

RECLAMATION

Managing Water in the West

RECORD OF DECISION

for the

FINAL ENVIRONMENTAL IMPACT STATEMENT

PURE WATER SAN DIEGO PROGRAM, NORTH CITY PROJECT

San Diego County, California

October 2018

Prepared By:



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10/9/18
Date


Recommended:



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10-9-18
Date

Recommended:



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10/12/18
Date

Approved:



Terrance J. Fulp, Ph.D.
Lower Colorado Regional Director

November 1, 2018
Date



Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

SUMMARY OF ACTION

The North City Project is the first phase of the Pure Water San Diego Program, a water and wastewater facilities plan to produce potable water from recycled water. The Bureau of Reclamation is participating in planning, design and construction under the San Diego Area Water Reclamation Program authority and is providing Title XVI funding to the City of San Diego for the North City Project.

The Pure Water San Diego Program will ultimately produce 83 million gallons per day (MGD) of locally controlled water implemented in phases over a 20-year period, grouped by geographical area: North City, Central Area, and South Bay. The North City Project will produce 30 MGD of purified water and is scheduled to be operational in 2021.

The North City Project will increase the treatment capacity at the existing North City Water Reclamation Plant and will construct a new North City Pure Water Facility with an 8-mile purified water pipeline to Miramar Reservoir. A project alternative would deliver the water to San Vicente Reservoir instead.

A final Environmental Impact Statement (EIS) was completed pursuant to the National Environmental Policy Act (NEPA). Two action alternatives were considered: the Miramar Reservoir Alternative and the San Vicente Reservoir Alternative. The EIS also evaluated a No Project/No Action Alternative.

BUREAU OF RECLAMATION DECISION

The Bureau of Reclamation approves the **Miramar Reservoir Alternative**. As federal funds become available we may execute one or more cooperative agreements with the City of San Diego to provide up to 25% of the cost to construct components of the project up to our authorized funding ceiling.

ALTERNATIVES CONSIDERED IN THE FINAL EIS

The North City Project will expand the existing North City Water Reclamation Plant and construct an adjacent North City Pure Water Facility. Other project components include a new pump station and forcemain to deliver additional wastewater to the North City Water Reclamation Plant; a brine/centrate discharge pipeline; upgrades to the existing Metro Biosolids Center; and a new North City Renewable Energy Facility with a gas pipeline from the Miramar Landfill gas collection system. Two alternative purified water pipelines were considered: one to Miramar Reservoir and one to San Vicente Reservoir.

The Miramar Reservoir Alternative will construct the North City Pure Water Facility and convey purified water to Miramar Reservoir, and includes improvements to the existing Miramar Water Treatment Plant. The San Vicente Reservoir Alternative would also construct the North City Pure Water Facility, but include fewer treatment processes and would install a longer purified water pipeline to the much larger San Vicente Reservoir. The San Vicente Reservoir Alternative includes an additional pump station, the Mission Trails Booster Station, along the San Vicente Pure Water Pipeline. Improvements to the Miramar Treatment Plant would not be needed for the San Vicente Reservoir Alternative.

Under the No Project/No Action Alternative, the North City Project would not be implemented. The proposed North City Pure Water Facility and associated improvements at other treatment, pumping, and conveyance facilities would not be constructed.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Miramar Reservoir Alternative is considered the environmentally preferable alternative. Compared to the San Vicente Reservoir Alternative, the Miramar Reservoir Alternative will have less impact to biological resources, lower greenhouse gas emissions, less community disruption, and less electricity and gas consumption. The Miramar Reservoir Alternative also avoids significant impacts associated with air quality and aesthetics that would occur under the San Vicente Reservoir Alternative.

The No Project/No Action Alternative would avoid all project-related impacts, but would meet none of the project objectives. Beneficial effects, including creation of a local renewable energy source and replacement of existing imported supply with a new, local, drought-proof supply, would not occur.

