

RECLAMATION

Managing Water in the West

National Environmental Policy Act
FINDING OF NO SIGNIFICANT IMPACT

No. 09-SCAO-020-FONSI

Vail Lake Transmission Main and Pump Station
Riverside County, California

Cooperative Agreement No. R09AC35R01 provides Federal funds for the Rancho California Water District (RCWD) to construct the Vail Lake Water Storage Pipeline and Pump Station Project, a component of the Rancho California Water District Demineralization and Non-Potable Water Conversion Project. As part of the project, Vail Lake will be connected to Rancho California Water District's imported water system via a transmission main and pump station. The project is located in Riverside County, California.

The project will install 14,000 feet of 48-inch diameter pipeline from the existing Valle de Los Caballos (VDC) groundwater recharge basins to Vail Lake, a pump station and associated features. The project will enable up to eighty (80) cubic feet per second (cfs) of raw water purchased by RCWD from the Metropolitan Water District of Southern California (MWDSC) to be stored in Vail Lake, improving RCWD's water supply reliability and reducing its imported water costs. The Vail Lake Transmission Main would be a two-way flow pipeline conveyance facility, both to store raw water in Vail Lake and to distribute the stored raw water from Vail Lake to RCWD's groundwater recharge basins and raw water conveyance facilities.

Based on our review of the Mitigated Negative Declaration (MND) (dated October 2007) and Addendum (dated March 2009) for the Vail Lake Transmission Main and Pump Station Project certified pursuant to the California Environmental Quality Act (CEQA), we have determined that the proposed grant agreement does not constitute 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 (NEPA). Accordingly, preparation of an environmental impact statement on the proposed action is not required.

Recommended: _____/s/_____ Date: 10/8/09
Delmar D. Holz, Holz Consulting, LLC

Reviewed By: _____/s/_____ Date: 10/9/09
Dennis Wolfe, Area Engineer

Approved: _____/s/_____ Date: 10/9/09
William J. Steele, Area Manager



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

Cooperative Agreement No. R09AC35R01 provides American Recovery and Reinvestment Act (ARRA) funding from the Bureau of Reclamation (Reclamation) for Rancho California Water District (RCWD) to construct the Vail Lake Transmission Main and Pump Station Project in Riverside County, California. Total project cost is \$26,000,000, including Reclamation funding of approximately \$6,500,000.

Identified environmental effects were evaluated in a Mitigated Negative Declaration (MND) (dated October 2007) and Addendum (dated March 2009) for the Vail Lake Transmission Main and Pump Station Project (State Clearinghouse No. 2007081138), certified by RCWD pursuant to California Environmental Quality Act. The MND and Addendum concluded that the proposed project would not have a significant effect on the environment. Mitigation measures were made a condition of approval.

PURPOSE AND NEED

The proposed project would enable raw water, up to 80 cubic feet per second (cfs), purchased by RCWD from the Metropolitan Water District (MWDSC) of Southern California, to be stored in Vail Lake. This would improve the RCWD's water supply reliability and reduce its imported water costs. The Vail Lake Transmission Main would be a two-way flow pipeline conveyance facility, both to store raw water in Vail Lake and then to distribute the stored raw water from Vail Lake to RCWD's groundwater recharge basins and raw water conveyance facilities. In addition, the proposed project will include facilities and processes to prevent possible Quagga mussel infestation of Vail Lake.

AUTHORITY

Section 9104 of Public Law (PL) 111-11, the Omnibus Public Land Management Act of 2009, amended the Reclamation Wastewater and Groundwater Study and Facilities Act (Title XVI of PL 102-575) by adding Section 1649 which provides that the Secretary of the Interior, in cooperation with the Rancho California Water District, California, may participate in the design, planning, and construction of permanent facilities for water recycling, demineralization, and desalination, and distribution of non-potable water supplies in Southern Riverside County, California.

PROJECT DESCRIPTION

RCWD is located in southwestern Riverside County and includes the City of Temecula, portions of the City of Murrieta, and unincorporated areas of the county. RCWD's current service area covers 99,000 acres and it includes 878 miles of water mains, 35 storage reservoirs, one surface reservoir (Vail Lake), 53 groundwater wells, and 36,759 service connections. Approximately 109,000 people are served by RCWD. Like the rest of southern California, RCWD is facing increasing water demands, variability in water supplies, dependency on imported water, and water quality challenges. Some imported water sources that supply water through MWDSC are over-allocated and water supplies are limited during dry weather years and droughts. During wet weather years, surplus water is available from MWDSC for both surface water and ground water storage through various replenishment programs established by MWDSC. In addition, MWDSC's rates are steadily increasing due to the implementation of its Regional Integrated Resources Plan (RIRP) and multi-billion dollar Capital Improvement Program. In order to address these issues, RCWD took a long-term perspective and developed its own water facility master plans and RIRP to evaluate water supply and demand management alternatives.

