discussions, potential Project-related impacts to beneficial uses would be less than significant.
- u) *Impact aquatic, wetland, or riparian habitat?* **Less Than Significant Impact.** As described above in Response 14.4(b), the Project Area currently supports predominantly non-native habitats, while Project implementation would result in the Restoration Area being restored to native, primarily riparian and wetland, habitats. Based on these conditions, potential water quality-related effects from Project impacts to aquatic, wetland, or riparian habitats would be less than significant.
- v) *Potentially impact stormwater runoff from construction or post construction?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k), 14.9(l), 14.9(m), 14.9(p) through 14.9(r), and 14.9(t), above.
- w) *Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k), 14.9(l), 14.9(m), 14.9(p) through 14.9(r), 14.9(t), and 14.9(v), above. In addition, as outlined in Section 8.0 and Response 14.9(a), Project implementation would not entail any long-term uses (or related impacts) such as material storage, vehicle/equipment fueling or maintenance, waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas.
- x) *Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k), 14.9(l), 14.9(m), 14.9(p) through 14.9(r), 14.9(t), 14.9(v), and 14.9(w), above.
- y) *Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?* **Less Than Significant Impact.** Please refer to Responses 14.9(d) 14.9(e), 14.9(n), and 14.9(o), above.
- z) *Create significant increases in erosion of the project site or surrounding areas?* **Less Than Significant Impact.** Please refer to Responses 14.9(a), 14.9(c), 14.9(f), 14.9(k) through 14.9(m), 14.9(p) through 14.9(r), 14.9(t), 14.9(v), and 14.9(x), above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.10 LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Physically divide an established community?* **No Impact.** The proposed Project would not have an impact on the physical arrangement of an established community. The Project is the restoration of the San Luis Rey River within the Restoration Area to its historical floodplain, and would not result in a change, or adverse effect, to the existing surrounding uses. Therefore, no impact is anticipated to occur.
- b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?* **No Impact.** The proposed Project would not conflict with the existing General Plan land use designations or zoning designations at the site. The Project would be subject to review and approval by the City for consistency with all applicable regulations and ordinances. The Restoration Area is not within a Specific plan area or the coastal zone. The Project would be subject to review and permit or other applicable authorizations by the regulatory agencies as described in Sections 10 and 12, above. Therefore, no impact is anticipated to occur.
- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?* **No Impact.** Refer to Response 4.4(f) above. No impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.11 MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* **No Impact.** The City's General Plan and Zoning Ordinance would not permit any mineral extraction on or within the vicinity of the Project Area. Therefore, the Project would have no impact.

b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?* **No Impact.** Refer to Response 14.10a, above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.12 NOISE. Would the project:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* **Less Than Significant Impact.** An Acoustical Analysis was prepared for the proposed Project (HELIX 2012b) and is included in Appendix H. According to the Acoustical Analysis, State Route 76 (SR 76) traffic noise is the dominant source of noise in the southern portion of the Project Area and the northern area has a low level from both SR 76 and North River Road. An onsite inspection was conducted at 1:30 p.m. on Friday March 9, 2012, to measure existing noise levels. The farm fields were fallow at the time of this inspection, so this is a conservative analysis of ambient noise, as the farm fields are now in active production. A 15-minute ambient noise measurement was made approximately 180 feet from the centerline of SR 76 near the southeast corner of the developed field. The measured noise level was 56.7 decibels with A-weighting (dBA) L_{EQ} (time-averaged noise levels). During the ambient noise measurement, there was no measurable wind, the humidity was low, and the temperature was in the low 70s (degrees Fahrenheit). There was minimal activity at the facilities to the west and no other ambient noise source was heard during the site visit (HELIX 2012b).

Upon completion of Project construction, no ongoing operational noise would be generated by the Project. The proposed Project would, however, create short-term, temporary impact in terms of construction noise. Noise generated by construction equipment, including trucks, backhoes and other equipment, may temporarily impact nearby sensitive receptors. The construction equipment anticipated for the proposed Project is listed in Table 14-11 below and was provided by the Project applicant. The vehicles' horsepower, load factors, engine manufacturing years, and estimated number of hours that the vehicles would be in use during construction are estimated as well.

Model	Description	Horsepower	Hours to Complete Project	Load Factor	Engine Year
Cat 965B	Tractor	500	1,200	0.72	2009
Ktec 1231	36 CY Pull Scraper	-	1,200	-	-
Cat 965B	Tractor	500	1,200	0.72	2008
Ktec 1231	36 CY Pull Scraper	-	1,200	-	-
Case STX 485	Rubber-tired Tractor	485	1,200	0.72	2008
Ktec 1231	36 CY Pull Scraper	-	1,200	-	-
Cat 965B	Tractor	500	1,200	0.72	2009
Ktec 1231	36 CY Pull Scraper	-	1,200	-	-
Cat 965B	Tractor	500	1,200	0.72	2007
Ktec 1231	36 CY Pull Scraper	-	1,200	-	-
Cat D6T	Dozer	200	1,200	0.64	2008
Cat D8T	Dozer	310	1,200	0.64	2008
Peterbilt	Water Truck	300	1,200	0.50	2006
CAT	Compactor	240	600	0.64	2007
Cat 321 DL	Excavator	148	1,000	0.57	2008

Source: HELIX 2012b

Because most of the construction equipment is mobile, the most accurate construction noise model is a slow-moving point source of noise. The basic modeling assumes that the slow-moving point would be in approximately the same location four times during an hour. Noise source data used in this analysis is shown in Table 14-12 below.

Equipment	Noise Levels in dB¹ Measured at Octave Frequencies in Hertz (Hz)									Overall Noise Level (dBA)
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	
D8 as a Line Source	130	125.5	114.5	116.5	113.5	112.5	118.5	102.5	96.5	121.2
Loader as a Line Source	109.2	121.6	109.8	105.9	103.1	118.9	106.6	99.9	95.5	119.4
Cat Scraper as a Line Source	115.4	125.6	117.1	120.7	116.1	107.4	107.3	103.4	121.1	115.4

¹ Based on Sound Power Levels (S_{wL})

Source: HELIX 2012b

Based on the noise data above, the following potential impacts to sensitive noise receptors were analyzed.

Residential

The City of Oceanside does not have quantified construction noise level limits. The expected 75 dBA 1-hour average noise impact contour is 75-feet or less, and the property-line noise levels could reach

as high as 78 dBA. The only residences within 75 feet of any of the Project boundaries are along the north central portion of Soil Placement Site 4. These residences provide housing for seasonal farm workers and are unoccupied in the off-season. In addition, if occupied, the farm workers would not be in the residences during the day when the construction equipment would be operating. Pursuant to the City's Noise Ordinance standards, construction activities would be limited to daytime hours for the duration of construction. Therefore, a less than significant noise impact to nearby seasonal residences is anticipated to occur (HELIX 2012b).

Mission Vista High School

The City does not provide specific planning limits for noise impacts to schools or residential interiors (often used as a basis for school interior planning). Other municipal agencies including San Diego County use a 50 dBA L_{EQ} (or lower) standard for consideration of interior noise.

Using a 15 dB exterior-to-interior reduction would allow a noise impact of 65 dBA L_{EQ} at the edge of a building before interior noise levels exceeded 50 dBA. The school is within the potential 65 dBA L_{EQ} construction noise impact area. However, the school has a tall berm facing the site which provides a noise shield barrier between the proposed construction and the school. The berm would provide a reduction greater than 10 dBA, which would reduce the exterior noise impacts to less than 55 dBA L_{EQ} and the interior to less than 40 dBA L_{EQ} . Therefore, a less than significant noise impact to Mission Vista High School is anticipated to occur.

Sensitive Habitat

Impacts to sensitive habitat could only occur if construction activities were to happen during the breeding season. Construction noise levels could be as high as 78 dBA at the Project boundary, which would exceed the 60 dBA noise level limit for occupied sensitive species habitat. Implementation of Mitigation Measures BIO-5, BIO-6, and BIO-9, above, would reduce potential sensitive habitat impacts to a level of less than significant.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?* **Less Than Significant Impact.** Construction activities would be temporary in nature. Therefore, excessive ground borne vibration or noise is not expected to occur. Therefore, a less than significant impact is anticipated to occur.
- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?* **No Impact.** Due to the nature and scope of the proposed Project, a permanent increase in the ambient noise level in the Project vicinity would not occur. No impact would occur.
- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?* **Less Than Significant Impact.** Refer to Response 4.12a. As noted above, the implementation of the proposed Project may result in short-term increased noise levels within the Project vicinity due to construction activities. This temporary condition would cease upon Project completion and is subject to the City's construction noise ordinance. Implementation of Mitigation Measures BIO-5, BIO-6, and BIO-9, above, would reduce potential noise impacts to sensitive habitats to a level of less than significant.
- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* **No Impact.** Refer to Response 4.8e. The proposed Project is not located within two miles of a public airport or public use airport. No impacts are anticipated to occur.
- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?* **No Impact.** Refer to Response 4.8f. The proposed Project is not located within two miles of a private airstrip. No impacts are anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.13 POPULATION & HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* **No Impact.** The Project does not propose any housing, or new or extended roadways or other infrastructure that could directly or indirectly induce population growth. No impact would occur.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?* **No Impact.** No housing is located on the Project Area, and the Project does not include the removal of any housing. No impact would occur.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?* **No Impact.** Refer to Response 4.13a and 4.13b, above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.14 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1) *Fire protection?* **No Impact.** The Project does not propose any activities that would result in the need for additional fire protection services or facilities. Therefore, no impact would occur.

- 2) *Police protection? **No Impact.*** The Project does not propose any activities that would result in the need for additional police protection services or facilities. Therefore, no impact would occur.
- 3) *Schools? **No Impact.*** The Project does not propose any residential facilities that could generate additional students. Implementation of the proposed Project would not result in the need for the construction of additional school facilities. Therefore, no impact would occur.
- 4) *Parks? **No Impact.*** Implementation of the proposed Project would not affect any existing park facilities. Further, the Project does not propose any activities that would increase the demand for recreational facilities. Therefore, no impact would occur.
- 5) *Other public facilities? **No Impact.*** The Project does not propose any activities that would result in the need for other public services or facilities. Therefore, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.15 RECREATION. Would the project:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? **No Impact.*** The Project does not propose any activities that would generate an increase in demand on existing public or private parks or other recreational facilities or increase physical deterioration of such facilities. Therefore, no impact would occur.
- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? **No Impact.*** The Project does not propose the construction or expansion of recreational facilities. Therefore, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.16 TRANSPORTATION/TRAFFIC. Would the project:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion/management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?* **Less Than Significant Impact.** Upon completion of construction, the Restoration Area is not anticipated to generate long-term, operational vehicular trips. However, the Project would result in a minor increase in vehicular trips during the construction phase, as a result of transportation of construction workers and equipment to and from the site. An approximate maximum of 25 construction workers would be onsite at any given time. Construction equipment would be stored in onsite staging areas during periods of non-use in the construction phase, thereby minimizing the number of ingress/egress trips required. Therefore, a less than significant impact is anticipated to occur.
- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?* **Less Than Significant Impact.** Refer to Response 4.16a, above. A less than significant impact is anticipated to occur.
- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?* **No Impact.** The proposed Project Area is not located within two miles of a public or private airport, and does propose any activities, uses, or features with potential to interfere with air traffic patterns. Refer to Response 4.8e and 4.8e f, above. No impact is anticipated to occur.
- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* **No Impact.** The Project does not propose any new public roads or changes to existing roads. The Project would utilize existing paved access points from Highway 76/Mission Avenue, and the existing unpaved access points from North River Road. Therefore, no impact is anticipated to occur.

- e) *Result in inadequate emergency access?* **Less Than Significant Impact.** According to Figure PS-11 of the Public Safety Element of the City’s General Plan, an emergency evacuation plan is in place that identifies major streets and thoroughfares to be used for relocation routes in the event of an emergency (City 2002, as amended). Two of the routes identified in this emergency response plan include Highway 76/Mission Avenue and North River Road, both of which are adjacent to the proposed Project. However, construction and implementation of the proposed Project would not prevent the use of these streets in the event of an emergency. No revisions to adopted emergency plans would be required as a result of the proposed Project, and adequate emergency access would be provided during short-term construction activities. Therefore, a less than significant impact is anticipated to occur.
- f) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?* **No Impact.** Project implementation would not conflict with adopted policies, plans, or programs supporting alternative transportation, nor preclude the implementation of such policies, plans, or programs. Therefore, no impact is anticipated to occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.17 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?* **No Impact.** The Project does not propose any activities or uses that would require use of wastewater treatment services. Project compliance with stormwater runoff and discharge requirements is discussed above under Section 4.9, Hydrology and Water Quality. Therefore, no impact would occur.
- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* **No Impact.** The Project does not propose any activities that would require the use or expansion of

existing water or wastewater facilities, or the construction of new water or wastewater facilities. Therefore, no impact would occur.

