

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Discharge of Dredged and/or Fill Materials

PROJECT: Pure Water North City Project
Certification Number R9-2018-0084
WDID: 9 000003301

Reg. Meas. ID: 421448
Place ID: 847294
Party ID: 524058
Person ID: 539748

APPLICANT: City of San Diego – Public Utilities
9192 Topaz Way
San Diego, CA 92123

ACTION:

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	

PROJECT DESCRIPTION

An application dated April 27, 2018 was submitted by the City of San Diego (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Pure Water North City Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on October 23, 2018. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2017-00649-CIA).

The Project is located within the City of San Diego, County, California. The Project center reading is located at latitude 32° 46'16.72 and longitude -117°12'17.47. The Applicant has paid all required application fees for this Certification in the amount of \$10,216.00. On an annual basis, the Applicant must also pay all fees.¹ On October 23, 2018, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

¹ Additional information regarding fees can be found electronically on the State Water Resources Control Board website at the following location: https://www.waterboards.ca.gov/resources/fees/water_quality/

The Applicant proposes to construct and upgrade a number of treatment facilities, pump stations, and pipelines in order to provide potable recycled water. The project proposes to build the Morena Pump Station and pipelines to convey a portion of wastewater flows that are normally sent to the Point Loma Wastewater Treatment Plant to the existing North City Water Reclamation Plant. The Morena Pump Station would be constructed to divert and convey raw sewage from four existing sewer trunk lines to the existing reclamation plant. The existing North City Water Reclamation Plant (reclamation plant) is proposed to be upgraded and the North City Pure Water Facility (new purification facility) will be built adjacent to the upgraded reclamation plant.

Wastewater will be first treated at the reclamation plant and then recycled water will be conveyed to the purification facility for advanced water purification. After being treated at the new purification facility, the purified water will be conveyed through pumps and pipelines to Miramar Reservoir to be blended with local runoff and imported water.

The Applicant proposes to install a tunnel from the existing Miramar Water Treatment Plant into the bottom of Miramar Reservoir where the final segment of the pipeline will be installed. The pipeline will enter the bottom of Miramar Reservoir and subaqueous lateral discharge pipelines with diffusers will be installed at the bottom of Miramar Reservoir. The pipeline segment within the reservoir will be sunk to the bottom using ballast weights. The construction process will involve dredging of 0.017 acre (42 cubic yards) of the reservoir bottom and side casting the dredged material. The water from the reservoir would then receive an additional round of treatment at the Miramar Water Treatment Plant before being distributed as potable water. Upgrades will occur at the Miramar Water Treatment Plant including improvements to the existing reservoir pump station.

Additionally, the Applicant proposes to construct pipelines to transport brine and sludge from the reclamation plant and new purification facility back into the Metro System. Upgrades are also proposed for the Metropolitan Biosolids Center to handle the additional sludge. A new renewable energy facility will also be constructed at the North City Water Reclamation Plant which will receive landfill gas from the Miramar Landfill gas collection system through a new landfill gas pipeline.

The new purification facility would be located on the vacant Applicant owned lot across from Eastgate Mall to the north of the existing reclamation plant. This area has existing vernal pools that will be permanently impacted by the Project. Permanent impacts will also occur to Miramar Reservoir from dredging and the placement of the pipeline at the bottom of the reservoir. Temporary impacts to non-wetland waters will also occur where a pipeline needs to be constructed beneath Tecolote Creek near the Morena Pump Station.

The Project will convert approximately 16.05 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will be consistent with the most current BMP Design Manual for the City of San Diego. These BMPs will be designed, constructed, and maintained to meet City of San Diego low impact development (LID) capture volume and hydromodification treatment requirements.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.375 acre of wetland waters (vernal pools) and 0.39 acres of non-wetland waters (open water) of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the permanent loss of 0.375 acre (vernal pools) and 0.39 acre (open water) of jurisdictional waters will be achieved through the re-establishment of 0.6 acre of vernal pools, rehabilitation of 0.29 acre of vernal pools, 0.260 acre of enhancement of vernal pools and 0.39 acre of enhancement of non-wetland waters of waters of the United States and/or State. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant at the SANDER Mitigation Site, a 30 acre parcel located south of SR 52 and west of Convoy Ave within the Miramar Hydrologic Area (HSA 906.40) at a minimum compensation ratio of 3.07:1 (area mitigated:area impacted) for vernal pools impacts and 1:1 acre for open water impacts.

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for long-term management and protection of the mitigation areas are described in the *Final SANDER Mitigation Plan for the North City Project* (Mitigation Plan), dated November 2018. San Diego Water Board acceptance of the Mitigation Plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

Additional Project details are provided in Attachments 1 through 5 of this Certification.

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Attachments:

- 1. Definitions**
- 2. Project Location Maps**
- 3. Project Site Plans**
- 4. Mitigation Figures**
- 5. CEQA Mitigation Monitoring and Reporting Program**

The San Diego Water Board has independently reviewed the record of the Project to analyze the extent and nature of proposed Project impacts to the water quality and beneficial uses of waters of the United States and/or State and associated compensatory mitigation required to offset impacts attributed to the Project. In accordance with this Certification, the Applicant may proceed with the Project under the following terms and conditions:

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2018-0084 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section 1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gowdr401regulated_projects.pdf.

- D. Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.
- E. Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:
- http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml
- F. Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- I. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
 2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of Miramar Reservoir and Tecolote Creek or its tributaries;
 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.

- M. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or

earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.

- G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.
- H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- K. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at <http://www.cal-ipc.org/ip/inventory/>.
- L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.

- M. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the *Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States*, and any subsequent reissuance as applicable.
- N. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- O. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- P. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of Miramar Reservoir and Tecolote Creek. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately, and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.
- Q. **Groundwater Dewatering.** If groundwater dewatering is required for the Project, the Applicant shall enroll in and comply with the requirements of San Diego Water Board Order No. R9-2015-0013 NPDES No. CAG919003, *General Waste Discharge Requirements For Groundwater Extraction Discharges to Surface Waters within the San Diego Region* or its successor permit.
- R. **In-Water Work.** A detailed written plan for protection of water quality at Miramar Reservoir must be provided to the San Diego Water Board Water Board at least 60 days prior to the start of in-water work activities at Miramar Reservoir. The City must receive written approval by the San Diego Water Board of the plans prior to starting in-water work activities at Miramar Reservoir. The Plan must also include a monitoring plan to assure compliance with applicable water quality objectives including but not limited to turbidity.

IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.
- B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- C. **Post-Construction BMP Design.** The Project must be designed to comply with the requirements for priority development projects in section E.3 of the Regional MS4 Permit Order No. R9-2013-0001, *National Pollutant Discharge Elimination Systems Permit and Waste Discharge Requirements for Discharges of Urban Runoff from the MS4s Draining the Watersheds within the San Diego Region* (Regional MS4 Permit) as well as the most current BMP Design Manual for the City of San Diego. Where conflict exists between the referenced documents the most stringent requirements shall apply.
- D. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA)² guidance. The Applicant shall:
1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;
 2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;
 3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;
 4. Identify and promptly repair damage to BMPs; and
 5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.

V. PROJECT IMPACTS AND COMPENSATORY MITIGATION

- A. **Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to vernal pools and Miramar Reservoir within the Peñsaquitos Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum,

² California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003*), available on-line at: <http://www.cabmphandbooks.org/> [Accessed on January 15, 2012]

compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
Permanent Impacts						
Vernal Pool	0.375 ¹		0.6 Establishment 0.29 Rehabilitation 0.26 acre Enhancement ³	3.07:1	N/A	N/A
Open Water	0.39 ²		0.39 Enhancement ⁴	1:1	N/A	N/A
Temporary Impacts⁵						
Streambed	0.03					

1. 0.375 acre of impact from the fill of vernal pools at the location of the new North City Pure Water Facility (NCPWF)
2. 0.39 acre of impact from the dredging of a tunnel into the bottom of Miramar Reservoir and placement of pipelines at the bottom of Miramar Reservoir. The total amount of dredging is 0.017 acre (42 cubic yards).
3. Vernal pool re-establishment, rehabilitation, and enhancement at the SANDER Mitigation Site
4. Stream channel enhancement at the SANDER Mitigation Site
5. All areas of temporary impacts must be restored to pre-project contours and re-vegetated with native species.

C. Compensatory Mitigation Plan Implementation. The Applicant must fully and completely implement the Mitigation Plan; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.

D. Performance Standards. Compensatory mitigation required under this Certification shall be considered achieved once it has met the ecological success performance standards contained in the Mitigation Plan (Section 8, page 117) to the satisfaction of the San Diego Water Board.

- E. Temporary Project Impact Areas.** The Applicant must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-project contours and re-vegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.
- F. Long-Term Management and Maintenance.** The compensatory mitigation site(s) must be managed, protected, and maintained, in perpetuity, in conformance with the long-term management plan and the final ecological success performance standards identified in the provisions for long-term management and protection of the mitigation areas are described in the *Final SANDER Mitigation Plan for the North City Project dated November 2018*. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area(s) in a manner consistent with the following requirements:
1. Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;
 2. Maintenance activities must be limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species, and remedial measures deemed necessary for the success of the compensatory mitigation project;
 3. The Mitigation site(s) must be maintained, in perpetuity, free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and
 4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.
- G. Timing of Mitigation Site Construction.** The construction of proposed mitigation must be concurrent with project grading and completed no later than 24 months following the start of Project construction. The 24-month period has been chosen to allow the timing of mitigation construction to occur outside of bird breeding system and provide the opportunity to grade during the dry season. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.

H. **Mitigation Site(s) Preservation Mechanism.** Within 90 days from the issuance of this Certification, the Applicant must provide the San Diego Water Board with a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. Within 5 years of the start of Project construction, the Applicant must submit proof of a completed final preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. The conservation easement, deed restriction, or other legal limitation on the mitigation properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and
 6. The results of such analyses.