BASIS FOR DECISION/FACTORS CONSIDERED

The environmental effects of the North City Project were evaluated in the final EIS, no. 20180075, published by the Environmental Protection Agency on May 4, 2018 (83 FR 19758). The EIS was combined with an environmental impact report (California State Clearinghouse no. 2016081016) prepared by the City of San Diego under the California Environmental Quality Act. Our decision to approve the Miramar Reservoir Alternative is based on the environmental impacts, economic and technical factors, our mission and statutory authority, and essential considerations of national policy.

Purpose and Need:

The City of San Diego relies on imported water supplies to meet about 85% of its potable water demand. The North City Project is needed to make the City of San Diego more water independent and to increase the reliability of its water supplies, while also reducing the volume of treated wastewater discharged to the Pacific Ocean through the Point Loma ocean outfall.

The Point Loma Wastewater Treatment Plant currently operates under a Clean Water Act section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit (no. CA0107409), which allows discharge to the Pacific Ocean without full secondary treatment. The North City Project will reduce flows to the Point Loma Wastewater Treatment Plant and will significantly reduce total suspended solids, facilitating Point Loma Wastewater Treatment Plant's ability to meet modified ocean discharge standards equivalent to full secondary treatment.

The North City Project's goals and objectives are to:

- Produce 30 MGD of local, high-quality purified water to serve the San Diego region.
- Reduce dependence on imported water.
- Increase use of recycled water.
- Reduce flows to the Point Loma Wastewater Treatment Plant and reduce total suspended solids discharged at the Point Loma ocean outfall.
- Exceed the target online dates for the first phase of the Pure Water Program agreed to in the 2014 Cooperative Agreement¹ and meet the revised Compliance Schedule for the Pure Water San Diego Potable Reuse Tasks, Phase 1, of San Diego Regional Water Quality Control Board Order no. R9-2017-0007.²

¹ Cooperative Agreement with Coastkeeper, Surfrider, Coastal Environmental Rights Foundation, and the San Diego Audubon Society supporting potable reuse of wastewater and secondary equivalency.

² Waste Discharge Requirement Order no. R9-2017-0007 by the San Diego Regional Water Quality Control Board and modified NPDES permit no. CA0107409 commit the City to implement the potable reuse program.

Economic, Technical, Statutory, and National Policy Considerations

The North City Project supports Department of the Interior priorities to modernize our infrastructure and sustainably develop our energy and natural resources. The Miramar Reservoir Alternative is more cost-effective than the San Vicente Reservoir Alternative. The purified water pipeline to Miramar Reservoir is shorter, and pumping costs are reduced substantially.

The original plan was to deliver the purified water to the much larger San Vicente Reservoir, providing more dilution of the purified water. This was driven by an earlier regulatory policy. The California State Water Resources Control Board has developed new regulations for surface water augmentation using recycled water. Under the new regulations, the Miramar Reservoir Alternative is viable and became the locally preferred alternative.

California Health and Safety Codes allow the State Water Resources Control Board to approve the North City Project after an engineering evaluation of the treatment technology. The City of San Diego completed a Title 22 Engineering Report in compliance with the new State regulations. The State Water Resources Control Board evaluated the proposed treatment technology and concluded that the project water will meet all applicable primary and secondary drinking water standards.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Congress authorized the San Diego Area Water Reclamation Program in 1992 to increase local water supplies. The North City Project will meet 15% of the potable water needs for the City of San Diego.

Authority

Federal assistance is authorized by the Reclamation Wastewater and Groundwater Study and Facilities Act of 1992 (Title XVI of Pub. L. 102-575, as amended). Section 1612 "San Diego Area Water Reclamation Program" directs the Secretary of the Interior, in cooperation with the City of San Diego, to participate in the planning, design, and construction of demonstration and permanent facilities to reclaim and reuse water in the San Diego metropolitan service area.

