

FINDING OF NO SIGNIFICANT IMPACT

Tulare Irrigation District Plum Basin Project – Phases II and III

FONSI-10-064

Recommended by:	MARIAN	Date:	4/5/2011
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Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that the approval to partially fund Phases II and III of Tulare Irrigation District's (TID) Plum Basin Project 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 Draft Finding of No Significant Impact (FONSI) is supported by Reclamation's Draft Environmental Assessment (EA) number EA-10-064, *Tulare Irrigation District Plum Basin Project – Phases II and III*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft EA and Draft FONSI (http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=7416) during a public comment period from March 21, 2011 through April 4, 2011. No comments were received.

Background

In January 2008, TID and the City of Tulare (City) purchased 154-acres of property consisting of plum orchards and fallowed ground. In a joint-effort with the City, TID prepared an Initial Study (IS) and finalized a Mitigated Negative Declaration (MND) in January 2009, in accordance with the California Environmental Quality Act, which analyzed the environmental impacts of converting the 154 acres into a three-cell recharge/regulation basin (Plum Basin Project). Due to lack of funding, the Plum Basin Project was separated into three, independent functioning phases, with each phase consisting of the construction and operation of one of three cells. The Plum Basin Project is located within Tulare County, California in Section 29, Township 19 South, Range 25 East, Mount Diablo Base & Meridian.

TID applied for and was awarded a 2009 Water for America Challenge Grant from Reclamation to help develop Phase I of the Plum Basin Project. The environmental impacts associated with Phase I was analyzed in, *EA-09-77 Tulare Irrigation District Plum Basin Project – Phase I*, and a FONSI was signed in February 2010.

In order to fully build-out the Plum Basin Project, TID applied for and has been selected as a recipient for federal funds through a 2010 WaterSMART Grant from Reclamation to help fund the construction of Phases II and III (Proposed Action). The Proposed Action will include converting approximately 105 acres of fallowed land into 45 and 60-acre basins, each with groundwater recharge and surface water regulating capabilities. The Proposed Action area will be excavated approximately 6 feet deep and the excavated materials will be used to build 6-foot tall levees around the basins. Construction will also include inlet/outlet structures between the basins and TID's Main Canal, which will be outfitted with control gates, flowmeters, and other related appurtenances.

Findings

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

Water Resources

The Proposed Action will not generate a new supply of water; rather, it will improve the reliability of TID's water supplies by using surface water to recharge the underlying groundwater subbasin for use by private landowners within the district when groundwater pumping is necessary. The Proposed Action does not include additional groundwater pumping; instead, it will help to mitigate the water-level impacts associated with existing groundwater pumping. In particular, the increased ability to recharge available surface water supplies will help to mitigate the projected long-term decline in groundwater levels. The ability to regulate surface water will help TID minimize seepage losses in its distribution system. Therefore, the Proposed Action will have slight beneficial impacts to TID's water resources.

Land Use

The Proposed Action will not result in adverse impacts to lands designated as prime agricultural land since the construction of water facilities have been determined to be compatible uses within any agricultural preserve; therefore, there will be no significant impact to land use.

Biological Resources

The Proposed Action area consists of the recently fallowed land that is frequently disked for weed control. Although San Joaquin kit foxes been reported in the area, disking for weed control has greatly degraded any habitat for denning. Swainson's hawks could forage in these fields. There is suitable habitat for burrowing owls; however, the nearest recorded occurrence is approximately 12.5 miles away from the Proposed Action location. Preconstruction surveys will be conducted before any ground-disturbing activities are to begin. If the surveys detect the presence of listed species or migratory birds, then the Proposed Action will be paused until Reclamation completes any consultation with the United States Fish and Wildlife Service that might be necessary and until any additional protective measures are identified and incorporated for any migratory birds.

If preconstruction surveys find that no special-status species are present within the Proposed Action area, then Reclamation's determination of no effect remains and the project could move forward. By following Environmental Protection Measures listed in section 2.2.1 of EA-10-064, this will avoid or minimize any potential impacts to kit foxes, burrowing owls, or Swainson's hawk during construction. Therefore, the Proposed Action is anticipated to have no significant impact on biological resources.

Cultural Resources

The Proposed Action is the type of activity that has the potential to affect historic properties. Reclamation analyzed the impacts to cultural resources for the full build-out of the Plum Basin Project in EA-09-77, of which the Proposed Action is a part. Reclamation determined that there would be no adverse effects to historic properties; therefore, no cultural resources would be impacted as a result of implementing the Proposed Action. Reclamation consulted with the State Historic Preservation Officer (SHPO) on May 13, 2010 regarding this determination pursuant to 36 CFR Part 800.5(b). The SHPO concurred with Reclamations' findings and determination on May 25, 2010.