- E. California Rapid Assessment Method.** California Rapid Assessment Method (CRAM)³ monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory mitigation site(s). These conditions reflect the overall level of ecological function of an aquatic resource. Prior to initiating Project construction, the Applicant shall develop a monitoring plan to implement California Rapid Assessment Method (CRAM) monitoring. The Applicant must conduct a quantitative function-based assessment of the health of vernal pool habitat to establish pre-project baseline conditions, set CRAM success criteria, and assess the mitigation site(s) progress towards meeting the success criteria. CRAM monitoring must be conducted following construction completion. The annual CRAM monitoring results shall be submitted with the Annual Project Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report.
- F. Discharge Commencement Notification.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.
- G. Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.
- H. Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation, compensatory mitigation, and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. The Annual Project Progress Reports must contain compensatory mitigation monitoring information sufficient to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1st through December 31st of each year. Annual Project Progress Reports must include, at a minimum, the following:
1. **Project Status and Compliance Reporting.** The Annual Project Progress Report must include the following Project status and compliance information:
 - a. The names, qualifications, and affiliations of the persons contributing to the report;
 - b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality

³ The most recent versions of the California Rapid Assessment Method (CRAM) for Wetlands and additional information regarding CRAM can be accessed at <http://www.cramwetlands.org>

- treatment;
- c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
 - d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
2. **Compensatory Mitigation Monitoring Reporting.** Mitigation monitoring information must be submitted as part of the Annual Project Progress Report for a period of not less than seven years, sufficient to demonstrate that the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan. Following Project implementation, the San Diego Water Board may reduce or waive compensatory mitigation monitoring requirements upon a determination that performance standards have been achieved. Conversely the San Diego Water Board may extend the monitoring period beyond seven years upon a determination that the performance standards have not been met or the compensatory mitigation project is not on track to meet them. The Annual Project Progress Report must include the following compensatory mitigation monitoring information:
- a. Names, qualifications, and affiliations of the persons contributing to the report;
 - b. An evaluation, interpretation, and tabulation of the parameters being monitored, including the results of the Mitigation Plan monitoring program, and all quantitative and qualitative data collected in the field;
 - c. A description of the following mitigation site(s) characteristics:
 - i. Detritus cover;
 - ii. General topographic complexity;
 - iii. General upstream and downstream habitat and hydrologic connectivity; and
 - iv. Source of hydrology
 - d. Monitoring data interpretations and conclusions as to how the compensatory mitigation project(s) is progressing towards meeting performance standards and whether the performance standards have been met;
 - e. A description of the progress toward implementing a plan to manage the compensatory mitigation project after performance standards have been achieved to ensure the long-term sustainability of the resource in perpetuity, including a discussion of long term financing mechanisms, the party responsible for long term management, and a timetable for future steps;

- f. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;
 - g. Photo documentation, including all areas of permanent and temporary impact, prior to and after mitigation site construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/401c/401PhotoDocRB9V713.pdf. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;
 - h. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification;
As-built drawings of the compensatory mitigation project site(s), no bigger than 11”X17”; and
 - i. A survey report documenting boundaries of the compensatory mitigation site(s).
- I. Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project**. The final report must include the following information:
- 1. Date of construction initiation;
 - 2. Date of construction completion;
 - 3. BMP installation and operational status for the Project;
 - 4. As-built drawings of the Project, no bigger than 11”X17”;
 - 5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and
- J. Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.
- K. Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to

SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2018-0084:847294:ngergans
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), converted to text searchable format using Optical Character Recognition (OCR), and not be password protected. All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2018-0084:847294:ngergans.

- L. Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
 4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

- M. Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

VII. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- B. **Hazardous Substance Discharge.** Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. **Oil or Petroleum Product Discharge.** Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in

violation of a Basin Plan prohibition.

- D. **Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.
- E. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**
 2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**
 3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board **within 10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The City of San Diego is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated April 11, 2018 for the Final Environmental Impact Report (FEIR) titled Final North City Project, Pure Water San Diego Program EIR/EIS (State Clearing House Number 2016081016). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.
- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment X to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

IX. SAN DIEGO WATER BOARD CONTACT PERSON

Nicole Gergans, Environmental Scientist
Telephone: (619) 521-3969
Email: nicole.gergans@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Pure Water North City Project** (Certification No. R9-2018-0084) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that

enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2018-0084 issued on December 18, 2018.



DAVID W. GIBSON
Executive Officer
San Diego Water Board

18 December 2018
Date

ATTACHMENT 1

DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of dredged material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of fill material – means the addition of fill material into waters of the United States and/or State.

Dredged material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

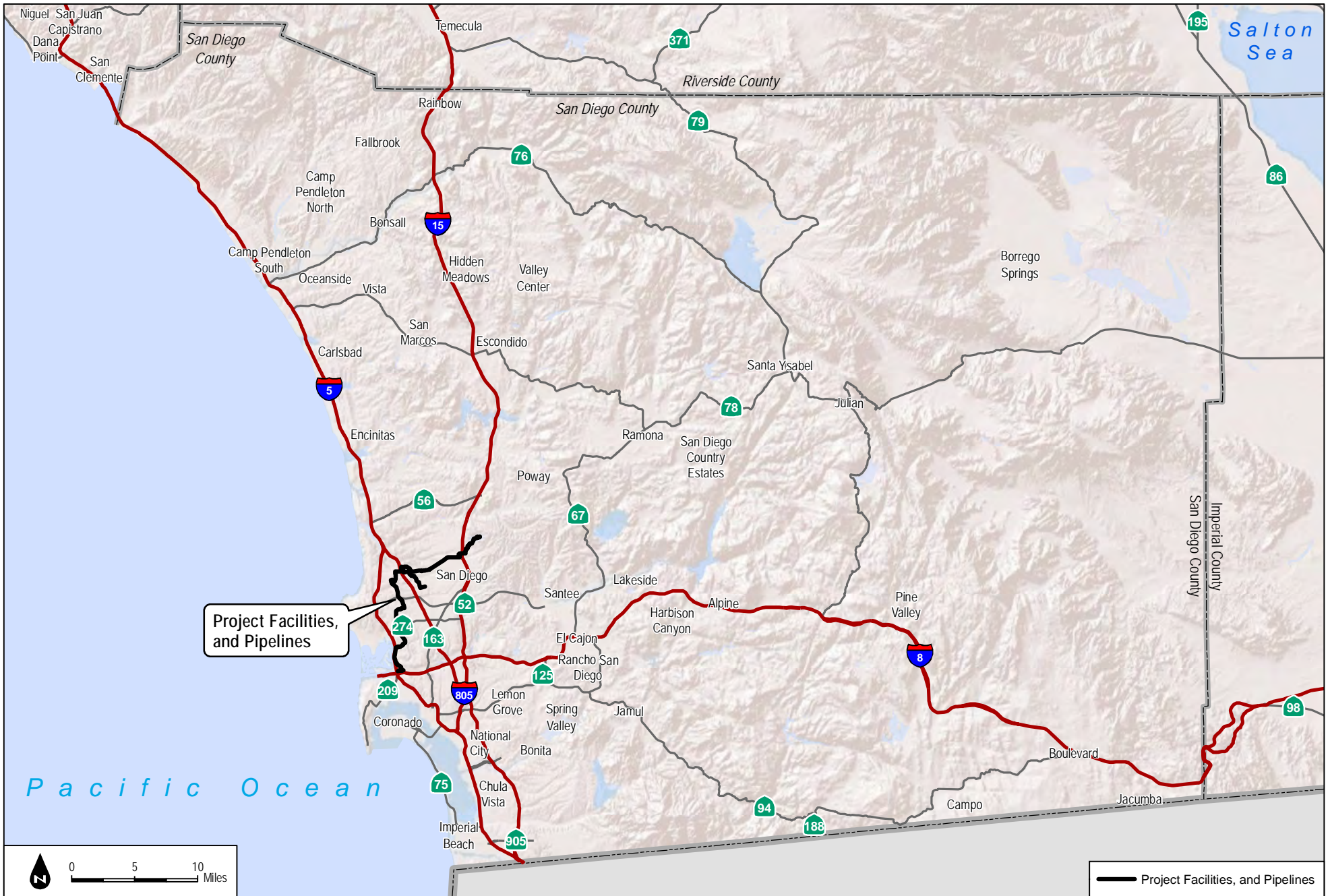
Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

