Item 337 Swl-A 10-25-16

RESOLUTION NUMBER R- 310760

DATE OF FINAL PASSAGE NOV 07 2016

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN DIEGO CERTIFYING THE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT, ADOPTING FINDINGS, AND A MITIGATION, MONITORING AND REPORTING PROGRAM FOR THE PURE WATER SAN DIEGO PROGRAM.

WHEREAS, on August 5, 2015, the Public Utilities Department submitted an application to Development Services Department for the Pure Water San Diego Program (Project); and

WHEREAS, the matter was set for a public hearing to be conducted by the City Council of the City of San Diego; and

WHEREAS, the issue was heard by the City Council on 0CT 25 2016 and

WHEREAS, the City Council considered the issues discussed in the Final Environmental Impact Report No. 438188/SCH No. 2014111068 (Report) prepared for this Project; NOW THEREFORE,

BE IT RESOLVED, by the City Council that it is certified that the Report has been completed in compliance with the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code Section 21000 et seq.), as amended, and the State CEQA Guidelines thereto (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq.), that the Report reflects the independent judgment of the City of San Diego as Lead Agency and that the information contained in said Report, together with any comments received during the public review process, has been reviewed and considered by the City Council in connection with the approval of the Project.

BE IT FURTHER RESOLVED, that pursuant to CEQA Section 21081 and State CEQA Guidelines section 15091, the City Council hereby adopts the Findings made with respect to the Project, which are attached hereto as Exhibit A.

BE IT FURTHER RESOLVED, that pursuant to CEQA Section 21081.6, the City Council hereby adopts the Mitigation Monitoring and Reporting Program, or alterations to implement the changes to the Project as required by this City Council in order to mitigate or avoid significant effects on the environment, which is attached hereto as Exhibit B.

BE IT FURTHER RESOLVED, that the Report and other documents constituting the record of proceedings upon which the approval is based are available to the public at the office of the CITY CLERK, 202 C STREET, SAN DIEGO, CA 92101.

BE IT FURTHER RESOLVED, that THE CITY CLERK is directed to file a Notice of Determination with the Clerk of the Board of Supervisors for the County of San Diego regarding the Project.

APPROVED: JAN I. GOLDSMITH, City Attorney

By

Christine M. Leone Deputy City Attorney

CML:bas

August 26, 2016

Or.Dept:Public Utilities

Doc. No.: 1341546

meeting of OCT 25 2016	—· —·
	ELIZABETH S. MALAND City Clerk
;	By Deputy City Clerk
Approved: 11/7/16 (date)	KEVIN L. FAULCONER, Mayor
Vetoed:(date)	KEVIN L. FAULCONER, Mayor

Passed by the Council of The Cit	y of San Diego on _	OCT 2	5 2016 , by	the following vote:
Councilmembers	Yeas	Nays	Not Present	Recused
Sherri Lightner	Ø			
Lorie Zapf	Ø			
Todd Gloria	Ź			
Myrtle Cole	otan			
Mark Kersey	Ź			
Chris Cate	Ø			
Scott Sherman	Z Z Z A			
David Alvarez	Ź			
Marti Emerald	$ ot \hspace{-1em} ot $			
(Please note: When a resolutio approved resolution was return	n is approved by th ned to the Office of	e Mayor, the	date of final passak.)	age is the date the
		KEVIN L. FAULCONER		
AUTHENTICATED BY:		Ma	iyor of The City of	San Diego, California.
(Seal)	·	ELIZABETH S. MALAND City Clerk of The City of San Diego, California.		
		Ву		, Deputy

Office of the City Clerk, San Diego, California

810760

Resolution Number R-

EXHIBIT A

DRAFT CANDIDATE FINDINGS

REGARDING

FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE

PURE WATER SAN DIEGO PROGRAM

PROJECT No. 438188

SCH No. 2014111068

OCTOBER 2016

DRAFT CANDIDATE FINDINGS for the PURE WATER PROGRAM Project No. 438188 SCH No. 2014111068

I. INTRODUCTION

A. Findings of Fact

The following Candidate Findings are made for the Pure Water Program (Program). The environmental effects of the Program are addressed in the final Program Environmental Impact Report (PEIR) dated August 8, 2016, which is incorporated by reference herein.

The California Environmental Quality Act (CEQA) [Section 21081(a)] and the State CEQA Guidelines [Section15091(a)] require that no public agency shall approve or carry out a project for which an environmental impact report has been completed which identifies one or more significant effects thereof, unless such public agency makes one or more of the following findings:

- 1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects on the environment;
- 2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been or can or should be adopted by that other agency; or
- 3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

CEQA also requires that the findings made pursuant to Section 15091 be supported by substantial evidence in the record (Section 15091(b) of the State CEQA Guidelines). Under CEQA, substantial evidence means enough relevant information has been provided (and reasonable inferences from this information may be made) that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Substantial evidence must include facts, reasonable assumptions predicted upon facts, and expert opinion supported by facts (Section 15384 of the State CEQA Guidelines).

CEQA further requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental effects when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" (Section 15093(a) of the State CEQA Guidelines). When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final PEIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its actions based on the final PEIR and/or other information in the record.

The following Candidate Findings have been submitted by the City of San Diego Public Utilities Department as Candidate Findings to be made by the decision making body. The Planning Department (Planning) Environmental & Policy Analysis Division does not recommend that the discretionary body either adopt or reject these findings. They are attached to allow readers of this report an opportunity to review the applicant's position on this matter. It is the exclusive discretion of the decision-maker certifying the PEIR to determine the adequacy of the proposed Candidate. It is the role of staff to independently evaluate the proposed the Candidate Findings, and to make a recommendation to the decision-maker regarding their legal adequacy.

B. Environmental Review Process

The lead agency approving the Program and conducting environmental review under the California Environmental Quality Act (California Public Resources Code Sections 21000, et seq., and the Guidelines promulgated thereunder in California Code of Regulations, Title 14, Sections 15000 et seq. (CEQA Guidelines), hereinafter collectively, CEQA) shall be the City of San Diego (the City). The City as lead agency shall be primarily responsible for carrying out the Program. In compliance with Section 15082 of the CEQA Guidelines, the City published a Notice of Preparation on November 24, 2014, which began a 30-day period for comments on the appropriate scope of the PEIR. Consistent with Public Resources Code Section 21083.9, the City held a public agency scoping meeting on December 9, 2014 at the City of San Diego South Bay Recreation Center and on December 11, 2014 at the Public Utilities Department Metropolitan Operations Complex. The purpose of this meeting was to seek input and concerns from the public regarding the environmental issues that may potentially result from the Program.

The City published a draft Environmental Impact Report on February 10, 2016 in compliance with CEQA. Pursuant to CEQA Guidelines Section 15085, upon publication of the draft PEIR, the City filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that the draft PEIR had been completed and was available for review and comment by the public. The City also posted a Notice of Availability of the draft PEIR at this time pursuant to CEQA Guidelines Section 15087. The draft PEIR was circulated for 60 days for public review from February 10, 2016 to April 11, 2016. After the close of public review period, the City provided responses in writing to all comments received on the draft PEIR.

The final PEIR for the Program was published on August 8, 2016. The final PEIR has been prepared in accordance with CEQA and the State CEQA Guidelines. Pursuant to CEQA Guidelines Section 15084(d)(3), the applicant retained a consultant, Dudek, to assist with the preparation of the environmental documents. The City, acting as the Lead Agency, has reviewed and edited as necessary the submitted drafts and certified that the final PEIR reflects its own independent judgment and analysis under Guideline Section 15090(a)(3) and CEQA Section 21082.1(a)-(c). In accordance with Section 21081.6 of CEQA, a mitigation, monitoring, and reporting program (MMRP) will be adopted upon certification of the final PEIR to ensure that the mitigation measures are enforceable and implemented.

The PEIR addresses the environmental effects associated with implementation of the Program. The PEIR is intended to serve as an informational document for public agency decision-makers and the general public regarding the objectives and components of the Program. The PEIR addressed the potential significant adverse environmental impacts associated with the Program, and identifies feasible mitigation measures and alternatives that may be adopted to

reduce or eliminate these impacts. The PEIR is incorporated by reference into this CEQA findings document.

The PEIR is the primary reference document for the formulation and implementation of a mitigation monitoring program for the Program. Environmental impacts cannot always be mitigated to a level that is considered less than significant. In accordance with CEQA, if a lead agency approves a Program that has significant unavoidable impacts that cannot be mitigated to a level below significance, the agency must state in writing the specific reasons and overriding considerations for approving the Program based on the final CEQA documents and any other information in the public record for the Program (CEQA Guidelines, Section 15093). This is called a "statement of overriding considerations" (CEQA Guidelines, Section 15093). As disclosed in the PEIR and this Candidate Findings, the Program would not result in unavoidable environmental effects; therefore, a Statement of Overriding Considerations is not required.

The documents and other materials that constitute the record of proceedings on which the City's CEQA findings are based are located at the City of San Diego Planning Department, located at 1010 Second Avenue, Suite 1200, East Tower, MS 413, San Diego, CA 92101. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2).

II. PROJECT SUMMARY

A. Project Location

The Program includes a variety of facilities located throughout the central and southern coastal areas of San Diego County. The Program location can be generally described in three major geographic components: North City, South Bay, and the Central Area. New advanced water purification facilities and the majority of pump stations would be located within the corporate boundaries of the City. Pipelines would traverse a number of local jurisdictions, including the Cities of San Diego, La Mesa, El Cajon, Santee, Chula Vista, National City and the community of Lakeside in unincorporated San Diego County, in addition to federal lands within Marine Corps Air Station (MCAS) Miramar, Naval Base Point Loma and the U.S. Marine Corp Recruit Depot.

B. Project Description

The Program would treat municipal wastewater to levels suitable for potable reuse in order to create a new, reliable, local source of water while at the same time reducing the City's reliance on imported water. The City currently relies on imported water for 85% of its water supply, including the California State Water Project and the Colorado Rivers (conveyed via the California Aqueduct and the Colorado River Aqueduct, respectively). The region's reliance on imported water causes San Diego's water supply to be vulnerable to impacts from shortages, disruptions, and susceptible to price increases. In addition, recurring drought conditions further impact water supply availability. The Program would also divert wastewater from the Point Loma Wastewater Treatment Plant (PLWTP), thereby reducing the total dissolved suspended solids discharged by the PLWTP to the same or lower levels as would be achieved by implementing full secondary treatment.

The Program would use advanced water purification technology to produce potable water from recycled water and provide a safe, reliable and cost-effective drinking water supply for San Diego. The Program consists of the design and construction of new advanced water purification facilities and a new water reclamation plant; upgrades to existing water reclamation and wastewater treatment facilities; and design and construction of new pump stations and pipelines. The following Program components are currently contemplated as comprising the entirety of the Program; however, Program components are subject to change during future project-level design.

The Program would construct advanced water purification facilities (AWPFs) at the existing North City Water Reclamation Plant (NCWRP) and South Bay Water Reclamation Plant (SBWRP), and a third AWPF and new WRP would be constructed. Upgrades would occur at the existing NCWRP and SBWRP in order to provide sufficient tertiary influent for the AWPFs. Pump station and pipeline facilities would convey different types of flows to and from the treatment facilities for: 1) diverting wastewater flows to water reclamation facilities; 2) conveying recycled water to advanced water purification facilities; 3) conveying purified water from AWPFs to the San Vicente and Lower Otay Reservoirs; and 4) transporting waste flows (brine and sludge) from treatment processes to solids handling facilities or back into the Metro System. Upgrades would also occur at the Metropolitan Biosolids Center and PLWTP to handle the additional brine and sludge produced by the WRP expansions and advanced water purification process.

C. Project Objectives

The Program is proposed by the City of San Diego to use advanced water purification technology to produce potable water from recycled water and provide a safe, reliable, and cost-effective drinking water supply for San Diego. The stated objectives of the Program are:

- 1. Provide a cumulative total of at least 83 million gallons per day (MGD) of local, high-quality purified water to serve the San Diego Region.
- 2. Reduce dependence on imported water.
- 3. Reduce energy consumption associated with importing water.
- 4. Increase use of recycled water.
- 5. Reduce flows to the PLWTP and reduce total dissolved suspended solids discharged at the Point Loma ocean outfall to the same or lower levels as would be achieved by implementing secondary treatment at the full plant capacity.
- 6. Implement the Program in scheduled phases that meet the target online dates agreed to in the 2014 Cooperative Agreement and the 2015 Application for Renewal of National Pollutant Discharge Elimination System (NPDES) permit¹.

Modified permit application that commits to the goal of implementing a potable reuse program and obtaining legislative or administrative actions such that the Point Loma ocean outfall discharge is recognized as equivalent to secondary treatment for purposes of compliance with the CWA (secondary equivalency).

III. ISSUES ADDRESSED IN PEIR

The final PEIR contains an environmental analysis of the potential impacts associated with implementing the Program. The City of San Diego Planning Department, located at 1010 Second Avenue, Suite 1200, East Tower, MS 413, San Diego, CA 92101, is the custodian of the final PEIR and other materials.

The major issues that are addressed in the final PEIR include land use; air quality and odor; health and safety; biological resources; noise; historical resources; hydrology and water quality; paleontological resources; public utilities; visual effects and neighborhood character; energy; geology and soils; transportation, circulation, and parking; public services; greenhouse gas (GHG) emissions; and water supply. The final PEIR concluded that significant direct and/or indirect impacts could potentially occur with respect to the following issues:

- 1. Land Use (Conflicts with Environmentally Sensitive Lands regulations and Historical Resource Regulations)
- 2. Land Use (Conflicts with Multiple Species Conservation Program and Other Adopted Environmental Plans)
- 3. Land Use (Conflicts with Airport Land Use Compatibility Plan)
- 4. Air Quality and Odor (Emissions of Criteria Pollutants)
- 5. Air Quality and Odor (Increases Operational Odors)
- 6. Health and Safety (Wildfire Hazards)
- 7. Health and Safety (Hazardous Material Exposure)
- 8. Health and Safety (Conflict with Hazardous Material Sites)
- 9. Health and Safety (Required Review by Airport Land Use Commission and Federal Aviation Administration)
- 10. Biological Resources (Conflict with Sensitive Habitat)
- 11. Biological Resources (Conflict with Wetlands)
- 12. Biological Resources (Loss of Sensitive Species)
- 13. Biological Resources (Conflict with Wildlife Linkages and Corridors)
- 14. Biological Resources (Conflict with Habitat Conservation Plans)
- 15. Biological Resources (Conflict with Multi-Habitat Planning Area)
- 16. Biological Resources (Introduction of Invasive Species)
- 17. Noise (Conflict with Noise Thresholds)
- 18. Historical Resources (Loss of Historical Resources)
- 19. Historical Resources (Disturbance of Human Remains)
- 20. Hydrology and Water Quality (Runoff Impacts)
- 21. Hydrology and Water Quality (Changes to Surface/Ground Water Quality)
- 22. Hydrology and Water Quality (Cumulative Impacts)
- 23. Paleontological Resources (Loss of Paleontological Resources)

- 24. Public Utilities (Generation of Solid Waste)
- 25. Visual Effects and Neighborhood Character (Landform Alteration)
- 26. Visual Effects and Neighborhood Character (Impacts to Scenic Vistas)
- 27. Visual Effects and Neighborhood Character (Alteration to Visual Character)
- 28. Geology and Soils (Exposure to Geological Hazards)
- 29. Geology and Soils (Increased Erosion)
- 30. Geology and Soils (Unstable Geological Conditions)
- 31. Transportation, Circulation, and Parking (Disruption of Access)

IV. SUMMARY OF IMPACTS

A. Findings Regarding Impacts that Can Be Mitigated to Below a Level of Significance

The City, having reviewed and considered the information contained in the final PEIR, finds pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1) that changes or alterations have been required in, or incorporated into, the Program which would mitigate, avoid, or substantially lessen to below a level of significance potential significant direct environmental effects related to: land use; air quality and odor; health and safety; biological resources, noise, historical resources; hydrology and water quality; paleontological resources; public utilities; visual effects and neighborhood character; geology and soils; and transportation, circulation, and parking. The basis for this conclusion follows.

1) <u>Land Use (Conflicts with Environmentally Sensitive Lands Regulations and Historical Resource Regulations)</u>

Impact: Within the Program area, Environmentally Sensitive Lands (ESLs) include sensitive biological resources including lands within the City's Multi-Habitat Planning Area (MHPA) and special flood hazard areas (i.e., floodways in river valleys). Development of future Program components that would encroach into ESL resources would be subject to the development restrictions of the ESL Regulations (Land Development Code, Section 143.0101 et. seq.).

The Historical Resources Regulations (Section 143.0213(a) of the Land Development Code) apply when historical resources are present. Given the presence of historical resources distributed throughout the Program area, implementation of the Program has the potential to result in significant impacts to historic built-environment resources and archaeological resources.