- c) *Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* **No Impact.** The Project does not propose any activities that would require the use or expansion of existing stormwater drainage facilities, or the construction of new stormwater drainage facilities. Project compliance with stormwater runoff and discharge requirements is discussed above under Section 4.9, Hydrology and Water Quality. Therefore, no impact would occur.
- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?* **No Impact.** The Project does not propose any activities or uses that would require additional water supplies. Implementation of the Project would reduce water use at the site, by reducing the need for agricultural water supply in the Restoration Area. No new or expanded water supply entitlements would be required with implementation of the proposed Project. Four agricultural wells would be decommissioned within the restoration footprint. Therefore, no impacts are anticipated to occur.
- e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?* **No Impact.** The Project does not propose any activities or uses that would require wastewater treatment services. Therefore, no impacts are anticipated to occur.
- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?* **Less Than Significant Impact.** Once restoration is complete, the Restoration Area would not be a generator of solid waste. During construction, excavated soil materials are proposed for reuse onsite, and placement in designated soil placement sites. Any non-soil material removed from the Restoration Area during construction, such as decommissioned water supply piping, would be managed for disposal at a permitted solid waste disposal site. Any cleared vegetation not reused on site would be managed for delivery to a permitted compost or disposal facility. Potential contaminated soil that could require disposal at a solid waste facility would be contained and disposed of pursuant to local, state and federal hazardous waste disposal regulations, as discussed under section 4.8, *Hazards and Hazardous Materials*, above. Volumes of these materials are not anticipated to consist of sufficient quantity to exceed permitted capacities. Upon completion of construction activities, the Project does not propose any long-term operational activities that would generate solid waste, or require the use of solid waste facilities. Therefore, a less than significant impact is anticipated to occur.
- g) *Comply with federal, state, and local statutes and regulations related to solid waste?* **No Impact.** Refer to Response 14.17f, above.

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
14.18 MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's incremental effects are considerable when compared to the past, present, and future effects of other projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory?* **Potentially Significant Unless Mitigated.** Although the proposed Project would temporarily impact areas potentially utilized by fish, wildlife, and plant species, and areas potentially containing unknown examples of California history or pre-history, Project-specific mitigation measures have been incorporated, as discussed above and outlined in the MMRP contained in Section IV Appendix B, to reduce impacts to a level of less than significant. Upon incorporation of these mitigation measures, a less than significant impact is anticipated to occur.
- b. *Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?* **No Impact.** The proposed Project is a wetland restoration project that would provide long-term beneficial effects to sensitive species, habitats, and river hydrology. Further, the Project would provide wetland mitigation opportunities for other projects in the region and would be beneficial in nature to federally listed species known or potentially occurring in the region. As such, no impact would occur.
- c. *Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's incremental effects are considerable when compared to the past, present, and future effects of other projects)?* **Less Than Cumulatively Considerable.** As described above, potential temporary Project-specific impacts that would occur as a result of construction activities would be mitigated at the Project level.

No long-term adverse impacts are anticipated to occur, and as such, the Project would not incrementally contribute to a cumulatively considerable impact.

- d. *Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?* **Less Than Significant Impact.** The proposed Project would result in

potential dust and equipment noise during construction activities. However, these are subject to compliance with existing regulations and proposed BMPs, as discussed above under air quality and noise. Therefore, a less than significant impact would occur.

16. **PREPARATION.** The initial study for the subject Project was prepared by:

Julie McCall, HELIX Environmental Planning, Inc.

17. **DETERMINATION.** (To be completed by lead agency) Based on this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described herein have been included in this Project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

18. **DE MINIMIS FEE DETERMINATION** (Chapter 1706, Statutes of 1990-AB 3158)

- It is hereby found that this Project involves no potential for any adverse effect, either individually or cumulatively, on wildlife resources and that a "Certificate of Fee Exemption" shall be prepared for this Project.
- It is hereby found that this Project could potentially impact wildlife, individually or cumulatively, and therefore fees shall be paid to the County Clerk in accordance with Section 711.4(d) of the Fish and Game Code.

19. **ENVIRONMENTAL DETERMINATION:** The initial study for this Project has been reviewed and the environmental determination, contained in Section V. preceding, is hereby approved:

Richard Greenbauer, Senior Planner

- 20. PROPERTY OWNER/APPLICANT CONCURRENCE:** Section 15070(b)(1) of the California Environmental Quality Act (CEQA) Guidelines provides that Lead Agencies may issue a Mitigated Negative Declaration where *the initial study identifies potentially significant effects, but, revisions in the Project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.* The property owner/applicant signifies by their signature below their concurrence with all mitigation measures contained within this environmental document. However, the applicant's concurrence with the Draft Mitigated Negative Declaration is not intended to restrict the legal rights of the applicant to seek potential revisions to the mitigation measures during the public review process.

Cindy Tambini, Wildlands SLR Holdings I, LLC

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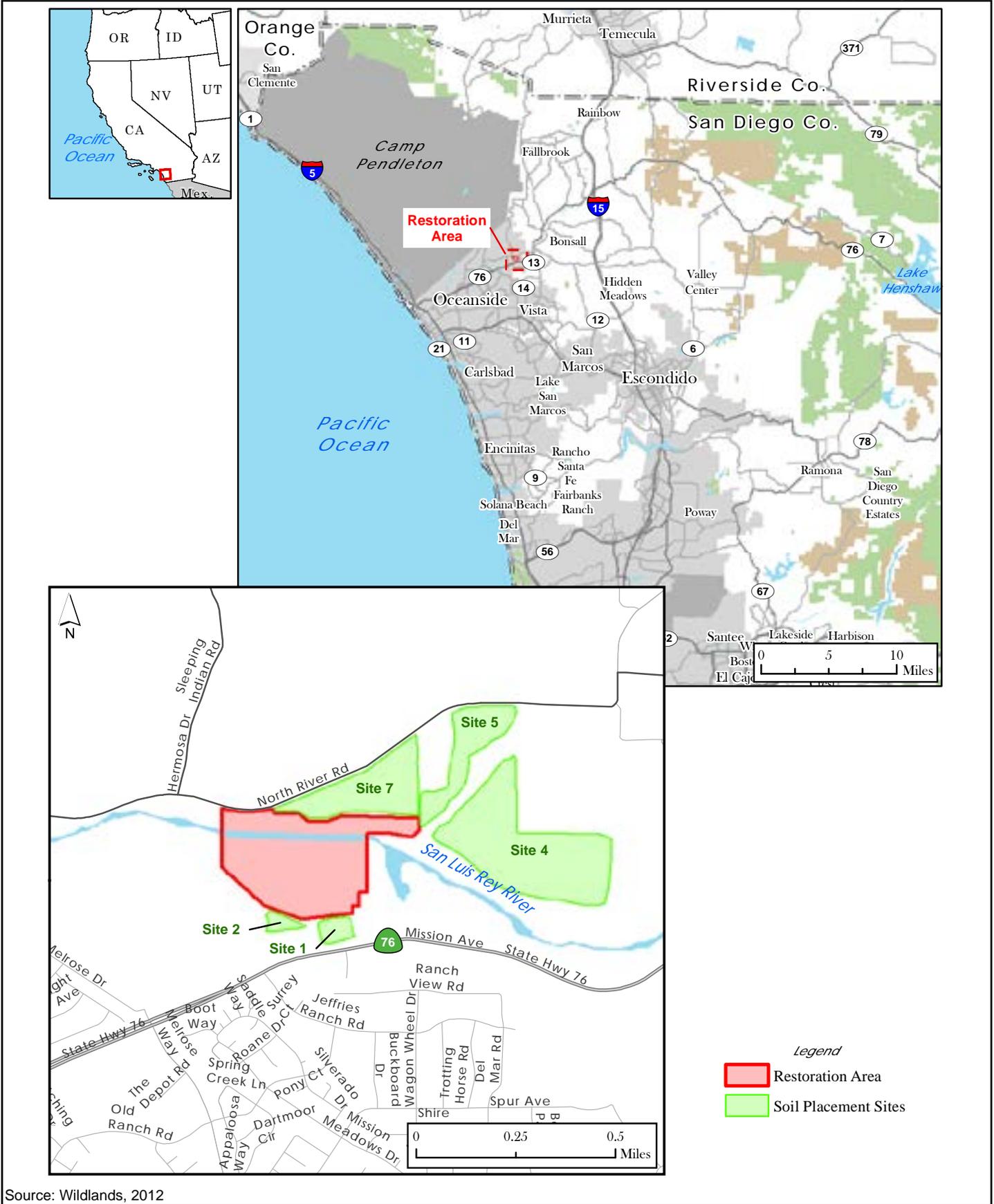
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FIGURES



Source: Wildlands, 2012

E:\ArcGIS\W\WDL-01 SanLuisRey\Map\ENV\IS\Fig2_Regional.indd -KF

Regional Vicinity Map

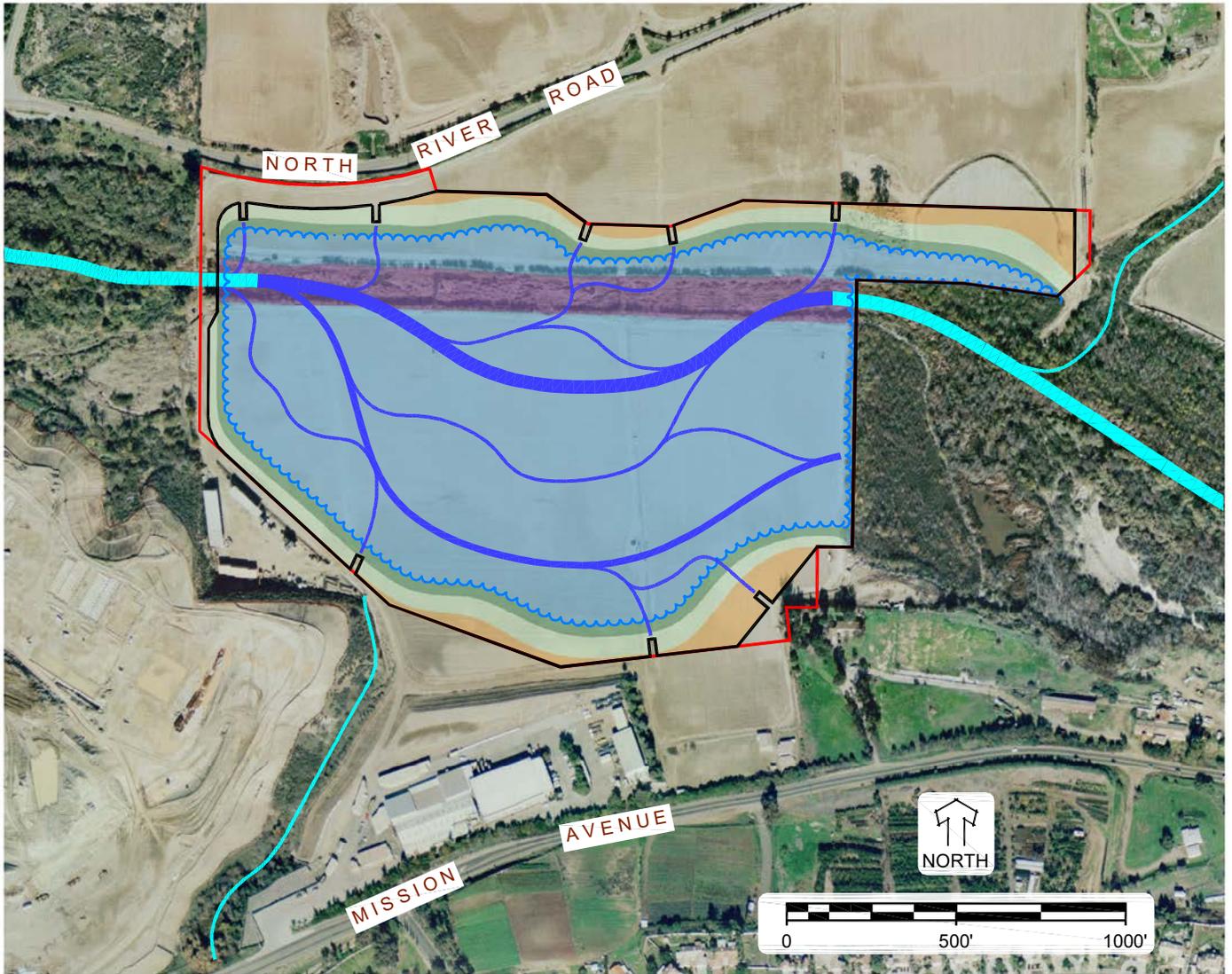
SAN LUIS REY MITIGATION BANK



Source: Wildlands, 2012
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**Aerial Site Plan with City of Oceanside
 General Plan Land Use Designations**
 SAN LUIS REY MITIGATION BANK