City of San Diego
North City Pure Water Project
Certification No. R9-2018-0084

**ATTACHMENT 2
PROJECT LOCATION MAPS**

- 1) Figure 1 – Regional Map**
- 2) Figure 2 – Vicinity Map**

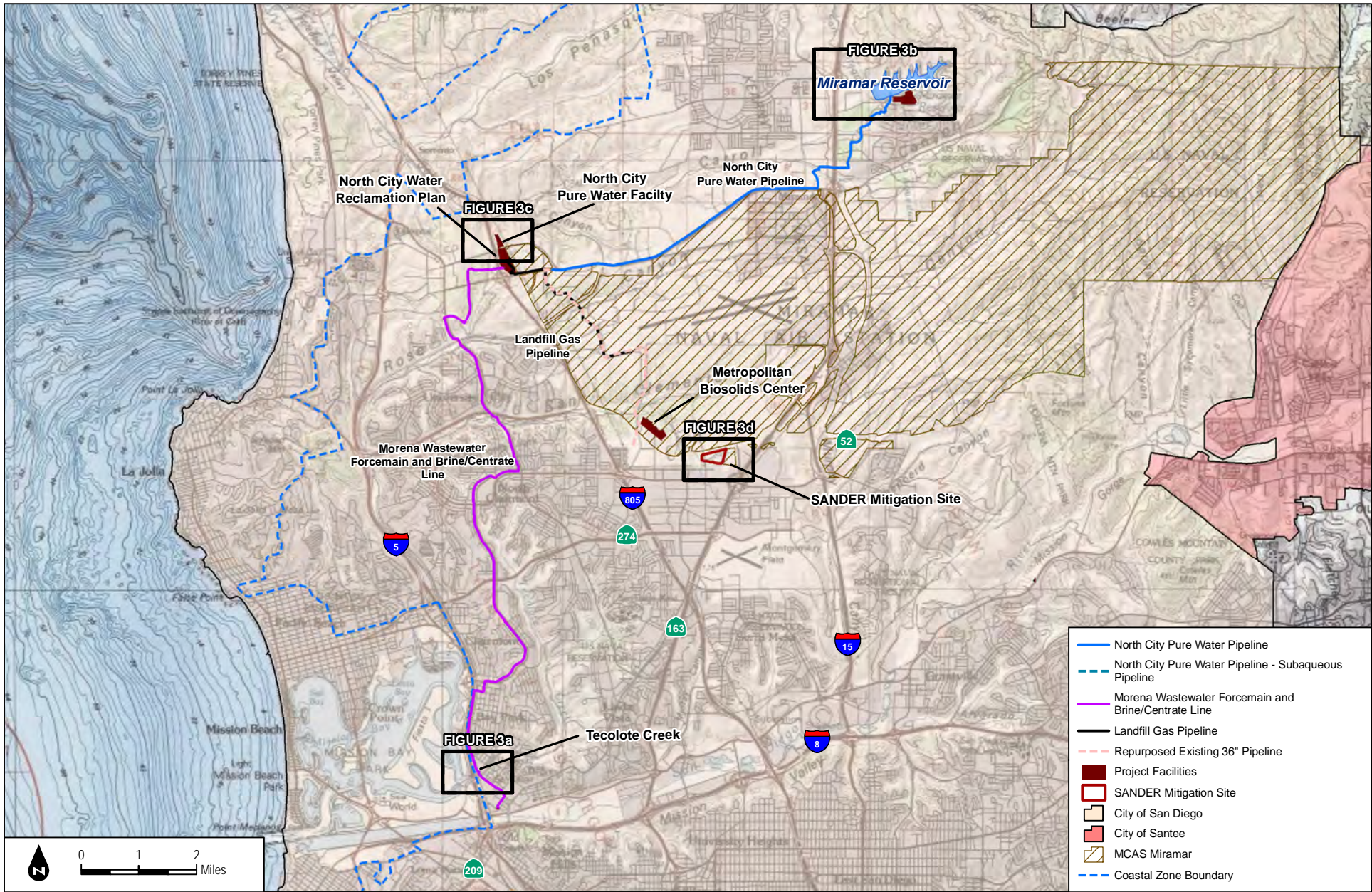


SOURCE: City San Diego 2016; ESRI 2016



Application for 401 Water Quality Certification for the Pure Water North City Project

FIGURE 1
Regional Map



SOURCE: USGS 7.5-Minute Series Del Mar, Poway, San Vicente Reservoir, La Jolla, La Mesa, El Cajon Quadrangles; City of San Diego 2016; CA Coastal Commission



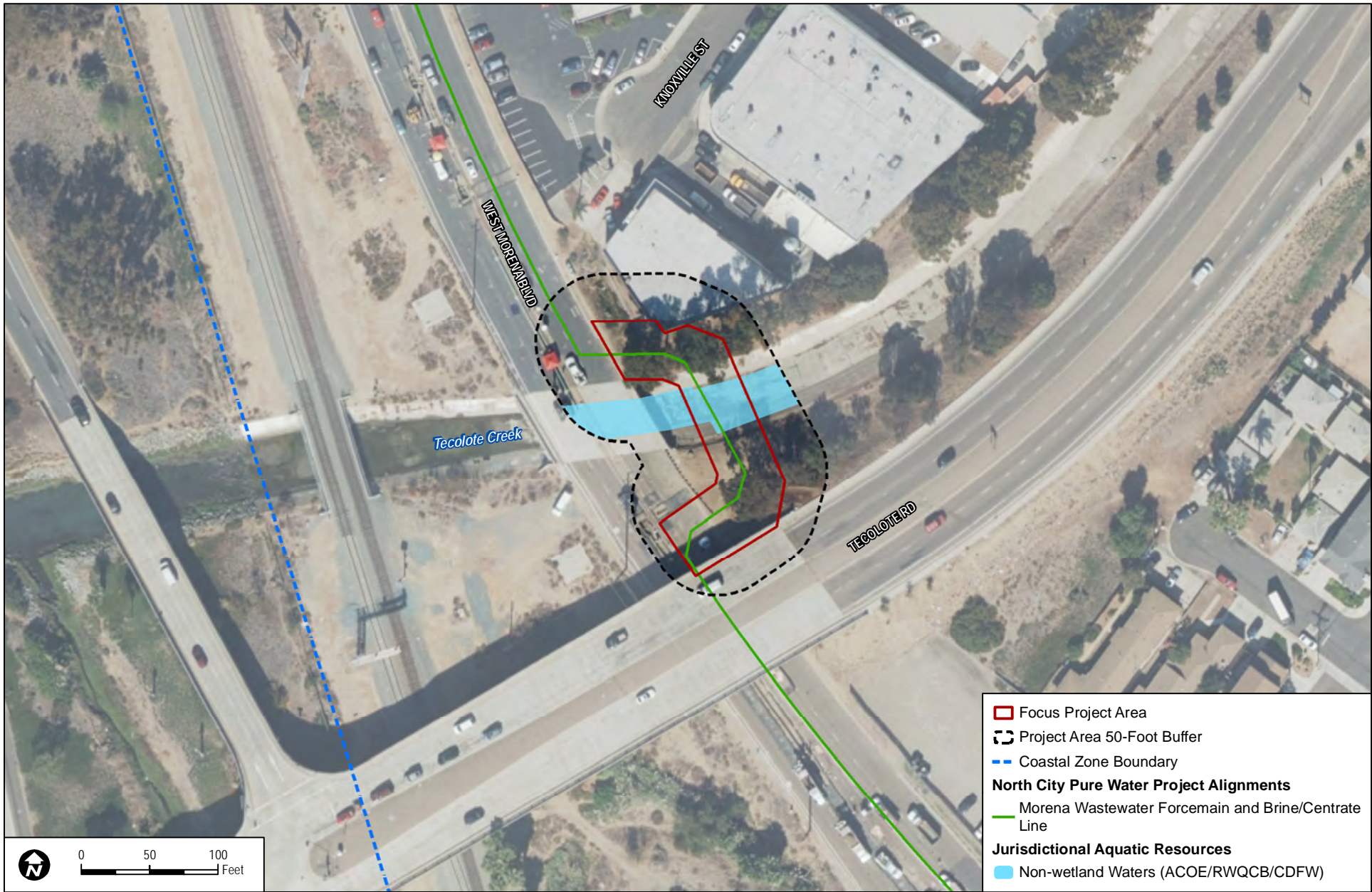
Application for 401 Water Quality Certification for the Pure Water North City Project

FIGURE 2
Vicinity Map

City of San Diego
North City Pure Water Project
Certification No. R9-2018-0084

**ATTACHMENT 3
PROJECT SITE PLANS**

- 1) Figure 5a – Morena Pipelines Tecolote Creek Impact Area Biological Resources**
- 2) Figure 5b - Miramar Reservoir Biological Resources**
- 3) Figure 5c – Biological Resources on the North City Pure Water Facility Site**



- Focus Project Area
- Project Area 50-Foot Buffer
- Coastal Zone Boundary
- North City Pure Water Project Alignments**
- Morena Wastewater Forcemain and Brine/Centrate Line
- Jurisdictional Aquatic Resources**
- Non-wetland Waters (ACOE/RWQCB/CDFW)