Finding: Incorporation of Mitigation Framework measures MM-LU-1 and MM-LU-2 would reduce potential conflicts with Environmentally Sensitive Lands Regulations and Historical Resource Regulations to below a level of significance.

Facts in Support of Finding: Where applicable the development of all future Program components would be required to comply with the ESL Regulations and would be evaluated in accordance with the City's Biology Guidelines. Additionally, all Program components would be subject to future evaluation in accordance with CEQA. At that time, appropriate site-specific mitigation in accordance with the Mitigation Framework measures MM-LU-1 and MM-BIO-1 through BIO-3 would be identified for impacts to sensitive biological resources covered under the ESL regulations. For other resource areas covered under the ESL regulations, such as steep

hillsides, future Program components would be designed to ensure compliance with the supplemental regulations and any other regulatory requirements to ensure that no impacts would occur.

Incorporation of the Mitigation Framework measure MM-LU-2 and Mitigation Framework measures MM-HIST-1 and MM-HIST-2 contained in Section 5.6, Historical Resources, would reduce the potential for significant impacts at the Program-level to below a level of significance.

2) Land Use (Conflicts with MSCP or Other Adopted Environmental Plans)

Impact: Program components implemented in accordance with the Program could result in direct and/or indirect impacts to the MHPA, direct impacts to County of San Diego Preserves and Resource Protection Ordinance (RPO) resources, City of Chula Vista Multiple Species Conservation Program (MSCP) and Otay Ranch Resources Management Plan, the MCAS Miramar Integrated Natural Resources Management Plan (INRMP) and the San Diego Bay National Wildlife Refuge Comprehensive Conservation Plan (NWR CCP), the Point Loma Ecological Conservation Area (PLECA), and the City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP). These are considered potentially significant impacts at the program level, and mitigation is required.

Finding: Incorporation of Mitigation Framework measures MM-LU-3 through MM-LU-9 would reduce Program level impacts to below a level of significance.

Facts in Support of Finding: Under MM-LU-3 all subsequent infrastructure implemented in accordance with the Program that are within or adjacent to designated MHPA areas shall comply with the MHPA Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. All development for utilities within the MHPA shall be designed to minimize environmental impacts and must avoid disturbing the habitat of MSCP-covered species, and wetlands, as required by MM-LU-4. If such accordance and avoidance is unfeasible, impacts shall be mitigated.

MM-LU-5 requires subsequent environmental documentation for future project components with potential to impact resources protected by the County RPO and shall complete a Resource Protection Study pursuant to Section 86.603 of the RPO. Consideration and implementation of siting and design criteria under MM-LU-6 will ensure compatibility of Program components and the Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan. If the siting of Program components would require lands to be removed from the PLECA, MM-LU-7 requires that an area of equal size and equal or greater ecological value will be added to the PLECA to offset the loss. Additionally, for proposed facilities on federal lands, MM-LU-8 requires that appropriate NEPA documentation shall be prepared and submitted to necessary federal agencies and parties including MCAS Miramar, the San Diego Bay NWR, and the U.S. Fish and Wildlife Service (USFWS). Lastly, MM-LU-9 requires the City shall coordinate with MCAS Miramar and the San Diego Bay NWR regarding project components located on federal lands and shall ensure consistency with applicable land use regulations of MCAS Miramar INRMP and the San Diego Bay NWR CCP. Lastly, all development for future project components with potential to impact vernal pools, the City shall implement avoidance and minimization measures to minimize potential impacts to vernal pools consistent with the VPHCP and the City's ESL Regulations.

Incorporation of Mitigation Framework measures MM-LU-3 through MM-LU-9, would reduce the potential for significant impacts at the Program-level to below a level of significance.

3) Land Use (Conflicts with ALUCP)

Impact: Treatment and pumping facility upgrades and improvements would not introduce residential or other sensitive land uses within an airport compatibility zone or result in large concentrations of people within an airport safety area, and therefore, would generally not pose a land use conflict/inconsistency or safety hazard. No proposed facilities include uncovered water features that would attract birds and create a potential hazard to aircraft. Nonetheless, Program components would need to be reviewed by the Airport Land Use Commission (ALUC) and Federal Aviation Administration (FAA) to make a final determination of consistency during subsequent project review. As such, at the program level, potential inconsistencies with applicable Airport Land Use Compatibility Plans (ALUCPs) would be considered potentially significant and mitigation is required.

Finding: Incorporation of Mitigation Framework measures MM-LU-11 and MM-LU-12 would reduce potential conflict with ALUCPs to below a level of significance.

Facts in Support of Finding: As required by MM-LU-11, subsequent projects, implemented in accordance with the Program, shall submit a description of each Program component located in an airport influence area to the ALUC for consistency determinations with the applicable adopted ALUCP. Additionally, under MM-LU-12, subsequent projects that are (1) located in the Airport Approach Overlay Zone and receive an FAA determination of hazard and that are not exempt or (2) located within the Airport Land Use Compatibility Overlay Zone are proposing deviations from the overlay zone requirements, or that include a rezone or land plan approval, shall obtain a Site Development Permit in accordance with San Diego Municipal Code Section 126.0502(e).

Incorporation of Mitigation Framework measures MM-LU-11 and MM-LU-12 would reduce the potential for significant impacts at the Program-level to below a level of significance.

4) Air Quality and Odor (Emissions of Criteria Pollutants)

Impact: Daily construction emissions would not exceed the City of San Diego's significance thresholds for VOC, CO, SO_x, PM₁₀, or PM_{2.5}. Emissions represent maximum of summer and winter. "Summer" emissions are representative of the conditions that may occur during the ozone season (May 1 to October 31), and "winter" emissions are representative of the conditions that may occur during the balance of the year (November 1 to April 30). It was found that daily construction emissions would exceed the threshold for NO_x during construction of the North City component only, resulting in a potentially significant impact. However, it should be noted that facilities associated with the North City component (similar to the Central Area and South Bay components) would be constructed across a broad geographic area, and therefore, would generally not result in substantial NO_x emissions in any one location.

Finding: Incorporation of Mitigation Framework measures MM-AQ-1 and MM-AQ-2 would reduce potential impacts related to emissions of criteria pollutants below a level of significance.

Facts in Support of Finding: The best management practices included in MM-AQ-1 shall be considered in all subsequent project-level environmental analysis and implemented during

construction to comply with applicable San Diego Air Pollution Control District rules and regulations, and to further reduce daily construction emissions. Additionally, MM-AQ-2 requires the implementation of construction activity measures associated with the San Vicente Purified Water Pipeline component to reduce oxides of nitrogen. Generally, these best management practices and construction associated measures require construction equipment regulations as well as construction worker practices designed to reduce potential impacts related to emissions of criteria pollutants throughout project construction.

Incorporation of Mitigation Framework measures MM-AQ-1 and MM-AQ-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

5) Air Quality and Odor (Increased Operational Odors)

Impact: Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the Program facilities. Such odors are temporary and for the types of construction activities anticipated for Program components, would generally occur at magnitudes that would not affect a substantial number of people. Therefore, impacts associated with odors during construction would be considered less than significant.

From an operational standpoint, some of the proposed pump stations could be potentially located near sensitive receptors and, if left unabated, could result in nuisance odors reaching receptors nearby. AWPFs would not result in nuisance odors because the AWPFs would accommodate flows that would have undergone previous tertiary treatment. However, the Program would involve new treatment facilities, such as the Central Area Water Reclamation Plant (CAWRP) and associated pump stations, and upgrades to existing facilities that could result in potential nuisance odors if facilities would be located in proximity to sensitive receptors. Therefore, mitigation is required.

Finding: Incorporation of Mitigation Framework measure MM-AQ-3 would reduce potential impacts related to increased operational odors to below a level of significance.

Facts in Support of Finding: MM-AQ-3 requires Program components shall implement odor control systems specifically designed to abate the odorous potential of the specific facility. Odor control systems shall be similar to those currently employed at City of San Diego wastewater treatment facilities and pump stations to reduce odor impacts. A range of control systems, including NAOCl/NaOH wet scrubbers, Biofilters, or equivalent alternatives, would be implemented throughout Program construction. Odors could also be abated through the addition of chemical such as iron chloride to reduce the liquid phase concentrations and thus, reduce the amount volatilized into the gas phase.

The incorporation of Mitigation Framework measure MM-AQ-3 would reduce the potential for significant impacts at the Program-level to below a level of significance.

6) Health and Safety (Wildfire Hazards)

Impact: The Program components would primarily be located within developed areas and roadways; however portions may be located within and adjacent to open space areas with potentially flammable materials such as brush, grass, or trees. Engine-powered equipment and vehicles associated with the construction and operation of the Program could increase wildfire hazards by introducing new ignition sources to areas adjacent to or within currently undeveloped areas;

therefore, impacts related to wildfire hazards would be potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-HAZ-1 and MM-HAZ-2 would reduce potential impacts related to wildfire hazards to below a level of significance.

Facts in Support of Finding: MM-HAZ-1 requires a brush management plan is to be prepared by the City or its contractors prior to construction of Program components, as determined necessary by the City of San Diego. Construction within areas of dense foliage during dry conditions shall be avoided, when feasible. In cases where avoidance is not feasible, necessary brush fire prevention and management practices shall be incorporated. Additionally, the City of San Diego shall provide fire safety information to construction crews during regular safety meetings under MM-HAZ-2. Fire management techniques shall be applied during construction as deemed necessary by the City of San Diego Fire Marshal based on vegetation within the site and surrounding areas.

The incorporation of Mitigation Framework measures MM-HAZ-1 and MM-HAZ-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

7) Health and Safety (Hazardous Material Exposure)

Impact: The use, storage, transportation, and disposal of these substances is regulated by the County Department of Environmental Health Hazardous Materials Division, and would be conducted according to all applicable federal, state, and local regulations. Existing and recently enacted legislation to protect the public from any potential impacts from the use of hazardous materials includes the Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation, and Liability Act, and the Toxic Substances Control Act. The Program components' adherence to statutory standards and practices would reduce the risk of an explosion or release of hazardous substances to the environment due to an accident or upset conditions. The Program would implement project–specific hazardous materials business plans and other safety programs for each subsequent Program component, as required by law, substantially reducing the risk of an accidental release of a hazardous material. The use of hazardous materials at each treatment facility site for their intended purpose is not expected to pose a hazard to the public or environment. However, the risk for hazardous materials exposure during routine transport, use, or disposal of hazardous materials is potentially significant and mitigation is required.

Finding: Incorporation of Mitigation Framework measures MM-HAZ-3 through MM-HAZ-5 would reduce potential impacts related to hazardous materials exposure to below a level of significance.

Facts in Support of Finding: Compliance with regulatory requirements for safe handling and storage of materials (see Mitigation Framework measures MM-HAZ-3 through MM-HAZ-5) would minimize hazards associated with operation of the Program. As such, the Program would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

MM-HAZ-3 requires the preparation of a Hazardous Materials Reporting Form and Hazardous Materials Review by the Development Services Department shall be prepared for each Program component in compliance with the City of San Diego's Information Bulletin 116. In accordance with Article of Chapter 6.95 of California Health and Safety Code and San Diego County Code

Section 68.1113, MM-HAZ-4 requires a hazardous materials business plan shall be submitted to the Department of Environmental Health Hazardous Materials Division prior to operations of each treatment facility and every 3 years thereafter. Other safety programs 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.

Lastly, MM-HAZ-5 requires all hazardous materials shall be handled and stored, transported and disposed in accordance with all applicable federal, state, and local codes and regulations. Specific requirements of the California Fire Code that reduce the risk of fire or the potential for a release of hazardous materials that could affect public health or environment would also be adhered to.

The incorporation of Mitigation Framework measures MM-HAZ-3 through MM-HAZ-5 would reduce the potential for significant impacts at the Program-level to below a level of significance.

8) Health and Safety (Conflict with Hazardous Material Sites)

Impact: As detailed locations are not finalized for Program components, subsequent project-level analysis is required to determine the significance of potential hazardous effects for all Program components. Since hazardous materials sites are subject to changing conditions, e.g., closure of known sites, discovery of new hazardous materials sites, site leakages, and/or remediation of existing sites, site-specific hazardous materials analyses for each Program component would be required. Therefore, impacts to hazardous materials sites would be potentially significant and mitigation is required.

Finding: Incorporation of Mitigation Framework measure MM-HAZ-6 would reduce potential impacts related to hazardous materials sites to below a level of significance.

Facts in Support of Finding: MM-HAZ-6 ultimately requires that subsequent projects, implemented in accordance with the Program, shall conduct a site-specific record search for the locations and type of hazardous materials to the satisfaction of the City of San Diego. Details on the known hazardous materials locations would need to be investigated at the project level of analysis for individual Program components to determine the specifics on location, type, and status of hazardous materials sites that may be affected. An analysis shall be conducted for each Program component to determine if the component meets conditions specified in detail in MM-HAZ-6. The analysis would include a discussion of whether any Program component would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the event that one of the above conditions is met, the City shall coordinate with the Department of Environmental Health to determine the appropriate corrective action (i.e., remediation) or avoidance measures (i.e. alternative facility siting).

Incorporation of Mitigation Framework measure MM-HAZ-6 would reduce the potential for significant impacts at the Program-level to below a level of significance.

9) Health and Safety (Required Review by ALUC and FAA)

Impact: Program components would be located within the Airport Influence Areas (AIAs) of San Diego International Airport, MCAS Miramar, Brown Field Municipal Airport, Montgomery Field Municipal Airport, and Gillespie Field. Specifically, the North City component would be located

within the AIA of MCAS Miramar, Montgomery Field, and Gillespie Field; the Central Area component would be located within the AIA of San Diego International Airport; and the South Bay component would be located within the AIA of Brown Field. Although not governed by ALUCPs, Naval Air Station North Island is in the vicinity of the Central Area component and Naval Outlying Field Imperial Beach is in the vicinity of the South Bay component. Program components are not anticipated to pose a safety hazard for people working within an AIA; however, Program components would require review by the ALUC and FAA to make a final determination of consistency during subsequent project review.

Finding: Implementation of Mitigation Framework measures MM-LU-11 and MM-LU-12 would reduce potentially significant airport impacts to below a level of significance.

Facts in Support of Finding: MM-LU-11 requires subsequent projects, implemented in accordance with the Program, shall submit a description of each Program component located in an airport influence area to the ALUC for consistency determinations with the applicable adopted ALUCP. Additionally, MM-LU-12 states subsequent projects that are (1) located in the Airport Approach Overlay Zone and receive an FAA determination of hazard and that are not exempt or (2) located within the Airport Land Use Compatibility Overlay Zone are proposing deviations from the overlay zone requirements, or that include a rezone or land plan approval, shall obtain a Site Development Permit in accordance with San Diego Municipal Code Section 126.0502(e).

Incorporation of Mitigation Framework measures MM-LU-11 and MM-LU-12 would reduce the potential for significant impacts at the Program-level to below a level of significance.

10) Biological Resources (Conflict with Sensitive Habitat)

Impact: The Biological Resources Report (Appendix C of the PEIR) evaluated potential direct impacts to biological resources in the study corridor identified by the City as 500 feet on either side of the conceptual alignments of proposed pipelines and a 300-foot study area around proposed buildings and other facilities. Potential indirect impacts to sensitive wildlife species and preserves were evaluated in a 0.5-mile corridor around all proposed facilities, including pipelines. Impacts to sensitive habitat or sensitive natural communities at the proposed North City Advanced Water Purification Facility (NCAWPF) (Tier IIIB), the reservoir outfall/discharge structure (ROD) at San Vicente Reservoir (CoTier III), the ROD at Otay Reservoir, and the Otay Reservoir Booster Station (Tier II/CoTier II) would be permanent and unavoidable. Without implementation of the mitigation described below, permanent impacts would be considered potentially significant.

Impacts to sensitive habitat or sensitive natural communities at all other proposed Program facilities, whether direct or indirect, would be temporary. Without implementation of the mitigation described below, temporary impacts would be considered potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-BIO-1 would reduce potential impacts to sensitive habitats or sensitive natural community to below a level of significance.

Facts in Support of Finding: Where sensitive biological resources are known or suspected on or adjacent to a proposed project site, MM-BIO-1 requires a biological assessment shall be performed by a qualified City-approved biologist familiar with MSCP Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista for that project. It is expected that

the majority of sensitive species not covered by the MSCP will be adequately mitigated through the habitat-based mitigation required by the City of San Diego (2012). However, mitigation requirements and protocols may be required to ensure that impacts on sensitive species are reduced to below a level of significance. Sensitive wildlife mitigation must be developed in accordance with all applicable federal, state, and local laws and protocols (including the MSCP Subarea Plan Appendix A Conditions of Coverage) in effect at the time when permits are applied for.

Future projects resulting in impacts on sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the City Biology Guidelines and MSCP Subarea Plan and provide suitable mitigation in accordance with the City's Biology Guidelines and MSCP Subarea Plan. Mitigation for impacts on sensitive species communities shall be implemented at the time future projects are proposed. The details of these mitigation requirements are identified under MM-BIO-1 in the PEIR.