Figure 2



LEGEND

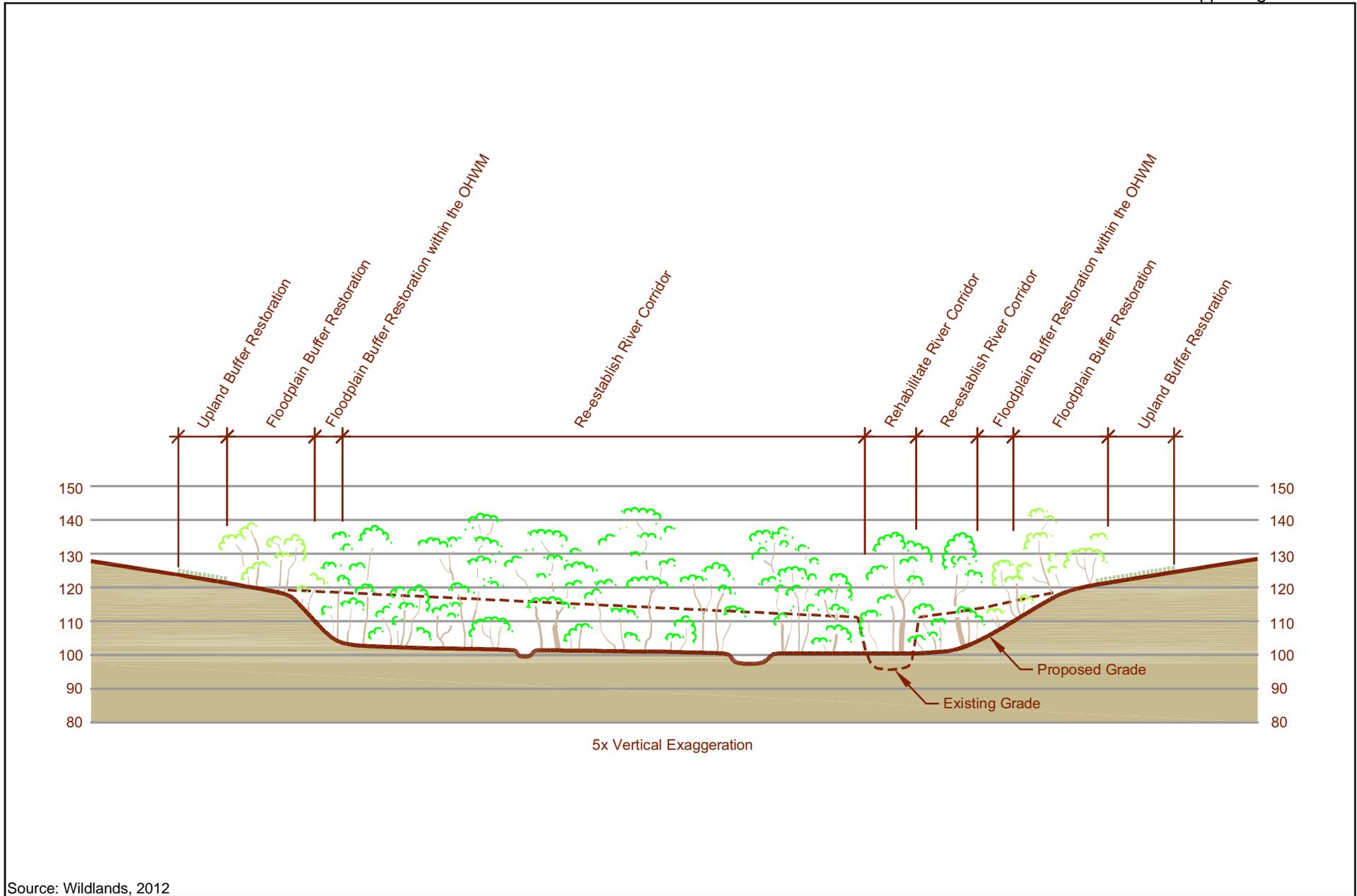
Property Boundary		56.54 acres
Bank Boundary		53.84 acres
Restore / Rehabilitate 404 Wetland River Corridor		5.28 acres
Restore / Re-establish 404 Wetland River Corridor		35.84 acres
Floodplain Buffer Restoration within OHWM		3.89 acres
Floodplain Buffer Restoration		5.34 acres
Upland Buffer Restoration		3.25 acres
Existing Riparian Forest		0.24 acres
Existing River		
Existing Stream / Drainage		
Restored River		
Restored Secondary Channel		

Source: Wildlands, 2012

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Preliminary Restoration Concept Plan

SAN LUIS REY MITIGATION BANK

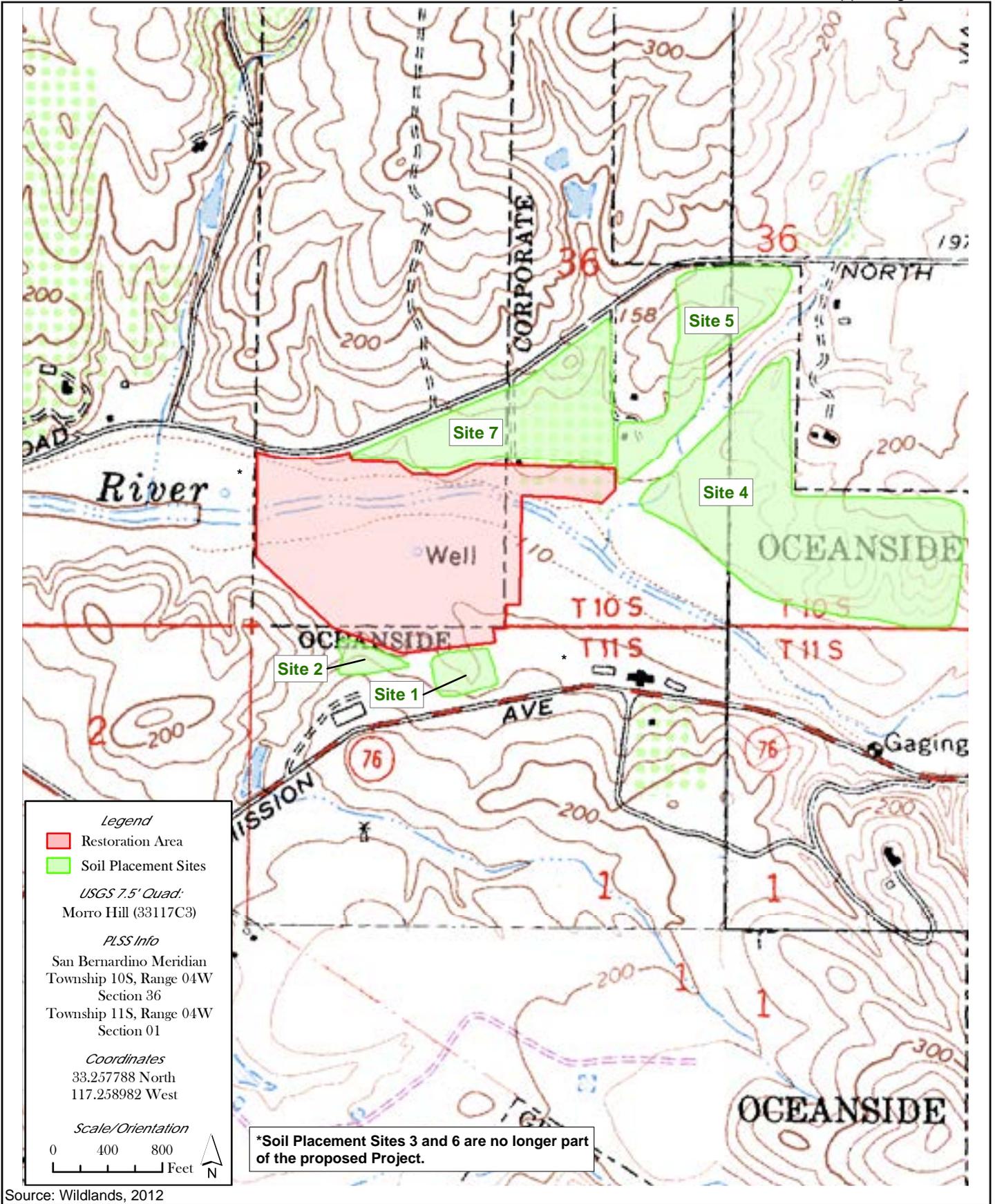


Source: Wildlands, 2012

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Schematic Cross-section

SAN LUIS REY MITIGATION BANK



Source: Wildlands, 2012

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**USGS Topographic Map and
Potential Soil Placement Sites 1-7**
SAN LUIS REY MITIGATION BANK
Figure 5

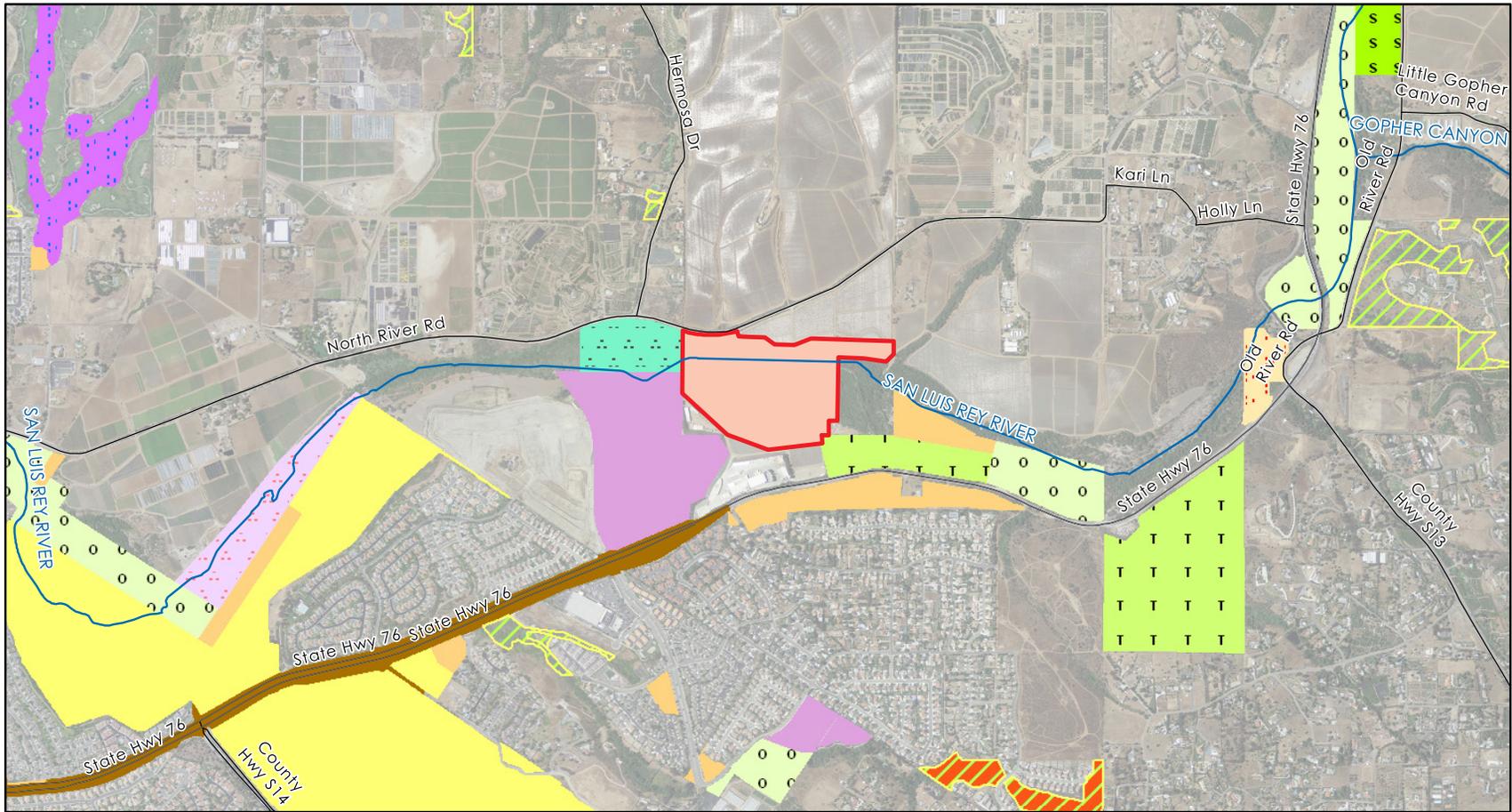


Source: Wildlands, 2012

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Nearby Restoration Projects

SAN LUIS REY MITIGATION BANK



Legend		
Restoration Area	State of California	Other Public Lands***
Open Space Easement*	The Center for Natural Lands Management	City of Oceanside
Other Conserved Lands**	Granite Construction	County of San Diego
City of Oceanside	Lennar Homes HOA	School Districts
County of San Diego	Private	State of California
Caltrans		

Data Sources

*Taken from SanGIS' Open Space Easements GIS dataset. Jan. 2010.