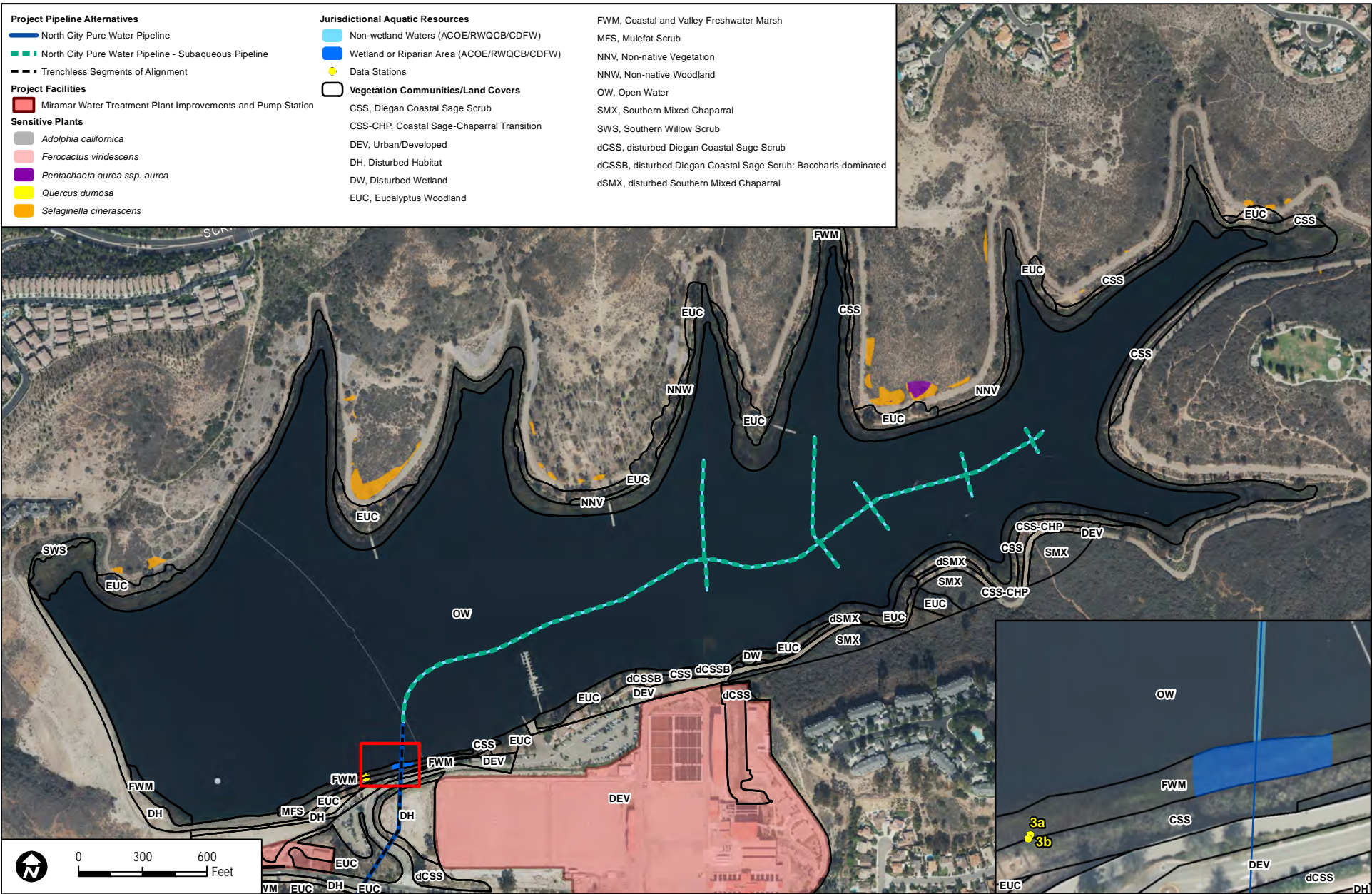
0 50 100 Feet

SOURCE: City of San Diego, 2016, 2017; SANDAG 2014



FIGURE 5a
Morena Pipelines Tecolote Creek Impact Area Biological Resources

Application for 401 Water Quality Certification for the Pure Water North City Project

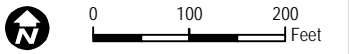


SOURCE: City of San Diego 2016, 2017; SANDAG



Application for 401 Water Quality Certification for the Pure Water North City Project

FIGURE 5b
Miramar Reservoir Biological Resources



SOURCE: City of San Diego 2016, 2017; SANDAG

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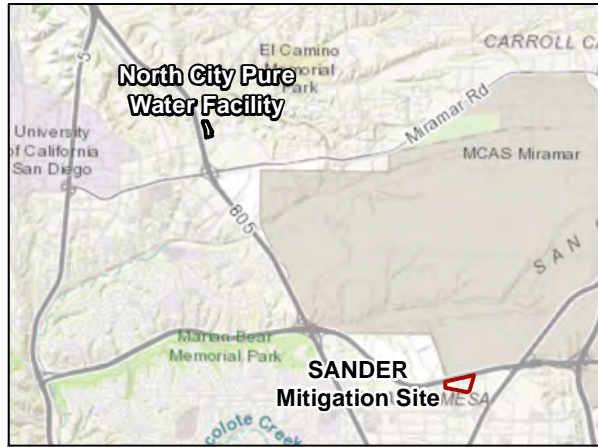
Application for 401 Water Quality Certification for the Pure Water North City Project

FIGURE 5c
 Biological Resources on the North City Pure Water Facility Site

City of San Diego
North City Pure Water Project
Certification No. R9-2018-0084

**ATTACHMENT 4
MITIGATION FIGURES**

- 1) Figure 5 – Existing Site Conditions**
- 2) Figure 7 – Site Disturbances and Invasive Plant Species**
- 3) Figure 8 – Upland and Wetland Implementation Plan**



Legend

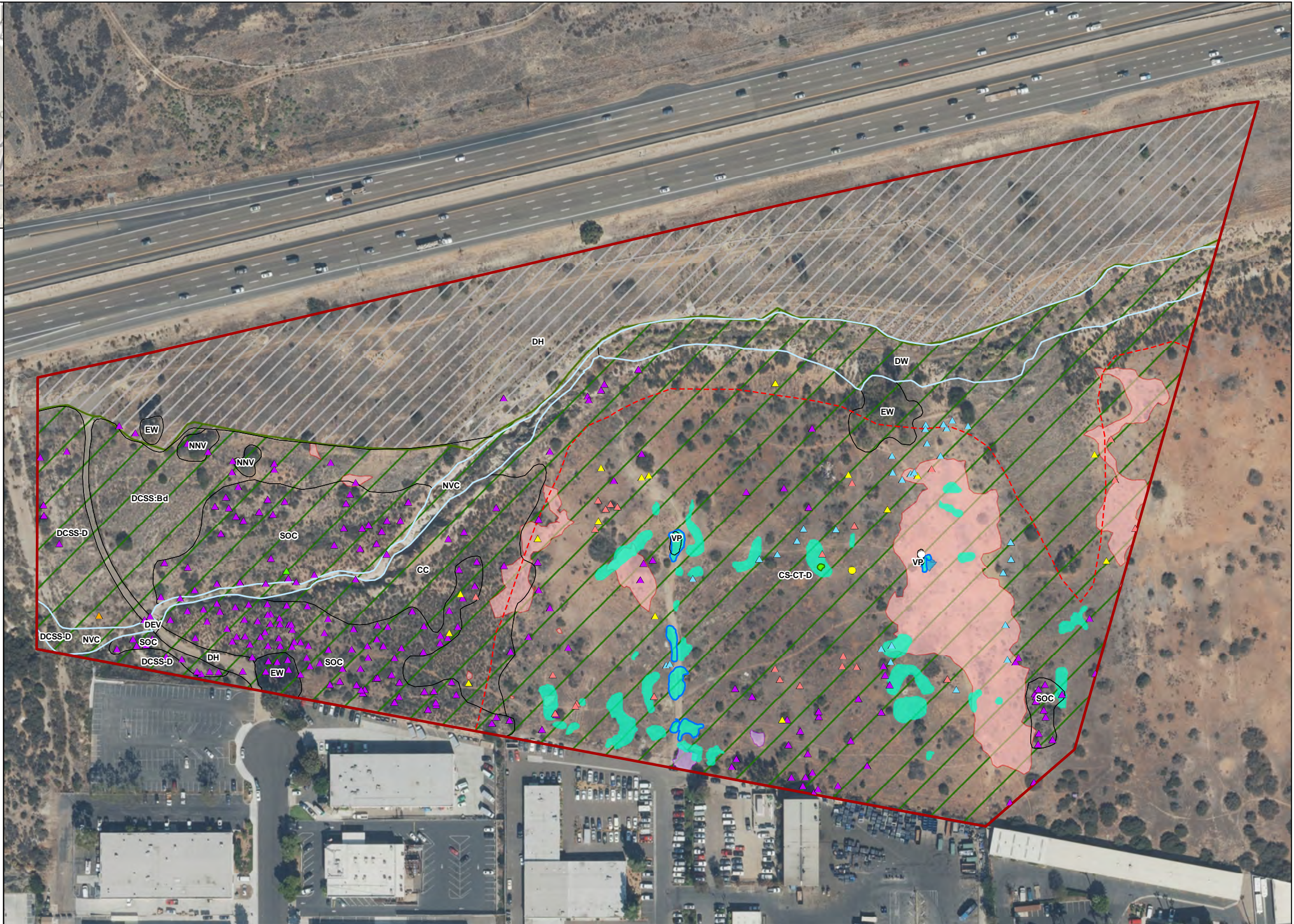
- North City Pure Water Facility
- SANDER Mitigation Site
- Vernal Pool HCP Hardline (City of San Diego)
- MHPA Addition Boundary
- Existing Vernal Pool Basins
- USACE/RWQCB Non-Wetland Waters/CDFW Streambed¹
- Vegetation Communities/Land Cover Types**
- CC, Chamise Chaparral - 1.3 acres
- CS-CT-D, Coastal Sage-Chaparral Transition-Disturbed - 13.47 acres
- DCSS-D, Diegan Coastal Sage Scrub-Disturbed - 0.82 acre
- DCSS:Bd, Diegan Coastal Sage Scrub: Baccharis-dominated - 1.32 acres
- DEV, Developed - 0.01 acre
- DH, Disturbed Habitat - 8.18 acres
- DW, Disturbed Wetland - 1.33 acres
- EW, Eucalyptus Woodland - 0.31 acre
- NNV, Non-Native Vegetation - 0.08 acre
- NVC, Non-vegetated Channel - 0.47 acre
- SOC, Scrub Oak Chaparral - 2.55 acres
- VP, Vernal Pool - 0.02 acre

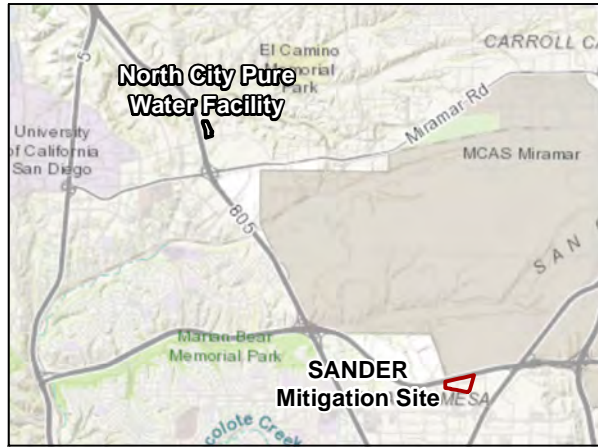
Sensitive Species

- western spadefoot toad
- western spadefoot toad juveniles
- Orcutt's brodiaea (*Brodiaea orcuttii*)
- Long spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- San Diego barrel cactus (*Ferocactus viridescens*)
- Nuttall's scrub oak (*Quercus dumosa*)
- Ashy spike moss (*Selaginella cinerascens*)
- San Diego viguiera (*Viguiera laciniata*)
- Orcutt's brodiaea (*Brodiaea orcuttii*)
- Long spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- Nuttall's scrub oak (*Quercus dumosa*)
- San Diego mesa mint (*Pogogyne abramsii*)
- San Diego fairy shrimp (*Branchinecta sandiegonensis*)
- Maintained Engineered Landfill Surface

¹ Since no formal jurisdictional delineation occurred within the disturbed wetland/non-vegetated channel the jurisdictional limits are approximate.

