

# RECLAMATION

*Managing Water in the West*

## FINDING OF NO SIGNIFICANT IMPACT

# Semitropic Water Storage District Pond-Poso Spreading and Recovery Facility

FONSI-09-134


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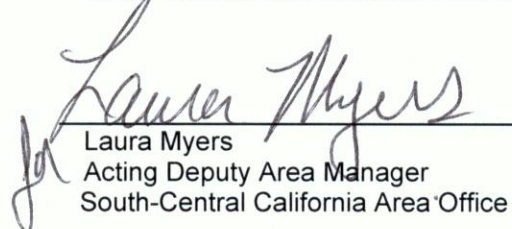
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# Finding of No Significant Impact

## Semitropic Water Storage District Spreading and Recovery Facility

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the U.S. Bureau of Reclamation (Reclamation), has determined that the award of a American Recovery and Reinvestment Act of 2009 grant to assist with funding the construction of the Pond-Poso Spreading and Recovery Facility is not a major federal action that would significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact is supported by Reclamation's Environmental Assessment (EA) Number EA-09-134, *Semitropic Water Storage District Spreading and Recovery Facility*, and is hereby incorporated by reference. Reclamation posted the draft EA/FONSI on Reclamation's website. The public review period began January 21, 2010 and ended February 19, 2010. Reclamation did not receive any comments during the review period.

### Background

The American Recovery and Reinvestment Act of 2009 (Recovery Act) is a bill to create jobs, restore economic growth, and strengthen America's middle class through measures that modernize the nation's infrastructure, enhance America's energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief, and protect those in greatest need, and for other purposes. The Department of the Interior has been tasked with managing \$3 billion in investments as part of the Recovery Act in order to jumpstart the economy, create or save jobs, and address long-neglected challenges. Of the \$3 billion, one billion will be invested in water infrastructure across the United States by Reclamation. Out of this, \$260 million will go to projects in California that will expand water supplies, repair aging water infrastructure, and mitigate the effects of a devastating drought the state is currently experiencing. An additional \$135 million is available for grants for water reuse and recycling projects. Semitropic Water Storage District (Semitropic or District) applied for a Recovery Act challenge grant in 2009 to assist with funding the construction of the *Pond-Poso Spreading and Recovery Facility* (PPSRF).

Prior to the formation of the District, irrigated agriculture relied completely on groundwater. As in other areas developed in reliance on groundwater, water levels declined as groundwater was pumped for beneficial use. To address the developing problem, Semitropic was formed to implement conjunctive use programs and facilities and, in particular, to import water to supplement the area's water needs. In 1973, Semitropic began importing surface water from the State Water Project and conjunctively managed their water supply since the imported water supply is highly variable. Under their conjunctive use program, the underlying groundwater reservoir continued to meet demands for seasonal peaks and provide irrigation water in times of limited surface supplies. Some lands in the District received the imported water supply, while other lands remained solely dependent on pumped groundwater for irrigation. In 1994, Semitropic entered into a Memorandum of Understanding with five other local districts to create the Semitropic Groundwater Bank. The Groundwater Bank was created in response to several

challenges including (1) groundwater overdraft; (2) rising energy costs; (3) rising water costs, (4) water shortages and (5) poor agricultural economy. The objectives of the Semitropic Groundwater Bank are to (1) increase the water supply reliability of the area; (2) decrease the cost of water for irrigation; and (3) correct overdraft in the groundwater basin.

Since its inception, the Semitropic Groundwater Bank has provided long-term underground storage of water for use by the banking partners in times of need. Under the Groundwater Bank, the District takes delivery of (i.e., banks) “wet-year” water, which is used to turn off wells and temporarily improve groundwater levels. This “banked” groundwater is then used to supplement surface water deliveries during “dry” years. The banking of water has been limited to “in-lieu” recharge wherein the District satisfies an irrigation demand with surplus water from its banking partners “in-lieu” of farmers pumping (leaving a like amount in groundwater storage). This method of banking has been limited to periods when the banking partners’ water supplies have not exceeded the ability to absorb the surface water by delivery to an irrigation demand. However, when surface water supplies exceed the ability to deliver and absorb the surface water with an irrigation demand, the District does not have direct recharge facilities within the District to absorb the water supply. To add this capability, the District developed the PPSRF.