Title XVI Program

To date, the Title XVI program has obligated a total of \$489,433,000 for authorized projects in southern California that produced 354,306 acre-feet in fiscal year 2017. This total includes \$132,250,754 under the San Diego Area Water Reclamation Program, one of the original Title XVI authorities. A total of 22,307.6 acre-feet was beneficially re-used by infrastructure funded under the San Diego Area Water Reclamation Program in fiscal year 2017. The North City Project will add over 33,000 acre-feet per year.

The Bureau of Reclamation has an existing cooperative agreement with the City of San Diego that provides \$9 million of Title XVI funds for pre-construction activities associated with the North City Project, including engineering, design, permitting, and environmental impact analysis. We previously provided \$3,334,000 under an earlier cooperative agreement for the Indirect Potable Reuse/Reservoir Augmentation Demonstration Project, including a 1 MGD demonstration-scale advanced water treatment plant at the North City Water Reclamation Plant.

The San Diego Area Water Reclamation Program is approaching its funding cap of \$172,590,000.

Other Federal Actions Associated with the North City Project

The project includes a landfill gas pipeline within an existing 40-foot utility easement across federal land on Marine Corps Air Station (MCAS) Miramar and Miramar National Cemetery. The City of San Diego is requesting the United State Marine Corps to increase the easement to 50 feet across MCAS Miramar. The existing 40-foot utility easement will not be widened within the Miramar National Cemetery.

The Environmental Protection Agency is negotiating terms and conditions for a \$614 million Water Infrastructure Finance and Innovation Act loan to the City of San Diego for the North City Project. The City has also applied to the California State Water Resources Control Board for Clean Water State Revolving Fund³ loans for several project components.

The City has applied to the Army Corps of Engineers for a Clean Water Act section 404 permit to impact vernal pool wetlands, open trench across Tecolote Creek, and install a sub-aqueous pipeline along the bottom of Miramar Reservoir, and has applied to the San Diego Regional Water Quality Control Board for a Clean Water Act section 401 water quality certification and a Clean Water Act NPDES permit to discharge the purified water into Miramar Reservoir.

The Environmental Protection Agency, the United State Marine Corps, and the Veterans Administration each accepted NEPA cooperating agency status. The Environmental Protection Agency approved a Record of Decision on June 20, 2018.

Environmental Effects

Most environmental impacts can be mitigated to a less-than-significant level. The environmental benefits of the North City Project outweigh construction-phase nuisances, such as dust, noise, and traffic disruptions. The identified environmental effects of the Miramar Alternative are summarized below:

Impacts that Are Unavoidable

Impacts related to Noise, and Transportation, Circulation and Parking were found to be significant and unavoidable. These are temporary impacts during the two-year construction phase. Significant cumulative impacts were also acknowledged, due to other ongoing construction projects in the area.

Impacts that Can Be Mitigated to Below a Level of Significance

Changes or alterations have been required in, or incorporated into, the project which will mitigate, avoid, or substantially lessen to below a level of significance direct environmental effects related to: land use, air quality and odor, biological resources, health and safety/hazards, historical resources, paleontological resources, and public utilities.

Irreversible Environmental Effects

The predominant irreversible environmental changes identified by the EIS are: introduction of a new source of water at the Miramar Reservoir, reduction in discharge at the Point Loma ocean outfall, and commitment of land resources to develop the North City Pure Water Facility, North City Renewable Energy Facility, pump stations, landfill gas pipeline, pipelines, and improvements to existing facilities.

The North City Project will irreversibly alter these sites to water reclamation and conveyance uses for the foreseeable future. Once construction occurs, reversal of the land to its original condition is unlikely. The North City Pure Water Facility site is currently vacant and does not generate traffic or noise. Permanent changes will include traffic, noise, and increased human presence.

³ The Clean Water State Revolving Fund program is partially funded by a capitalization grant from the Environmental Protection Agency. Issuance of these funds is considered equivalent to a federal action.