Vail Lake was created in 1948 through the construction of Vail Dam on Temecula Creek to store local runoff. Vail Dam was constructed under Permit No. 7032 from the State Water Resources Control Board which provides for the appropriation of up to 40,000 acre-feet (AF) of water from Temecula Creek for storage within Vail Lake. The amount of local runoff reaching the lake can vary widely depending on hydrological conditions. From 1962 to 2000, inflow has varied from 218 AF to 29,570 AF, with an average of 5,150 AF. The average available storage capacity between those years was 30,900 AF. RCWD's surface water storage permit in Vail Lake allows up to 40,000 AF, with a surface area of 1,000 acres, to be stored from November 1 to April 30. During these months, RCWD is permitted to release available water from Vail Lake to the VDC recharge basins for groundwater recharge. From May through October, existing State permits prohibit storage of local runoff and requires the inflow to pass through Vail Dam to Temecula Creek.

The construction of Vail Dam included outlet valving and piping for the release of water. Included with the Vail Dam outlet piping was a 21-inch diameter pipeline in Pauba Canyon that conveyed water by gravity from just downstream of Vail Dam to the spreading basins (VDC groundwater recharge basins) located at the mouth of the canyon. Portions of the 21-inch diameter pipeline were destroyed when Vail Dam spilled water in 1980 and 1993.

In 1998, RCWD initiated its artificial groundwater recharge program, utilizing raw water from MWDSC. The raw water conveyance system currently ends at the VDC groundwater recharge basins. Upon completion of the Vail Lake Transmission Main and Pump Station, surplus raw water from MWDSC would be stored in the Vail Lake until released to the VDC groundwater recharge basins. The planned storage of this water in Vail Lake for at least one year would allow RCWD to benefit from MWDSC's lower replenishment water rate. Raw water purchased from MWDSC is a blend of State Water Project and Colorado River Aqueduct water, stored in either Diamond Valley Lake or Lake Skinner.

A description of the proposed facilities to be constructed follows:

- Approximately 14,000 feet of a buried 48-inch diameter cement mortar-lined and coated steel pipeline and appurtenances extending easterly through Pauba Canyon within an existing dirt road, from the VDC groundwater recharge basins to the downstream face of Vail Dam.
- Construction of an emergency discharge outlet at Vail Dam. This 48 inch diameter, 28 foot long partially buried pipeline (18 feet would be above grade) would allow for a controlled release of water from Vail Lake in the event of structural damage to the dam from an earthquake or threat of overflow from excessive rain. The emergency discharge pipeline would be built in the same construction action (e.g., the area of disturbance would not be disturbed at two different times) as the pipeline within Pauba Canyon and within the same construction limits.
- Installation of a stream discharge turnout from the 48-inch diameter pipeline within Pauba Canyon located upstream of the existing VDC groundwater recharge basins. The turnout location would allow release of water (up to 40 cfs) within Temecula Creek to maximize recharge to the groundwater basin and to provide supplemental water habitat enhancement as part of the post-construction revegetation activities.
- An 8 to 80 cfs pump station located in the easterly portion of an existing recharge basin (the proposed site would be within an existing recharge basin that is not used for recharge and is currently the site of a radio-controlled airplane runway operation). The Vail Lake Pump Station would consist of four, 14,000 gallons per minute capacity variable frequency drive pumps at 500 horsepower for a maximum design capacity of 80 cfs. The Vail Lake Pump Station would include a building with HVAC facilities for the electrical equipment associated with the pump station.
- Installation of a turbine generator within a building that will be an extension of the proposed pump station electrical equipment building located on the proposed pump station pad. This turbine would recover power when releases are made from Vail Lake. Up to 405 kilowatts of energy could be produced for use on site or sale to the electrical grid.
- A new concrete vault flow meter facility and minor pipeline modifications to the existing Vail Dam discharge piping at the base of Vail Lake Dam. The meter facility would house two flow meters. The first flow meter would be a new 48-inch diameter flow meter for the proposed 48-inch diameter Vail Transmission Main. The second flow meter would be a replacement for the existing 24-inch diameter flow meter on the bottom outlet for the Vail Dam discharge piping. Included in this work would be removal of the existing 24-inch diameter flow meter and concrete vault, minor modifications to the existing 24-inch diameter Vail Dam discharge piping and associated electrical facilities for the flow meters and vault structure.
- Twelve self-cleaning filters to screen Quagga mussels, located to the west of the proposed pump station, near the VDC recharge basins. The filters, like the pump station, would be located within an existing unused recharge basin. The filter assembly would have a footprint of approximately 200 feet by 75 feet. Raw water from MWDSC would be conveyed through the filters prior to being pumped to Vail Lake. Material screened by the filters would be automatically washed off the screens in regular intervals; this backwash would be sent to the recharge ponds. It is anticipated that any Quagga mussels would be damaged in the backwash process. After deposition in the recharge ponds Quagga mussels would be subjected to desiccation and mortality.