Semitropic has plans to increase the capacity of the Semitropic Groundwater Bank with construction of the Stored Water Recovery Unit (SWRU) which would increase storage by 650,000 acre-feet to a total maximum of 1.65 million acre-feet and increase recovery capacity by 200,000 acre-feet per year for a total pump back capacity of 290,000 acre-feet per year. This means that the Semitropic Groundwater Bank, including its entitlement exchange capability of up to 133,000 acre-feet per year, would be able to deliver up to 423,000 acre-feet per year of dry year yield to the California Aqueduct. Both the PPSRF and the planned SWRU are components of the Semitropic Groundwater Bank. However, the PPSRF has “independent utility” relative to the planned SWRU. More specifically, it can be operated as a fully functional recharge and recovery facility, independent of any of the existing or planned facilities.

Reclamation proposes to approve federal funding for the District to complete the pumping plant immediately east of the Pond-Poso Canal; construct pond structures including 34 interbasin structures and 20 pond overpours; construct 3 emergency spillways located on the lowest tiers of the spreading ponds, adjacent to the Pond-Poso Canal; construct 4 County road siphon crossings; complete 7 production wells, 8 casing path wells and 5 shallow wells; and construct a collector system composed of pipelines.

The construction of the easterly spreading grounds (including construction of diked spreading ponds, conveyance ditches, well pads and habitat benches) was completed in 2007. This work was completed prior to the application for the Recovery Act-funded challenge grant and is not part of the Proposed Action.

As part of the original Semitropic Banking Program, a groundwater monitoring committee was established in 1994 to develop information so that any adverse impacts of the Groundwater Banking Program could be mitigated. The monitoring program is overseen by a committee made up of primarily representatives from surrounding water districts. The Kern County Water Agency and Department of Water Resources participate in committee activities and water

scheduling. Monitoring includes water level measurement in monitoring wells and groundwater quality (including salinity and nitrate) evaluations (Semitropic 1994). In general, the Semitropic Groundwater Bank operations do not allow for more water to be returned than has previously been banked. More specifically, the above-mentioned groundwater monitoring committee provides guidance on groundwater monitoring and subsidence that this facility would follow. In this regard, as the PPSRF is added to the Semitropic Groundwater Bank, it would follow the operation rules of the Semitropic Groundwater Bank Environmental Impact Report and the recommendation of the Groundwater Monitoring program.

Semitropic will be required to have a qualified biologist conduct a survey for the San Joaquin kit fox between 14 and 30 days prior to any ground disturbing work. Copies of any survey reports must be submitted to Reclamation. Standard San Joaquin kit fox avoidance measures must be implemented during the proposed work. If any trees that are used by White-tailed Kites need to be removed as part of the proposed work, they cannot be removed during the breeding season.

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

## **FINDINGS**

### **Water Resources**

The Proposed Action will contribute to the sustainability of the underlying groundwater resource and will allow Semitropic to continue to conjunctively manage the surface and groundwater resource for the benefit of the region. The Proposed Action will improve Semitropic's flexibility to absorb surface water available to the region, since surface water is becoming more difficult to deliver on a schedule that matches with the irrigation demand.

Groundwater banking reduces overdraft by utilizing available surface water supplies in lieu of groundwater pumping. In this regard, under the Proposed Action, water that was banked during "wet" periods or years will be available to Semitropic in "dry" periods or years, and will reduce Semitropic's need to pump groundwater to supplement their water supplies needs.

The banking of water in Semitropic combined with an anticipated minimum of 10 percent of water left in the District once water is returned to the banking partners will have a positive impact on the groundwater resources. There will be no significant impacts from the Proposed Action.

### **Biological Resources**

The Proposed Action will be consistent with the current operations of the District's Groundwater banking operations. Since the Proposed Action will be constructed on once highly disturbed agricultural land where agricultural operations took place for many years, the project site provides limited opportunities for special status animal species and special status plant species to inhabit the property. Presently, as part of regular maintenance of the District's converted land from agricultural use to spreading grounds on the east side of the Pond-Poso Canal, the District continues to disturb the area by such practices as disking, scraping, application of herbicides for

weed control and other practices necessary to maintain the dikes, ditches and ponds of the spreading grounds.