**Taken from SANDAG's Conserved Lands GIS dataset July 2010.

***Taken from SANDAG's 2009 Public Land Ownership GIS dataset. 2009.

Scale

0 0.25 0.5 Miles

Aerial Image

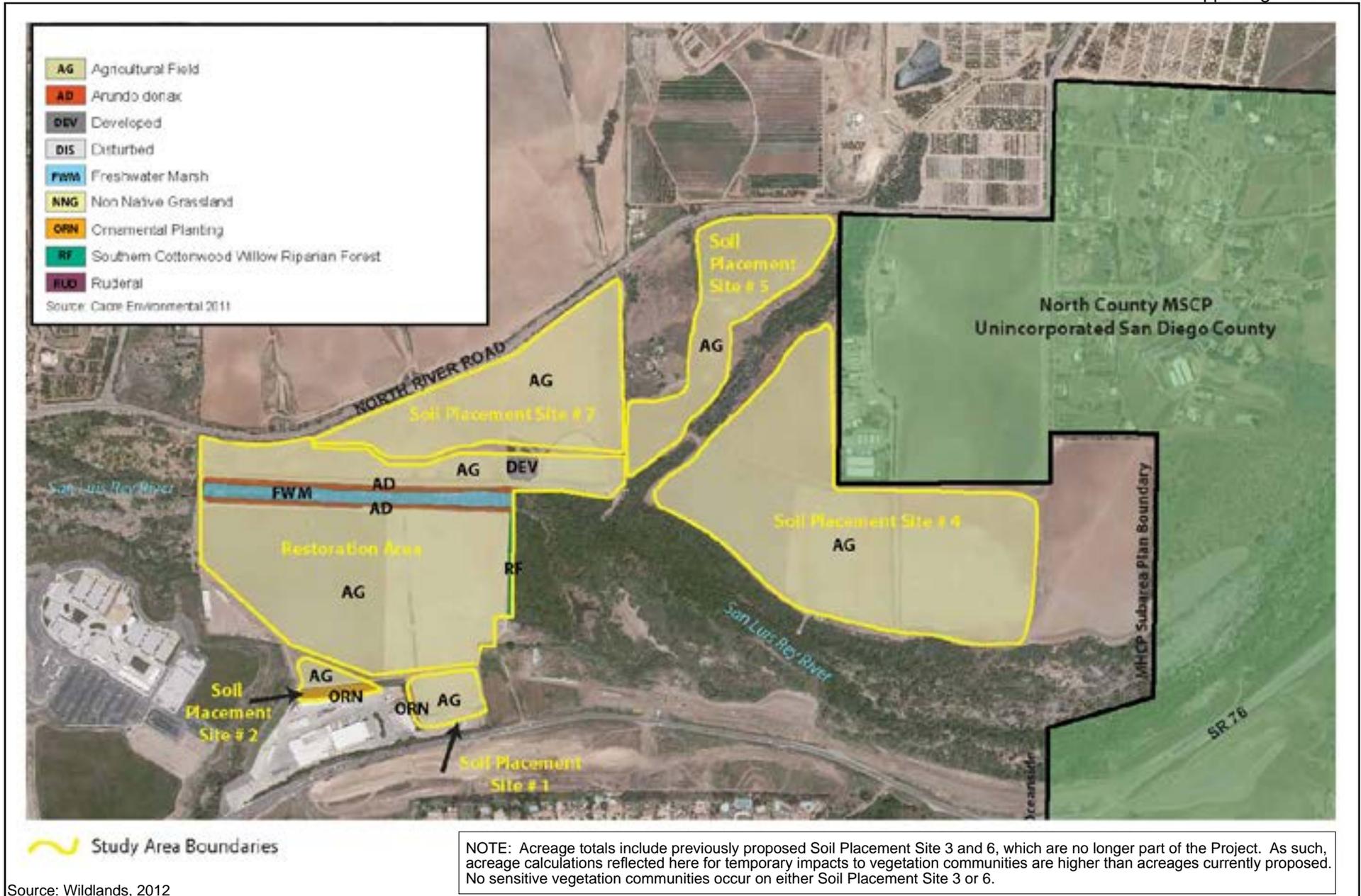
2009 National Agriculture Imagery Program

Source: Wildlands, 2012

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Conserved and Public Properties

SAN LUIS REY MITIGATION BANK

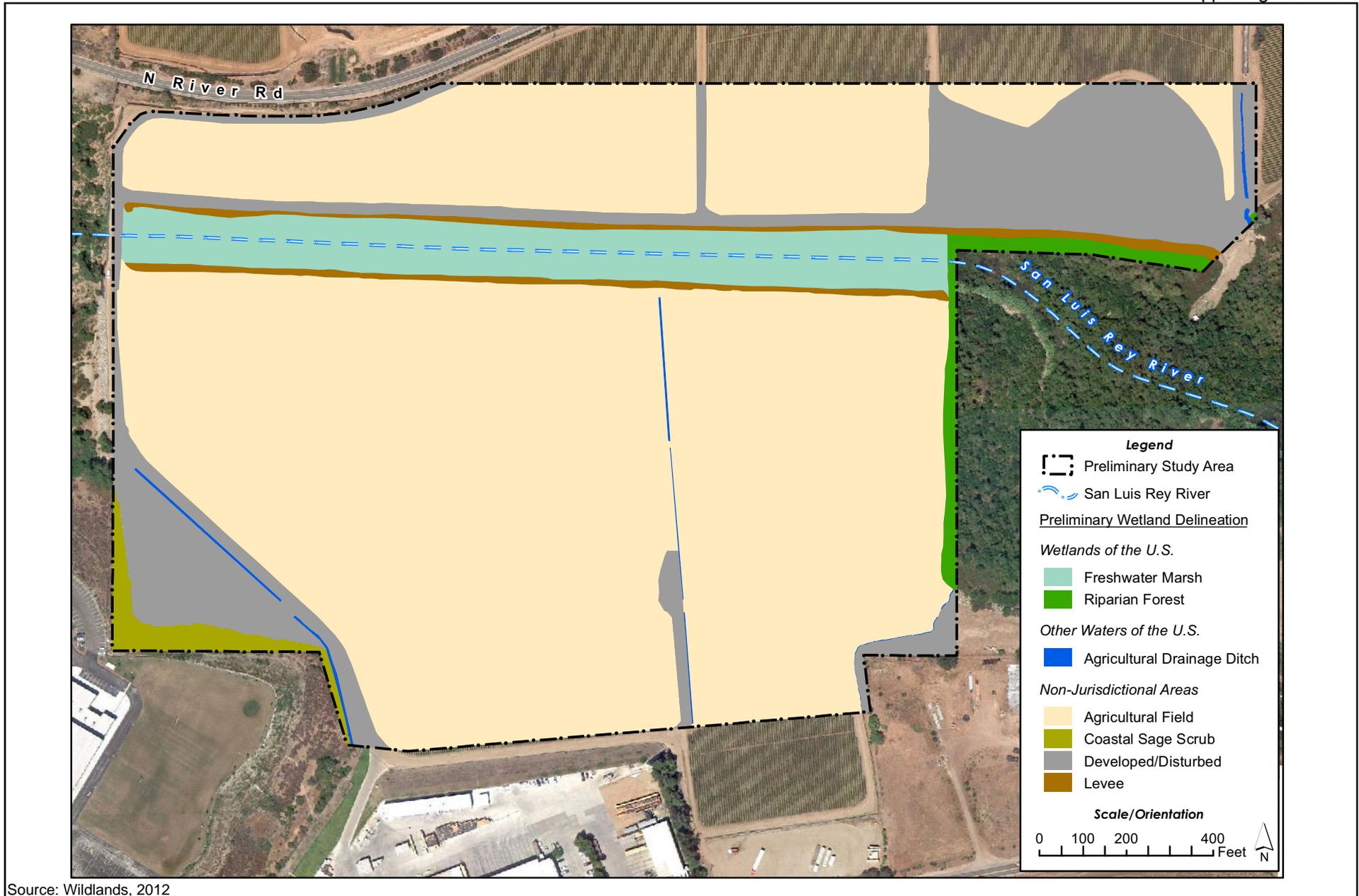


Source: Wildlands, 2012

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Vegetation Communities

SAN LUIS REY MITIGATION BANK

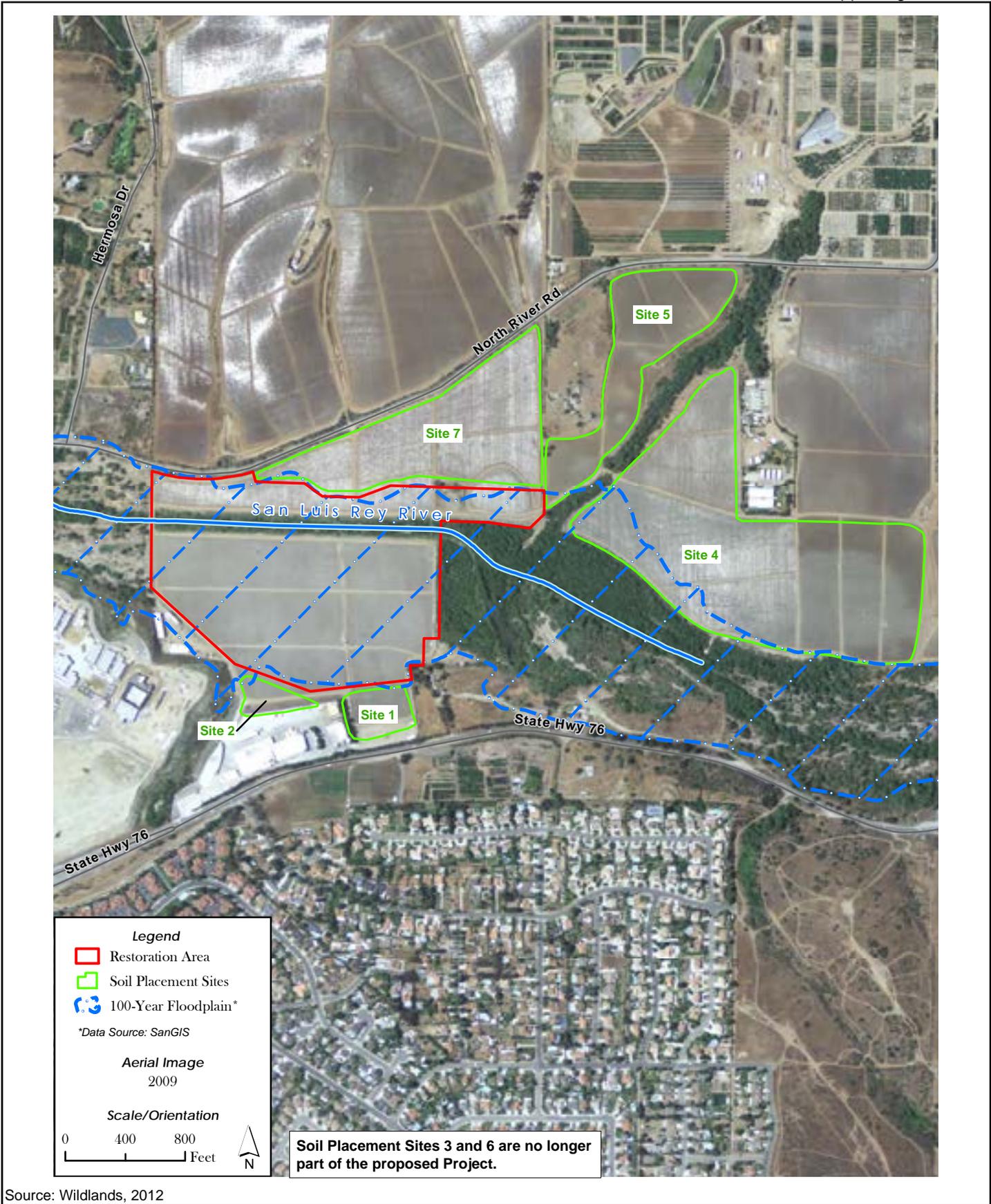


Source: Wildlands, 2012

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Preliminary Wetland Delineation