Irreversible and Irretrievable Commitment of Resources

Irreversible commitments of resources, such as electricity, natural gas, potable water, and building materials, and incremental demands for construction materials, such as lumber, petrochemicals, fuel, gas, sand and gravel, petrochemicals, and other materials, will occur. Construction will incrementally reduce existing supplies of fuel oil, natural gas, and gasoline.

California Environmental Quality Act Findings

The San Diego City Council approved Resolution no. R-311671 on April 10, 2018. The resolution certified the environmental impact report under the California Environmental Quality Act, adopted findings and a Statement of Overriding Considerations, adopted a Mitigation Monitoring and Reporting Program, and approved the Miramar Reservoir Alternative. Notice of Determination was filed at the San Diego County Clerk and at the California State Clearinghouse in the Governor's Office of Planning and Research.

The San Diego City Council concluded that the benefits of the project outweigh the unavoidable significant environmental impacts:

- The North City Project will expand the City's potable water production capacity to replace imported water supplies and will meet projected water demands within the City's service area as outlined in the conceptual future water supply sources in the City's 2015 Urban Water Management Plan.
- The North City Project will reduce flows to the Point Loma Wastewater Treatment Plant, which will reduce total suspended solids discharged and recycle a valuable and limited resource that is currently discharged to the Pacific Ocean.
- The North City Project will allow San Diego to become more water independent and increase the reliability of water supplies. The City's water supply will become less vulnerable to impacts from shortages and less susceptible to price increases if the North City Project is implemented.
- By reducing flows to the Point Loma Wastewater Treatment Plant, the North City Project will contribute to the Point Loma Wastewater Treatment Plant's continued ability to meet modified treatment standards that would be the same as if the existing 240 MGD Point Loma Wastewater Treatment Plant were converted to secondary treatment standards by significantly reducing total suspended solids.
- The North City Project will increase the use of recycled water and further the goal as identified in the City's Climate Action plan for increased recycled water production.
- The Pure Water Program will create 1/3 of San Diego's drinking water supply.
- The Pure Water Program and North City Project offer a cost-effective investment for San Diego's water needs and will provide a reliable, sustainable water supply.
- The North City Project includes use of renewable energy sources to power water treatment facilities furthering the goals of the City's Climate Action Plan to achieve 100% renewable energy by 2035.
- The North City Project will contribute to the City's future prosperity and quality of life by securing and maintaining water supplies.

Cross-Cutting Federal Authorities:

Bureau of Reclamation staff concluded that the EIS adequately evaluated the reasonably foreseeable effects of the proposed action consistent with Reclamation policy for implementation of NEPA. We also considered the following environmental laws, regulations, and Executive Orders:

Clean Air Act

The San Diego air basin is designated nonattainment/moderate for 2008 8-hour ozone, maintenance for 1997 8-hour ozone, maintenance for ozone 1-hour, maintenance for carbon monoxide, and attainment for lead, NO₂, PM_{2.5} and PM₁₀. The *de minimis* thresholds at 40 CFR 93.153(b) will not be exceeded during construction or operation. No conformity determination is required. Permits from the San Diego Air Pollution Control District are required for several project components.

Clean Water Act

The City of San Diego made a commitment to begin implementing the Pure Water San Diego Program in their application to renew the Clean Water Act section 301(h) modified ocean discharge permit for the Point Loma Wastewater Treatment Plant (NPDES permit no. CA0107409). The Environmental Protection Agency approved the variance from secondary treatment requirements on August 4, 2017.

The City has applied to the Army Corps of Engineers for a Clean Water Act section 404 permit to impact vernal pool wetlands, open trench across Tecolote Creek and install a sub-aqueous pipeline along the bottom of Miramar Reservoir.

A Clean Water Act section 401 water quality certification was requested from the San Diego Regional Water Quality Control Board. The City has also applied to the San Diego Regional Water Quality Control Board for a Clean Water Act NPDES permit to discharge purified water into Miramar Reservoir.

The project will comply with the general construction stormwater NPDES permit and will implement a Stormwater Pollution Prevention Plan, required by California State Water Resources Control Board Adopted Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ.