The area is either outside the current range or clearly lacks required habitat elements for all but four species: the blunt-nosed leopard lizard, the Tipton kangaroo rat, the giant kangaroo rat, and the San Joaquin kit fox. The only kangaroo rat burrow system found lacked the precincts typical of the giant kangaroo rat, and trapping results verified that neither this species nor the Tipton kangaroo rat are present on-site. The blunt-nosed leopard lizard relies on burrows constructed by small mammals. There is a very limited abundance of small mammal burrows in the area, and because of the great disturbance of the site and the fact that it is surrounded by active agricultural fields, the blunt-nosed leopard is not expected to occur there. The San Joaquin kit fox is not expected to occur on-site, because of the fact that the area was recently cultivated, is surrounded by miles of active farm lands, potential dens with signs of kit fox use were not found, and the prey base is extremely low. The potential dens that were seen also would not be directly impacted by the Proposed Action. Nevertheless, a qualified kit fox biologist must perform a pre-activity survey of the entire action area and standard avoidance measures must be implemented. If the pre-activity survey detects a kit fox or any sign of a kit fox, the Proposed Action cannot proceed without further evaluation by Reclamation and consultation with the U.S. Fish and Wildlife Service. No critical habitat was found in the action area, and therefore none will be affected. Accordingly, no adverse effect is expected on any special-status biological resources within the area to be constructed under this Proposed Action.

The “habitat benches” will provide potential habitat for migratory birds that utilize that habitat type. This will provide a benefit to these species.

There will be no significant adverse impacts from the Proposed Action.

### **Air Quality**

Under the Proposed Action, impacts to the air quality from the construction activities will be minimal because the majority of the large ground disturbing activities have already taken place. Construction of the Proposed Action components will involve soil disturbing activities that will have a minimal affect on the air quality. The results of the air quality analysis indicates that VOC, CO, NOx, and PM emissions fall below the de minimis thresholds.

There will be negligible emissions from operation of the Proposed Action after construction is complete. Electric pumps will be used to recover stored groundwater. These pumps will not emit pollutants at the pump; the source of the pollutants originates at the power plant. Power plants are permitted based on their maximum operating potential. The additional electricity will not result in the power plant exceeding operating capacity, and, thus, the applicable emissions permit.

The construction and operation of the PPSRF would not cause an adverse impact to air quality in the SJVAB or exceed applicable standards.

## **Cultural Resources**

The operation of this facility will be consistent with the current operations of the District's groundwater banking operations. Since the area of the Proposed Action is located in lands that have historically been disturbed for many years by farming practices such as harvesting, tilling and irrigation, and recently converted to spreading grounds, any archaeological resources that may be present have likely already been impacted by these practices.

The reconnaissance level cultural resource identification effort conducted by Three Girls and a Shovel, LLC., were unable to identify cultural resources. During the identification process, both the Santa Rosa Rancheria and the Tule River Reservation were contacted and asked to assist in the identification of sites of religious and cultural significance and assist in the identification of any known cultural resources. No response was made to these inquiries.

Reclamation entered into consultation with the SHPO on December 10, 2009 requesting concurrence on Reclamation's finding that no historic properties would be affected by the proposed undertaking. SHPO concurred in a letter dated December 22, 2009. There will be no significant impacts to cultural resources from the Proposed Action.

## **Indian Trust Assets**

There will be no significant impacts on ITA, since there are no ITA within the vicinity of the Proposed Action.

## **Land Use**

Under the Proposed Action, land use will not change. The PPSRF will still be consistent with related open space use under the Williamson Act. Therefore, there will be no significant impacts from the Proposed Action.

## **Socioeconomic Resources**

Under the Proposed Action, the capacity for local regulation of available water supplies will be increased. To the extent that the area has a sustainable water supply, the portion of the overall economy that is reliant on agriculture will be positively impacted because farmers will continue to employ farm labor. Therefore, the Proposed Action will have no significant impacts on the socioeconomic resources of the area.

## **Environmental Justice**

The Proposed Action will enhance the operation of the District's Groundwater Bank to better manage available water supplies. The agricultural industry will be positively impacted because it will maintain and generate demand for farm labor, a source of employment for many minority and disadvantaged populations. By continuing to provide employment at historic levels, the Proposed Action will have no significant impact on minority or disadvantaged populations.

## **Climate Change**

The Proposed Action is expected to result in a slight temporary net increase in green house gas (GHG) emissions associated with short term construction activities. Operation will also result in a slight net increase of GHG emissions associated with the slightly increased need for maintenance activities.

While any increase in GHG emissions adds to the global inventory of gases that will contribute to global climate change, the Proposed Action will result in only very slight increases in GHG emissions from temporary or existing sources. Therefore, there will be no significant impacts to global climate change.

**Cumulative Impacts**

Construction and operation of the PPSRF will not contribute to cumulative changes or impacts to water resources, biological resources, air quality, cultural resources, ITA, land use, socioeconomic resources, environmental justice or global climate change. Therefore, there will be no cumulative impacts as a result of the Proposed Action.