Incorporation of Mitigation Framework measure MM-BIO-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

11) Biological Resources (Conflict with Wetlands)

Impact: Where possible, siting of the facilities within existing streets and unpaved roadways and on existing bridges, as well as using appropriate construction methods, such as auger boring/pipe jacking, horizontal directional drilling or microtunneling, or by using existing subterranean pipe, would provide an opportunity for avoidance. However, impacts to wetlands would occur at the NCAWPF, the ROD at San Vicente Reservoir, and the ROD at Otay Reservoir. Although some level of minimization at these proposed facility sites would be possible, impacts would be permanent and unavoidable. Without implementation of the Mitigation Framework described below, permanent impacts would be considered potentially significant.

Impacts to wetlands at all other proposed Program facilities, whether direct or indirect, would be temporary. Without implementation of the Mitigation Framework described below, temporary impacts would be considered potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO-2 would reduce potential impacts related to wetland areas to below a level of significance.

Facts in Support of Finding: To reduce potential direct impacts on City, state, and federally regulated wetlands, MM-BIO-2 requires all subsequent projects shall be required to comply with U.S. Army Corps of Engineers Clean Water Act Section 404 requirements and special conditions, the Regional Water Quality Control Board (RWQCB) in accordance with Section 401 of the Clean Water Act, California Department of Fish and Wildlife Section 1602 Streambed Alteration Agreement requirements and special conditions, and the City of San Diego ESL Regulations for minimizing impacts on wetlands. Achieving consistency with these regulations for impacts on wetlands and special aquatic sites would reduce potential impacts on regulated wetlands and provide compensatory mitigation (as required) to ensure no net loss of wetland habitats. In addition, the USFWS would be involved under Section 7 of the federal Endangered Species Act during consultation initiated by the U.S. Army Corps of Engineers during the 404 permit process if federal listed species are present. If there is no federal nexus to jurisdictional waters, then a Section 10(A) authorization from USFWS would be required to cover any potential effects on federal listed species. With additional consideration for the requirements

outlined in MM-BIO-1, a required biological assessment shall be performed by a qualified City-approved biologist familiar with MSCP Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista.

Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

12) Biological Resources (Loss of Sensitive Species)

Impact: A majority of the study area for the proposed Program is located in existing streets and developed areas in an urbanized setting. Most of the database occurrence records for sensitive species that overlap the proposed Program study area do not reflect species locations actually within the footprint of the proposed facilities, as those facilities are likely to be sited on currently developed lands and minimal, if any, suitable habitat is present. The potential for direct impacts to sensitive species is highest where the proposed facilities and/or alignments would be located in undeveloped land; however, many of those locations are also in urbanized areas where the potential for sensitive species in the study area footprint is low. High potential for direct impacts is restricted to river crossings, vernal pool complexes, and places such as Otay Valley where proposed facilities would be located outside of urbanized areas. Additionally, construction noise would potentially result in impacts to sensitive species occupying adjacent habitat.

Finding: Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO2 would reduce potential impacts to sensitive species to below a level of significance.

Facts in Support of Finding: Compliance with all provisions of MSCP Subarea Plans and the INRMP, ESA compliance on land not covered by one of the plans, implementation of Mitigation Framework measures MM-BIO-1, MM-BIO-2, would ensure that potentially significant direct and indirect impacts to sensitive species are reduced to below a significant level. Measures proposed address both temporary and permanent impacts during construction and operations.

Regarding the construction of the Program, MM-BIO-1 requires for proposed project components adjacent to or within the MHPA, construction noise that exceeds the maximum levels allowed shall be avoided, especially during the breeding season for protected avian species. Additionally, where sensitive biological resources are known or suspected on or adjacent to a proposed project site, a biological assessment shall be performed by a qualified City-approved biologist familiar with MSCP Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista for that project. Under MM-BIO-2 the USFWS would be involved under Section 7 of the federal Endangered Species Act during consultation initiated by the U.S. Army Corps of Engineers during the 404 permit process if federal listed species are present. If there is no federal nexus to jurisdictional waters, then a Section 10(A) authorization from USFWS would be required to cover any potential effects on federal listed species.

Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

13) Biological Resources (Conflict with Wildlife Linkages and Corridors)

Impact: The study area for the proposed Program facilities was analyzed for potential impacts to wildlife core and linkage areas identified in the San Diego, County and Chula Vista MSCP Subregional Plan(s), as related to their function in facilitating in wildlife movement. Of the potential permanent or temporary impacts, those considered direct would include but not be limited to, construction of new aboveground facilities that would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction, interference with otherwise natural movement wildlife corridors/linkages, would further constrain an already narrow corridor, or cause increased traffic on existing or new access roads that would result in significant road-kill.

Construction and operations of the facilities would also indirectly impact wildlife movement by increasing noise and/or nighttime lighting in a wildlife corridor or linkage, by removal of available vegetative cover, or by placing of incompatible uses adjacent to a corridor. This Program-level analysis is based upon a conceptual design only, and specific locations for each facility relative to wildlife corridors are not known or confirmed to a project-level or design-level of detail. However, the potential for impacts to wildlife corridors at each facility is provided in the Biological Resources chapter of the FEIR. Impacts to City MHPA, including core and linkage areas, could result in potentially significant impacts.

Finding: Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO-3 would reduce potential impacts to wildlife movement to below a level of significance.

Facts in Support of Finding: Prior to subsequent project level review, MM-BIO-1 requires all projects which could have potentially significant impacts resulting in a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals shall be analyzed in accordance with the CEQA Significance Thresholds. This requires that site-specific biological resources surveys be conducted in accordance with City of San Diego Biology Guidelines (2012) and MSCP Subarea Plan.

With regards to MM-BIO-3 mitigation to reduce potentially significant impacts from subsequent project components that would interfere with the nesting, foraging, or movement of wildlife species within the Program area shall be identified in a site-specific biological resources report prepared in accordance with City of San Diego Biology Guidelines. Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting, or foraging activities shall be addressed in the biology report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species-specific mitigation plans in order to comply with the federal Endangered Species Act, MBTA, State Fish and Game Code, and/or the ESL Regulations.

Incorporation of Mitigation Framework measures MM-BIO-1 and MM-BIO-3 would reduce the potential for significant impacts at the Program-level to below a level of significance.

14) Biological Resources (Conflict with Habitat Conservation Plans)

Impact: The study area for the proposed Program facilities was analyzed for potential conflicts with City, of San Diego, County of San Diego, and City of Chula Vista MSCP Subarea Plans, County RPO wetland buffer requirements, the San Diego Bay NWR CCP, the Draft VPHCP, the MCAS Miramar INRMP, and the MOU for PLECA. The study area for the proposed Program facilities is located entirely within or crosses through portions of the various local adopted local

habitat conservation plans or policies that protect biological resources. Compliance with all provisions of these plans and policies, including implementing any mitigation requirements specific to each one, subject to review by the agencies with regulatory oversight, would be required. This compliance, mitigation implementation, and regulatory review would ensure that no conflicts with the plans and policies occur.

Finding: Incorporation of Mitigation Framework measures MM-BIO-1 and MM-LU-3 through MM-LU-9 would reduce potential impacts to below a level of significance.

Facts in Support of Finding: MM-BIO-1 requires a biological assessment shall be performed by a qualified City-approved biologist familiar with MSCP Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista for that project. It is expected that the majority of sensitive species not covered by the MSCP will be adequately mitigated through the habitat-based mitigation required by the City of San Diego (2012). However, mitigation requirements and protocols may be required to ensure that impacts on sensitive species are reduced to below a level of significance. Sensitive wildlife mitigation must be developed in accordance with all applicable federal, state, and local laws and protocols (including the MSCP Subarea Plan Appendix A Conditions of Coverage) in effect at the time when permits are applied for.

Under MM-LU-3 all subsequent infrastructure implemented in accordance with the Program that are within or adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. All development for utilities within the MHPA shall be designed to minimize environmental impacts and must avoid disturbing the habitat of MSCP-covered species, and wetlands, as required by MM-LU-4. If such accordance and avoidance is unfeasible, impacts shall be mitigated.

MM-LU-5 requires subsequent environmental documentation for future project components with potential to impact resources protected by the County RPO shall complete a Resource Protection Study pursuant to Section 86.603 of the RPO. Consideration and implementation of siting and design criteria under MM-LU-6 will ensure compatibility of Program components and the Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan. If the siting of Program components would require lands to be removed from the PLECA, MM-LU-7 requires that an area of equal size and equal or greater ecological value will be added to the PLECA to offset the loss. Additionally, for proposed facilities on federal lands, MM-LU-8 requires that appropriate NEPA documentation shall be prepared and submitted to necessary federal agencies and parties including MCAS Miramar, the San Diego Bay NWR, and USFWS. Lastly, MM-LU-9 requires the City shall coordinate with MCAS Miramar and the San Diego Bay NWR regarding project components located on federal lands and shall ensure consistency with applicable land use regulations of MCAS Miramar INRMP and the San Diego Bay NWR CCP. Lastly, all development for future project components with potential to impact vernal pools, the City shall implement avoidance and minimization measures to minimize potential impacts to vernal pools consistent with the VPHCP and the City's ESL Regulations.

Incorporation of Mitigation Framework measures MM-BIO-1 and MM-LU-3 through MM-LU-9 would reduce the potential for significant impacts at the Program-level to below a level of significance.

15) Biological Resources (Conflict with MHPA)

Impact: The following Program components (or portions thereof) are anticipated to be located adjacent to the MHPA: Wastewater Force Main/Brine Pipeline from the NCWRP to the Proposed Morena Boulevard Pump Station; San Vicente Purified Water Pipeline; sludge pipeline from CAWRP to PLWTP; Central Area Advanced Water Purification Facility (CAAWPF); Central Area Tertiary Effluent Force Main and Brine Conveyance; Central Area Purified Water Pipeline; South Bay Advanced Water Purification Facility; South Bay Solids Processing Facility; Wastewater Force Main from National City to SBWRP; and the South Bay Purified Water Pipeline. The ROD at San Vicente Reservoir, Otay Reservoir Booster Station, and ROD at Otay Reservoir would be located entirely within the MHPA. The components adjacent of intersecting the MHPA could result in potential adverse edge effects to the MHPA as a result of indirect impacts such as drainage, toxins, lighting, noise, barriers to incursion, invasive species, brush management, and grading/land development. Compliance with the MHPA Land Use Adjacency Guidelines would be required for implementation of all Program components developed in areas adjacent to or within the MHPA.

Finding: Implementation of Mitigation Framework measures MM-BIO-1 and MM-LU-3 through MM-LU-9 would reduce conflicts with MHPA to below a level of significance.

Facts in Support of Finding: MM-BIO-1 requires any necessary MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage. Mitigation for impacts on sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the City's Biology Guidelines (City of San Diego 2012). These mitigation ratios are based on the tier level of the vegetation community, the location of the impact, and the location of the mitigation site(s). For example, impacts on lands inside the MHPA and mitigated outside the MHPA would have the highest mitigation ratio, whereas impacts on lands outside the MHPA and mitigated inside the MHPA would have the lowest mitigation ratio.

Under MM-LU-3 all subsequent infrastructure implemented in accordance with the Program that are within or adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. All development for utilities within the MHPA shall be designed to minimize environmental impacts and must avoid disturbing the habitat of MSCP-covered species, and wetlands, as required by MM-LU-4. If such accordance and avoidance is unfeasible, impacts shall be mitigated.

MM-LU-5 requires subsequent environmental documentation for future project components with potential to impact resources protected by the County RPO shall complete a Resource Protection Study pursuant to Section 86.603 of the RPO. Consideration and implementation of siting and design criteria under MM-LU-6 will ensure compatibility of Program components and the Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan. If the siting of Program components would require lands to be removed from the PLECA, MM-LU-7 requires that an area of equal size and equal or greater ecological value will be added to the PLECA to offset the loss. Additionally, for proposed facilities on federal lands, MM-LU-8 requires that appropriate NEPA documentation shall be prepared and submitted to necessary federal agencies and parties including MCAS Miramar, the San Diego Bay NWR, and USFWS. Lastly, MM-LU-9 requires the City shall coordinate with MCAS Miramar and the San Diego Bay NWR regarding project components located on federal lands and shall ensure consistency with applicable land use regulations of MCAS Miramar INRMP and the San Diego Bay NWR CCP. Lastly, all development

for future project components with potential to impact vernal pools, the City shall implement avoidance and minimization measures to minimize potential impacts to vernal pools consistent with the VPHCP and the City's ESL Regulations.

Incorporation of MM-BIO-1 and MM-LU-3 through MM-LU-9 would reduce the potential for significant impacts at the Program-level to below a level of significance.

16) Biological Resources (Introduction of Invasive Species)

Impact: Consistency with the City's MHPA Land Use Adjacency Guidelines and similar policies in the County of San Diego and City of Chula Vista would be required at the project level for the Program facilities identified above as having potential to cause adverse edge effects through the introduction of invasive species into natural open areas.

For all applicable Program components, ensuring that ground-disturbance is implemented in existing developed, disturbed, and non-native areas would minimize new disturbance to natural areas. Where proposed facilities cross open space in rivers, using auger boring/pipe jacking or horizontal directional drilling construction methods would avoid surface disturbance and minimize the introduction of invasive species into riparian areas. Further, project-level analyses will include requirements for revegetation of areas disturbed during construction, using native species palettes to prevent the disturbed habitat from being colonized with ruderal species that subsequently disperse into natural areas.

Finding: Incorporation of Mitigation Framework measure MM-LU-3 would prevent invasive species from adversely affecting natural open areas.

Facts in Support of Finding: Under MM-LU-3 all subsequent infrastructure implemented in accordance with the Program that are within or adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Specifically, MM-LU-3 requires no invasive plant species shall be introduced into areas adjacent to the MHPA.

Incorporation of MM-LU-3 would reduce the potential for significant impacts at the Program-level to below a level of significance.

17) Noise (Conflict with Noise Thresholds)

Impact: Noise levels could create temporary substantial noise increases and result in short-term exceedance of construction noise standards during construction of all portions of the North City, South Bay, and Central Area components, resulting in a potentially significant impact.

As final design locations and specifications are not yet available for the pump stations, AWPFs, WRPs, and PLWTP, it cannot be determined if operation of these facilities would result in adverse noise effects on nearby noise-sensitive land uses at a program-level analysis. Therefore, operational noise impacts resulting from the pump stations and treatment facilities would be potentially significant.

As final design locations and specifications are not yet available for the pump stations or treatment facilities, it cannot be determined if operation of these facilities would generate

substantial vibration at nearby sensitive receptors at a program-level analysis and, therefore, impacts would be considered potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-NOI-1 and MM-NOI-2 would reduce potential impacts related to noise generation to below a level of significance.

Facts in Support of Finding: Implementation of Mitigation Framework measure MM-NOI-1 would be required to ensure noise impacts related to Program construction would be reduced to below a level of significance. MM-NOI-1 requires that from a construction stand point, project-level environmental analyses shall evaluate noise impacts of subsequent project-specific features. The City of San Diego shall incorporate and/or modify and augment facility design as appropriate to address project-specific noise effects (e.g., nighttime construction equipment regulations and use electrically powered equipment where feasible).

Additionally, the implementation of Mitigation Framework measure MM-NOI-2 would be required to ensure that potential noise impacts associated with the operation of treatment facilities would be reduced to below a level of significance. MM-NOI-2 requires subsequent Program components shall be evaluated by the City of San Diego at the project-specific environmental/design phase to determine if potential noise or groundborne vibration impacts in excess of applicable noise or vibration standards would result. A site-specific acoustical analysis shall be required for any project located within 500 feet of any residential dwellings, which would ensure compliance with construction noise and outdoor noise standards.

Incorporation of Mitigation Framework measures MM-NOI-1 and MM-NOI-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

18) Historical Resources (Loss of Historical Resources)

Impact: In total, 1,236 archaeological and 1,257 historic built-environment resources (e.g., addresses) have been previously recorded within the Program study area. South Coastal Information System records indicate that approximately 19% (30.92 square miles) of the study area has been included as part of one or more previous archaeological or built-environment technical studies and the remaining 81% (131.63 square miles) appear to have not been subject to previous investigation. Due to the presence of archaeological and historic built-environment resources in the study area and because construction of Program components would entail ground-disturbing activities, impacts to archaeological and historic built-environment resources are considered potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-LU-2, MM-HIST-1 and MM-HIST-2 would reduce potential impacts to unknown subsurface archaeological resources and historic built environment resources to below a level of significance.

Facts in Support of Finding: MM-LU-2 requires subsequent project components implemented in accordance with the Program would be subject to discretionary review and further environmental review under CEQA and shall be reviewed in accordance with Mitigation Framework measures MM-HIST-1 and MM-HIST-2.