SAN LUIS REY MITIGATION BANK



Source: Wildlands, 2012

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100-year Floodplain

SAN LUIS REY MITIGATION BANK

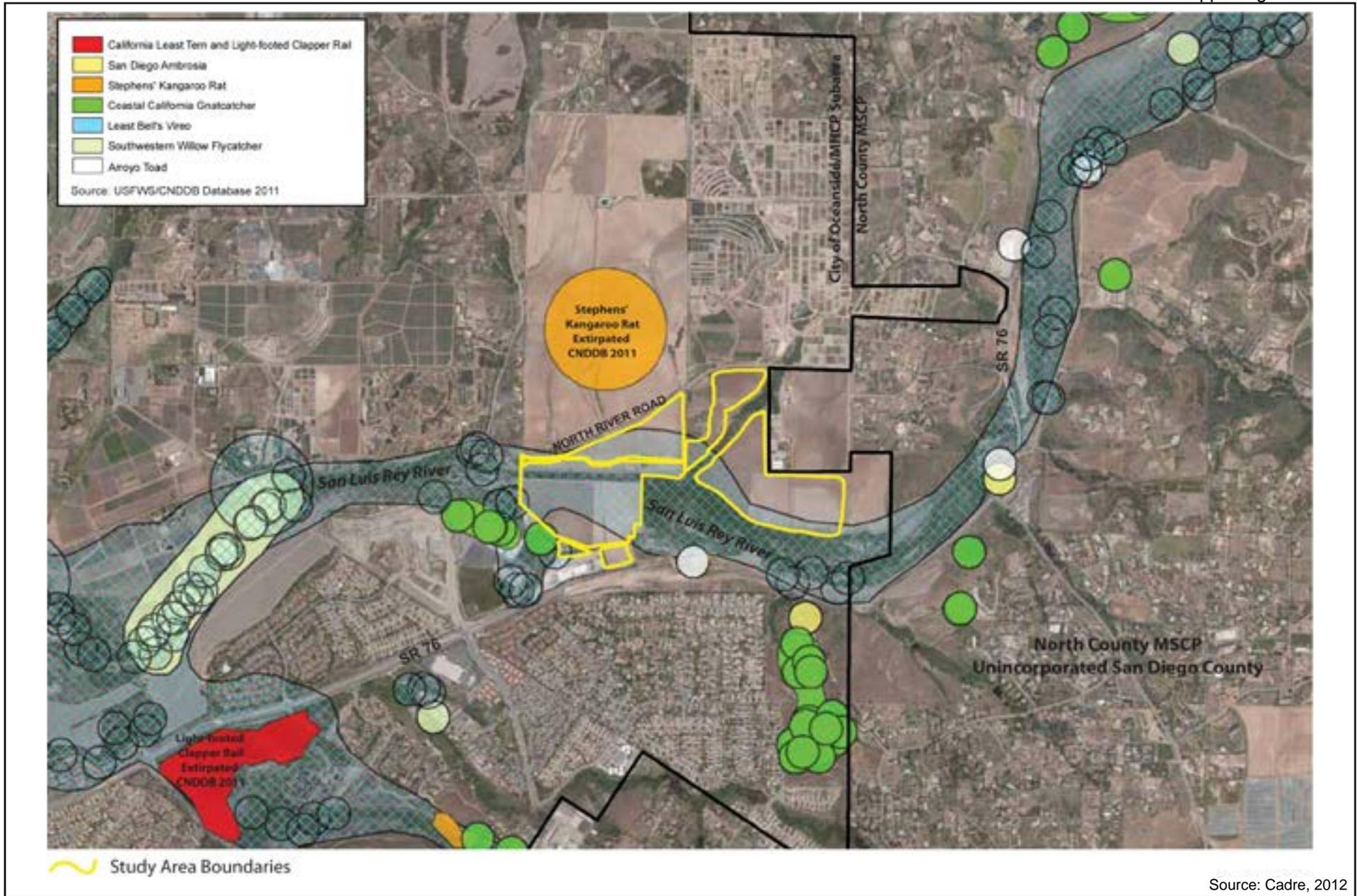


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San Diego Ambrosia Critical Habitat

SAN LUIS REY MITIGATION BANK

Figure 11

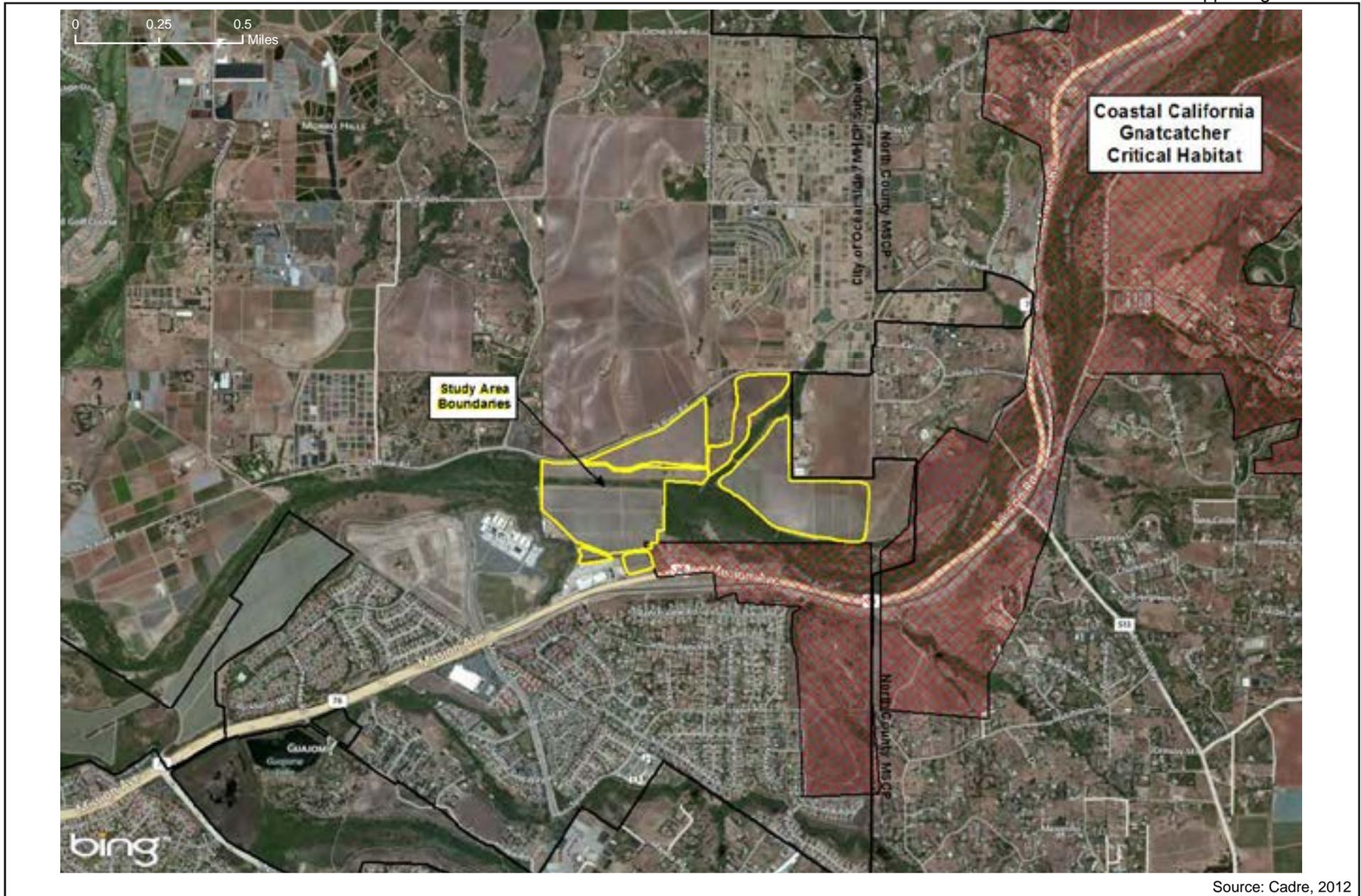


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Listed and Proposed Wildlife Species Locations

SAN LUIS REY MITIGATION BANK

Figure 12



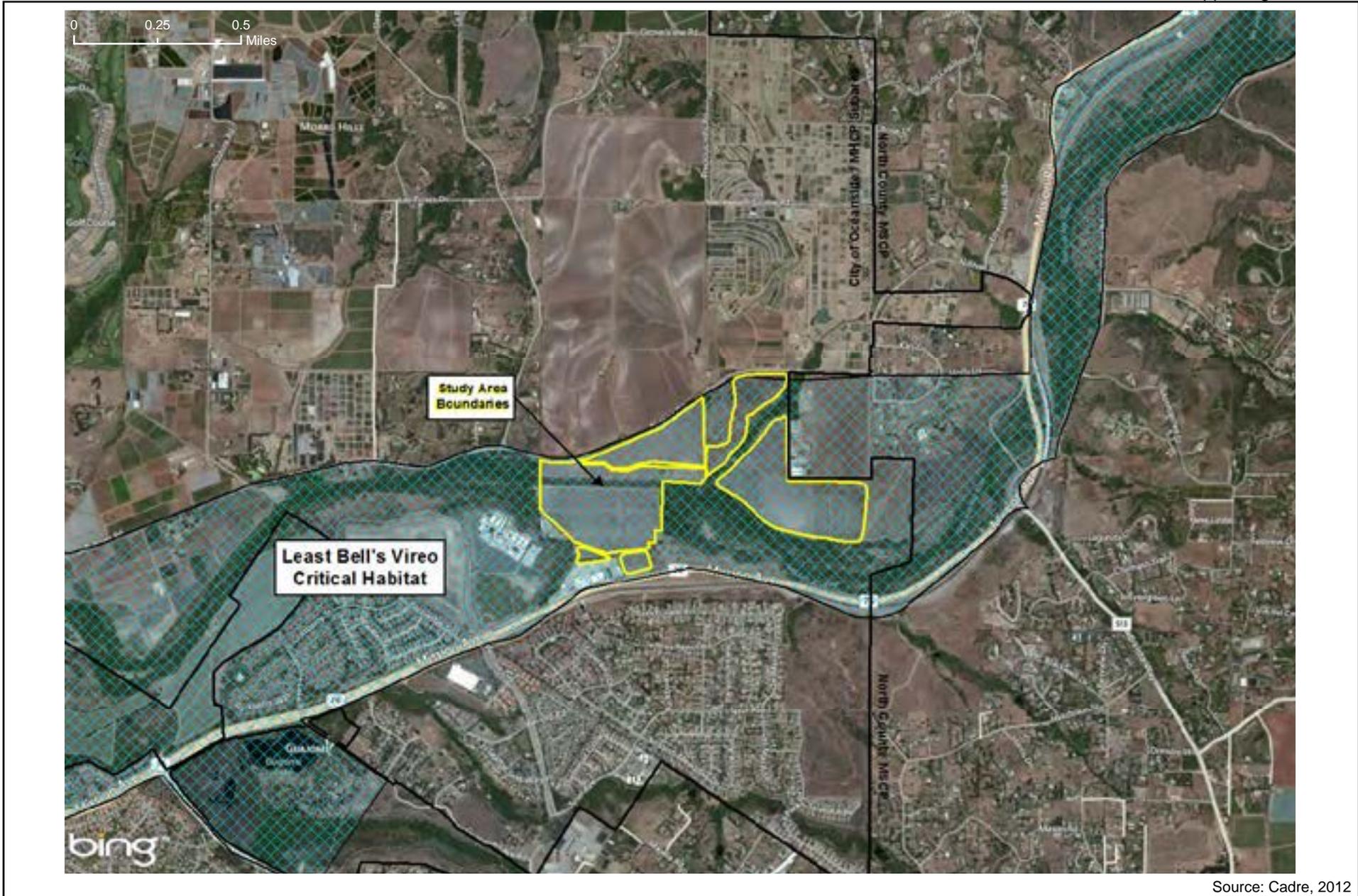
Source: Cadre, 2012

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Coastal California Gnatcatcher Critical Habitat

SAN LUIS REY MITIGATION BANK

Figure 14



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Least Bell's Vireo Critical Habitat

