

# RECLAMATION

*Managing Water in the West*

**National Environmental Policy Act  
FINDING OF NO SIGNIFICANT IMPACT**

No. 10-SCAO-005-FONSI

Irvine Basin Groundwater and Surface Water Improvement Projects  
(San Diego Creek Watershed Natural Treatment System)  
Orange County, California

Reclamation Wastewater and Groundwater Study and Facilities Act of 1992  
(Title XVI of Public Law 102-575)

Based on our review and evaluation of an Environmental Impact Report prepared under the California Environmental Quality Act and other supporting documents, we have determined that the proposed action to construct water treatment wetlands within the San Diego Creek Watershed in Orange County, California, is not a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969. Accordingly, preparation of an environmental impact statement on the proposed action is not required.

Recommended: \_\_\_\_\_ /s/ \_\_\_\_\_ Date: 12/21/2009  
Doug McPherson, Environmental Protection Specialist

Reviewed By: \_\_\_\_\_ /s/ \_\_\_\_\_ Date: 12/21/2009  
Dennis Wolfe, Area Engineer

Approved: \_\_\_\_\_ /s/ \_\_\_\_\_ Date: 12/22/2009  
William J. Steele, Area Manager



**U.S. Department of the Interior  
Bureau of Reclamation  
Lower Colorado Region  
Southern California Area Office  
Temecula, California**

## **BACKGROUND**

The Irvine Ranch Water District (District) is seeking Federal funds through the Bureau of Reclamation (Reclamation) for the San Diego Creek Natural Treatment System (NTS). The NTS is a component of the Irvine Groundwater and Surface Water Improvement Program, authorized under section 1636 of the Reclamation Wastewater and Groundwater Study and Facilities Act of 1992 (Title XVI of Public Law 102-575), as amended by the Irvine Basin Surface and Groundwater Improvement Act of 2004 (P.L. 108-233).

The San Diego Creek Watershed located in Orange County, California is 118 square-miles in size and includes all of the cities of Irvine and Tustin, and portions of the cities of Lake Forest, Laguna Hills, Newport Beach, Orange, Santa Ana and unincorporated Orange County. San Diego Creek flows into Upper Newport Bay and drains almost 80 percent of the total area tributary to Newport Bay.

Water quality in the San Diego Creek and Newport Bay has been affected by excessive sediments and nutrient levels, primarily nitrate from fertilizers, elevated levels of pesticides, fecal coliform bacteria, selenium from natural sources and heavy metals. Because of these water quality problems, San Diego Creek and Newport Bay have been designated as water quality limited by the State of California.

The NTS Plan was developed by the District in cooperation with Orange County and the cities of Irvine, Lake Forest, Newport Beach, Orange, Santa Ana and Tustin to address regional water quality treatment needs in San Diego Creek and its tributaries, and to complement the County and Cities-led watershed activities for compliance with Total Maximum Daily Load (TMDL) targets. Secondary benefits include habitat creation and enhancement, aesthetics, recreation and education.

## **PURPOSE AND NEED**

The comprehensive Irvine Basin Surface and Groundwater Improvement Program is designed to improve the impaired quality of surface and groundwater in the Irvine Sub-basin. The NTS Plan is one of the overall project components which will provide regional, watershed-wide benefits by treating surface water in the form of urban runoff throughout the San Diego Creek Watershed.

In 2000, the US EPA identified the San Diego Creek Watershed as an "impaired water body" pursuant to Section 303(d) of the federal Clean Water Act. In addition, the Santa Ana Regional Water Quality Control Board (RWQCB) identified the San Diego Creek and Upper Newport Bay as impaired with respect to sediments, nutrients, pathogens and unknown toxicity and adopted Total Maximum Daily Loads (TMDLs) for designated pollutants.

In response, IRWD, in cooperation with the County of Orange and cities within the San Diego Creek Watershed voluntarily developed a NTS Plan to contribute to the overall regional water quality treatment solutions for the San Diego Creek Watershed. The primary purpose of the NTS is to cost-effectively improve water quality via the use of regional treatment systems that utilize natural treatment processes. The facilities envisioned in the NTS Plan are constructed water quality treatment wetlands similar to the existing District facilities at the San Joaquin Marsh. The goals of the NTS Plan are to improve water quality in San Diego Creek and its tributaries and Upper Newport Bay and to complement the County and city-led watershed activities for compliance with TMDL requirements.

## **PROJECT DESCRIPTION**

The NTS is a watershed-wide system of 31 manmade wetlands placed in strategic locations throughout the San Diego Creek Watershed. Dry weather urban runoff, as well as flows from smaller rainstorms, will be diverted into these wetlands where contaminant levels will be reduced before the water reaches the Upper Newport Bay. The treatment process takes place naturally using natural ecosystems such as beneficial bacteria in the pond soils along with plants such as bulrush and cattails to remove nitrogen from the runoff. Sediment, phosphorous and other pollutants are also reduced in the settling basins within the creek channel.

Extensive scientific review and assessment of the watershed determined the most environmentally suitable locations for these smaller water quality wetlands and the number of sites needed to achieve the maximum cleanup potential. Models indicate that the NTS should remove 126,000 pounds of nitrogen and 21,000 pounds of phosphorous annually, reduce fecal coliform levels by 26 percent, and reduce selenium levels by 20 to 50 percent annually.