With regards to archaeological resources, MM-HIST-1 requires that prior to issuance of any permit for future development project implemented in accordance with the Program area that could directly affect and archaeological resource, the City shall require a methodical step-by-step

process to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity.

Similarly with regards to historic buildings, structures, and objects, MM-HIST-2 requires that prior to issuance of any permit for a future development project implemented in accordance with the Program that would directly or indirectly affect a building/structure in excess of 45 years of age, the City shall determine whether the affected building/structure is historically significant. Preferred mitigation for historic buildings or structures shall be to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource shall be taken.

Incorporation of Mitigation Framework measures MM-LU-2, MM-HIST-1 and MM-HIST-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

19) Historical Resources (Disturbance of Human Remains)

Impact: Avoiding impacts on religious or sacred places or human remains may be unavoidable in certain circumstances when resources are discovered during construction. Although there are no known religious or sacred uses within the Program area, there is potential for these to be encountered during future construction activities associated with implementation of the Program, particularly given the high cultural sensitivity of areas within the study area, such as areas along waterways, where prehistoric resources are most likely to be found. There are areas reported within the 1-mile South Coastal Information System records search buffer where known human remains are reported to be interred outside of formal cemeteries. Additionally, previously unknown prehistoric human remains and prehistoric sites have been uncovered within the City during both archaeological investigations and grading activities. Therefore, the potential for encountering human remains during construction activities is also possible. Thus, significant impacts on religious or sacred uses or human remains may occur as a result of future projects implemented in accordance with the Program.

Finding: Incorporation of Mitigation Framework measure MM-HIST-1 would reduce potential impacts related to the disturbance of human remains to below a level of significance.

Facts in Support of Finding: In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and other applicable federal, state, and local regulations shall be adhered to. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Incorporation of Mitigation Framework measure MM-HIST-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

20) Hydrology and Water Quality (Runoff Impacts)

Impact: Proposed Program components that would create additional impervious surfaces or are located within a water quality sensitive area would result in potentially significant impacts.

Proposed Program components located within or immediately adjacent to a 100-year special flood hazard area could result in a significant impact related to facility flooding. Therefore, impacts are potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-HYD-1 and MM-HYD-2 would reduce potential impacts associated with increases in impervious surfaces and alteration of drainage patterns to below a level of significance. Incorporation of Mitigation Framework measure MM-HYD-3 would reduce potential impacts related to flood hazards to below a level of significance.

Facts in Support of Finding: In order to reduce runoff impacts, MM-HYD-1 requires that during construction of all Program components, the City shall comply with the current State Water Resources Control Board (SWRCB) construction general permit (Order Number 2009-009-DWQ, as amended) and the City's Storm Water Management and Discharge Control Ordinance (San Diego Municipal Code 43.0301 et seq.). In compliance with these requirements, a water pollution control plan (for land disturbances of less than 1 acre) or a stormwater prevention plan (for land disturbances of greater than 1 acre) shall be prepared identifying stormwater best management practices (BMPs) to be implemented as appropriate for site conditions and receiving water risk.

Additionally, MM-HYD-2 requires Program components shall be designed to comply with the City's Storm Water Standards manual and the Municipal Stormwater Permit (San Diego RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100, and other future amendments), including implementation of source control BMPs, and Low Impact Development features that are appropriate for site conditions and adequately sized to meet site's design capture volume for stormwater.

Lastly, MM-HYD-3 requires proposed Program facilities located within a 100-year flood hazard area shall be located and designed in a manner that protects proposed facilities from flooding (e.g., elevated above the 100-year flood or flood-proofed) and does not alter the boundaries or depth of the existing floodplain for off-site properties as mapped by the Federal Emergency Management Agency and the County.

With the implementation of these criteria under MM-HYD-1 through MM-HYD-3 the impacts as a result of runoff would be reduced to below a level of significance.

21) Hydrology and Water Quality (Changes to Surface/Ground Water Quality)

Impact: With the implementation of the Program, changes to surface and ground water quality could occur. From a construction standpoint, there are two typical ways that construction activities associated with the proposed Program could adversely affect stormwater quality, through land disturbance and spills or leaks of construction materials. From an operational standpoint, although the proposed treatment, pumping and conveyance facilities do not involve physical modification to the City's ocean outfalls, the Program would involve modifications to the NCWRP, SBWRP, and PLWTP. Therefore, impacts would be potentially significant.

Impacts associated with fail safe disposal would only occur in emergency situations and would be temporary in nature. However, impacts would be potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-HYD-4 would be reduce

potentially significant impacts related to stormwater and non-stormwater discharges during construction to below a level of significance. Incorporation of Mitigation Framework measure MM-HYD-5, would be reduce potentially significant impacts to water quality associated with fail safe disposal to below a level of significance.

Facts in Support of Finding: Prior to issuance of any permit that would allow excavation which requires dewatering, MM-HYD-4 requires a plan for disposal of the dewatering effluent shall be prepared. If groundwater is to be discharged to the sanitary sewer system, such discharges shall be made by permit/approval from the Industrial Waste Division of the City of San Diego Public Utilities Department. If groundwater is to be discharged to land, the stormwater drainage system, or a surface water body, such discharge shall be made in coordination with the San Diego RWQCB and the appropriate flood control district, and in accordance with applicable waste discharge requirements. Additionally, MM-HYD-5 requires that during project-level review for the proposed treatment and conveyance facilities, the City shall prepare and submit a Failsafe Disposal Plan and submit it to the SWRCB Division of Drinking Water and San Diego RWQCB for review and approval.

Implementation of the Program would ultimately decrease the volume of water needing to be discharged through the Point Loma Ocean Outfall and the South Bay Ocean Outfall by diverting some of the treated wastewater to the AWPFs. With a decrease in volume needed to be discharged through the ocean outfalls, the Program would not result in substantial adverse effects on ocean water quality.

Impacts associated with stormwater and non-stormwater discharges during construction of Program components would be adequately addressed through compliance with the SWRCB Construction General Permit (Order Number 98-672009-009-DWQ, as amended), the City's Storm Water Runoff and Drainage Regulations (Code of Ordinances Chapter 14, Article 2, Division 2), and required notification procedures and waste discharge requirements.

With a decrease in volume needed to be discharged through the ocean outfalls, the Program would have a beneficial impact with respect to treated wastewater disposal through the Point Loma Ocean Outfall and the South Bay Ocean Outfall.

Incorporation of MM-HYD-4 and MM-HYD-5 would reduce the potential for significant impacts at the Program-level to below a level of significance.

22) Hydrology and Water Quality (Cumulative Impacts)

Impact: The cumulative effects of past and current projects in the cumulative scenario have resulted in substantial water quality problems in the region's major waterways, and because water quality problems are generally cumulative in nature, all efforts must be made to reduce pollutant concentrations within stormwater discharges to the maximum extent practicable, even if the impact of an individual project appears inconsequential. The NPDES permits required for the Program are aimed at maintaining the beneficial uses of the water bodies in the RWQCB Basin Plan and meeting water quality objectives associated with specific pollutants of concern. Because adverse water quality and major hydrologic alterations are linked to the large-scale, cumulative effects of development projects, as well as industrial and/or agricultural land uses, the provisions within the NPDES permits, by their nature, seek to address cumulative conditions. Therefore, impacts would be potentially significant.

Finding: Incorporation of Mitigation Framework measures MM-HYD-1 through MM-HYD-5 would reduce potential cumulatively significant water quality impacts to below a level of significance.

Facts in Support of Finding: The Mitigation Framework measures are designed to address cumulative water quality issues by reducing to the maximum extent practicable the levels of pollutants entering the storm drain system. Among other things, compliance with the City's Storm Water Standards manual requires identification of impaired water bodies and implementation of strict controls to ensure construction and operation does not contribute pollutants for which the water body is impaired.

In order to reduce runoff impacts, MM-HYD-1 requires that during construction of all Program components, the City shall comply with the current SWRCB construction general permit (Order Number 2009-009-DWQ, as amended) and the City's Storm Water Management and Discharge Control Ordinance (San Diego Municipal Code 43.0301 et seq.). In compliance with these requirements, a water pollution control plan (for land disturbances of less than 1 acre) or a stormwater pollution prevention plan (for land disturbances of greater than 1 acre) shall be prepared identifying stormwater BMPs to be implemented as appropriate for site conditions and receiving water risk.

Additionally, MM-HYD-2 requires Program components shall be designed to comply with the City's Storm Water Standards manual and the Municipal Stormwater Permit (San Diego RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100, and other future amendments), including implementation of source control BMPs, and LID features that are appropriate for site conditions and adequately sized to meet site's design capture volume for stormwater.

Lastly, MM-HYD-3 requires proposed Program facilities located within a 100-year flood hazard area shall be located and designed in a manner that protects proposed facilities from flooding (e.g., elevated above the 100-year flood or flood-proofed) and does not alter the boundaries or depth of the existing floodplain for off-site properties as mapped by the Federal Emergency Management Agency and the County.

Prior to issuance of any permit that would allow excavation which requires dewatering, MM-HYD-4 requires a plan for disposal of the dewatering effluent shall be prepared. If groundwater is to be discharged to the sanitary sewer system, such discharges shall be made by permit/approval from the Industrial Waste Division of the City of San Diego Public Utilities Department. If groundwater is to be discharged to land, the stormwater drainage system, or a surface water body, such discharge shall be made in coordination with the San Diego RWQCB and the appropriate flood control district, and in accordance with applicable waste discharge requirements. Additionally, MM-HYD-5 requires that during project-level review for the proposed treatment and conveyance facilities, the City shall prepare and submit a Failsafe Disposal Plan and submit it to the SWRCB Division of Drinking Water and San Diego RWQCB for review and approval.

Program compliance with the Construction General Permit, the Municipal Stormwater Permit and the incorporation of MM-HYD-1 through MM-HYD-5 would reduce the potential for significant Program-level to below a level of significance.

23) Paleontological Resources (Loss of Paleontological Resources)

Impact: According to the conceptual siting and alignments of the Program components, the following moderate or high resource potential areas may be affected: Friars Formation (Tf), Mission Valley Formation (Tmv), Otay Formation (To), Stadium Conglomerate (Tst), Point Loma Formation (Kp), Cabrillo Formation (Kcs), San Diego Formation (Tsd), and Ardath Shale (Ta). While these areas may be affected according to the current conceptual alignments, site-specific locations and design are not yet known and subject to change. As final design, location, and excavation quantities are not yet known and are subject to change prior to future project-level analysis, for the purposes of this program-level analysis, impacts to paleontological resources would be potentially significant.

Finding: Incorporation of the Mitigation Framework measure MM-PALEO-1 would reduce potential impacts to paleontological resources to below a level of significance.

Facts in Support of Finding: Prior to the approval of subsequent development projects implemented in accordance with the Program areas, MM-PALEO-1 requires the City shall determine the potential for impacts to paleontological resources based on review of the project application submitted, and recommendations of a project-level analysis completed in accordance with the steps detailed in MM-PALEO-1. Future projects shall be sited and designed to minimize impacts on paleontological resources in accordance with the City's Paleontological Resources Guidelines and CEQA Significance Thresholds.

Incorporation of Mitigation Framework measure MM-PALEO-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

24) Public Utilities (Generation of Solid Waste)

Impact: Per the City's Significance Determination Thresholds projects that generate more than 1,500 tons of waste may result in a direct impact. The construction of Program components would generate demolition and construction debris which could exceed the threshold, and therefore, impacts would be potentially significant.

Sludge facilities would be improved, or new facilities constructed, as part of the Program and would provide sufficient capacity to process sludge generated by the WRPs and AWPFs. The impacts associated with improvements at PLWTP and Metropolitan Biosolids Center and the construction of the South Bay Sludge Processing Facility are addressed throughout this PEIR. Nonetheless, additional sludge would be produced by the Program, resulting in a potentially significant impact.

Per the City's Significance Determination Thresholds projects that generate more than 1,500 tons of waste may result in a direct impact. The ongoing generation of solid waste such as filter cartridges, reverse osmosis (RO) membrane elements, ultraviolet (UV) reactor lamps, and ballasts associated with operation of the proposed facilities would result in a potentially significant impact.

Finding: Incorporation of Mitigation Framework measures MM-PU-1 and MM-PU-2 would reduce potentially significant solid waste impacts to below a level of significance.

Facts in Support of Finding: During construction, MM-PU-1 requires the construction contractor shall comply with the Standard Specifications for Public Work Construction (aka "THE WHITEBOOK"), Section 702, which sets forth the requirements for construction and demolition waste management, and 90% waste reduction during demolition and 75% waste reduction during construction. Additionally, during operation, MM-PU-2 requires the City shall manage solid waste to ensure a minimum 75% waste diversion through source reduction, recycling, composting, or transformation.

Incorporation of MM-PU-1 and MM-PU-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

25) Visual Effects and Neighborhood Character (Landform Alteration)

Impact: The expansion of existing facilities and construction of pipelines is not expected to require or result in substantial changes to existing topography. Therefore, impacts associated with this portion of Program implementation would be less than significant. While the preliminary sites chosen for the new treatment facilities and pump stations are relatively flat, disturbed, and/or developed, these sites are subject to change prior to final design. Additionally, grading plans for each site are not yet developed and would not be known until future project–level analysis. Therefore, impacts associated with the development of treatment facilities and pump stations would be potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-AES-1 would reduce the potentially significant landform alteration impacts to below a level of significance.

Facts in Support of Finding: MM-AES-1 requires the City shall minimize and limit potential for substantial landform alteration by avoiding steep slopes where feasible during the selection of sites for treatment facilities and pump stations. In the event that a chosen site contains steep slopes as defined by the City of San Diego Municipal Code, the treatment facility or pump station shall be designed to avoid or disturb steep hillsides or design development within the allowable encroachment in accordance with the City of San Diego Land Development Code, Environmentally Sensitive Land Regulations. Lastly, final grading plans for each treatment facility and pump station shall minimize alterations to existing topography and mimic existing topography to the extent feasible.

Incorporation of Mitigation Framework measure MM-AES-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

26) Visual Effects and Neighborhood Character (Impacts to Scenic Vistas)

Impact: The expansion of existing facilities and construction of pipelines is not expected to require or result in substantial blockage of public views or views of important visual resources. Therefore, impacts associated with this portion of Program implementation would be less than significant.

While the majority of the chosen sites would likely not result in substantial view blockage, at this program level of analysis, it is not possible to fully analyze the potential for effects on scenic vistas. More importantly, the currently proposed sites are conceptual and preliminary, and are still subject to engineering design and analysis in conjunction with more detailed facility planning and design. It is possible that the more detailed planning and design would

require shifting of the site layout such that development of any given treatment facility or pump station would result in substantial blockage of public views and important visual resources. Therefore, impacts would be potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-AES-2 would reduce potentially significant impacts to scenic vistas to below a level of significance.

Facts in Support of Finding: During future project-level analysis, MM-AES-2 requires the City shall analyze and determine the potential for Program components to block public scenic views or views of important visual resources. The City shall make necessary alterations to the site design to minimize such impacts as necessary, prior to final design, and to the satisfaction of the City's Planning Department.

Incorporation of Mitigation Framework measure MM-AES-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

27) Visual Effects and Neighborhood Character (Alteration to Visual Character)

Impact: The expansion of existing facilities and pipelines would not have a substantial effect on visual character and impacts would be less than significant.

It is not possible to fully determine the extent of potential visual character, lighting and glare effects until final site design and engineering for future project-level analysis. Additionally, the sites chosen are preliminary and conceptual and are subject to change prior to project-level review, which may result in a different specific existing visual environment than described in this section. Therefore, any given treatment facility and pump station may result in the substantial alteration of visual character and a potentially significant impact.

Finding: Incorporation of Mitigation Framework measure MM-AES-3 would reduce potentially significant impacts to visual character to below a level of significance.

Facts in Support of Finding: Prior to final design, MM-AES-3 requires that subsequent projects implemented in accordance with the Program shall incorporate setbacks from the property line to minimize apparent bulk, scale, and mass of structures, nonreflective exterior finished that do not substantially contrast with the existing surrounding natural and built environment, landscaping consistent with the existing surroundings to provide for visual screening and softening of views and structures, use of lighting only as necessary for nighttime security purposed, and use of lighting that is shielded and directed downward and away from neighboring property lines.

Incorporation of Mitigation Framework measure MM-AES-3 would reduce the potential for significant impacts at the Program-level to below a level of significance.

28) Geology and Soils (Exposure to Geological Hazards)

Impact: The Program would be located in the San Diego Region of seismically active Southern California. Bases on conceptual alignments of the Program, there is potential for segments of pipeline alignments to be located within an Alquist-Priolo Earthquake Fault Zone. As such the program would be subject to earthquakes similar to that of the entire region. The Program components may be locally subject to seismically induced secondary effects related to

liquefaction, lateral spreading, local subsidence of soil, landslides, mudslides, ground failure, and other geological hazards. The potential for these conditions and susceptibility to such hazards would depend on site-specific conditions that would not be known until future project-level analysis is conducted.