- Dechlorination facilities, including a 10,000 gallon chemical storage tank and chemical feed system located immediately north of the proposed pump station and within the pump station pad. Raw water received from MWDSC may have 0.5 mg/L of chlorine residual (the chlorine is a method of controlling Quagga mussels), this water must be dechlorinated in order to protect the aquatic resources within Vail Lake. Dechlorination facilities would only be in operation when water is going to be pumped to Vail Lake (up to six months of the year).

ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENT

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 has reviewed the adopted the MND and Addendum and supporting information and concluded that the document adequately identifies and discloses the reasonably foreseeable environmental effects of the proposed action. We adopt these documents as our Environmental Assessment in accordance with CEQ regulations (40 CFR 1506.3) and Department of the Interior regulations for implementing NEPA (43 CFR 46.320(a)).

FINDINGS

Water Resources

The project would allow RCWD to take surplus raw water from the MWDSC and store it in Vail Lake for later groundwater recharge. Surplus water is typically lower cost than other supplies from MWDSC. The ability to store surplus water will allow RCWD to benefit from reduced MWDSC water rates. In addition, this surplus water will improve RCWD's water supply reliability.

Land Use

The project area is in an unincorporated part of Riverside County. The Vail Lake and Pauba Canyon area lies within an area designated as Estate 2-5 acres in Riverside County's Southwest Area Plan. There would be no conflict with an established community and no conflict with any land use plan, policy, or regulation.

Indian Trust Assets

The proposed project will not affect tribal water rights or other Indian Trust Assets.

Socioeconomic Resources

Adverse socioeconomic impacts are not expected. The proposed project allows RCWD to store less expensive "replenishment water" in Vail Lake and then to use this water for artificial recharge during times of reduced supply or drought. This will benefit RCWD customers through lower water supply costs. The proposed project does not increase the amount of water available to RCWD from MWDSC nor would it increase the amount of groundwater recharge. The project does not provide additional infrastructure to deliver water to customers. Hence, the project would not induce population growth. No effects to public health and safety were identified. Economic or social effects are not intended by themselves to require preparation of an EIS (40 CFR 1508.14).

Environmental Justice

The proposed project would be constructed in a canyon to which the public has no access. The nearest residence is approximately 2,000 feet from the project site. The proposed action will not disproportionately impact economically disadvantaged or minority populations. No impacts relevant to Environmental Justice are anticipated.

Endangered Species Act

The proposed project is located within designated critical habitats for Quino checkerspot butterfly (*Euphydryas editha quino*) and coastal California gnatcatcher (*Polioptila californica californica*). Nevin's barberry (*Berberis nevinii*) was observed in the project area. Arroyo toad (*Bufo californicus*), and Stephens' kangaroo rat (*Dipodomys stephensi*) have a moderate or higher potential to occur on site. Marginally suitable habitat for slender-horned spineflower (*Dodecahema leptoceras*) occurs on the site.

The proposed action may affect Federally-listed species or designated critical habitat, but is authorized under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) managed by the Western Riverside County Regional Conservation Authority (RCA). RCWD has applied for and obtained status as a Participating Special Entity of the MSHCP. RCWD will perform all required surveys, reports, and other documentation to the satisfaction of the RCA before receiving a Take Authorization. RCWD will comply with any conditions of the Take Authorization stipulated by RCA. All federally-listed threatened or endangered species with the potential to occur on site are covered under the MSHCP.

Cultural Resources

Four archaeological resources are recorded within one-half mile of the project area, but no archeological resources are within the Area of Potential Effect (APE). Two historical structures, over 50 years old were identified during preparation of the MND. These two structures, Vail Lake Dam, and a remnant concrete pipe were evaluated using California Register criteria and were not recommended for inclusion. No direct impacts to cultural resources are anticipated. However, because potential impacts to cultural resources may result from the inadvertent discovery of a cultural resource during trenching operations, RCWD has developed Mitigation Measure CR-1 (see Referenced MND). This mitigation measure will avoid potential impacts to cultural resources that could be discovered during construction.