Indian Trust Assets (ITA)

There are no tribes possessing legal property interests held in trust by the United States in the lands involved with the Proposed Action. The nearest ITA is a Public Domain Allotment approximately 24 miles north/northeast of the Proposed Action location; therefore, this action will have no impact on ITA.

Indian Sacred Sites

Since no known Indian sacred sited have been identified, the Proposed Action will not impact known Indian sacred sites and/or prohibit access to and ceremonial use of this resource.

Socioeconomic Resources

The Proposed Action will increase water reliability for TID. As a result, the viability of farming practices will also benefit from a more reliable irrigation water supply. Design and construction of the Proposed Action will temporarily increase jobs; therefore, the Proposed Action could result in slight beneficial impacts to socioeconomic resources.

Environmental Justice

To the extent that water supply reliability is improved in Tulare County, it will serve to support the continued viability of available municipal and industrial water to the surrounding communities and irrigation water for local farms. As a result, there will be slight beneficial impacts in regards to environmental justice from the implementation of the Proposed Action.

Air Quality

Emissions from construction will be short-term and operation of electrically-driven pumps will be very infrequent. Comparison of the estimated Proposed Action emissions with the thresholds for Federal conformity determinations indicates that emissions will be below these thresholds. Accordingly, construction and operation under the Proposed Action will not result in significant impacts to air quality beyond Federal thresholds.

Global Climate

The Proposed Action will involve short-term impacts consisting of emissions during construction and long-term impacts are attributable to project operations and will involve the generation of electrical energy to power the electric motor pump drivers. These emissions will vary annually, but estimated carbon dioxide (CO₂) emissions for all electric pumps will be approximately 1.6 metric tons/year. Short-term impacts will consist of CO₂ emissions during construction, which have been calculated to be 68.55 tons/year, and when added to the CO₂ emissions from the electric pumps, is still well-below the threshold for annually reporting greenhouse gas (GHG) emissions (25,000 metric tons/year), which is a surrogate for a threshold of significance. As a result, the Proposed Action will result in no significant impacts to the global climate.

Cumulative Impacts

The 2009 IS/MND analyzed the construction of a 154-acre recharge/regulation basin, of which this Proposed Action is a part, and is considered to be a related project that could contribute to cumulative impacts to environmental resources. As a result, this section will also analyze potential impacts to resources from the full build-out of the Plum Basin Project in order to determine overall cumulative impacts.

Biological resources will continue to be affected by other types of activities that are ongoing but unrelated to the Proposed Action. Impacts to biological resources from the implementation of the Proposed Action will occur only during construction activities. Pending results from the kit fox, burrowing owl, and Swainson's hawk surveys, the Proposed Action, when added to other similar past, existing, and future actions, will not contribute to cumulative significant impacts to biological resources since construction activities are short-term and avoidance measures will be implemented.

While the emissions of one single project will not cause adverse impacts to the global climate, GHG emissions from multiple projects throughout the world could result in an adverse impact with respect to global climate change. Full build-out of the overall Plum Basin Project could contribute to global climate change impacts due to emissions of CO₂ during construction. However, the estimated CO₂ emissions from the Plum Basin Project is 162.2 tons/year and is well below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action will not contribute to cumulative significant impacts to the global climate.

The Proposed Action will not contribute to cumulative significant impacts to air quality since construction emissions involved with the full build-out of the overall Plum Basin Project have been estimated to be below Federal conformity thresholds.

In recent years, land use changes in TID have involved the urbanization of agricultural lands. These types of changes are typically driven by economic pressures and are as likely to occur without the Proposed Action as with it. While prime farmland will be converted into a recharge/regulation basin, such conversion is considered a compatible use with any agricultural preserve. In the long-term, the Proposed Action will result in an improvement in water supply reliability and groundwater level conditions, which will benefit other lands that are designated as prime agricultural lands. Accordingly, no cumulative significant impacts to land use are anticipated.

The Proposed Action, when added to other similar existing and proposed actions, will result in an increase in TID's surface water supply reliability and improve groundwater conditions. As a result of improved water resources conditions, there could be minor beneficial cumulative impacts in regards to socioeconomic resources and environmental justice. The Proposed Action will not impact cultural resources, ITA, and Indian sacred sites; therefore, it will not contribute to cumulative impacts on these resources.