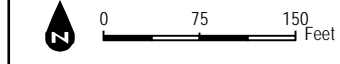
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- LEGEND**
- North City Pure Water Facility
 - SANDER Mitigation Site
 - Vernal Pool HCP Hardline (City of San Diego)
 - MHPA Boundary¹
 - Brush Management Zone
- Vernal Pool Mitigation**
- Re-establishment - 0.60 acre
 - Rehabilitation - 0.29 acre
 - Enhancement - 0.26 acre
- Disturbance Areas**
- Rubble (concrete and asphalt) - 0.28 acre
 - Trash - 0.14 acre
 - Invasive Plant Species - 1.68 acre
 - Acalon, Acacia longifolia
 - Caredu, Carpobrotus edulis
 - Corsel, Cortaderia selloana
 - Euc, Eucalyptus
 - Lythys, Lythrum hyssopifolia
 - Wasrob, Washingtonia robusta
 - Annual Invasive Weeds Pervasive
 - Dirt Roads/Trails

¹ Invasive weed species will be treated throughout the MHPA boundary for the entire maintenance and monitoring period



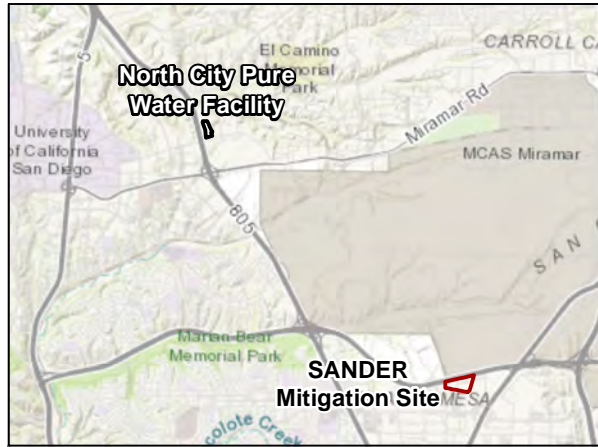
SOURCE: City of San Diego 2016, 2017; SanGIS; SANDAG



SANDER Mitigation Plan for the North City Project

FIGURE 7

Site Disturbances and Invasive Plant Species

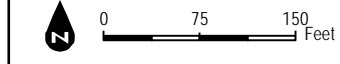


- LEGEND**
- North City Pure Water Facility
 - Sander Mitigation Site
 - Vernal Pool HCP Hardline (City of San Diego)
 - MHPA Boundary ¹
 - USACE/RWQCB Non-Wetland Waters/CDFW Streambed ²
- Vernal Pool Mitigation**
- Re-establishment - 0.60 acre
 - Rehabilitation - 0.29 acre
 - Enhancement - 0.26 acre ³
- Stream Enhancement**
- DW - Disturbed Wetland - 0.41 acre
 - NVC - Non-vegetated Channel - 0.10 acre
- Upland Restoration/Enhancement**
- CC - Chamise Chaparral - 1.29 acres
 - CS-CT-D - Coastal Scrub - Chaparral Transition-Disturbed - 12.62 acres
 - DCSS - Diegan Coastal Sage Scrub - 2.14 acres
 - SOC - Scrub Oak Chaparral - 2.63 acres

¹ Invasive weed species will be treated throughout the MHPA boundary for the entire maintenance and moitoring period

² Since no formal jurisdictional delineation occurred within the disturbed wetland/non-vegetated channel the jurisdictional limits are approximate.

³ A minimum of 0.39 acre of stream enhancement will occur within the 0.51 total acreage shown here



SOURCE: City of San Diego 2016, 2017; SanGIS; SANDAG



SANDER Mitigation Plan for the North City Project

FIGURE 8
Upland and Wetland Implementation Plan

Applicant
Project Name
Certification No. R9-2018-0084

ATTACHMENT 5
CEQA MITIGATION MONITORING AND REPORTING PROGRAM

- c. Construction equipment shall be maintained in accordance with the manufacturer's specifications.

Mitigation measure MM-AQ-3 is provided to reduce odor impacts for the Miramar Reservoir Alternative.

MM-AQ-3 The City shall implement odor control systems at the NCWRP Expansion, Morena Pump Station, and Morena Wastewater Forcemain specifically designed to abate the potential odors of the facility. Odor control systems would be similar to those currently employed at City of San Diego wastewater treatment facilities to reduce odor impacts. The following odor control systems or equivalent measures shall be implemented to mitigate nuisance odors:

- a. North City Water Reclamation Plant Expansion and the Morena Pump Station: NaOCl/NaOH Wet Scrubber plus carbon or Biofilter plus carbon.
- b. Air/vacuum relief valves at high points along the wastewater forcemain: ferric chloride and/or High Purity Oxygen injection.

Alternatively, odors could be abated through the addition of chemicals such as iron chloride, nitrate, hydrogen peroxide, sodium hypochlorite, high purity oxygen, magnesium hydroxide, and/or caustic solutions to reduce the liquid phase concentration and thus, reduce the amount volatilized into the gas phase.

San Vicente Reservoir Alternative

Potential impacts to air quality would be reduced with implementation of MM-AQ-1 through MM-AQ-3.

10.2.2 BIOLOGICAL RESOURCES

Miramar Reservoir Alternative

Refer to Section 6.4, Biological Resources, for specific impact summary tables for the Miramar Reservoir Alternative.

MM-BIO-1a Mitigation for Upland Impacts. In order to offset the permanent impacts to sensitive upland vegetation communities, 6.61 acres of

mitigation would be required for the Miramar Reservoir Alternative and 8.14 acres of mitigation would be required for the San Vicente Reservoir Alternative. Mitigation would be provided through restoration and preservation of uplands at the SANDER Vernal Pool and Upland Mitigation Site. All mitigation would occur within the Multiple Species Conservation Program's (MSCP's) Multi-Habitat Planning Area (MHPA). Additionally, in order to satisfy the cumulative impacts requirement, a Native Grassland Creation Mitigation Plan – Pueblo South (Appendix S, of Appendix C) would be implemented for mitigation of impacts to 1.30 acres of native grassland. Native grassland creation would be conducted at Pueblo South, which is outside the MHPA and would be required for either Project Alternative.

MM-BIO-1b Mitigation for Vernal Pool Impacts. In order to offset permanent impacts to vernal pools, 0.75 acre of mitigation would be required for both Project Alternatives. Mitigation would be provided through restoration of vernal pools and adjacent uplands at the SANDER Vernal Pool and Upland Mitigation site, which is within the Vernal Pool Habitat Conservation Plan (VPHCP) hard line preserve. The SANDER Vernal Pool and Upland Mitigation site is within MHPA lands; therefore all mitigation would occur within the MSCP's MHPA and would be implemented in accordance with City/U.S. Army Corps of Engineers (ACOE)/California Department of Fish and Wildlife (CDFW)/Regional Water Quality Control Board (RWQCB) guidelines. The SANDER Vernal Pool and Upland Mitigation Plan (Appendix R, of Appendix C) would be developed and implemented at the SANDER Vernal Pool and Upland Mitigation Site. Both upland vegetation, including in Tier mitigation, and vernal pool impacts would be mitigated at the SANDER site.

MM-BIO-2 Habitat Revegetation. Habitat revegetation and erosion control treatments will be installed within temporary disturbance areas in native habitat, in accordance with the San Diego Municipal Code, Land Development Code—Biology Guidelines (City of San Diego 2012) and the San Diego Municipal Code, Land Development Code—Landscape Standards (City of San Diego 2016). The Conceptual Revegetation Plan (Appendix P, of Appendix C) was prepared by a Restoration Specialist. Habitat revegetation will feature native species that are typical of the area, and erosion control features will include silt fence and straw fiber rolls, where appropriate. The revegetation

areas will be monitored and maintained for 25 months to ensure adequate establishment and sustainability of the plantings/seedings.