Migratory Bird Treaty Act and Executive Order 13186

There will be no take of migratory bird species. Vegetation clearing will occur outside of the bird nesting season or pre-work nesting surveys will be completed to avoid take. Biological monitoring is required before construction activities during the nesting season.

Fish and Wildlife Coordination Act

Fish and Wildlife Coordination Act requirements are not triggered by the federal financial assistance.

Safe Drinking Water Act

The purified water will augment supplies at Miramar Reservoir and will be treated further at the Miramar treatment plant, consistent with the Surface Water Treatment Rule. The California State Water Resources Control Board adopted Division of Drinking Water Surface Water Augmentation Regulations SBDDW-16-02 by order no. 2018-0014, effective October 1, 2018. The North City Project complies with these regulations. No sole source aquifers are involved.

Coastal Barrier Islands Protection Act

The federal expenditure will not tend to encourage development or modification of coastal barriers. The project is not within any units of the Coastal Barrier Resources System. The Coastal Barrier Resource Act applies on the Atlantic, Gulf, and Great Lakes coasts. No system units are located along the Pacific coast.

Farmland Protection Policy Act

The project will not convert farmland to non-agricultural use. The landfill gas pipeline alignment avoids Unique Farmland at the west end of MCAS Miramar. The alignment crosses locally important farmland along Miramar Road where the pipeline will be within the paved roadway. No other Prime, Unique, or Statewide farmland is within or near the project. Except for undeveloped land on MCAS Miramar, nearly the entire the project is located within land already in urban development, mapped as developed by the California Farmland and Monitoring Program, and identified as “urbanized area” by the Census Bureau.

Magnuson-Stevens Fishery Conservation and Management Act

The North City Project has no adverse effect to Essential Fish Habitat in the Pacific Ocean.

Coastal Zone Management Act

The North City Project is outside the coastal zone, except for one overflow pipe from the Morena Pump Station that extends 200 feet into the coastal zone within the City of San Diego local coastal jurisdiction and California Coastal Commission appealable jurisdiction. The project was determined exempt from City of San Diego coastal development permit requirements. No appeal was filed.

Endangered Species Act

Implementation of the North City Project will not jeopardize the survival and recovery of any federally-listed species or result in the destruction or adverse modification of any critical habitat areas. The North City Pure Water Facility site contains vernal pool habitat. Protocol surveys did not identify any federally-listed species at the site. Installation of the landfill gas pipeline across MCAS Miramar will occur within 100 feet of vernal pools, and affect sage scrub habitat used by threatened coastal California gnatcatchers. Habitat restoration proposed at the SANDER site is within a designated critical habitat area for endangered San Diego fairy shrimp.

National Historic Preservation Act

No adverse effect to any resource listed in or eligible for listing in the National Register of Historic Places was identified. The purified water pipeline will be installed under Evans Pond on the Scripps-Meanley Stables and House Complex, listed in the San Diego Register of Historic Resources. There will be no adverse effect to the historic property. The City of San Diego is a certified local government under the National Historic Preservation Act.

Archaeological and Historic Preservation Act

No significant scientific, prehistorical, historical, or archaeological data will be irrevocably lost or destroyed by the project. Archaeological monitoring and contingencies for discovery are included in construction specifications.

Archaeological Resources Protection Act

This law is applicable on federal and Indian lands. The North City Project will be covered by existing MCAS Miramar requirements where the project is on federal lands. No archaeological resources are known within the utility right-of-way across MCAS Miramar.

Airports

The landfill gas pipeline will cross MCAS Miramar. Most project components are within the Airport Influence Area for MCAS Miramar. The Morena pump station is located within the Airport Influence Area for San Diego International Airport. The Morena pipelines are also within the Airport Influence Area for Montgomery Field. No impacts related to airport hazards will occur.

Executive Order 12898 - Environmental Justice in Minority Populations and Low-Income Populations

No environmental justice communities were identified. Neither adverse short-term construction effects nor adverse operational effects will be borne disproportionately by minority or low-income populations.