The Program areas contain geologic conditions which would pose significant risks for construction of facilities and associated components if not properly addressed at the project-level. Unstable conditions relating to earthquakes, landslides, mudslides, liquefaction, ground failure and other similar hazards represent a potentially significant impact for future development, and mitigation is required.

Finding: Incorporation of Mitigation Framework measure MM-GEO-1 would reduce potential impacts related to geologic hazards to below a level of significance.

Facts in Support of Finding: Impacts associated with geologic hazards shall be mitigated at the project-level through adherence to the City's Seismic Safety Study and recommendations of a site-specific geotechnical report prepared in accordance with the City's Geotechnical Report Guidelines, as required by MM-GEO-1. Impacts shall also be avoided or reduced through engineering design that meets or exceeds adherence to the City's Municipal Code and the California Building Code.

Specific compressible soil impacts shall be mitigated through the removal of undocumented fill, colluvium/topsoil, and alluvium to firm the ground. Regarding expansive soils, future development shall be required to implement typical remediation measure, which shall include placing a minimum 5-foot cap of low expansive over the clays.

Incorporation of Mitigation Framework measure MM-GEO-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

29) Geology and Soils (Increased Erosion)

Impact: The potential for an increase in erosion of soils on or off site would occur during both the construction and operation phases of the Program. Construction of the treatment facilities, pump stations, and pipelines would temporarily expose soils to wind and water erosion. Therefore, impacts would be potentially significant. Based on the steep nature of many of the hillsides and the generally poorly consolidated nature of the sedimentary materials and soils found throughout the Program area, erosion would represent a potentially significant impact, particularly in conjunction with some portions of the San Diego Formation and in drainages and stream valleys. Therefore, impacts would be potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-GEO-2 would reduce potential impacts related to erosion to below a level of significance.

Facts in Support of Finding: Regardless of final location of Program components, construction of Program components would be required to comply with the SWRCB's Construction General Permit, which requires the development and implementation of a Stormwater Pollution Prevention Plan as well as implementation of BMPs. Construction would also be required to comply with all applicable jurisdictions' grading requirements, which would minimize erosion during construction. Common BMPs include site watering, sediment filters, and specific materials handling and storage.

MM-GEO-2 requires all subsequent projects implemented in accordance with the Program shall be designed to avoid or reduce geologic hazards to the satisfaction of the City Engineer. Submittal, review, and approval of site specific geotechnical investigations shall be completed in accordance with the City's Municipal Code requirements. Engineering design specifications based on future project-level construction plans shall be incorporated into all future projects implemented in accordance with the Program to minimize hazards associated with site-level geologic and seismic conditions satisfactory to the City Engineer and shall include the measures depicted in detail under MM-GEO-2 to control erosion during and after grading or construction.

Compliance with the SWRCB's Construction General Permit and incorporation of Mitigation Framework measure MM-GEO-2 would reduce the potential for significant impacts at the Program-level to below a level of significance.

30) Geology and Soils (Unstable Geological Conditions)

Impact: The Program components may be located on a geological unit or soil that is unstable or would result in landslides, lateral spreading, subsidence, liquefaction, or collapse. The potential for these conditions and susceptibility to such hazards would depend on site specific conditions that would not be known until future project-level analysis can be conducted. Therefore, impacts are potentially significant.

The Program areas contain geologic conditions which would pose significant risks for construction of facilities and associated components if not properly addressed at the project-level. Unstable conditions relating to landslides, lateral spreading, subsidence, liquefaction or collapse represent a potentially significant impact for future development. Therefore, impacts are potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-GEO-1 would reduce potential impacts related to geologic hazards to a level below significance.

Facts in Support of Finding: : Impacts associated with unstable geological conditions shall be mitigated at the project-level through adherence to the City's Seismic Safety Study and recommendations of a site-specific geotechnical report prepared in accordance with the City's Geotechnical Report Guidelines, as required by MM-GEO-1. Impacts shall also be avoided or reduced through engineering design that meets or exceeds adherence to the City's Municipal Code and the California Building Code.

Specific compressible soil impacts shall be mitigated through the removal of undocumented fill, colluvium/topsoil, and alluvium to firm the ground. Regarding expansive soils, future development shall be required to implement typical remediation measure, which shall include placing a minimum 5-foot cap of low expansive over the clays.

Incorporation of Mitigation Framework measure MM-GEO-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

31) Transportation, Circulation, and Parking (Alteration to Circulation)

Impact: The majority of the pipeline alignments would be constructed using open trench construction techniques. Therefore, construction of pipelines would require encroachment onto public right-of-way at different times throughout the construction phase of each program

component. Construction and staging of equipment for the treatment facilities and pump stations of each Program component would likely be limited to each respective site. However, construction of treatment facilities and pump stations may require temporary encroachment onto public rights-of-way and roadways for ingress/egress of workers and equipment. Therefore, impacts would be potentially significant.

Finding: Incorporation of Mitigation Framework measure MM-TRA-1 would reduce potentially significant impacts to vehicle movement and access to roadways to below a level of significance.

Facts in Support of Finding: Prior to construction of any project that requires encroachment into public roadways, a traffic control plan would be prepared by the City in conformance with the City's and each affected municipality's traffic control regulations. The traffic control plan would be prepared to ensure that vehicular, bicycle, and pedestrian access would be maintained to individual properties and businesses, and that emergency access would not be restricted. Construction of pipelines, pump stations, and treatment facilities may temporarily result in disrupted access along roadways, resulting in a potentially significant impact related to construction traffic.

Additionally, MM-TRA-1 requires that the construction contractor shall provide a minimum 2-week written notice by mail to owners/occupants along streets to be impacted during construction. During construction, the construction contractor shall ensure continuous, unobstructed, safe, and adequate pedestrian and vehicular access to and from public facilities, commercial/industrial establishments during regular business hours, and residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time.

Compliance with the prepared traffic control plan and incorporation of Mitigation Framework measure MM-TRA-1 would reduce the potential for significant impacts at the Program-level to below a level of significance.

B. Findings Regarding Impacts that Are Unavoidable

No impacts related to the implementation of the Program were found to be significant and unavoidable.

V. FINDINGS REGARDING ALTERNATIVES

In accordance with Section 15126.6(a) of the Guidelines, an environmental impact report (EIR) must contain a discussion of "a range of reasonable alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Section 15126.6(f) further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Thus, the following discussion focuses on Program alternatives that are capable of eliminating significant environmental impacts or substantially reducing them as compared to the proposed Program, even if the alternative would impede the attainment of some Program objectives, or would be more costly. In accordance with Section 15126.6(f)(1) of the Guidelines, among the factors that may be taken into account when addressing the feasibility

of alternatives are: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

As required in Section 15126.6(a), in developing the alternatives to be addressed in this section, consideration was given to an alternative's ability to meet most of the basic objectives of the project. Because the Pure Water Program will cause potentially significant environmental effects unless mitigated, the City must consider the feasibility of any environmentally superior alternatives to the Program, evaluating whether these alternatives could avoid or substantially lessen the potentially significant environmental effects while achieving most of the objectives of the proposed Program.

A. Alternatives Eliminated from Detailed Consideration

Over the past decade or more, the City has engaged in an extensive and deliberate process to consider water supply portfolio options generally, and water reuse options specifically. Through those processes, a variety of alternative concepts for water supply and reuse were evaluated, and as a result, the Program was developed. The various options and concepts that were included among those studies and evaluation processes are alternatives that were considered and rejected. Included among those are alternatives relating to increasing non-potable recycled water use and updating PLWTP to full secondary treatment, both of which were considered and rejected in the Water Reuse Study and the Recycled Water Study.

B. Alternatives under Consideration

The final PEIR analyzes the following alternatives:

1. No Program/No Build Alternative

CEQA Guidelines, Section 15126.6(e), requires that an EIR evaluate a "no project" alternative along with its impact. The purpose of describing and analyzing a no project alternative is to allow a lead agency to compare the impacts of approving the project to the impacts of not approving it.

Under the No Program/No Build Alternative, the Program would not be implemented. The three AWPFs, the CAWRP in the Central Area, and the associated pumping and conveyance facilities would not be constructed. Therefore, 83 MGD of purified water would not be produced. Instead, potable water demand would continue to be met through imported water supplies. In addition, current levels of wastewater flows would continue to the PLWTP, and the PLWTP would continue operating under a modified permit.

Under this alternative, none of the environmental impacts associated with the construction and operation of the Program would occur. Beneficial impacts of the proposed Program would not occur. Additionally, under this alternative, the City would continue to purchase imported water to meet local demand, which would result in higher net energy use and associated GHG emissions. This alternative does not meet any of the objectives set forth earlier in this report.

2. Post Office Site Alternative

The City identified an additional potentially feasible alternative location for a treatment facility that could provide an alternative to the CAWRP and CAAWPF. The Post Office Site Alternative is so named becauseit is located at the former site of the U.S. Post Office on the west side of Midway Drive, north of Barnett Avenue and south of Rosecrans Street.

Zoning and land use designations for the site allow for a mix of light industrial/office uses. However, although the Post Office alternative site is located in close proximity to the South and North Metro Interceptor sewer lines, diverting wastewater from these interceptors would require a deep diversion structure (more than 30 feet below ground surface). Alternatively, an influent pump station could be located near Pump Station No. 2, which would require a pipeline to traverse property near the west end of the airport and runway. Additional disadvantages of the site include highly liquefiable and compressible soil – subject to liquefaction and seismically induced settlement; high groundwater table (approximately 5 to 8 feet below ground surface); and the fact that the site is prone to flooding during major rain events.

Impacts related to land use, air quality and odor, health and safety, biological resources, noise, historical resources, hydrology and water quality, paleontological resources, public utilities, visual effects and neighborhood character, energy, geology and soils, transportation, circulation and parking, public services, GHG emissions, and water supply with regards to this alternative would be similar to those of the proposed Program. This alternative would also meet all the previously discussed Program objectives. However, although all the Program objectives are met, this alternative does not provide any benefits in terms of reducing significant environmental impacts that could not otherwise be reduced to less than significant with mitigation under the proposed Program.

3. Alternate Reservoir Augmentation Alternative

Under this alternative, water purified at the NCAWPF would be conveyed to the Miramar Reservoir and water purified at the CAAWPF would be conveyed to Lake Murray, where it would be stored prior to treatment at a water treatment facility. Water purified at the South Bay Advanced Water Purification Facility would be conveyed to a more southern location at the Otay Reservoir avoiding the additional costs and impacts associated with construction of the pipeline to the northern portion of the reservoir. Under this alternative, an additional treatment step using ozone-biological activated carbon would be included in the advanced water purification process. This additional treatment step would be implemented prior to microfiltration or ultrafiltration and RO in order to increase cumulative log removals of pathogens and chemicals of emerging concerns and to improve the water quality of the product water, thereby alleviating the need for the additional environmental buffer that is associated with the use of the larger San Vicente Reservoir, and for the Otay Reservoir a larger separation between product water delivery and withdrawal points.

Utilizing Miramar Reservoir and Lake Murray for storage of purified water would substantially reduce the miles of purified water pipeline needing to be constructed from the NCAWPF and CAAWPF. The Miramar Reservoir is owned and operated by the City of San Diego and is located in the Scripps Ranch Community. Lake Murray is also owned and operated by the City and is located within Mission Trails Regional Park, in the Navajo Community Planning Area.

The Alternate Reservoir Augmentation alternative would result in similar impacts related to land use, health and safety, public utilities, visual effects and neighborhood character, product water quality, geology and soils, public services, and water supply as the proposed Program. The additional treatment requirements at the AWPFs would result in slightly higher energy consumption and associated GHG emissions; however, the shortened purified water pipeline length would result in a net overall reduction in energy consumption and associated GHG emissions. Impacts related to air quality, biological resources, noise, historical resources, hydrology and water quality, paleontological resources, and transportation would be slightly reduced under this alternative. Additionally, this alternative would meet all of the Program objectives. Therefore, it is considered the environmentally superior alternative.

EXHIBIT B

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PURE WATER SAN DIEGO PROGRAM

ENVIRONMENTAL IMPACT REPORT No. 438188 SCH No. 2014111068

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Planning Department, 1010 Second Avenue, Suite 1200, East Tower, San Diego, CA, 92101. All mitigation measures contained in the Environmental Impact Report No. 438188, SCH No. 2014111068 are further described below.

LAND USE

Mitigation Framework

Environmentally Sensitive Lands Regulations

MM-LU-1 Subsequent project components implemented in accordance with the Program would be subject to discretionary review and further environmental review under CEQA and shall be reviewed in accordance with Mitigation Framework MM-LU-3; MM-BIO-1- through MM-BIO-3 in Section 5.4, Biological Resources; and MM-HYD-3 in Section 5.7, Hydrology and Water Quality.

Historical Resources Regulations

MM-LU-2 Subsequent project components implemented in accordance with the Program would be subject to discretionary review and further environmental review under CEQA and shall be reviewed in accordance with Mitigation Framework MM-HIST-1 and MM-HIST-2 in Section 5.6 Historical Resources.

Environmental Plan Consistency

MHPA adjacency impacts would be addressed at the project-level. Projects adjacent to the MHPA would incorporate features into the project and/or permit conditions that demonstrate compliance with the MHPA Land Use Adjacency Guidelines. To ensure avoidance or reduction of potential MHPA impacts resulting from new development adjacent to the MHPA, the following Mitigation Framework measures shall be required for all future projects as part of the subsequent environmental review and development permit processing:

All subsequent infrastructure implemented in accordance with the Program MM-LU-3 that are within or adjacent to designated MHPA areas shall comply with the Land Use Adjacency Guidelines of the MSCP in terms of land use, drainage, access, toxic substances in runoff, lighting, noise, invasive plant species, grading, and brush management requirements. Mitigation measures include, but are not limited to: sufficient buffers and design features, barriers (rocks, boulders, signage, fencing, and appropriate vegetation) where necessary, lighting directed away from the MHPA, and berms or walls adjacent to commercial or industrial areas and any other use that may introduce construction noise or noise from future development that could impact or interfere with wildlife utilization of the MHPA. The project biologist for each proposed component/project would identify specific mitigation measures needed to reduce impacts to below a level of significance. Subsequent environmental review would be required to determine the significance of impacts from land use adjacency and compliance with the Land Use Adjacency Guidelines of the MSCP. Prior to approval of any subsequent development project in an area adjacent to a designated MHPA, the City of San Diego shall identify specific conditions of approval in order to avoid or to reduce potential impacts to adjacent the MHPA. Specific requirements shall include:

- Drainage All new and proposed parking lots and developed areas in and adjacent to the MHPA shall be designed so they do not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials prior to release by incorporating the use of filtration devices, planted swales and/or planted detention/desiltation basins, or other approved permanent methods that are designed to minimize negative impacts, such as excessive water and toxins into the ecosystems of the MHPA.
- 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 impactive 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. Provide a note in/on the CD's 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."

- Lighting Lighting within or adjacent to the MHPA shall be directed away/shielded from the MHPA and be subject to City Outdoor Lighting Regulations per LDC Section 142.0740.D. Overhead lighting shall be shielded and either have a fixed downward-aiming position or have a locking feature to fix the light in the downward position. Additionally, overhead lighting adjacent to the MHPA shall be placed on a timer to turn off from 11 pm to sunrise unless determined by the City of San Diego that overhead lighting is necessary for public safety.
- Noise New development adjacent to the MHPA must follow the protocol established under MM-BIO-1 and MM-BIO-3 with regard to Mitigation for Short-term Impacts on Sensitive Species from Project Construction.
- Barriers New development within or adjacent to the MHPA shall be required to provide barriers (e.g., non-invasive vegetation; rocks/boulders; 6-foot high, vinyl-coated chain link or equivalent fences/walls; and/or signage) along the MHPA boundaries to direct public access to appropriate locations, reduce domestic animal predation, protect wildlife in the preserve, and provide adequate noise reduction where needed.
- **Invasive Species** No invasive plant species shall be introduced into areas adjacent to the MHPA.
- brush Management New development adjacent to the MHPA shall be set back from the MHPA to provide required Brush Management Zone 1 area on the building pad outside of the MHPA. Zone 2 may be located within the MHPA provided the Zone 2 management will be the responsibility of an HOA or other private entity except where narrow wildlife corridors require it to be located outside of the MHPA. Brush management zones will not be greater in size than currently required by the City's regulations, the amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done and vegetation clearing shall be prohibited within native coastal sage scrub and chaparral habitats from March 1 August 15 except where the City ADD/MMC has documented the thinning would be consist with the City's MSCP Subarea Plan. Existing and approved projects are subject to current requirements of Municipal Code Section 142.0412.
- MM-LU-4 All development for utilities within the MHPA shall be designed to minimize environmental impacts and must avoid disturbing the habitat of MSCP-covered species, and wetlands. If such avoidance is unfeasible, impacts shall be mitigated. Temporary access roads and staging areas in the MHPA shall be located in agricultural lands or existing disturbed areas

rather than in habitat. If temporary disturbance to habitat in the MHPA is unavoidable, restoration of and/or mitigation for the disturbed area shall be required after project completion. Construction and maintenance activities in wildlife corridors in the MHPA shall avoid significant disruption of corridor usage.