SAN LUIS REY MITIGATION BANK

Figure 15



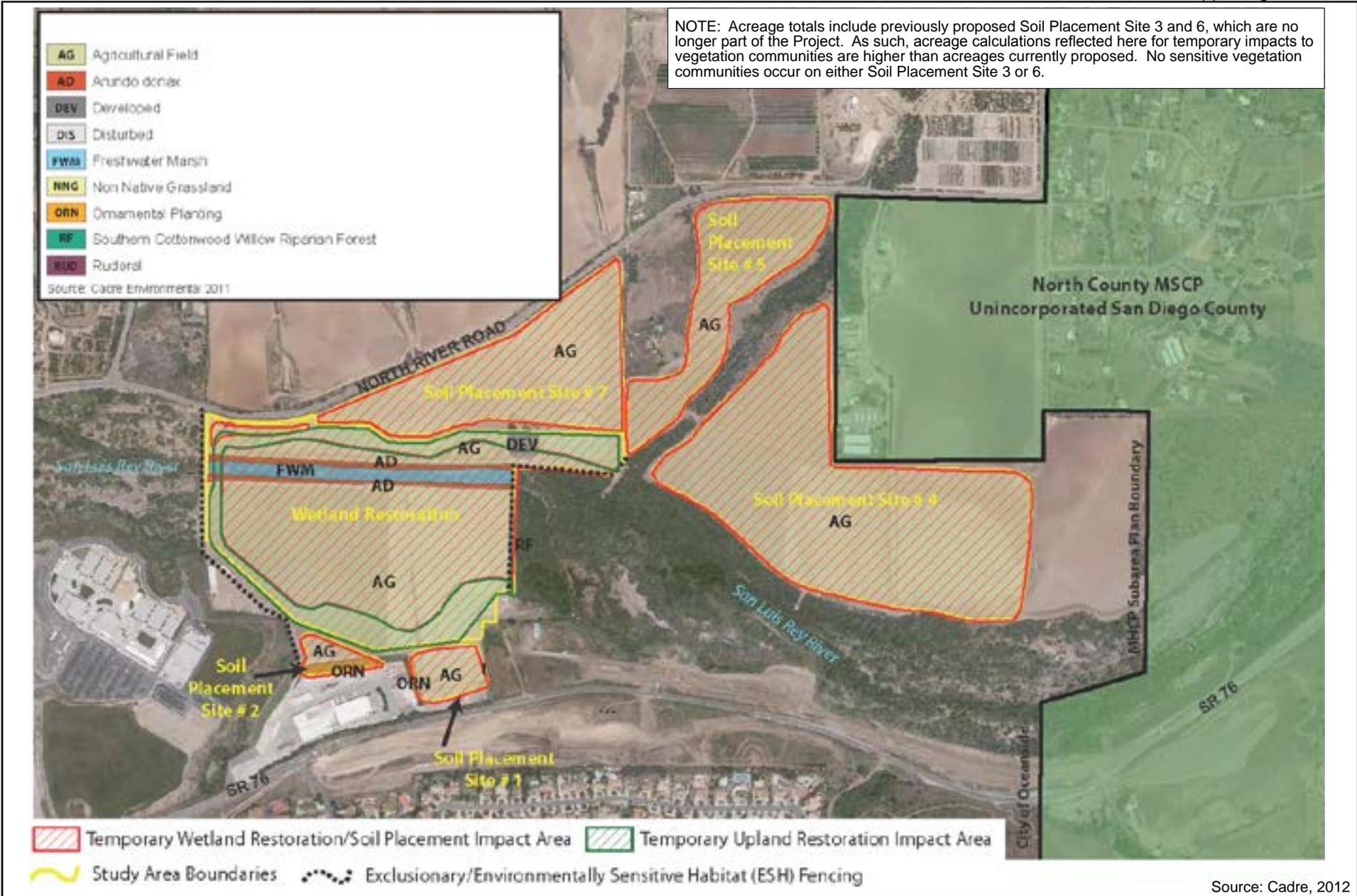
Source: Cadre, 2012

Southwestern Willow Flycatcher Critical Habitat

SAN LUIS REY MITIGATION BANK

Figure 16

NOTE: Acreage totals include previously proposed Soil Placement Site 3 and 6, which are no longer part of the Project. As such, acreage calculations reflected here for temporary impacts to vegetation communities are higher than acreages currently proposed. No sensitive vegetation communities occur on either Soil Placement Site 3 or 6.



Vegetation Communities Temporary Beneficial Impacts

SAN LUIS REY MITIGATION BANK

Figure 17

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SECTION IV

**MITIGATION, MONITORING AND
REPORTING PROGRAM**

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

Mitigation Monitoring and Reporting Programs (MMRPs) are required by California Environmental Quality Act (CEQA) Section 21081.6 to be incorporated into the Mitigated Negative Declaration (MND) for projects having the potential to cause significant environmental impacts. The MMRP describes changes to the project or conditions of project approval that mitigate or avoid significant effects on the environment. This Appendix A of the MND provides the MMRP addressing the San Luis Rey Mitigation Bank (Project) proposed by Wildlands SLR Holdings I, LLC and being carried forward for approval by the City of Oceanside. A brief description of the Project is located below. The proposed Project is located within the City of Oceanside (City), and the City is the Lead Agency under CEQA and has approval authority over the proposed project.

PROJECT DESCRIPTION SUMMARY

The proposed Project involves the restoration of a riparian river corridor and floodplain along a portion of the San Luis Rey River. The Project area includes the Restoration Area (approximately 56 acres) and several Soil Placement Sites (approximately 93 acres), for a total project area of approximately 150 acres. The Restoration Area is currently utilized for agriculture and was converted to this use by channelizing and confining the river within farm berms, and the placement of fill within the river's historic corridor and floodplain to create farm fields. Despite the farm berms and the fill, the Restoration Area remains within the 100-year floodplain and is subject to periodic flooding. Implementation of the Project would require the removal of the fill, and its relocation to adjacent farm fields and agricultural areas (Soil Placement Sites). The Restoration Area within the floodplain would be permanently protected with a conservation easement or other restriction which would prohibit future development activities. The Project is intended to provide a designated area for compensatory mitigation that may be required by federal, state, and local agencies as compensation for unavoidable impacts to wetlands as a result of other actions approved by such agencies. Due to its location within the San Luis Rey River floodplain and the implementation of successful riparian restoration projects located immediately up and down stream, the Restoration Area has a high potential for success. Therefore, the property has been identified by several state and federal agencies as a high priority restoration site.

MMRP FORMAT AND IMPLEMENTATION

Mitigation measures that would reduce or eliminate potential environmental impacts of the proposed Project were identified in the EIR. The project mitigation measures will become conditions of Project approval if the Project MND is approved. The City of Oceanside is required to verify that all adopted mitigation measures are implemented properly. To ensure compliance, this MMRP (including checklists) has been formulated. It shall be adopted, along with CEQA Findings, by the City of Oceanside (Lead Agency) and must be administered by City of Oceanside personnel from the Planning and Community Service (Engineering) departments. Specific responsibilities are delineated for each measure in the attached checklist table. These responsibilities may be delegated to qualified City staff or consultants. This service is provided on a full-cost recovery basis by the City. No authorization to commence any activity on site shall be granted except with the concurrence of the respective City Departments.

The checklist, which follows as Table A-1, is intended to be used by the applicant, grading/construction contractors, and personnel from the above-listed City Departments, as the appointed mitigation implementation and monitoring entities. Information contained within the checklist clearly identifies each mitigation measure, defines the conditions required to verify compliance and delineates the monitoring schedule. Following is an explanation of the four columns that constitute each MMRP checklist.

- Column 1 *Mitigation Measure:* An inventory of each mitigation measure is provided, with a brief description.
- Column 2 *Type:* Each mitigation measure is classified as either Construction-related Mitigation (CM) or Operational Mitigation (OM), based upon the following definitions:
- Construction-related Mitigation – mitigation that requires monitoring during Project construction (e.g., dust control, road improvements);
 - Operational Mitigation – mitigation that requires monitoring after the Project becomes operational (e.g., landscape maintenance, lighting).
- Column 3 *Monitor:* Identifies the senior staff person at the City who is responsible for determining compliance with each mitigation measure and informing the Planning Department regarding compliance. This individual may assign specific monitoring tasks to City staff or consulting specialists (e.g., biological monitor, paleontological monitor).
- Column 4 *Schedule:* As scheduling is dependent upon the progression of the overall project, specific dates are not used within the “Schedule” column. Instead, scheduling describes a logical succession of events (e.g., prior to occupancy, annually, etc.) and, if necessary, delineates a follow-up program.

Table B-1 SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
AIR QUALITY - <i>Construction Best Management Practices</i>			
Prior to grading, the following measures shall be included in the notes on the grading plan and implemented during construction, to the satisfaction of the City Engineer. a. Adhere to best management practices, which shall include the application of water on disturbed soils and replanting disturbed areas as soon as practical. b. During construction activities, construction equipment shall be properly maintained to ensure proper timing and tuning of engines. c. The contractor shall adhere to all San Diego Air Pollution Control District (SDAPCD) Rules and Regulations. d. If feasible, the contractor shall ensure use of low-sulfur diesel fuel in construction equipment as required by the California Air Resources Board.	CM	City Planner; City Engineer	Prior to project grading.
Construction vehicles shall drive 20 mph or less on unpaved surfaces within the Project Area.	CM	City Planner; City Engineer	During project grading and project construction.
Wheels and undercarriages of haul trucks shall be cleaned prior to entering public roadways. If necessary, access to all public streets from which site access is taken shall be swept on a daily basis to prevent dirt from being carried from the site. The goal is to keep vehicles from pulverizing dirt into fine particles.	CM	City Planner; City Engineer	During project grading and project construction.
Dirt trackout control devices shall be installed and maintained where paved and unpaved travel routes intersect at public streets.	CM	City Planner; City Engineer	During project grading and project construction.
Signage shall be placed in visible areas on the Project Area with a name and telephone number to call for complaints related to fugitive dust. The calls shall be responded to in a timely manner.	CM	City Planner; City Engineer	During project grading and project construction.
A dust control plan shall be prepared for the Project and submitted to the City of Oceanside prior to earthwork activity.	CM	City Planner; City Engineer	Prior to project grading.
Construction equipment shall meet California Air Resources Board—certified off road vehicle requirements.	CM	City Planner; City Engineer	During project grading and project construction.

Table B-1 (cont.) SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
AIR QUALITY (Mitigation Measures)			
<p><u>AQ-1.</u> In order to reduce fugitive dust emissions to below a level of significance, the Project shall implement one of the following dust control measures as described in the following scenarios. Alternatively, the Project shall implement alternative measures, subject to approval by the City, that result in equal or greater reductions to fugitive dust emissions.</p> <p><i>Mitigation Scenario 1:</i> The Project shall increase the number of scraper carriages to each tractor loading such that each tractor can pull two scraper carriages, reducing the total number of tractor round-trips, and the daily maximum PM₁₀ fugitive dust emissions to 171.54 pounds per day (lbs/day; from 200.78 lbs/day). The doubling of the scraper carriages would reduce PM₁₀ fugitive dust emissions by 15 to 20 percent to an emission level below South Coast Air Quality Management District (SCAQMD) limits.</p> <p>- Or -</p> <p><i>Mitigation Scenario 2:</i> The Project shall reduce the maximum speed limit of the tractor-scraper from 20 miles per hour (mph) down to 7 or 8 mph. (For reference, if the tractor-scraper equipment is operating at 20 mph speed limit maximum then the average time to complete the scraper production cycle would average approximately 2.76 minutes per trip to traverse the estimated 0.92 mile average haul route distance [round trip]). The average time to complete the trip may increase while the PM10 fugitive dust emissions would decrease by approximately 50 percent to an emission level below SCAQMD limits.</p> <p>- Or -</p> <p><i>Mitigation Scenario 3:</i> The third option would be to water the site three times per day. According to the Western Regional Air Partnership’s Fugitive Dust Handbook (WRAP 2006) watering the site three times per day pursuant to Rule 55 would reduce fugitive dust emissions by 90 percent.</p>	CM	City Planner; City Engineer	Prior to vegetation clearing or project construction. Periodic compliance verification during vegetation clearing or project construction.