Revegetation Plan(s) and Specifications:

1. Landscape Construction Documents (LCD) shall be prepared on D-sheets and submitted to the City of San Diego Development Services Department, Landscape Architecture Section (LAS) for review and approval. LAS shall consult with Mitigation Monitoring Coordination (MMC) and obtain concurrence prior to approval of LCD. The LCD shall consist of revegetation, planting, irrigation and erosion control plans; including all required graphics, notes, details, specifications, letters, and reports as outlined below.
2. Landscape Revegetation Planting and Irrigation Plans shall be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Revegetation/ Restoration Plans) of the City of San Diego's LDC Biology Guidelines (April 2012). The Principal Qualified Biologist (PQB) shall identify and adequately document all pertinent information concerning the revegetation goals and requirements, such as but not limited to, plant/seed palettes, timing of installation, plant installation specifications, method of watering, protection of adjacent habitat, erosion and sediment control, performance/ success criteria, inspection schedule by City staff, document submittals, reporting schedule, etc. The LCD shall also include comprehensive graphics and notes addressing the ongoing maintenance requirements (after final acceptance by the City). For areas where a water source is not available irrigation can be completed by a water truck. Additionally, it is recommended that planting/seeding occur in the fall or early winter, to the maximum extent practical, in order to minimize the amount of water truck visits needed.
3. The Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Construction Manager (CM) and Grading Contractor (GC), where applicable shall be responsible to insure that for all grading and contouring, clearing and grubbing, installation of plant materials, and any necessary maintenance activities or remedial actions required during installation and the

120-day plant establishment period are done per approved LCD. The following procedures at a minimum, but not limited to, shall be performed:

- a. The RMC shall be responsible for the maintenance of the upland mitigation area for a minimum period of 120 days.
- b. At the end of the 120-day period the PQB shall review the revegetation area to assess the completion of the short-term plant establishment period and submit a report for approval by MMC. If the 120-day plant establishment period success criteria has not been met, an extension may be warranted at the discretion of the PQB.
- c. MMC would provide approval in writing to begin the 25-month maintenance and monitoring program.
- d. Existing indigenous/native species shall not be pruned, thinned, or cleared in the revegetation/mitigation area.
- e. The revegetation site shall not be fertilized.
- f. The RIC is responsible for reseeding (if applicable) if weeds are not removed, within one week of written recommendation by the PQB.
- g. Weed control measures shall include the following: (1) hand removal, (2) cutting, with power equipment, and (3) chemical control. Hand removal of weeds is the most desirable method of control and would be used wherever possible.
- h. Damaged areas shall be repaired immediately by the RIC/RMC. Insect infestations, plant diseases, herbivory, and other pest problems would be closely monitored throughout the 25-month maintenance period. Protective mechanisms such as metal wire netting shall be used as necessary. Diseased and infected plants shall be immediately disposed of off site in a legally acceptable manner at the discretion of the PQB or Qualified Biological Monitor (City approved). Where possible, biological controls would be used instead of pesticides and herbicides.

MM-BIO-3 Nesting Birds. To avoid any direct impacts any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by CDFW or

USFWS, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-construction survey to the City's Development Services Department for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, and construction barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

MM-BIO-4a Coastal California Gnatcatcher. Prior to the preconstruction meeting, the Assistant Deputy Director (ADD) or MMC shall verify that the MHPA boundaries and the Project requirements regarding the coastal California gnatcatcher, as specified below, are shown on the construction plans.

No clearing, grubbing, grading, or other construction activities shall occur during the coastal California gnatcatcher breeding season (March 1 to August 15), until the following requirements have been met to the satisfaction of the ADD/MMC:

1. A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the coastal California gnatcatcher. Surveys for coastal California

gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If coastal California gnatcatchers are present, then the following conditions must be met:

- a. Between March 1 and August 15, no clearing, grubbing, or grading of occupied coastal California gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and
- b. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a Qualified Acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ADD/MMC at least 2 weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or
- c. At least 2 weeks prior to the commencement of construction activities, under the direction of a Qualified Acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities would not exceed 60 dB(A) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the Qualified Acoustician or Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16). Construction noise monitoring shall

continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD/MMC, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

2. If coastal California gnatcatchers are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the ADD/MMC and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:
 - a. If this evidence indicates that the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then Condition 1(a) shall be adhered to as specified above.
 - b. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

MM-BIO-4b Coastal California Gnatcatcher. Ambient noise levels on MCAS Miramar, in particular in the vicinity of the airfield, exceed typical construction noise level. On MCAS Miramar, construction noise levels are not anticipated to exceed ambient noise levels. Potential impacts associated with construction activities on MCAS Miramar would be mitigated through the following:

1. Qualified Biologist (possessing a valid federal Endangered Species Act (FESA) Section 10(a)(1)(a) Recovery Permit) shall conduct a pre-construction survey within suitable habitat. Between February 15 and August 31, no clearing, grubbing, or grading of occupied coastal California gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and

2. For potential impacts associated with construction noise, presence or absence of coastal California gnatcatcher would be determined by pre-construction surveys conducted by a Qualified Biologist adjacent to the Project area. Coastal sage scrub outside of the impact area would be flagged to protect it from construction equipment as directed by the Project Biologist. Between February 15 and August 31, no noise-generating construction activities that exceed ambient noise levels would occur in close proximity to occupied habitat. If necessary, other measures shall be implemented in consultation with the Project Biologist as necessary, to reduce noise levels. Measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

MM-BIO-5 Burrowing Owl. Species Specific Mitigation (required to meet MSCP Subarea Plan Conditions of Coverage) for Potential Impacts to Burrowing Owl and Associated Habitat located outside the MHPA (burrowing owl and associated habitat impacts within the MHPA must be avoided).

Prior to Permit or Notice to Proceed Issuance:

1. As this project has been determined to have burrowing owl occupation potential, the Permit Holder shall submit evidence to the Assistant Deputy Director of the City's Entitlements verifying that a Biologist possessing qualifications pursuant to the "Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency, California Department of Fish and Game" (hereafter referred as CDFG 2012, Staff Report), has been retained to implement a burrowing owl construction impact avoidance program.
2. The Qualified Biologist shall attend the pre-construction meeting to inform construction personnel about the City's burrowing owl requirements and subsequent survey schedule.

Prior to Start of Construction:

1. The Permit Holder and Qualified Biologist must ensure that initial pre-construction/take avoidance surveys of the Project "site" are completed between 14 and 30 days before initial construction activities, including brushing, clearing, grubbing, or grading of the

Project site; regardless of the time of the year. “Site” means the Project site and the area within a radius of 450 feet of the Project site. A report detailing the results of the surveys shall be submitted and approved by the Wildlife Agencies and/or City MSCP staff prior to construction or burrowing owl eviction(s) and shall include maps of the Project site and burrowing owl locations on aerial photos.

2. The pre-construction survey shall follow the methods described in CDFG 2012, Staff Report, Appendix D (please note, in 2013, CDFG became California Department of Fish and Wildlife or CDFW).
3. 24 hours prior to commencement of ground disturbing activities, the Qualified Biologist shall ~~verify~~ update and report results of preconstruction/take avoidance surveys. Verification shall be provided to the City’s MMC Section. If results of the preconstruction surveys have changed and burrowing owl are present in areas not previously identified, immediate notification to the City and Wildlife Agencies shall be provided prior to ground disturbing activities.

During Construction:

1. Best Management Practices shall be employed as burrowing owls are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are burrowing owl occupied and have followed all protocol in this mitigation section, or sites within 450 feet of occupied burrowing owl areas, should undertake measures to discourage burrowing owls from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms.
2. Ongoing burrowing owl detection—If burrowing owls or active burrows are not detected during the pre-construction surveys, Section “a” below shall be followed. If burrowing owls or burrows are detected during the pre-construction surveys, Section “b” shall be followed. Neither the MSCP Subarea Plan nor this mitigation section allows for any burrowing owls to be injured or killed outside or within the MHPA; in addition, impacts to burrowing owls within the MHPA must be avoided.

- a. Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are Not Detected During the Initial Preconstruction Survey. Monitoring the site for new burrows is required using the protocol in Appendix D of the Burrowing Owl Staff Report (CDFG 2012) for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete. (NOTE: Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol)
 - i. If no active burrows are found but burrowing owls are observed to occasionally (1—3 sightings) use the site for roosting or foraging, they should be allowed to do so with no changes in the construction or construction schedule.
 - ii. If no active burrows are found but burrowing owls are observed during follow up monitoring to repeatedly (4 or more sightings), using the site for roosting or foraging, the City's MMC Section shall be notified and any portion of the site where owls have been sighted and that has not been graded or otherwise disturbed shall be avoided until further notice.
 - iii. If a burrowing owl begins using a burrow on the site at any time after the initial pre-construction survey, procedures described in Section b must be followed.
 - iv. Any actions other than these require the approval of the City and the Wildlife Agencies.
- b. Post-Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are detected during the Initial Pre-Construction Survey. Monitoring the site for new burrows is required using the protocol in Appendix D of the Burrowing Owl Staff Report (CDFG 2012) for the period following the initial pre-construction survey, until construction is scheduled to be complete and is complete. (NOTE: Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol.)

- i. This section (b) applies only to sites (including biologically defined territory) wholly outside of the MHPA; all direct and indirect impacts to burrowing owls within the MHPA SHALL be avoided.
- ii. If one or more burrowing owls are using any burrows (including pipes, culverts, debris piles etc.) on or within 300 feet of the proposed construction area, the City's MMC Section shall be contacted. The City's MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist the appropriate City biologist for on-going coordination with the Wildlife Agencies and the qualified consulting burrowing owl biologist. No construction shall occur within 300 feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography, and other physical and biological characteristics.
 1. Outside the Breeding Season: If the burrowing owl is using a burrow on site outside the breeding season (i.e. September 1 – January 31), the burrowing owl may be evicted after the qualified burrowing owl biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow and written concurrence from the Wildlife Agencies for eviction is obtained prior to implementation.
 2. During Breeding Season: If a burrowing owl is using a burrow on-site during the breeding season (February 1 to August 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the burrowing owls can be evicted. Eviction requires written concurrence from the Wildlife Agencies prior to implementation.
3. Survey Reporting During Construction: Details of construction surveys and evictions (if applicable) carried out shall be immediately (within 5 working days or sooner) reported to the City's MMC Section and the Wildlife Agencies and must be provided in writing (as by e-mail) and acknowledged to have been

received by the required Wildlife Agencies and Development Services Department Staff member(s).

Post Construction:

Details of all the surveys and actions undertaken on-site with respect to burrowing owls (i.e., occupation, eviction, locations etc.) shall be reported to the City's MMC Section and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries of all previous reports for the site; and maps of the Project site and burrowing owl locations on aerial photos.

Introduction to MM-BIO-6

Project construction within 500 feet of the San Diego River, Rose Creek, San Clemente Creek and any other sensitive riparian areas may have adverse indirect impacts on least Bell's vireo and southwestern willow flycatcher if construction occurs during the breeding season from March 15 through September 15 for least Bell's vireo and May 1 through September 1 for southern willow flycatcher and the species are determined to be present.