Executive Order 13112 – Invasive Species

The project may introduce invasive species into natural open space areas within temporary construction areas where pipelines will cross native habitats, or where facilities are constructed adjacent to native habitats. Impacts will be adverse but mitigated.

Executive Order 11990 – Protection of Wetlands; as amended by Executive Order 12608

Construction of the North City Pure Water Facility will result in direct permanent impacts to 0.38 acre of vernal pool wetlands. Impacts will be mitigated by restoring 0.75 acre of vernal pools and adjacent upland habitats. The subaqueous discharge pipeline along the bottom of Miramar Reservoir will not result in a net loss of aquatic resources function or services and will not reduce habitat for wildlife.

Executive Order 11988 - Floodplain Management

Several project pipelines will cross areas located within a 100-year floodplain or floodway. No aboveground facilities will be installed within a flood zone. The North City Project will not place structures that would impede or redirect flood flows. There is no practicable alternative to locating the pipelines in the floodplain. The action conforms to local floodplain protection standards.

Indian Trust Assets

No known Indian trust assets, either land or water rights, are associated with the action.

Federal Wildland Fire Management Policy

Various components are adjacent to or traverse open space areas with flammable materials such as brush, grass, or trees. The project will implement a Construction Fire Prevention/ Protection Plan

National Fire Plan

A Construction Fire Prevention/Protection Plan will be developed and implemented.

Wild and Scenic Rivers

The project does not involve any river designated in the National Wild and Scenic Rivers System or any river listed in the National River Inventory.

Agency Consultation and Coordination*U.S. Fish and Wildlife Service*

On September 6, 2018, the Fish and Wildlife Service concurred that the landfill gas pipeline is not likely to adversely affect threatened coastal California gnatcatcher on MCAS Miramar, and determined that the North City Project is consistent with the City of San Diego Vernal Pool Habitat Conservation Plan and the City of San Diego Subarea Plan of the Multiple Species Conservation Program.

California State Historic Preservation Officer

On March 27, 2018, the California State Historic Preservation Officer concurred with our finding of “no adverse effect to historic properties” for the Miramar Alternative.

Veterans Administration, National Cemetery Administration

The City of San Diego and the Miramar National Cemetery have established an open relationship and created a platform for future coordination meetings for the North City Project. The City is requesting night time construction to minimize disruptions to cemetery operations.

Federal Aviation Authority (FAA)

The City of San Diego filed FAA Form 7460-1, *Notice of Proposed Construction or Alteration* for the Pure Water Facility, the Water Reclamation Plant expansion, and the Metro Biosolids Center improvements. The FAA made a *Determination of No Hazard to Air Navigation* for the Pure Water Facility and the Water Reclamation Plant expansion. The FAA determination is pending on the Metro Biosolids Center improvements. The City has not yet submitted notice for the North City Renewable Energy Facility.

California Coastal Commission

The California Coastal Commission federal consistency coordinator determined that the project will not affect coastal resources and that federal consistency review is not required.

National Marine Fisheries Service

No components of the project are located within the Pacific Ocean. Consultation under the Magnuson-Stevens Act is not required.

Natural Resources Conservation Service

No farmland will be converted to non-agricultural uses. Farmland Protection Policy Act consultation is not required.

ENVIRONMENTAL COMMITMENTS AND MONITORING

All practicable means to avoid or minimize environmental harm from the Miramar Reservoir Alternative have been adopted. The San Diego City Council adopted all feasible mitigation measures to reduce environmental impacts and approved a Mitigation Monitoring and Reporting Program. The mitigation measures adopted by the San Diego City Council under the California Environmental Quality Act are considered ameliorative design elements per Department of the Interior NEPA regulations at 43 CFR 46.130(b). No additional environmental commitments are required by the Bureau of Reclamation.

COMMENTS RECEIVED ON THE FINAL EIS

No comments on the final EIS were received.