Table B-1 (cont.) SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES			
<p><u>BIO-1 Project Biologist.</u> A project biologist approved by the Corps and USFWS (Agencies) and CDFW, as appropriate, will be on site during project implementation to ensure that all avoidance and minimization measures are adhered to and unintended impacts to arroyo toad, vireo, flycatcher, and gnatcatcher and their habitats are avoided. At least two weeks prior to project initiation, the name(s), permit numbers, resumes, and at least three references for the project biologist will be submitted to the Agencies. The project biologist must be familiar with federally threatened or endangered species and habitats potentially occurring within the region of the project site. Project related activities will not be initiated prior to receiving Agency approval. The project biologist will be responsible for ensuring compliance with the project description (including all conservation measures) to minimize and avoid impacts (incidental take) to federally threatened and/or endangered species. The project biologist will have authorization to halt/suspend all activities until appropriate corrective measures have been completed and will also be required to report violations immediately to the Agencies. The project biologist's responsibilities will include but not be limited to:</p> <ol style="list-style-type: none"> 1. Advise all project-related staff (contractors) on the appropriate implementation of the conservation measures. 2. Be available to supervise and monitor biological resource compliance efforts in areas requiring avoidance or containing suitable habitat for federally endangered species. 3. Be available to monitor installation of all Best Management Practices (BMPs), Environmentally Sensitive Habitat (ESH) fencing (BIO-3.1), and arroyo toad exclusionary fencing (BIO-4.1). 4. Halt any and all activities in any area when a potential unauthorized incidental "take" of an endangered species may or has occurred. 5. Inspect active project site where federally listed species habitat is present or adjacent to work area to ensure compliance with all conservation measures for the duration of the proposed action. Monitor project site as appropriate but not less than once a week for compliance with all conservation measures. 6. Conduct initial Environmental Awareness Program (BIO-2) for all project-related staff. 7. Conduct species specific monitoring (BIO-4, BIO-5). 8. Notify the Agencies of any noncompliance with any conservation measure and complete project reporting (BIO-6). 9. Monitor for potential impacts to wildlife movement and take corrective action if needed. 	CM	City Planner; City Engineer; Resource Agencies; Project Biologist	Project biologist to be approved prior to initiation of project vegetation clearing or project construction.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<u>BIO-2 Environmental Awareness Program.</u> The designated biological monitor will develop and implement an environmental awareness program for all project-related staff (contractors). All employees, contractors, and subcontractors who will work on the project will participate in the program. The environmental awareness program will include but not be limited to a description of all federally endangered species and their habitats potentially occurring within the region of the project site, the general provisions of the federal Endangered Species Act (Act), the need to adhere to the provisions of the Act, the penalties associated with violating the Act, and the general measures that are being implemented to conserve the listed species as they relate to the project. A handout will be provided to all staff illustrating all focal species and listing contact information and procedural instructions, if detected. A training acknowledgement form will be signed by all staff participating in the project indicating that they have received training and will abide by the guidelines and conservation measures.	CM	City Planner; City Engineer; Resource Agencies; Project Biologist	Prior to initiation of project vegetation clearing or project construction.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<p><u>BIO-3 General Measures to Avoid and Minimize Impacts to Listed Species and Arroyo Toad Critical Habitat</u></p> <ol style="list-style-type: none"> 1. The Applicant will install temporarily ESH fencing (with silt barriers) around the limits of project impacts (including construction staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Fencing will be installed in a manner that does not impact habitats to be avoided. The Applicant will submit to the Agencies for approval, at least 5 days prior to initiating project impacts, the final plans for initial clearing and grubbing of habitat and project construction. These final plans will include photographs that show the fenced limits of impact and all areas (including riparian/wetland or coastal sage scrub) to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of the Agencies. Temporary construction fencing will be removed upon project completion. 2. At least thirty (30) days prior to initiation of construction related activities, grading plans will be submitted to the Agencies, U.S. Environmental Protection Agency (EPA), California Department of Fish and Wildlife for review. The plans will include preconstruction photographs of the project site. 3. Employees will strictly limit their activities, vehicles, equipment, and materials to the designated temporary impact areas and designated staging areas. No personnel or equipment will be allowed to enter areas designated as ESH areas. 4. To avoid attracting predators, work areas will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the project site. 5. No pets will be allowed in the project site. 6. All equipment maintenance, staging, and dispensing of fuel, oil, or coolant, will occur within a predetermined staging area. Fueling and maintenance of trucks and other vehicles will occur within a predetermined staging area. Equipment will be checked for leaks prior to operation and repaired as necessary. 7. The mitigation bank will be planted as early as possible following completion of grading/excavation activities adjacent to ESH areas. Specifically, BMP's to address erosion and excess sedimentation will be incorporated into the project plans. Measures that will be implemented during excavation, hauling, spreading and restoration efforts may include (but will not be limited to) the use of silt fencing, gravel bags, hay bales, fiber rolls, and protective velocity dissipaters at drainage outlet points. 8. Herbicides used in exotic species control during long-term maintenance activities will be currently approved by the EPA for use in wetlands, and no herbicide will be applied to native vegetation. The herbicide should be tinted with a biodegradable dye to facilitate visual control of spray. 	<p>CM</p>	<p>City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor</p>	<p>Prior to initiation of project vegetation clearing or project construction.</p>

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<u>BIO-4 Arroyo Toad Impact Avoidance and Minimization Measures</u>			
<p>1. Prior to initiation of vegetation clearing or project construction, fencing will be installed around each segment of the project site adjacent to suitable arroyo toad upland and/or breeding habitat to exclude arroyo toads from the project site. The fence will consist of fabric or plastic at least 2 feet high, staked firmly to the ground with the lower one foot of material stretching outward along the ground and secured with a continuous line of gravel bags. No digging or vegetation removal will be associated with the installation of this fence and all materials will be removed when the project is complete. Ingress and egress of equipment and personnel will use a single access point to the site. This access point will be as narrow as possible and will be closed off by exclusionary fencing when personnel are not on the project site. Where they overlap, the arroyo toad exclusionary fence can be combined with the ESH fencing in BIO-3.1.</p> <p>2. Prior to mitigation bank construction, but after exclusionary fencing has been installed, at least 3 surveys for arroyo toads will be conducted within the fenced area by the Agency-approved project biologist specified in BIO-1. Surveys will be conducted during the appropriate climatic conditions during the appropriate time of day or night to maximize the likelihood of encountering arroyo toads. If arroyo toads are found within the project site during the surveys, all work will cease and the Agencies will be notified to reinstate section 7 consultation.</p>	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	Prior to initiation of project vegetation clearing or project construction.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<p><u>BIO-5 Vireo, Flycatcher and Gnatcatcher Impact Avoidance and Minimization Measure.</u> All vegetation clearing will be conducted between September 15 and February 15 to avoid potential direct and/or indirect impacts to breeding vireo, flycatcher or gnatcatcher. In the event vegetation clearing and/or construction activities (excavation and/or restoration efforts) must occur within the vireo, flycatcher or gnatcatcher breeding season, then a pre-construction survey will be conducted no more than three (3) days prior to project initiation to ensure that no impacts to nesting birds occur. Should vireo, flycatcher or gnatcatcher nests or breeding activity be documented within (if vegetation has not been removed) or adjacent to the project site, then appropriate measures will be implemented including, but not be limited to, monitoring during clearing, excavation or planting to ensure that no impacts to the breeding individuals occur, temporary designation of the breeding site as an ESH, and/or delaying/restricting project related activities within a buffer zone (determined by the project biologist in coordination with the Agencies based on location and topography) until nesting and fledging is complete.</p> <p><u>Reporting</u></p> <ol style="list-style-type: none"> 1. The project biologist will submit monthly updates and a final report to the Agencies within 60 days of project completion documenting that authorized temporary impacts were not exceeded and general compliance with all conservation measures. 2. The final report will summarize the results of the monitoring efforts and include recommendations to further reduce potential impacts to sensitive species, if applicable. As previously stated, the Agencies will also be notified if any listed species are found within or adjacent to the project site. The date, specific location (Global Positioning System coordinates), approximate size, age, and health of the individual will be recorded and provided in both hard copy and digital format to the Agencies within 30 days of the observation. 3. The Service will be notified if any listed species are found injured or dead. A written notification would also be prepared after verbal notification to the Service. The report would include the date, time and location of the discovered animal/carcass, cause of injury or death, and any other pertinent information. All dead and preserved specimens will be submitted to educational/research institutions with the appropriate federal permits. 	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	Between September 15 and February 15, or after species surveys by biologists, if allowed.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<p><u>BIO-6 California Steelhead Impact Avoidance and Minimization Measures</u></p> <ol style="list-style-type: none"> 1. Water diversion construction (including filtering system) within the project site will be initiated after May 1 and removed by November 30. This construction season is when the southern California steelhead is not expected to occur within the project site. Following completion of project-related activities, all water diversion materials will be removed and flows will be restored to natural conditions. 2. A preconstruction survey will be conducted immediately prior to initiation of project-related activities within the San Luis Rey River to determine presence/absence of the southern California steelhead. Project-related activities conducted within or adjacent to the San Luis Rey River will not be initiated until the species has been documented absent from the Study Area. 3. Avoid working in actively flowing water, where feasible. 4. Any shallow or deep aquatic habitat including existing pools, riffles and plunge pools will be retained and/or restored within the project site, where feasible. 5. The exclusionary/ESH fencing proposed to traverse the up and downstream segments of the San Luis Rey River would be breached to allow for migration no later than November 30. 6. The date, time of observation, specific location (GPS coordinates), approximate size, age, and health of all individuals observed will be recorded and provided to the NMFS within thirty days of the documentation in both hard copy and digital format. 	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	Between May 1 and November 30.
<p><u>BIO-7 Nesting Bird Impact Avoidance and Minimization Measures.</u> Impacts to nesting bird species are prohibited under the MBTA. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Suitable nesting bird habitat has been documented within and immediately adjacent to the project site. Therefore, to remain in compliance with the MBTA, nesting bird surveys will be conducted and avoidance and minimization measures consistent with BIO-5 will be implemented.</p>	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	Between September 15 and February 15, or after species surveys by biologists, if allowed.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<u>BIO-8 Water Quality/General Impact Avoidance and Minimization Measures</u>			
<p>1. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas outside of Waters of the U.S. within the project limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering Waters of the U.S. and shall be shown on the grading plans. Fueling of equipment shall take place within existing disturbed areas greater than 100 feet from Waters of the U.S. Contractor equipment shall be checked for leaks prior to operation and repair as necessary.</p> <p>2. "No fueling zones" shall be established within a minimum of 100 feet from the San Luis Rey River.</p> <p>3. Any project related spills of hazardous materials shall be reported to appropriate entities including but not limited to the City of Oceanside, Corps, USFWS, CDFW, and Regional Water Quality Control Board (RWQCB) and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.</p> <p>4. Any planting stock to be brought onto the project site for restoration shall be first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including, but not limited to, Argentine ants, fire ants, and other insect pests. Any planting stock found to be infested with such pests shall not be allowed on the project site or within 300 feet of natural habitats. The stock shall be quarantined, treated or disposed of according to best management principles by qualified experts in a manner that precludes invasions into natural habitats.</p> <p>5. Any temporary irrigation installed for the restoration area shall be used for the shortest duration possible.</p> <p>6. Public access to the project site shall be prohibited. Fencing may be required to keep unauthorized personnel from trespassing.</p>	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	During project vegetation clearing and project construction.

Table B-1 (cont.) SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
BIOLOGICAL RESOURCES (cont.)			
<p>BIO-9. Prior to conducting any proposed actions during the breeding season (February 15 to September 15), the monitoring biologist shall conduct a pre-construction survey/surveys to identify any active migratory bird nesting locations in and near the Project area no more than three days prior to Project initiation. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. If the biologist finds an active nest within or adjacent to the action area, determines that the nesting species is protected, and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone from the nest. Any active nests observed during the survey shall be mapped on a recent aerial photograph including documentation of GPS coordinates. Only specified activities (if any), as approved by the qualified biologist, shall take place within the buffer zone until the nest is vacated.</p> <p>Surveys for active raptor nests shall be performed in all adjacent habitats and trees no more than three days prior to commencement of any activities during the raptor nesting season generally extending from February 1 to June 30. Active raptor nests observed during the survey shall be mapped on a recent aerial photograph including documentation of GPS coordinates. Restrictions on activities shall be required in the vicinity of the nest until the nest is no longer active as determined by the qualified biologist. The qualified biologist shall determine an appropriate buffer zone around a nest to allow activities to proceed while minimizing disturbance to the active nest. Once the nest is no longer active, the proposed action may proceed within the buffer zone. Impacts to active raptor nests shall be avoided.</p>	CM	City Planner; City Engineer; Resource Agencies; Project Biologist; Biological Monitor	Between September 15 and February 15, or after species surveys by biologists, if allowed.
CULTURAL RESOURCES			
<p>CUL-1. Prior to implementation of the monitoring program and prior to beginning any grading, a pre-excavation agreement shall be developed between the appropriate Native American group (assumed to be the San Luis Rey Band of Luiseño Mission Indians) and the Project applicant.</p>	CM	City Planner; City Engineer; Project Archaeologist	Prior to initiation of project grading.
<p>CUL-2. The qualified archaeologist and the Native American representative shall attend the pre-construction meeting with the Project applicant and contractors to explain the requirements of the monitoring program.</p>	CM	City Planner; City Engineer; Project Archaeologist	Prior to initiation of project grading.
<p>CUL-3. An archaeologist or a Native American monitor shall be onsite during grading and other ground-disturbing activities; given the extremely disturbed nature of the Project Area, it is not anticipated that full-time monitoring would be necessary; a monitoring schedule shall be developed between the archaeological Principal Investigator, Native American representative, and the Project applicant.</p>	CM	City Planner; City Engineer; Project Archaeologist; Archaeological Monitor/Native American Monitor	During project grading and project construction.