If a proposed project would encroach into the MHPA beyond the allowable development area pursuant to Sections 143.0142 and 131.0250(b) of the City of San Diego Land Development Code, Biology Guidelines, a MHPA boundary line adjustment shall be required. Under the City's MSCP Subarea Plan, an adjustment to the City's MHPA boundary is allowed only if the new MHPA boundary results in an exchange of lands that are functionally equivalent or higher in biological value. A determination of functionally equivalent or higher biological value shall be based on site-specific information (both quantitative and qualitative) that addresses the six boundary adjustment criteria outlined in Section 5.4.3 of the Final MSCP Plan (August 1998), which are as follows:

- 1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly and sufficiently conserved habitats, as defined in Section 3.4.2 [of the Final MSCP Plan]
- 2. Effects on covered species (i.e., the exchange maintains or increases the conservation of covered species).
- 3. Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves any habitat linkages or wildlife corridors);
- 4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection of biological resources)
- 5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the preserve);
- 6. Effects on species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state ESAs).

All proposed MHPA boundary adjustments require approval from the Wildlife Agencies. Approval is required prior to release of the environmental documentation for the project. Early consultation with the Wildlife Agencies

shall be required for any proposed MHPA boundary adjustment. Any proposed boundary adjustment shall also be disclosed in the environmental document (i.e., CEQA) for the project.

- MM-LU-5 Subsequent environmental documentation for future project components with potential to impact resources protected by the County Resource Protection Ordinance shall complete a Resource Protection Study pursuant to Section 86.603 of the Resource Protection Ordinance. Specific actions and requirements determined by the County following review of the Resource Protection Study shall be considered by the City during subsequent environmental review for future project components.
- MM-LU-6 Future project components located within City of Chula Vista preserve shall be subject to the Facilities Siting Criteria established in the Chula Vista MSCP Subarea Plan and siting and design requirements in Otay Ranch Resource Management Plan. Consideration and implementation of siting and design criteria will ensure compatibility of Program components and the Chula Vista MSCP Subarea Plan and Otay Ranch Resource Management Plan.
- MM-LU-7 If the siting of Program components would require lands to be removed from the PLECA, an area of equal size and equal or greater ecological value will be added to the PLECA to offset the loss. Additional mitigation for impacts to habitat removed from the PLECA may be required and may consist of adding land to the PLECA or restoring habitat within or outside of the PLECA. Such mitigation shall be proposed in the associated NEPA/CEQA compliance document for future project components and this document shall be submitted to the PLECA Working Group for review. The PLECA Working Group shall determine if a PLECA boundary adjustment is required based on the final design and restoration/mitigation proposal(s) from the City or if alternative construction methods or use of existing utility corridors would be sufficient to satisfy the terms of the PLECA MOU and avoid a boundary adjustment.

For future project components that would impact native Diegan coastal sage scrub and southern maritime chaparral on Naval Base Point Loma, a determination of consistency with Section 30240 of the Coastal Act may be required. Section 30240 of the Coastal Act protects environmentally sensitive habitat areas from significant disruption of habitat values, and allows only uses dependent on those resources within those areas. The NEPA/CEQA compliance document associated with future project components on Naval Base Point Loma shall include a determination of consistency with Section 30240 of the Coastal Act and the document shall be submitted to the California Coastal Commission for review.

- MM-LU-8 Construction of facilities on federal lands in MCAS Miramar and the San Diego Bay NWR would require analysis under the National Environmental Policy Act (NEPA). As such, for proposed facilities on federal lands, appropriate NEPA documentation shall be prepared and submitted to necessary federal agencies and parties including MCAS Miramar, the San Diego Bay NWR, and USFWS. The City shall coordinate with MCAS Miramar and the San Diego Bay NWR regarding project components located on federal lands and shall ensure consistency with applicable land use regulations of MCAS Miramar INRMP and the San Diego Bay NWR CCP. Actions in existing rights-of-way or easements on MCAS Miramar lands may not require authorization from MCAS Miramar and therefore shall require that the City consult directly with the USFWS under Section 10 of the ESA to address potential species and habitat issues.
- MM-LU-9 All development for future project components with potential to impact vernal pools, the City shall implement avoidance and minimization measures to minimize potential impacts to vernal pools consistent with the VPHCP and the City's ESL Regulations. If impacts to vernal pools are unavoidable and/or infeasible, temporary impacts shall be mitigated on site through restoration of the impact area back to a level equal to or greater quality than pre-construction conditions in accordance with MM-BIO-2. Permanent impacts to vernal pools shall be addressed via appropriate compensatory mitigation as established in MM-BIO-2.

Airport Land Use Plan Consistency

- MM-LU-10 Subsequent projects, implemented in accordance with the Program, shall submit a description of each Program component located in an airport influence area to the Airport Land Use Commission for consistency determinations with the applicable adopted Airport Land Use Compatibility Plan. In addition, any Program components located within the Part 77 imaginary surfaces for determining obstructions area or that meets the Part 77 criteria shall be required to submit a notification for review to the Federal Aviation Administration (FAA).
- MM-LU-11 Subsequent projects, implemented in accordance with the Program, that (1) are located in the Airport Approach Overlay Zone and receive an FAA determination of hazard and that are not exempt or (2) located within the Airport Land Use Compatibility Overlay Zone and proposing deviations from the overlay zone requirements, or that include a rezone or land use plan approval, shall obtain a Site Development Permit in accordance with San Diego Municipal Code Section 126.0502(e).

Air Quality

Mitigation Framework

The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the Program. In general, implementation of the Program and associated project design features would preclude or reduce air quality impacts. Compliance with the standards is required of all projects and is not considered to be mitigation. However, it is possible that for certain projects, adherence to the regulations would not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. These additional measures would be considered mitigation.

Where mitigation is determined to be necessary and feasible, these measures shall be included in a Mitigation Monitoring and Reporting Program for the project.

Mitigation Framework measures MM-AQ-1, MM-AQ-2, and MM-AQ-3 shall be implemented to reduce project-level impacts related to construction emissions and odor (operational). These measures shall be updated, expanded and refined when applied to specific future projects based on project-specific design and changes in existing conditions, and local, state, and federal laws.

- MM-AQ-1 The following best management practices shall be considered in all subsequent project-level environmental analysis and implemented during construction to comply with applicable SDAPCD rules and regulations, and to further reduce daily construction emissions:
 - Best available control measures that shall be implemented during construction to reduce particulate emissions and reduce soil erosion and trackout include the following:
 - Cover or water, as needed, any on-site stockpiles of debris, dirt, or other dusty material.
 - Use adequate water and/or other dust palliatives on all disturbed areas in
 order to avoid particle blow-off. Due to current drought conditions, the
 contractor shall consider use of a SDAPCD-approved dust suppressant where
 feasible to reduce the amount of water to be used for dust control. Use of
 recycled water in place of potable water shall also be considered provided
 that the use is approved by the City of San Diego and other applicable
 regulatory agencies prior to initiation of construction activity.¹ Use of

The use of recycled water for construction purposes requires approval of the City and other regulatory agencies on a case-by-case basis. The permit shall be obtained prior to beginning construction. Recycled water used for construction purposes may only be used for soil compaction during grading operations, dust control and consolidation and compaction of backfill in trenches for non-potable water, sanitary sewer, storm drain, gas and

recycled water shall be in compliance with all applicable City of San Diego Rules and Regulation for Recycled Water (City of San Diego 2008), particularly for the protection of public health per the California Code of Regulations, Title 22, Division 4. Wash down or sweep paved streets as necessary to control trackout or fugitive dust.

- Cover or tarp all vehicles hauling dirt or spoils on public roads if sufficient freeboard is not available to prevent material blow-off during transport.
- o Use gravel bags and catch basins during ground-disturbing operations.
- Maintain appropriate soil moisture, apply soil binders, and plant stabilizing vegetation.
- Additional construction measures to reduce equipment emissions may include:
 - o Properly tune and maintain construction equipment.
 - Encourage carpooling by all construction workers.
 - Limit any lane closures to off-peak travel periods.
- MM-AQ-2 The following measures shall be implemented during construction activities associated with the San Vicente Purified Water Pipeline components to reduce oxides of nitrogen (NO_x):
 - a. All construction equipment shall be equipped with Tier 3, or better (i.e., Tier4) diesel engines.
 - b. The engine size of construction equipment shall be the minimum size suitable for the required job.
 - c. Construction equipment shall be maintained in accordance with the manufacturer's specifications.
- MM-AQ-3 Program components shall implement odor control systems specifically designed to abate the odorous potential of the specific facility. Odor control systems shall be similar to those currently employed at City of San Diego wastewater treatment facilities and pump stations to reduce odor impacts. The following odor control systems or equivalent measures shall be implemented upon final facility design to mitigate nuisance odors:

electric pipelines. Equipment operators shall be instructed about the requirements contained herein and the potential health hazards involved with the use of recycled water. Water trucks, hoses, drop tanks, etc. shall be identified as containing non-potable water and not suitable for drinking. Determinations as to specific uses to be allowed shall be in accordance with the standards set forth in Title 22, Division 4 of the California Code of Regulations and with the intent of this ordinance to preserve the public health. The City may, at its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies. (City of San Diego 2008)

- a. Treatment plants and major pump stations: NaOCl/NaOH Wet Scrubber plus carbon or Biofilter plus carbon, or equivalent alternative.
- b. Treatment plants and pump stations with lower sulfide loads: Biotrickling filter plus carbon or carbon only, or equivalent alternative.
- c. Smaller municipal pump stations and air/vacuum relief valves at high points along forcemains: carbon only, or equivalent alternative.

Health and Safety

Mitigation Framework

- MM-HAZ-1 A brush management plan shall be prepared by the City or its contractors prior to construction of Program components, as determined necessary by the City of San Diego. Construction within areas of dense foliage during dry conditions shall be avoided, when feasible. In cases where avoidance is not feasible, necessary brush fire prevention and management practices shall be incorporated. Details of the brush management program shall be determined as site plans for the Program components are finalized to the satisfaction of the City of San Diego Fire Marshal.
- MM-HAZ-2 The City of San Diego shall provide fire safety information to construction crews during regular safety meetings. Fire management techniques shall be applied during construction as deemed necessary by the City of San Diego Fire Marshal based on vegetation within the site and surrounding areas.
- MM-HAZ-3 A Hazardous Materials Reporting Form and Hazardous Materials Review by the Development Services Department shall be prepared for each Program component in compliance with the City of San Diego's Information Bulletin 116.
- MM-HAZ-4 In accordance with Article of Chapter 6.95 of California Health and Safety Code and San Diego County Code Section 68.1113, a hazardous materials business plan (HMBP) shall be submitted to the Department of Environmental Health (DEH) Hazardous Materials Division prior to operations of each treatment facility and every 3 years thereafter. 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.

- MM-HAZ-5 All hazardous materials shall be handled and stored, transported and disposed in accordance with all applicable federal, state, and local codes and regulations. Specific requirements of the California Fire Code that reduce the risk of fire or the potential for a release of hazardous materials that could affect public health or environment include:
 - Provide an automatic sprinkler system for indoor hazardous material storage areas.
 - Separate incompatible materials by isolating them from each other with noncombustible partition.
 - Locate incompatible materials as far away from each other as practical and safe.
 - Provide spill control in all storage, handling, and dispensing areas.
 - Separate secondary containment for each liquid chemical storage system.
 - Chlorine in liquid form (sodium hypochlorite) instead of chlorine gas shall be used to mitigate concerns associated with accidental toxic gas plume releases and potential odor emissions from the chlorine storage facility.
 - Use aqua ammonia of a concentration below the regulatory threshold limit
 of 20% and amount below the regulatory threshold of 20,000 gallons shall
 be used to mitigate concerns associated with accidental release of toxic
 ammonia gas plume or measurable size.
 - Equip all liquid chemical storage tanks with a pressure relief valve, vapor
 equalization, carbon filter vent, and vacuum breaker. Any potential vapor
 fume releases from the tanks would be absorbed by the carbon filter vent,
 thereby providing an additional odor control for volatile chemicals such as
 ammonia and chlorine.
- MM-HAZ-6 Subsequent projects, implemented in accordance with the Program, shall conduct a site-specific record search for the locations and type of hazardous materials to the satisfaction of the City of San Diego. An analysis shall be conducted for each Program component to determine whether a proposed facility is (1) located within 1,000 feet of a known contamination site; (2) located within 2,000 feet of a known 'border zone property' (also known as a 'Superfund' site) or a hazardous waste property subject to corrective action pursuant to the Health and Safety Code; (3) where a DEH site file is closed; (4) located in Centre City San Diego (No known as Downtown San Diego), Barrio Logan or other areas known or suspected to contain contamination sites; (5) located on or near an active or former landfill; or (5) properties historically developed with industrial or commercial uses which involved dewatering. In the event that one of the above conditions is met, the City shall coordinate with the

Department of Environmental Health to determine the appropriate corrective action (i.e., remediation) or avoidance measures (i.e. alternative facility siting).

Biological Resources

Mitigation Framework

Prior to subsequent project level review, all projects which could have MM-BIO-1 potentially significant impacts resulting in a reduction in the number of unique, rare, endangered, sensitive, or fully protected species of plants or animals shall be analyzed in accordance with the CEQA Significance Thresholds, which require that site-specific biological resources surveys be conducted in accordance with City of San Diego Biology Guidelines (2012) and MSCP Subarea Plan. Where sensitive biological resources are known or suspected on or adjacent to a proposed project site, a biological assessment shall be performed by a qualified City-approved biologist familiar with MSCP Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista for that project. Based on available habitat within the project areas, focused presence/absence surveys shall be conducted in accordance with the Biology Guidelines and applicable resource agency survey protocols. Engineering design specifications based on project-level grading and site plans shall be incorporated into the design of future projects to minimize or eliminate direct impacts on sensitive plant and wildlife species consistent with the FESA, MBTA, CESA, MSCP Subarea Plan, and ESL Regulations. Mitigation for impacts on rare plant species shall be in accordance with the City's Biology Guidelines (City of San Diego 2012), which require habitat-based mitigation according to the established MSCP mitigation ratios (see Table MM-BIO-1A below, Table 3 in the City's Biology Guidelines),

soil salvage, and/or translocation or restoration of species.

It is expected that the majority of sensitive species not covered by the MSCP will be adequately mitigated through the habitat-based mitigation required by the City of San Diego (2012) and detailed below. However, mitigation requirements and protocols may be required to ensure that impacts on sensitive species are reduced to below a level of significance. Sensitive wildlife mitigation must be developed in accordance with all applicable federal, state, and local laws and protocols (including the MSCP Subarea Plan Appendix A Conditions of Coverage) in effect at the time when permits are applied for. Mitigation measures for general nesting birds and some individual species, including least Bell's vireo, coastal California gnatcatcher, and coastal cactus wren, have been standardized by the City's Mitigation Monitoring and

Reporting Program (MMRP) and would be implemented at a project level. Mitigation measures may include, but are not limited to, the following:

Mitigation for Impacts on Sensitive Upland Habitats

Future projects resulting in impacts on sensitive upland Tier I, II, IIIA, or IIIB habitats shall implement avoidance and minimization measures consistent with the City Biology Guidelines and MSCP Subarea Plan and provide suitable mitigation in accordance with Table 3 in the City's Biology Guidelines (see Table MM-BIO-1A) and MSCP Subarea Plan. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, maritime succulent scrub, coastal sage scrub, and grasslands consistent with federal, state, and City guidelines. Any required mitigation for impacts on sensitive vegetation communities shall be outlined in a conceptual mitigation plan following the outline provided in the City Biology Guidelines.

Mitigation for impacts on sensitive vegetation communities shall be implemented at the time future projects are proposed. Project-level analysis shall determine whether the impacts are within or outside the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.

Mitigation for impacts on sensitive upland habitats shall occur in accordance with the MSCP mitigation ratios as specified within the City's Biology Guidelines (City of San Diego 2012). These mitigation ratios are based on the tier level of the vegetation community, the location of the impact, and the location of the mitigation site(s). For example, impacts on lands inside the MHPA and mitigated outside the MHPA would have the highest mitigation ratio, whereas impacts on lands outside the MHPA and mitigated inside the MHPA would have the lowest mitigation ratio.

Mitigation for Impacts to Wetlands

Please refer to Mitigation Framework MM-BIO-2 under Impact 5.4-7.