## **ENVIRONMENTAL ANALYSIS PROCESS**

A Draft Environmental Impact Report (EIR), California State Clearinghouse No. 2002021120, was prepared by the District under the California Environmental Quality Act (CEQA) and circulated for public comment from March 12 through May 30, 2003 with a public hearing on April 8, 2003. After analysis and modifications to reflect public input, a Revised EIR was circulated from January 20 through March 29, 2004. The District certified a Final EIR on April 26, 2004, and adopted a Mitigation Monitoring Program.

NEPA requires review of a proposed Federal action to determine its impact on the human environment. Council on Environmental Quality (CEQ) regulations direct Federal agencies to cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements (40 CFR 1506.2). Department of Interior regulations for implementing NEPA encourage tiering of environmental documents and provide for adoption of existing environmental documents if, upon evaluation by a responsible official, it is found to comply with relevant provisions of the CEQ regulations.

In accordance with CEQ regulations for implementing the procedural requirements of NEPA, Reclamation staff reviewed the EIR and supporting information and concluded that the CEQA documents adequately identify and disclose the reasonably foreseeable environmental effects of the proposed action. We adopt these documents in accordance with CEQ regulations (40 CFR 1506.3) and Department of the Interior regulations for implementing NEPA (43 CFR 46.320(a)).

Reclamation also prepared an Environmental Assessment (EA), based on the information in the CEQA documents. A notice of availability was published in the Orange County Register on August 8, 2009. The EA was filed with the California State Clearinghouse (SCH No. 2009084004) on August 18, 2009, and copies were mailed to individuals, agencies and organizations that commented during the CEQA process. Comments on the EA were received from the City of Lake Forest, the Metropolitan Water District of Southern California, the California Department of Transportation and the California State Clearinghouse. None of the comments raised any environmental concerns.

## **SUMMARY OF CEQA FINDINGS**

The NTS Plan could impact biological resources, water quality, air quality, land use, landform modification and aesthetics, human health and public safety, and cultural resources. Mitigation measures were imposed to reduce potential impacts to below significance. No environmental effects would remain significant and unavoidable after implementation of project design features, standard conditions, and mitigation measures. Effects to flood control, noise, traffic, population and housing, geology and soils, paleontology, mineral resources, and public services and utilities were found to be less than significant.

## **OTHER FEDERAL REQUIREMENTS**

### Endangered Species Act

Approximately 9.17 acres of moderate to high quality habitat may be affected. Informal consultation with FWS biologists resulted in a finding that the action is not likely to adversely affect coastal California gnatcatchers and will have no effect on other listed species.

### Clean Water Act (CWA)

Prior to initiating any grading or construction permits, a National Pollutant Discharge Elimination System (NPDES) statewide General Construction Activity Storm water permit will be obtained. CWA section 404 fill permits and section 401 water quality certifications have been or will be approved before construction.

### Wetlands

Plan implementation will create a net increase of 56.7 acres of freshwater wetland habitat. Most NTS sites are not currently wetland areas. Less than 9 acres of degraded wetland habitat will be affected.

### Floodplain

Some proposed wetlands are within Federal Emergency Management Agency floodplain zone A. The action is substantially compliant with Executive Order No. 11988. No practicable alternatives to avoid the floodplain were identified.

### Clean Air Act

This project will have no significant impacts on air quality. Construction emissions will not exceed Clean Air Act conformity applicability *de minimis* thresholds at 40 CFR 93.153(b).

### Cultural Resources

All evaluations and record searches indicated no known cultural resources located within any of the 31 NTS facility sites and no impacts to known cultural resources are expected from the project.

### Farmlands

Twelve NTS sites are located within areas designated as prime or unique farmland. The amount of land is not substantial in the context of the 6,995 acres of prime and unique farmland in the watershed.

### Environmental Justice

The project is not located in a neighborhood that suffers from known exposure to adverse human health or other environmental conditions. The project has no potential to adversely impact any low income or ethnic communities in the long term.

### Indian Trust Assets

No known Indian Trust Assets will be affected.

### Wild and Scenic Rivers

San Diego Creek is not a designated Wild and Scenic River.

### Coastal Zone Management Act (CZMA)

The project is outside of the California Coastal Zone. No CZMA consistency certification is required.

### Sole source Aquifer

The project site is not located over a sole source aquifer.

## **AGENCY CONSULTATION AND COORDINATION**

### Fish and Wildlife Service

On July 27, 2009 the Fish and Wildlife Service concurred with Reclamation's finding that the action is "not likely to adversely affect" federally listed species.

### California State Historic Preservation Officer (SHPO)

On July 26, 2005, the California SHPO concurred with Reclamation's finding of "no historic properties affected by the proposed action.

### Army Corps of Engineers

Corps of Engineers staff at the Los Angeles District was contacted to verify the status of Clean Water Act section 404 fill permits.

### Regional Water Quality Control Board, Santa Ana Region

Regional Water Quality Control Board staff was contacted to verify the status of Clean Water Act section 401 water quality certifications.

### Natural Resources Conservation Service (NRCS)

Form AD-1006 was submitted to the NRCS on August 3, 2009, in compliance with Farmland Protection Policy Act requirements.

### Environmental Protection Agency (EPA)

The EPA may award \$992,800 for IRWD to design and develop NTS site 62. EPA agreed to be a NEPA cooperating agency on May 26, 2009. On November 30, 2009 the EPA issued a notice of availability of the EA and their FONSI.

## **ATTACHMENTS**

- 1) Comment Letters