MM-BIO-6 Riparian Birds. Prior to the preconstruction meeting, the Assistant Deputy Director (ADD) or MMC shall verify that MHPA boundaries and the Project requirements regarding the least Bell's vireo and southwestern willow flycatcher, as specified below, are shown on the construction plans.

No clearing, grubbing, grading, or other construction activities shall occur during the least Bell's vireo breeding season (March 15 to September 15) and southwestern willow flycatcher breeding season (May 1 to September 1), until the following requirements have been met to the satisfaction of the ADD/MMC:

1. A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the least Bell's vireo and southwestern willow flycatcher. Surveys for least Bell's vireo and southwestern willow flycatcher shall be

conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If least Bell's vireo, and/or southwestern willow flycatcher are present, then the following conditions must be met:

- a. Between March 15 to September 15 for least Bell's vireo and May 1 to September 1 for southwestern willow flycatcher, no clearing, grubbing, or grading of occupied habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and
- b. Between March 15 to September 15 for least Bell's vireo and/or May 1 to September 1 for southwestern willow flycatcher no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a Qualified Acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ADD/MMC at least 2 weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or
- c. At least 2 weeks prior to the commencement of construction activities, under the direction of a Qualified Acoustician, attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities would not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo, and/or southwestern willow flycatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the Qualified

Acoustician or Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16). Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ADD/MMC, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

2. If least Bell's vireo and/or southwestern willow flycatcher are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the ADD/MMC and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 to September 15 for least Bell's vireo and/or May 1 to September 1 for southwestern willow flycatcher adherence to the following is required:
 - a. If this evidence indicates that the potential is high for least Bell's vireo and/or southwestern willow flycatcher to be present based on historical records or site conditions, then Condition 1(a) shall be adhered to as specified above.
 - b. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

~~A monitoring and adaptive management plan within the reservoir would be contradictory to the drinking water reservoir goals, objectives and mandates, warm water fishery maintenance, and other human related recreational objectives; therefore, a trapping and relocation plan is proposed for this already threatened and apparent non-natural pond turtle population. Trapping and relocation is proposed to avoid potentially adverse indirect effects to western pond turtle populations. The USGS-advocated trapping and relocation program, which can~~

~~successfully establish new populations or maintain extant populations (Harmsworth Associates & Goodman 2002, 2003), would help increase and expand western pond turtle populations into areas that have higher habitat quality than the Miramar Reservoir, which has high human access and is an artificial reservoir within a park setting (USGS 2005).~~

~~**MM-BIO-7 Western Pond Turtle.** Since the Miramar Reservoir is maintained and operated as a drinking water reservoir which creates conditions that provide less than optimal habitat for western pond turtles and because an adaptive management program for this species would be contradictory to water quality benefits, the City prepared a conceptual trapping and relocation plan for this species (Appendix U, of Appendix C). Relocation would be conducted in accordance with the plan and in consultation with the California Department of Fish and Wildlife (CDFW) with input from the U.S. Geological Survey and approved by the Development Services Department and by MSCP Planning. The relocation plan provides the methods for the trapping of western pond turtles and relocation to the most proximate suitable habitat that would not be affected by the proposed project.~~

~~Specific trapping timing and methodology/recurrence intervals would be in consultation with CDFW and would be performed by a Qualified Biologist operating under an active California State Scientific Collecting Permit. However, trapping would be performed in late April through early August to remove egg-laying females from the reservoir prior to egg deposition, thus eliminating the potential for stranding of eggs or hatchlings.~~

~~**MM-BIO-89 Wetland Permits.** The owner/permittee shall provide evidence that all required regulatory permits, such as those required under Section 404 of the federal Clean Water Act, Section 1600 of the California Fish and Game Code, and the Porter-Cologne Water Quality Control Act, has been obtained.~~

Introduction to MM-BIO-910

Mitigation measure MM-BIO-910 will be included in the design and construction documents for each Project component and will reduce the potential for short-term and long-term indirect impacts to sensitive vegetation communities. A biological

monitor will be present during construction within or adjacent to sensitive resources and would ensure that the Project adheres to and implements the appropriate measures to protect sensitive resources.

MM-BIO-910 The following measures will be included in the design and construction documents for each Project component to reduce potential impacts to sensitive resources:

- a. **Qualified Biologist.** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego Municipal Code, Land Development Code—Biology Guidelines (City of San Diego 2012), has been retained to implement the Project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the Project.
- b. **Preconstruction Meeting.** The Qualified Biologist shall attend the preconstruction meeting, discuss the Project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.
- c. **Documentation.** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance, project permit conditions; California Environmental Quality Act (CEQA); National Environmental Policy Act (NEPA); endangered species acts (federal Endangered Species Act and California Endangered Species Act); and/or other local, state or federal requirements.
- d. **Biological Construction Mitigation/Monitoring Exhibit.** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes the biological documents above. In addition, the BCME would include restoration/revegetation plans, plant salvage/relocation requirements (e.g., burrowing owl exclusions, etc.), avian or other

wildlife surveys/survey schedules (including general avian nesting and U.S. Fish and Wildlife (USFWS) protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City Assistant Deputy Director (ADD)/MMC. The BCME shall include a site plan, written and graphic depiction of the Project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

- e. **Construction Fencing.** Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delineating buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
- f. **On-site Education.** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas).
- g. **Biological Monitoring.** During construction, a Qualified Biologist would be present to assist in the avoidance of impacts to native vegetation, jurisdictional aquatic resources, sensitive plants and wildlife, and nesting birds. Specific biological monitoring and or mitigation measures for sensitive wildlife, sensitive vegetation communities, and jurisdictional aquatic resources are described further in the mitigation measures.
- h. **Cover Trenches.** General biological monitoring shall include verifying that the contractor has covered all steep-walled trenches or

excavations over night or after shift. If trenches or excavations cannot be covered, the monitor would verify that the contractor has installed exclusionary fencing (e.g., silt fence) around the trenches or excavation areas or installed ramps to prevent entrapment of wildlife (e.g., reptiles and mammals). If animals are encountered within any trenches or excavated areas, they would be removed by the biological monitor, if possible, or provided with a means of escape (e.g., a ramp or sloped surface) and allowed to disperse. In addition, the biological monitor would provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and equipment and to use best judgment to avoid killing or injuring wildlife. The biological monitor would be available to assist with moving wildlife, if necessary.

- i. **Nighttime Construction.** To reduce impacts to nocturnal species in those areas where they have a potential to occur, nighttime construction activity within undeveloped areas containing sensitive biological resources would be minimized whenever feasible and shielded lights would be utilized when necessary. Construction nighttime lighting would be subject to City Outdoor Lighting Regulations per San Diego Land Development Code (LDC) Section 142.0740.
- j. **Best Management Practices/Erosion/Runoff.** The City will incorporate methods to control runoff, including a Stormwater Pollution Prevention Plan (SWPPP) to meet National Pollutant Discharge Elimination System (NPDES) regulations or batch discharge permit from the City. Implementation of stormwater regulations are expected to substantially control adverse edge effects (e.g., erosion, sedimentation, habitat conversion) during and following construction both adjacent and downstream from the study area. Typical construction Best Management Practices (BMPs) specifically related to reducing impacts from dust, erosion, and runoff generated by construction activities would be implemented. During construction, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect sensitive vegetation from being inundated with sediment-laden runoff. Dewatering shall be conducted in accordance with standard regulations of the

Regional Water Quality Control Board (RWQCB). An NPDES permit, issued by RWQCB to discharge water from dewatering activities, shall be required prior to start of dewatering. This will minimize erosion, siltation, and pollution within sensitive communities. Design of drainage facilities shall incorporate long-term control of pollutants and stormwater flow to minimize pollution and hydrologic changes.

- k. **Toxics/Project Staging Areas/Equipment Storage.** Projects that use chemicals or generate by-products such as pesticides, herbicides, and animal waste, and other substances that are potentially toxic or impactful to native habitats/flora/fauna (including water) shall incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. No trash, oil, parking, or other construction/development-related material/activities shall be allowed outside any approved construction limits. Where applicable, this requirement shall be incorporated into leases on publicly owned property when applications for renewal occur. Provide a note in/on the CDs that states: "All construction-related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owners Representative or Resident Engineer to ensure there is no impact to the MHPA."
- l. **Silt Fencing.** Covered projects shall require temporary fencing (with silt barriers) of the limits of Project impacts (including construction staging areas and access routes) to prevent additional vernal pool impacts and prevent the spread of silt from the construction zone into adjacent vernal pools. Fencing shall be installed in a manner that does not impact habitats to be avoided. Final construction plans shall include photographs that show the fenced limits of impact and all areas of vernal pools to be impacted or avoided. If work inadvertently occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing shall be removed upon project completion.

- m. **Dust.** Impacts from fugitive dust that may occur during construction grading shall be avoided and minimized through watering and other appropriate measures.
- n. **Vernal Pool Biologist.** A qualified monitoring biologist that has been approved by the City shall be on site during Project construction activities to ensure compliance with all mitigation measures identified in the CEQA environmental document. The biologist shall be knowledgeable of vernal pool species biology and ecology. The biologist shall perform the following duties:
- a. Oversee installation of and inspect the fencing and erosion control measures within or upslope of vernal pool restoration and/or preservation areas a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.
 - b. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.
 - c. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training shall include (1) the purpose for resource protection; (2) a description of the vernal pool species and their habitat(s); (3) the conservation measures that must be implemented during Project construction to conserve the vernal pool species, including strictly limiting activities, and vehicles, equipment, and construction materials to the fenced Project footprint to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the Project site by fencing); (4) environmentally responsible construction practices as outlined in measures 5, 6, and 7; (5) the protocol to resolve conflicts that may arise at any time during the construction process; and (6) the general provisions of the project's mitigation monitoring and reporting program (MMRP), the need to adhere to the provisions of FESA, and the penalties associated with violating FESA.
 - d. Halt work, if necessary, and confer with the City to ensure the proper implementation of species and habitat protection

measures. The biologist shall report any violation to the City within 24 hours of its occurrence.