Mitigation for Short-term Impacts on Sensitive Species from Project Construction

Within the Program area, for proposed project components adjacent to or within the MHPA, construction noise that exceeds the maximum levels

allowed shall be avoided during the breeding seasons for protected avian species such as: western snowy plover (March 1-September 15); California least tern (May 1-August 30); coastal California gnatcatcher (March 1-August 15); least Bell's vireo (March 15-September 15); coastal cactus wren (February 15-August 15); burrowing owl (February 1-August 31); southwestern willow flycatcher (May 1-August 30); light-footed Ridgway's rail (March 1-August 31); and western yellow-billed cuckoo (mid-June-late August). If construction is proposed during the breeding season for these species, USFWS protocol surveys shall be required in order to determine species presence/absence. When applicable, adequate noise reduction measures shall be incorporated.

Additional specific measures necessary for reducing potential indirect impacts on sensitive bird species are further detailed in Mitigation Framework MM-LU-3.

A revegetation plan must be prepared by a qualified City-approved biologist familiar with Multiple Species Conservation Program (MSCP) Subarea Plans for the City of San Diego, County of San Diego, and City of Chula Vista.

Other Agency Mitigation Requirements

Permanent impacts to sensitive upland communities in the Chula Vista MSCP Subarea Plan area shall require mitigation at the following ratios, assuming mitigation is provided inside the Preserve: CVTier I – 1:1 for impacts outside the Preserve and 2:1 for impacts inside the Preserve; CVTier II – 1:1 for impacts outside the Preserve and 1.5:1 for impacts inside the Preserve; CVTier III – 0.5:1 for impacts outside the Preserve and 1:1 for impacts inside the Preserve.

Permanent impacts to sensitive upland communities in the County MSCP Subarea Plan area shall require mitigation at the following ratios, assuming the land conserved as mitigation meets the definition of biological resource core area: CoTier II – 1:1 if impacted land does not meet the definition of biological resource core area and 1.5:1 if impacted land meets the definition of biological resource core area; CoTier III – 0.5:1 if impacted land does not meet the definition of biological resource core area and 1:1 if impacted land meets the definition of biological resource core area. Non-native grassland shall be mitigated at 0.5:1. Mitigation may be proposed through preservation of biological resource core areas by fee title transfer, conservation easement, or other appropriate title encumbrances.

Permanent impacts to sensitive upland communities on MCAS Miramar shall require mitigation at the ratios provided in the MCAS Miramar Integrated Natural Resources Management Plan (INRMP). Mitigation for impacts by non-military entities shall be provided on land outside of MCAS Miramar. Tables 6.2.2.2a and 6.2.2.2b of the INRMP provide mitigation ratios for temporary and permanent impacts, respectively. Compensatory mitigation shall be required only when threatened or endangered species are present in the impact area, and ratios range from 1:1 to 2:1 for temporary impacts and between 1:1 and 3:1 for permanent impacts.

All mitigation for unavoidable wetland impacts within the Coastal Overlay Zone shall occur within the Coastal Overlay Zone.

Table MM-BIO-1A

Mitigation Ratios for Impacts on Upland

Vegetation Communities and Land Cover Types

60 (40 (50) 00 (40)					
TIER 1	Southern Foredunes	Location of Preservation			
(rare	Torrey Pines Forest			Inside	Outside
uplands)	Coastal Bluff Scrub	Location	Inside	2:1	3:1
	Maritime Succulent Scrub	of Impact	Outside	1:1	2:1
	Maritime Chaparral				
	Scrub Oak Chaparral				
	Native Grassland				
	Oak Woodlands				
TIER II	Diegan Coastal Sage Scrub (CSS)		Location of Preservation		
(uncommon	CSS/Chaparral			Inside	Outside
uplands)		Location	Inside*	1:1	2:1
		of Impact	Outside	1:1	1.5:1
TIER IIIA	Chamise Chaparral		Location of Preservation		
(common uplands)	Southern Mixed Chaparral			Inside	Outside
		Location	Inside*	1:1	1.5:1
		of Impact	Outside	0.5:1	1:1
TIER IIIB	Non-native Grassland		Location of Preservation		
(common				Inside	Outside
uplands)		Location	Inside*	1:1	1.5:1
		of Impact	Outside	0.5:1	1:1

Notes: For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I or (2) occur outside of the MHPA within the affected habitat type (in-kind). For impacts on Tier II, IIIA, and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I – III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind). Project-specific mitigation will be subject to applicable mitigation ratios at the time of project submittal.

MM-BIO-2 To reduce potential direct impacts on City, state, and federally regulated wetlands, all subsequent projects shall be required to comply with ACOE CWA Section 404 requirements and special conditions, RWQCB in accordance with Section 401 of the CWA, CDFW Section 1602 Streambed Alteration Agreement requirements and special conditions, and the City of San Diego ESL Regulations for minimizing impacts on wetlands. Achieving consistency with these regulations for impacts on wetlands and special aquatic sites would reduce potential impacts on regulated wetlands and provide compensatory mitigation (as required) to ensure no net loss of wetland habitats. In addition, the USFWS would be involved under Section 7 of the FESA during consultation initiated by the ACOE during the 404 permit process if federal listed species are present. If there is no federal nexus to jurisdictional waters, then a Section 10(A) authorization from USFWS would be required to cover any potential effects on federal listed species.

Prior to obtaining discretionary permits for future actions implemented in accordance with the Program that are subject to ESL, and/or where the CEQA review has determined that there may be a significant impact on other biological resources considered sensitive under CEQA, a site-specific biological resources survey shall be completed in accordance with City of San Diego Biology Guidelines. In addition, a preliminary or final jurisdictional waters/wetlands delineation of the project site shall be completed following I SERVICIO ESTA CONTROLO DE LA CARTA LA LEGARA LEGARA LEGARA CARTA LA RESPONDA DE LA CARTA LA 图整照图 and any required updated or additional standards. A determination of the presence/absence and boundaries of any waters of the U.S. and waters of the state shall also be completed following the appropriate ACOE guidance documents for determining the OHWM boundaries. The limits of any riparian habitats on-site under the sole jurisdiction of CDFW shall also be delineated, as well as any special aquatic sites (excluding vernal pools) that may not meet federal jurisdictional criteria but are regulated by the RWQCB. Engineering design specifications based on project-level grading and site plans shall be incorporated into the project design to minimize direct impacts to wetlands, jurisdictional waters, riparian habitats, and vernal pools consistent with federal, state, and City guidelines. Any required mitigation for proposed impacts shall be outlined in a conceptual wetland mitigation plan prepared in accordance with the City's Biology Guidelines (2012).

Additionally, any impacts on wetlands in the City of San Diego would require a deviation from the ESL wetland regulations. Under the wetland deviation process, development proposals that have wetland impacts shall

be considered only pursuant to one of three options: Essential Public Project, Economic Viability Option, or Biologically Superior Option. ESL Regulations require that impacts on wetlands be avoided. Unavoidable impacts on wetlands shall be minimized to the maximum extent practicable and mitigated as follows for Essential Public Projects:

As part of the project-specific environmental review pursuant to CEQA, all unavoidable wetland impacts shall be analyzed, and mitigation shall be required in accordance with Table 2A in the City's Biology Guidelines (see Table MM-BIO-2A). Mitigation shall be based on the impacted type of wetland and project design. Mitigation shall prevent any net loss of wetland functions and values of the impacted wetland.

Table MM-BIO-2A
City of San Diego Wetland Mitigation Ratios (for Essential Public Projects and with Biologically Superior Design)

Riparian	2:1 to 3:1		
Vernal pool¹	2:1 to 4:1		
Basin with fairy shrimp ¹	2:1 to 4:1		
Freshwater marsh	2:1		

Notes:

The City does not have "take" authority for vernal pool species. A draft vernal pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies. If adopted, the City would have "take" authority for the vernal pool species occurring within the vernal pool HCP areas.

As part of any future project-specific environmental review pursuant to CEQA, all unavoidable wetlands impacts (both temporary and permanent) shall be analyzed and mitigation required in accordance with the City Biology Guidelines; mitigation shall be based on the impacted type of wetland habitat. Mitigation shall prevent any net loss of wetland functions and values of the impacted wetland. Operational definitions of the four types of activities that constitute wetland mitigation under the ESL Regulations are as follows:

- **Wetland creation** is an activity that results in the formation of new wetlands in an upland area. An example is excavation of uplands adjacent to existing wetlands and the establishment of native wetland vegetation.
- **Wetland restoration** is an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.

- **Wetland enhancement** is an activity that improves the self-sustaining habitat functions of an existing wetland. An example is removal of exotic species from existing riparian habitat.
- **Wetland acquisition** may be considered in combination with any of the three mitigation activities above.

Wetland enhancement and wetland acquisition focus on the preservation or the improvement of existing wetland habitat and function and do not result in an increase in wetland area; therefore, a net loss of wetland may result. As such, acquisition and/or enhancement of existing wetlands shall be considered as partial mitigation only for any balance of the remaining mitigation requirement after restoration or creation if wetland acreage is provided at a minimum of a 1:1 ratio.

For permanent wetland impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new in-kind habitat to the fullest extent possible and at the appropriate ratios. If on-site mitigation is not feasible, then at least a portion of the mitigation must occur within the same watershed. The City's Biology Guidelines and MSCP Subarea Plan require that impacts on wetlands, including vernal pools, shall be avoided, and that a sufficient wetland buffer shall be maintained, as appropriate, to protect resource functions/values. The project specific biology report shall include an analysis of on-site wetlands (including City, state, and federal jurisdiction analysis) and, if present, include project alternatives that fully/substantially avoid wetland impacts. Detailed evidence supporting why there is no feasible less environmentally damaging location or alternative to avoid any impacts must be provided for City staff review, as well as a mitigation plan that specifically identifies how the project is to compensate for any unavoidable impacts. A conceptual wetland mitigation plan (which includes identification of the mitigation site) shall be approved by City staff prior to the release of the draft environmental document. Avoidance shall be the first requirement; mitigation shall only be used for impacts clearly demonstrated to be unavoidable.

Prior to the commencement of any construction-related activities on-site for projects impacting wetland habitat (including earthwork and fencing), the applicant shall provide evidence of the following to the Mayor-appointed Environmental Designee prior to any construction activity:

- Compliance with ACOE Section 404 nationwide permit;
- Compliance with the RWQCB Section 401 Water Quality Certification; and

• Compliance with the CDFW Section 1601/1603 Streambed Alteration Agreement.

MM-BIO-3: Mitigation to reduce potentially significant impacts from subsequent project components that would interfere with the nesting, foraging, or movement of wildlife species within the Program area shall be identified in a site-specific biological resources report prepared in accordance with City of San Diego Biology Guidelines, as further detailed in MM-BIO-1 during the discretionary review process. The biology report shall identify the limits of any identified local-scale wildlife corridors or habitat linkages and analyze potential impacts in relation to local fauna, and the effects of conversion of vegetation communities to minimize direct impacts on sensitive wildlife species and to provide for continued wildlife movement through the corridor.

Measures that shall be incorporated into project-level construction documents to minimize direct impacts on wildlife movement, nesting, or foraging activities shall be addressed in the biology report and shall include recommendations for preconstruction protocol surveys to be conducted during established breeding seasons, construction noise monitoring and implementation of any species-specific mitigation plans in order to comply with the FESA, MBTA, State Fish and Game Code, and/or the ESL Regulations.

Noise

Mitigation Framework

- MM-NOI-1 Project-level environmental analyses shall evaluate noise impacts of subsequent project-specific features. The City of San Diego shall incorporate and/or modify and augment facility design as appropriate to address project-specific noise effects:
 - Pumps and associated equipment (e.g., portable generators etc.) used during nighttime hours (10 p.m. to 7 a.m.) and during construction activities shall be shielded from sensitive uses using local temporary noise barriers or enclosures, or shall otherwise be designed or configured so as to comply with applicable municipal code nighttime noise standards. The specific location and design of such barriers shall be determined in conjunction with construction plans for individual projects.
 - Construction activities shall not occur during nighttime restrictive time periods according to applicable requirements. The hours of construction, including noisy maintenance activities and all spoils and material transport, shall be

- restricted to the periods and days permitted by the local noise or other applicable ordinance.
- Nighttime work, where necessary to avoid daytime traffic jams or service outages, shall be planned to the extent practical to minimize the number and type of operating equipment, restrict the movement of equipment adjacent to the noise-sensitive receivers, and minimize noise from backup alarms.
- All noise-producing equipment and vehicles using internal combustion
 engines shall be equipped with mufflers; air-inlet silencers where
 appropriate; and any other shrouds, shields, or other noise-reducing
 features in good operating condition that meet or exceed original factory
 specification. Mobile or fixed "package" equipment (e.g., arc-welders, air
 compressors) shall be equipped with shrouds and noise control features
 that are readily available for that type of equipment.
- All mobile or fixed noise-producing equipment used on the Program
 facilities that are regulated for noise output by a local, state, or federal
 agency shall comply with such regulation while in the course of Program
 activity.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noisesensitive receptors.
- Construction site and access road speed limits shall be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- No project-related public address or music system shall be audible at any adjacent receptor.
- MM-NOI-2 Subsequent Program components shall be evaluated by the City of San Diego at the project-specific environmental/design phase to determine if potential noise or groundborne vibration impacts in excess of applicable noise or vibration standards would result. If such a potential exists, a noise and vibration study shall be conducted including recommendations for mitigation. Mitigation shall be specific to the Program feature, and designed to assure that noise and vibration produced by operation of the facility shall not cause

the limits in the municipal code to be exceeded, and any such mitigation shall be required as part of the subsequent Program component.

A site-specific acoustical analysis shall be required for any project located within 500 feet of any residential dwellings, which would ensure compliance with construction noise and outdoor noise standards. It is reasonable to assume that feasible mitigation is available through project-specific design features that would provide appropriate sound and vibration attenuation for operational impacts from Program components, such as pump stations and treatment facilities. Such design features, including construction of attenuation walls or structures, and location/placement of noise/vibration generating equipment shall be applied to reduce potentially significant impacts to less than significant levels at the project-level of analysis, to the satisfaction of the City of San Diego.

Historical Resources

Mitigation Framework

MM-HIST-1 Archaeological and Tribal Cultural Resources

Prior to issuance of any permit for a future development project implemented in accordance with the Program area that could directly affect an archaeological or tribal cultural resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological or tribal cultural resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socioeconomic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The environmental analyst will determine the likelihood for the project site to contain historical resources by reviewing site photographs and existing historic information (e.g., Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and may conduct a site visit. If there is any evidence that the site contains archaeological or tribal cultural resources, then an archaeological evaluation consistent with the City Guidelines would be required.

All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

Step 1:

Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the South Coastal Information Center (SCIC) at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) must also be conducted at this time. Information about existing archaeological collections should also be obtained from the San Diego Archaeological Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information would be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance, based on the City's Guidelines must be performed by a qualified archaeologist.

Where a recorded archaeological site or Tribal Cultural Resource (as defined in the Public Resources Code) is identified, the City would be required to initiate consultation with identified California Indian tribes pursuant to the provisions in Public Resources Code Section 21080.3.1 and 21080.3.2., in accordance with Assembly Bill 52. It should be noted that during the consultation process, tribal representative(s) will be involved in making recommendations regarding the significance of a tribal cultural resource which also could be a prehistoric archaeological site. A testing program may be recommended which requires reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines. Results of the consultation process will determine the nature and extent of any additional archaeological evaluation or changes to the proposed project.

The results from the testing program shall be evaluated against the Significance Thresholds found in the Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. However, this process would not proceed until such time that the tribal consultation has been concluded and an agreement is reached (or not reached) regarding significance of the resource and appropriate mitigation measures are identified. When the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3:

Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. When tribal cultural resources are present and also cannot be avoided, appropriate and feasible mitigation will be determined through the tribal consultation process and incorporated into the overall data recovery program, where applicable or project specific mitigation measures incorporated into the project. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to distribution of a draft CEQA document and shall include the results of the tribal consultation process. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American tribal cultural resource or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of California Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions will be outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in a subsequent project–specific environmental document. The Native American monitor shall be consulted during the preparation of the

written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4:

Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g., collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the Guidelines), which will be used by Environmental staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and tribal cultural resources containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical

Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5:

For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards unless otherwise determined during the tribal consultation process. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 [Coto] and California Native American Graves Protection and Repatriation Act of 2001[Health and Safety Code 8010-8011]) and federal (i.e., Native American Graves Protection and Repatriation Act [U.S.C. 3001-3013]) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation of all recovered artifacts must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance. When tribal cultural resources are present, or non-burial-related artifacts associated with tribal cultural resources area suspected to be recovered, the treatment and disposition of such resources will be determined during the tribal consultation process. This information must then be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, Title 36 of the Code of Federal Regulations, Part 79. Additional information regarding curation is provided in Section II of the Guidelines.

MM-HIST-2 Historic Buildings, Structures, and Objects

Prior to issuance of any permit for a future development project implemented in accordance with the Program that would directly or indirectly affect a

building/structure in excess of 45 years of age, the City shall determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as: age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in the Guidelines.