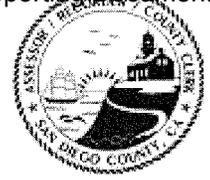
Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
CULTURAL RESOURCES (cont.)			
<u>CUL-4.</u> If cultural resources are encountered, the archaeological and Native American monitors both shall have the authority to temporarily halt or redirect grading within 100 feet of the find while the cultural resources are documented and assessed by both monitors. If significant resources are encountered, the Native American Monitor will be notified, and the resources will be handled consistent with CUL-6 and CUL-7 provided below.	CM	City Planner; City Engineer; Project Archaeologist; Archaeological Monitor/Native American Monitor	During project grading and project construction.
<u>CUL-5.</u> If any human remains are discovered, construction will be stopped within 100 feet of the find and the County Coroner shall be contacted. If Native American remains are suspected, the remains shall be kept in situ, or in a secure location within close proximity to where they were found, and the analysis of the remains will occur only in the presence of a Luseño Native American monitor. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.	CM	City Planner; City Engineer; Project Archaeologist; Archaeological Monitor/Native American Monitor	During project grading and project construction.
<u>CUL-6.</u> If cultural resources are encountered, recovered artifactual materials shall be cataloged and analyzed, and a report shall be completed describing the methods and results of the monitoring and data recovery program. If the resources are determined to be those of ancestral remains and/or associated burial goods, funerary goods or grave goods, the Native American monitor shall be consulted. Copies of analyses performed on cultural resources and reports generated from said analyses shall be provided to the San Luis Rey Band of Mission Indians in addition to the City.	CM	City Planner; City Engineer; Project Archaeologist; Archaeological Monitor/Native American Monitor	During project grading and project construction.
<u>CUL-7.</u> Artifacts collected (if any) shall be curated with accompanying catalog to current professional repository standards or the collection shall be repatriated to the San Luis Rey Band.	CM	City Planner; City Engineer; Project Archaeologist; Archaeological Monitor/Native American Monitor	During project grading and project construction.
GEOLOGY AND SOILS			
<u>GEO-1.</u> A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and submitted for review and approval prior to issuance of grading permit. The SWPPP shall outline methods that shall be implemented during construction to control erosion from graded or cleared portions of the site, including but not limited to straw bales, sandbags, soil binders, diversion fences, desilting basins, etc. The Plan shall be prepared in accordance with the City's grading ordinance, the City's water quality ordinance, the latest NPDES Statewide Construction General Permit, and to the satisfaction of the City Water Quality Engineer.	CM	City Planner; City Engineer; City Water Quality Engineer	Prior to issuance of grading permit.

Table B-1 (cont.)			
SAN LUIS REY MITIGATION BANKPROJECT – MITIGATION MONITORING CHECKLIST			
MITIGATION MEASURE	TYPE	MONITOR	SCHEDULE
HAZARDS AND HAZARDOUS MATERIALS			
<u>HAZ-1.</u> The top one foot of soil excavated from the area of the filtration plant shall be placed in one of the Soil Placement Sites at a minimum of five feet above groundwater elevation, and five feet from any slope faces, to provide a buffer that would minimize impacts to groundwater. This soil shall be placed to provide a sufficient vertical separation from groundwater.	CM	City Planner; City Engineer	During project grading.
<u>HAZ-2.</u> If soil that exhibits evidence of potential petroleum hydrocarbon impacts, or other hazardous materials are encountered during grading, the City Development Services Department and a qualified environmental professional shall be contacted to evaluate said soils, and provide professional recommendations regarding the containment and treatment or disposal of such soils.	CM	City Planner; City Engineer; Project Environmental Professional	During project grading.
<u>HAZ-3.</u> Excavated soil material is anticipated to be placed on the identified soil placement sites. However, should any excavated material be exported from the Project Area, the material shall be characterized to determine if offsite disposal would be necessary, or if reuse is acceptable.	CM	City Planner; City Engineer; Project Environmental Professional	During project grading.
HYDROLOGY AND WATER QUALITY			
<u>HYD-1.</u> Prior to grading, the applicant will obtain approval of a site-specific Erosion Control Plan from the City Engineering Department in accordance with the City's ordinance. This plan will include a list of best management practices that the contractor will use to ensure that temporarily exposed soils do not leave the work area.	CM	City Planner; City Engineer	Prior to project grading.
<u>HYD-2.</u> During the construction period, standard BMPs such as proper storage, use and disposal of construction material shall be applied to ensure that all hazardous materials (i.e., construction equipment fuels, oils, etc.) are stored properly and that no hazards occur during this phase of the project. Continual inspection and maintenance of all BMPs shall occur throughout the duration of the construction phase.	CM	City Planner; City Engineer	During project grading and project construction.



Ernest J. Dronenburg, Jr.

COUNTY OF SAN DIEGO
ASSESSOR/RECORDER/COUNTY CLERK



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Transaction #: 323706520140729

Deputy: JMURO

Location: COUNTY ADMINISTRATION BUILDING

29-Jul-2014 16:36

FEES:

2,181.25	Qty of 1 Fish & Game Neg Dec (1800) for Ref# SD2014 0649
50.00	Qty of 1 Fish and Game Filing Fee for Ref# 20140118
<hr/>	
2,231.25	TOTAL DUE

PAYMENTS:

2,181.25	Check
50.00	Check
<hr/>	
2,231.25	TENDERED

SERVICES AVAILABLE AT OFFICE LOCATIONS

- * Tax Bill Address Changes
- * Records and Certified Copies:
Birth/ Marriage/ Death/ Real Estate
- * Fictitious Business Names (DBAs)
- * Marriage Licenses and Ceremonies
- * Assessor Parcel Maps
- * Property Ownership
- * Property Records
- * Property Values
- * Document Recordings

SERVICES AVAILABLE ON-LINE AT www.sdarcc.com

- * Forms and Applications
- * Frequently Asked Questions (FAQs)
- * Grantor/ Grantee Index
- * Fictitious Business Names Index (DBAs)
- * Property Sales
- * On-Line Purchases
Assessor Parcel Maps
Property Characteristics
Recorded Documents

State of California—Natural Resources Agency
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
2014 ENVIRONMENTAL FILING FEE CASH RECEIPT

RECEIPT#
SD2014 0649
STATE CLEARING HOUSE #(If applicable)
2013091081

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY

LEAD AGENCY CITY OF OCEANSIDE	DATE 07/29/2014
COUNTY/STATE AGENCY OF FILING SAN DIEGO	DOCUMENT NUMBER *20140118*

PROJECT TITLE
SAN LUIS REY WETLAND RESTORATION/ MITIGATION BANK PROJECT MITIGATED NEGATIVE DECLARATION

PROJECT APPLICANT NAME WILDLANDS SLR HOLDINGS I, LLC. SINGH PROPERTY MANAGEMENT CO	PHONE NUMBER 916-435-3555
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PROJECT APPLICANT ADDRESS 3855 ATHERTON RD	CITY ROCKLIN	STATE CA	ZIP CODE 95765
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PROJECT APPLICANT (Check appropriate box):

- Local Public Agency
 School District
 Other Special District
 State Agency
 Private Entity

CHECK APPLICABLE FEES:

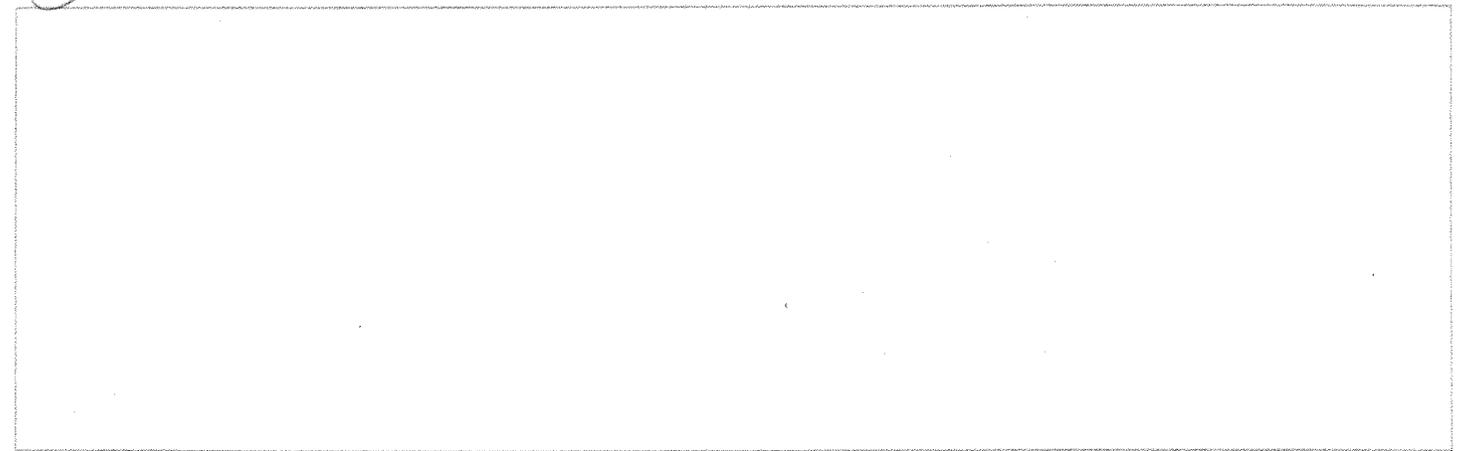
- | | | | |
|---|--------|------------|-------------|
| <input type="checkbox"/> Environmental Impact Report (EIR) | 140118 | \$3,029.75 | \$ _____ |
| <input checked="" type="checkbox"/> Negative Declaration (ND)(MND) | | \$2,181.25 | \$ 2,181.25 |
| <input type="checkbox"/> Application Fee Water Diversion (State Water Resources Control Board Only) | | \$850.00 | \$ _____ |
| <input type="checkbox"/> Projects Subject to Certified Regulatory Programs (CRP) | | \$1,030.25 | \$ _____ |
| <input checked="" type="checkbox"/> County Administrative Fee | | \$50.00 | \$ 50.00 |
| <input type="checkbox"/> Project that is exempt from fees | | | |
| <input type="checkbox"/> Notice of Exemption | | | |
| <input type="checkbox"/> CDFW No Effect Determination (Form Attached) | | | |
| <input type="checkbox"/> Other _____ | | | \$ _____ |

PAYMENT METHOD:

- Cash
 Credit
 Check
 Other CHK#6728 CHK#6722

TOTAL RECEIVED \$ 2,231.25

SIGNATURE 	TITLE Deputy
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NOTICE OF DETERMINATION

City of Oceanside, California

FILED
Ernest J. Dronenburg, Jr., Recorder County Clerk

JUL 29 2014
BY *J. Muro*
DEPUTY

TO:
Recorder/County Clerk
County of San Diego
P.O. Box 1750
San Diego, CA. 92112-4147

FROM:
City of Oceanside
Planning Division
300 N. Coast Highway
Oceanside, CA 92054

Subject: Filing of Notice of Determination in compliance with Public Resources Code, Sections 21108 and 21152.

SCH No.: 2013091081

Lead Agency: City of Oceanside **140118**

Project Manager: Richard Greenbauer, Senior Planner, Planning Division; (760) 435-3519

Applicant: Wildlands SLR Holdings I, LLC. ~~760~~ 916-435-3555
Singh Property Management Co.

Address: 3855 Atherton Rd. Rocklin, CA 95765.
P.O. Box 1850 Oceanside, CA 92051.

Project Location: The project is located North of Mission Avenue/SR76 and East of Melrose Drive.

Project Title: San Luis Rey Wetland Restoration/ Mitigation Bank Project Mitigated Negative Declaration

Description: Development Plan (D12-00004) and Development Plan (D13-00007), a request to allow the restoration of a riparian river corridor and floodplain along a portion of the San Luis Rey River. The project area includes the Restoration Area (approximately 56 acres) and 5 Soil Placement Sites (approximately 93 acres), for a total project area of approximately 150 acres located north of Mission Avenue / SR76 and east of Melrose Drive. The Restoration Area within the floodplain would be permanently protected with a conservation easement or other restriction which would prohibit future development activities.

The Planning Commission of the City of Oceanside, as Lead Agency, approved the above described project on Monday, July 28, 2014 and determined that:

1. The project will not have a significant effect on the environment.
2. A Mitigated Negative Declaration was prepared pursuant to the provisions of CEQA.
3. Mitigation Measures were made a condition of approval and a Mitigation Monitoring Reporting Program was adopted.
4. A Statement of Overriding Consideration was not adopted.
5. Findings were made pursuant to CEQA.

The Mitigated Negative Declaration, with comments and responses, and the record of project approval are available to the general public at the Development Services Department, Planning Division Counter, and 300 N. Coast Highway, Oceanside, California.

Richard Greenbauer
Richard Greenbauer, Senior Planner

Date: July 29, 2014

FILED IN THE OFFICE OF THE COUNTY CLERK

San Diego County on JUL 29 2014

Posted JUL 29 2014 Removed

Returned to agency on

Deputy *J. Muro*