- e. Submit regular (e.g., weekly) letter reports to the City during Project construction and a final report following completion of construction. The final report shall include as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were avoided, and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conservation measures was achieved.
- o. **Limits of Work.** The following conditions shall be implemented during Project construction:
 - a. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced Project footprint.
 - b. The Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.
 - c. Disposal or temporary placement of excess fill, brush, or other debris shall be limited to areas within the fenced Project footprint.
- p. **Equipment Staging.** All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the fenced Project impact 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 the vernal pools or their watersheds, and shall be shown on the construction plans. Fueling of equipment shall take place within existing paved areas greater than 100 feet from the vernal pools or their watersheds. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary. A spill kit for each piece of construction equipment shall be on site and must be used in the event of a spill. "No-fueling zones" shall be designated on construction plans.
- q. **Grading Activities.** Grading activities immediately adjacent to vernal pools shall be timed to avoid wet weather to minimize potential impacts (e.g., siltation) to the vernal pools unless the area

to be graded is at an elevation below the pools. To achieve this goal, grading adjacent to avoided pools shall comply with the following:

- a. Grading shall occur only when the soil is dry to the touch both at the surface and 1 inch below. A visual check for color differences (i.e., darker soil indicating moisture) in the soil between the surface and 1 inch below indicates whether the soil is dry.
- b. After a rain of greater than 0.2 inch, grading shall occur only after the soil surface has dried sufficiently as described above, and no sooner than 2 days (48 hours) after the rain event ends.
- c. To prevent erosion and siltation from stormwater runoff due to unexpected rains, best management practices (i.e., silt fences) shall be implemented as needed during grading.
- d. If rain occurs during grading, work shall stop and resume only after soils are dry, as described above.
- e. Grading shall be done in a manner to prevent runoff from entering preserved vernal pools.
- f. If necessary, water spraying shall be conducted at a level sufficient to control fugitive dust but not to cause runoff into vernal pools.
- g. If mechanized grading is necessary, grading shall be performed in a manner to minimize soil compaction (i.e., use the smallest type of equipment needed to feasibly accomplish the work).

San Vicente Reservoir Alternative

Refer to Section 6.4, Biological Resources for specific impact summary tables for the San Vicente Reservoir Alternative.

Potential impacts to biological resources would be reduced by implementation of mitigation measures MM-BIO-1a, MM-BIO-1b, MM-BIO-2 through MM-BIO-6, MM-BIO-89, and MM-BIO-940, in addition to the following measures:

MM-BIO-1c Mitigation for Impacts to Jurisdictional Aquatic Resources. In order to offset permanent impacts to jurisdictional resources (excluding vernal pools), 1.12 acres of mitigation would be required for the San Vicente

Reservoir Alternative. Mitigation would be provided at the SANDER Mitigation site (subject to the satisfaction of ACOE and RWQCB) or through allocation of credit at the San Diego River Mitigation Site subject to ACOE and RWQCB approval. All mitigation would occur within the MSCP's MHPA and is in accordance with City/ACOE/CDFW/RWQCB guidelines.

MM-BIO-78 Vernal Pool Watershed. There would be permanent indirect impacts within the PW36, VP697, and VP699 watersheds from air and blow-off valves associated with the San Vicente Pipeline - Repurposed 36-inch Recycled Water Line only if the San Vicente Alternative is implemented. As required under the Integrated Natural Resources Management Plan (INRMP), mitigation for permanent indirect impacts from the San Vicente Reservoir Alternative to an occupied watershed (PW36, VP697, and VP699) within the Level I and Level V Management Areas (MAs) would include enhancement of remaining portions of watershed (protection by temporary fencing or other means, enlarge another portion); monitoring of species in the feature may be necessary to document extent of actual impacts to threatened or endangered species; if impacts are documented to threatened or endangered species, then additional action would be required for indirect impacts to the threatened or endangered species by habitat enhancement, possibly elsewhere; and no work around the vernal pool during the rainy season or when ground is wet (about November 1 to June 1). The City typically applies a 100-foot-wide avoidance buffer surrounding wetland resources; however, the width of the buffer may be determined on a case-by-case basis depending on the need and value. Therefore, no work would occur within a 100-foot buffer around the vernal pool during rainy season or when ground is wet (about November 1 to June 1), unless it is determined that a reduced buffer is more appropriate.

10.2.3 HEALTH AND SAFETY/HAZARDS

Miramar Reservoir Alternative

Potential impacts due to fire hazards would be reduced with implementation of the following mitigation measure:

MM-HAZ-1 A Construction Fire Prevention/Protection Plan shall be prepared by the City of San Diego or its contractors prior to construction of the North City

Project, as determined necessary by the City of San Diego. Construction within or immediately adjacent to areas of dense foliage during periods of low humidity and/or high winds (Red Flag Warning periods) shall be prohibited. During all other non-Red Flag Warning periods, necessary brush fire prevention and management practices shall be incorporated and shall address common construction-related ignition prevention and hot-works (any spark-, heat-, or flame-producing activity) policies, as well as necessary fire prevention equipment to be on site during all construction activities. Details of the Construction Fire Prevention/Protection Plan shall be determined as site plans for each component are finalized to the satisfaction of the City of San Diego Fire Marshal. Plans shall also contain fire safety information to be disseminated to construction crews during regular safety meetings. Fire prevention techniques shall be applied during construction as deemed necessary by the City of San Diego Fire Marshal based on the vegetation (fuels) within the site and surrounding areas.

Potential impacts due to hazardous materials release would be reduced by implementation of the following mitigation measures:

MM-HAZ-2 A Hazardous Materials Reporting Form shall be prepared, as determined necessary by the City of San Diego, and a Hazardous Materials Review conducted by the Development Services Department for each North City Project component in compliance with the City of San Diego's Information Bulletin 116.

MM-HAZ-3 A Spill Prevention and Emergency Response Plan shall be completed, as determined necessary by the City of San Diego, for each North City Project component which includes on-site storage of hazardous materials (i.e., Morena Pump Station, NCWRP Expansion, North City Renewable Energy Facility, NCPWF, and Dechlorination Facility) prior to the commencement of operation. Other safety programs, including a worker safety program, fire response program, a plant safety program, and the facility's standard operating procedures, shall be developed addressing hazardous materials storage locations, emergency response procedures, employee training requirements, hazard recognition, fire safety, first aid/emergency medical procedures, hazard communication training, and release reporting requirements.

Potential impacts due to hazardous materials sites would be reduced by implementation of the following mitigation measures:

MM-HAZ-4 In the event that hazardous substances are encountered during construction, construction activities in the area shall immediately cease. All applicable procedures outlined in the City of San Diego “WHITEBOOK” Part 1 – General Provisions (A), Section 7-22, Encountering or Releasing Hazardous Substances shall be followed (City of San Diego 2015). In the case that groundwater contaminated with petroleum is encountered, the requirements of Section 7-8.6.6 of the “WHITEBOOK” shall be followed.

These procedures and requirements include, but are not limited to:

1. Comply with all applicable federal, state, and local laws and regulations and notification requirements.
2. Follow the guidelines of the current edition of the County of San Diego Department of Environmental Health (DEH) SAM Manual in the event that contaminated soil is encountered.
3. Immediately notify the Engineer, who in turn shall contact the City’s Environmental Services Department, Hazardous Materials Management Program.
4. In areas of known petroleum-contaminated soil, monitoring for the presence of contamination shall be the contractor’s responsibility, and an operational Photo Ionization Device shall be used at all times.
5. All suspected contaminated soil shall be stockpiled at a location approved by the Engineer and the HMMP on a relatively impervious surface.
6. Contaminated soil shall be disposed of dependent on classification and as approved by the Hazardous Substances Management Plan.

MM-HAZ-5 Prior to construction, the City shall conduct a survey where excavation is proposed to occur outside of roadway right-of-way for trenchless construction of the Morena Pipelines at Rose Canyon within the Camp Matthews Formerly Used Defense Site – Range Complex No.1 to identify potential munitions impacts. If the survey results indicate a potential risk for encountering munitions during excavation, an

unexploded ordnances (UXO) identification, training, and reporting plan will be prepared and implemented during construction.

San Vicente Reservoir Alternative

Potential impacts due to fire hazards, hazardous materials release, and hazardous materials sites would be reduced with implementation of MM-HAZ-1 through MM-HAZ-5.

10.2.4 HISTORICAL RESOURCES

Miramar Reservoir Alternative

The mitigation measures (MMs) provided in this section have been designed to fulfill the requirements of Section 106 of the National Historic Preservation Act, the CEQA Guidelines, and the City of San Diego Historic Resource Guidelines. The City of San Diego will be the lead agency implementing cultural resource mitigation measures and will provide information to the Bureau of Reclamation for their ongoing Section 106 oversight and consultation obligations. The interagency relationship shall be detailed in a Cultural Resources Monitoring and Treatment Plan, specified in MM-HIS-1:

MM-HIS-1 Cultural Resources Monitoring and Treatment Plan (CRMTP)

I. Prior to Start of Construction

A. Preparation of CRMTP

1. Prior to the start of construction, the Principal Investigator (PI) archaeologist shall prepare a CRMTP that specifies and describes:
 - The cultural resources area of potential effect (APE)
 - The chains of authority and communication, including interagency relationships for the purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA), California Environmental Quality Act (CEQA), and City of San Diego (City) Historic Resource Guidelines
 - Roles and responsibilities
 - Construction monitoring methods