Wetlands and Floodplain

The project could adversely affect riparian scrub habitat, including areas subject to jurisdiction of the Army Corps of Engineers (Corps), through vegetation removal and construction activities. There are 4.06 acres of potential Corps jurisdiction within the study area, which includes wetlands (1.12 acres) and non-wetland (2.94 acres) waters of the US. RCWD has applied for a Nationwide Permit from the Corps and will comply with all measures stipulated in the permit. Compliance with Corps permit terms and Mitigation Measures BR-1, BR-6, and BR-7, identified by RCWD in the MND, will minimize impacts to federally protected wetlands.

Project facilities would be located within and adjacent to the 100-year flood hazard area. The pump station, hydroelectric facilities, filters, and dechlorination facilities would be built on a pad that would be an extension of the existing recharge basin berms. Flood flows would not be impeded by the new facilities. Due to the nature of the project (transmission and storage of surplus water) and the topography of the project site, no practicable alternatives were identified to relocate project facilities outside of the floodplain. Construction of project facilities in the floodplain is not expected to result in an appreciable increase in flood velocity or flood elevation. Nor would construction of project facilities facilitate urban development in the floodplain.

Clean Water Act

RCWD applied to the Corps for a Nationwide permit (NWP 12) under section 404 of the Clean Water Act, Base No. SPL-2008-00474-CLD. Section 401 Water Quality Certification No. 07C-099 was approved by the San Diego Regional Water Quality Control Board on February 2, 2009 and amended May 18, 2009. Project construction will comply with dredge and fill and discharge conditions as required in the applicable section 404 permit and section 401 certification.

Clean Air Act

Estimated emissions for pipeline construction are below South Coast Air Quality Management District significance thresholds. Emissions will not exceed Clean Air Act conformity applicability *de minimis* thresholds at 40 CFR 93.153(b) and will not be regionally significant.

Prime and Unique Agriculture

The California Farmland Mapping and Monitoring Program has not designated any Prime or Unique farmland at the project site. The proposed project would extend through an area where there are no agricultural uses. The proposed project would not convert land to a non-agricultural use.

Wild and Scenic Rivers

Temecula Creek is not a designated Wild and Scenic River.

Coastal Zone

The proposed project area is outside the California Coastal Zone boundary.

Cumulative Effects

The 2007 MND evaluated cumulative impacts of current and foreseeable future facilities (as contained in the RCWD Water Facilities Master Plan). Due to the isolated location of the project site, no cumulatively considerable construction impacts are anticipated. Cumulative operational impacts of foreseeable projects would result in improved water reliability for RCWD customers. Overall, no cumulatively considerable adverse impacts were identified.

AGENCY CONSULTATION AND COORDINATION

Fish and Wildlife Service

RCWD contacted the Carlsbad US Fish and Wildlife Office during preparation of the MND. Fish and Wildlife staff indicated that RCWD participation in the MSHCP resolves all ESA obligations. Reclamation will request written concurrence.

California Native American Heritage Commission (NAHC)

Rancho California Water District contacted the Native American Heritage Commission (NAHC) for a list of Native Americans to contact regarding the proposed project. No traditional cultural properties or sacred sites were identified by the NAHC. The Cultural Resources Committee of the Pachanga Indian Reservation and the Pachanga Band of Luiseno Indians were provided via certified mail a copy of the Notice of Intent to Adopt a Mitigated Negative Declaration, the Initial Study/Draft Mitigated Negative Declaration/Draft Mitigation Monitoring Program, and a CD-ROM containing electronic copies of submitted documents including Appendices. No project specific concerns were reported.

California State Historic Preservation Officer (SHPO)

We conclude that there will be no effect to properties eligible for listing in the National Register of Historic Places. Reclamation will request SHPO concurrence in the no effect conclusion.

California Department of Conservation

The Farmland Mapping and Monitoring Program map entitled "Riverside County Important Farmland 2006" (Riverside County West, published October 2008) was consulted to determine if the project could affect Prime or Unique farmland.

ENVIRONMENTAL COMMITMENTS

Cultural Resources

1. Project construction will not begin until consultation with the California SHPO has been completed in accordance with section 106 of the National Historic Preservation Act.
2. Should cultural resources be discovered during project construction, all ground disturbing activities in the area of the archeological resource will be halted or redirected and a representative from the Pechanga Tribe and the Reclamation Regional Archeologist Office will be contacted. Construction will not resume in the area of the discovery until all mitigative measures developed in consultation with the State Historic Preservation Officer have been completed.

References:

Vail Lake Transmission Main and Pump Station Addendum to the Mitigated Negative Declaration, prepared by the Rancho California Water District, March 2009.

Vail Lake Transmission Main and Pump Station Initial Study and Mitigated Negative Declaration (Including Appendices), prepared by the Rancho California Water District, October 2007. State Clearinghouse Number 2007081138.