Preferred mitigation for historic buildings or structures shall be to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource shall be taken. Depending upon project impacts, measures shall include, but are not limited to:

- Preparing a historic resource management plan;
- Adding new construction which is compatible in size, scale, materials, color and workmanship to the historic resource (such additions, whether portions of existing buildings or additions to historic districts, shall be clearly distinguishable from historic fabric);
- Repairing damage according to the Secretary of the Interior's Standards for Rehabilitation;
- Screening incompatible new construction from view through the use of berms, walls and landscaping in keeping with the historic period and character of the resource;
- Shielding historic properties from noise generators through the use of sound walls, double glazing and air conditioning.

Specific types of historical resource reports, outlined in Section III of the HRG, are required to document the methods to be used to determine the presence or absence of historical resources, to identify potential impacts from a proposed project, and to evaluate the significance of any historical resources identified. If potentially significant impacts to an identified historical resource are identified these reports will also recommend appropriate mitigation to reduce the impacts to below a level of significance, where possible. If required, mitigation programs can also be included in the report.

Hydrology and Water Quality

Mitigation Framework

MM-HYD-1 During construction of all Program components, the City shall comply with the current State Water Resources Control Board (SWRCB) construction general permit (Order Number 2009-009-DWQ, as amended) and the City's

Storm Water Management and Discharge Control Ordinance (San Diego Municipal Code 43.0301 et seq.). In compliance with these requirements, a water pollution control plan (for land disturbances of less than 1 acre) or a stormwater pollution prevention plan (SWPPP) (for land disturbances of greater than 1 acre) shall be prepared identifying stormwater best management practices (BMP) to be implemented as appropriate for site conditions and receiving water risk. Minimum BMPs shall include erosion controls, sediment controls, tracking controls, wind erosion control, non-storm water management (i.e., dewatering BMPs), and proper materials and water waste management.

- MM-HYD-2 Program components shall be designed to comply with the City's Storm Water Standards manual and the Municipal Stormwater Permit (San Diego RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100, and other future amendments), including implementation of source control BMPs, treatment control BMPs, and LID features that are appropriate for site conditions and adequately sized to meet site's design capture volume for stormwater. Per the City's Storm Water Standards manual, program components classified as priority development projects shall prepare a water quality technical report, a drainage study, and where appropriate, a hydromodification management plan. Site BMPs and LID designs shall together be adequate to (1) match or reduce the pre-development peak flow rates and volumes, and (2) eliminate or substantially reduce pollutant loads from stormwater runoff.
- MM-HYD-3 Proposed Program facilities located within a 100-year flood hazard area shall be located and designed in a manner that protects proposed facilities from flooding (e.g., elevated above the 100-year flood or flood-proofed) and does not alter the boundaries or depth of the existing floodplain for off-site properties as mapped by the Federal Emergency Management Agency and the County. Belowground components of the proposed Program crossing 100-year flood zones shall be installed below the anticipated depth of scour, as determined by a scour analysis/report to be conducted by a qualified individual (e.g., professional engineer, professional geologist, or certified engineering geologist) experienced in scour analysis. Design and construction specifications of pipeline components crossing floodplains shall incorporate recommendations from the report to ensure that potential impacts from scouring do not comprise the integrity of the pipeline. Proposed Program construction, development or alterations located within or across a 100-year flood hazard area shall be reviewed and approved by

the County's floodplain administrator or designee prior to notice to proceed.

- MM-HYD-4 Construction Groundwater Dewatering. Prior to issuance of any permit that would allow excavation which requires dewatering, a plan for disposal of the dewatering effluent shall be prepared. If groundwater is to be discharged to the sanitary sewer system, such discharges shall be made by permit/approval from the Industrial Waste Division of the City of San Diego Public Utilities Department. If groundwater is to be discharged to land, the stormwater drainage system, or a surface water body, such discharge shall be made in coordination with the San Diego Regional Water Quality Control Board (RWQCB) and the appropriate flood control district, and in accordance with applicable waste discharge requirements. Discharges to land and surface waters shall require submittal of a notice of intent to the RWQCB and compliance with a number of physical, chemical, and thermal parameters (as applicable), along with pertinent site-specific conditions, pursuant to direction from the RWQCB.
- MM-HYD-5 Failsafe Disposal Plan During project-level review for the proposed treatment and conveyance facilities, the City shall prepare and submit a Failsafe Disposal Plan and submit it to the SWRCB Division of Drinking Water and San Diego RWQCB for review and approval. At a minimum, the plan shall specify the locations where off-specification water could be discharged, the anticipated flow rate and duration, and the minimum level of treatment the water would have at the discharge point. The objectives of the plan shall be to ensure that (1) adequate storm drain hydraulic capacity is available to convey the off-spec water from the diversion point to downstream surface waters during periods of peak storm flows, and (2) no adverse hydrodynamic effects on downstream surface waters would occur.

The plan shall identify the beneficial uses and water quality objectives for the waterways affected by failsafe disposal and shall develop a Monitoring and Reporting Program to be put in place. The plan shall identify a shutdown coordinator responsible for managing failsafe disposal, establish switching/valving procedures, outline neutralization methods for chlorinated or chloraminated water, establish roles and responsibilities, and identify action triggers and notification requirements to relevant agencies (e.g., RWQCB, local flood control agency). The plan shall be consistent with and demonstrate compliance with State Water Resources Control Board (SWRCB) Order No. 2014–0194–DWQ (General Waste Discharge Requirements for Discharges from Drinking Water Systems to Surface Waters).

If existing storm drain facilities are not available (or are undersized) at the selected diversion points, the construction (or upgrade) of diversion channels and/or energy dissipation facilities may be required to ensure that off-spec water diversions do not create adverse scour or erosion effects in downstream surface waters.

Paleontological Resources

Mitigation Framework

MM-PALEO-1: Prior to the approval of subsequent development projects implemented in accordance with the Program areas, the City shall determine the potential for impacts to paleontological resources based on review of the project application submitted, and recommendations of a project-level analysis completed in accordance with the steps presented below. Future projects shall be sited and designed to minimize impacts on paleontological resources in accordance with the City's Paleontological Resources Guidelines and CEQA Significance Thresholds. Monitoring for paleontological resources required during construction activities shall be implemented at the project-level and shall provide mitigation for the loss of important fossil remains with future subsequent development projects that are subject to environmental review.

I. Prior to Project Approval

- A. The environmental analyst shall complete a project-level analysis of potential impacts on paleontological resources. The analysis shall include a review of the applicable USGS Quad maps to identify the underlying geologic formations, and shall determine if construction of a project would:
 - Require over 1,000 cubic yards of excavation and/or a 10-foot, or greater, depth in a high resource potential geologic deposit/formation/rock unit.
 - Require over 2,000 cubic yards of excavation and/or a 10-foot, or greater, depth in a moderate resource potential geologic deposit/formation/rock unit.
 - Require construction within a known fossil location or fossil recovery site. Resource potential within a formation is based on the Paleontological Monitoring Determination Matrix.
- B. If construction of a project would occur within a formation with a moderate to high resource potential, monitoring during construction would be required.

- Monitoring is always required when grading on a fossil recovery site or a known fossil location.
- Monitoring may also be needed at shallower depths if fossil resources are present or likely to be present after review of source materials or consultation with an expert in fossil resources (e.g., the San Diego Natural History Museum).
- Monitoring may be required for shallow grading (<10 feet) when a site has previously been graded and/or unweathered geologic deposits/formations/rock units are present at the surface.

Monitoring is not required when grading documented artificial fill. When it has been determined that a future project has the potential to impact a geologic formation with a high or moderate fossil sensitivity rating a Paleontological MMRP shall be implemented during construction grading activities.

Public Utilities

- MM-PU-1 During construction, the construction contractor shall comply with the Standard Specifications for Public Work Construction (aka "The WHITEBOOK"), Section 702, which sets forth the requirements for construction and demolition waste management, and 90% waste reduction during demolition and 75% waste reduction during construction.

 Requirements include preparation of the Waste Management Form, discussions of waste management and recycling at worker orientations and all construction meetings, and implementation of a waste diversion strategy such as source separation.
- MM-PU-2 During operation, the City shall manage solid waste to ensure a minimum 75% waste diversion through source reduction, recycling, composting, or transformation.

Visual Resources and Community Character

- **MM-VIS-1** The City shall minimize and limit the potential for substantial landform alteration by implementing the following during project-level design:
 - In selection of sites for treatment facilities and pump stations, the City shall avoid steep slopes where feasible.
 - In the event that a chosen site contains steep slopes as defined by the City of San Diego Municipal Code, the treatment facility or pump station shall be

- designed to avoid or disturb steep hillsides or design development within the allowable encroachment in accordance with the City of San Diego Land Development Code, Environmentally Sensitive Land Regulations.
- Final grading plans for each treatment facility and pump station shall minimize alterations to existing topography and mimic existing topography to the extent feasible.
- MM-VIS-2 During future project-level analysis, the City shall analyze and determine the potential for Program components to block public scenic views or views of important visual resources. The City shall make necessary alterations to site design to minimize such impacts as necessary, prior to final design, and to the satisfaction of the City's Planning Department.
- MM-VIS-3 Prior to final design, subsequent projects implemented in accordance with the Program shall incorporate the following visual design measures into the design of each treatment facility and pump station in order to minimize the contrast with the existing visual character of the chosen site:
 - Setbacks from the property line to minimize apparent bulk, scale, and mass of structures (in accordance with San Diego Municipal Code Chapter 14, Article 2, Division 7 Section 142.0730)
 - Nonreflective exterior finishes that do not substantially contrast with the existing surrounding natural and built environment (in accordance with San Diego Municipal Code Chapter 14, Article 2, Division 4)
 - Landscaping consistent with the existing surroundings to provide for visual screening and softening of views of structures (in accordance with San Diego Municipal Code Chapter 14, Article 2, Division 7, Section 142.0740)
 - Use of lighting only as necessary for nighttime security purposes (in accordance with San Diego Municipal Code Chapter 14, Article 2, Division 7, Section 142.0740)
 - Use of lighting that is shielded and directed downward and away from neighboring property lines (in accordance with San Diego Municipal Code Chapter 14, Article 2, Division 7, Section 142.0740)

Geology and Soils

Mitigation Framework

MM-GEO-1 Impacts associated with geologic hazards shall be mitigated at the project-level through adherence to the City's Seismic Safety Study and recommendations of a site-specific geotechnical report prepared in accordance with the City's Geotechnical Report Guidelines. Impacts shall also be avoided or reduced through engineering design that meets or exceeds adherence to the City's Municipal Code and the California Building Code.

More specifically, compressible soils impacts shall be mitigated through the removal of undocumented fill, colluvium/topsoil, and alluvium to firm the ground. Future development shall also be required to clean up deleterious material and properly moisture, condition, and compact the soil in order to provide suitable foundation support.

Regarding impacts related to expansive soils, future development shall be required to implement typical remediation measures, which shall include placing a minimum 5-foot cap of low expansive (Expansion Index [EI] of 50 or less) over the clays; or design of foundations and surface improvements to account for expansive soil movement.

MM-GEO-2 All subsequent projects implemented in accordance with the Program shall be designed to avoid or reduce geologic hazards to the satisfaction of the City Engineer.

Submittal, review, and approval of site specific geotechnical investigations shall be completed in accordance with the City's Municipal Code requirements. Engineering design specifications based on future project-level construction plans shall be incorporated into all future projects implemented in accordance with the Program to minimize hazards associated with site-level geologic and seismic conditions satisfactory to the City Engineer and shall include the following measures to control erosion during and after grading or construction:

- Desilting basins, improved surface drainage, or planting of ground covers installed early in the improvement process in areas that have been stripped of native vegetation or areas of fill material;
- Short-term measures, such as sandbag placement and temporary detention basins;

- Restrictions on grading during the rainy season (November through March), depending on the size of the grading operation, and on grading in proximity to sensitive wildlife habitat; and
- Immediate post-grading slope revegetation or hydroseeding with erosionresistant species to ensure coverage of the slopes prior to the next rainy season.

Conformance to mandated City grading requirements shall ensure that future grading and construction operations would avoid significant soil erosion impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres, or any project involving less than one acre that is part of a larger development plan, shall be subject to NPDES General Construction Storm Water Permit provisions. Additionally, any development of this significant size within the City shall be required to prepare and comply with an approved Stormwater Pollution Prevention Plan (SWPPP) that shall consider the full range of erosion control BMPs such as, but not limited to, including any additional site-specific and seasonal conditions. Project compliance with NPDES requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development.

Prior to obtaining grading permits for future actions a site-specific geotechnical investigation shall be completed as necessary in accordance with the City of San Diego Guidelines for Preparing Geotechnical Reports. Engineering design specifications based on project-level grading and site plans shall be incorporated into the project design to minimize hazards associated with site-level geologic and seismic conditions satisfactory to the City Engineer. Measures designed to reduce erosion at the project-level shall include the following:

- Control erosion by minimizing the area of slope disturbance and coordinate the timing of grading, resurfacing, and landscaping where disturbance does occur.
- On sites for industrial activities require reclamation plans that control erosion, where feasible, in accordance with the LDC.
- Control erosion caused by storm runoff and other water sources.
- Preserve as open space those hillsides characterized by steep slopes or geological instability in order to control urban form, insure public safety, provide aesthetic enjoyment, and protect biological resources.

- Replant with native, drought-resistant plants to restore natural appearance and prevent erosion.
- Practice erosion control techniques when grading or preparing building sites.
- Utilize ground cover vegetation when landscaping a development in a drainage area to help control runoff.
- Incorporate sedimentation ponds as part of any flood control or runoff control facility.
- During construction, take measures to control runoff from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms, or lines of straw bales are a few of the techniques to consider.
- Phase grading so that prompt revegetation or construction can control
 erosion. Only disturb those areas that will later be resurfaced, landscaped,
 or built on. Resurface parking lots and roadways as soon as possible,
 without waiting until completion of construction.
- Promptly revegetate graded slopes with groundcover or a combination of groundcover, shrubs, and trees. Hydroseeding may substitute for container plantings. Groundcovers shall have moderate to high erosion control qualities.
- Where necessary, design drainage facilities to ensure adequate protection for the community while minimizing erosion and other adverse effects of storm runoff to the natural topography and open space areas.
- Ensure that the timing and method of slope preparation protects natural areas from disturbance due to erosion or trampling. The final surface shall be compacted and spillovers into natural areas shall be avoided.
- Plant and maintain natural groundcover on all created slopes.

When required, the geologic technical report shall consist of a preliminary study, a geologic reconnaissance, or an in-depth geologic investigation report that includes field work and analysis. The geologic reconnaissance report and the geologic investigation report shall include all pertinent requirements per the City Engineer in accordance with Section 145.1803 of the San Diego Municipal Code, San Diego Seismic Safety Study (2009).

Transportation, Circulation, and Parking

MM-TRA-1 Prior to construction, the construction contractor shall prepare a traffic control plan (TCP) implemented for all affected roadways. The TCP shall be prepared in accordance with the City's and each of the affected municipalities' traffic control guidelines, as applicable. The TCP shall be prepared to ensure that

access will be maintained to individual properties and businesses, and that emergency access will not be restricted. Any construction traffic impacts will be short-term in nature.

The TCP shall show all signage and striping, and shall delineate detours, flagging operations, and any other procedures that shall be used during construction to guide motorists safely through the construction zone and allow for a minimum of one lane of travel. The TCP shall also include provisions for coordinating with local emergency service providers regarding construction times and locations of lane closures.

Prior to the start of construction, the construction contractor shall provide a minimum 2-week written notice by mail to owners/occupants along streets to be impacted during construction.

During construction, the construction contractor shall ensure continuous, unobstructed, safe, and adequate pedestrian and vehicular access to and from public facilities (e.g., public utility stations and community centers). If normal access to these facilities is blocked by construction, an alternative access shall be provided. Should this occur, the construction contractor shall coordinate with each facility's administrators in preparing a plan for alternative access.

During construction, the construction contractor shall ensure continuous, unobstructed, safe, and adequate pedestrian and vehicular access to commercial/industrial establishments during regular business hours. If normal access to business establishments is blocked, alternative access shall be provided. Should this occur, the construction contractor shall coordinate with the businesses in preparing a plan for alternative access.

During construction, the construction contractor shall maintain continuous vehicular and pedestrian access to residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. For example, when a given pipeline segment is initially being excavated, access to individual driveways may be closed during the course of a workday. Access shall be reestablished at the end of the workday. If a driveway needs to be closed or interfered with as described previously, the construction contractor shall notify the owner or occupant of the closure of the driveway at least 5 working days prior to the closure.

The TCP shall include provisions to ensure that the construction contractor's work in any public street does not interfere unnecessarily with the operation of other agencies vehicles, such as emergency service providers.