

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

MID-PACIFIC REGION

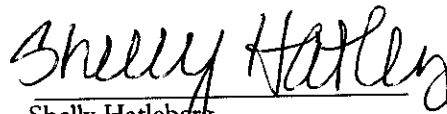
SACRAMENTO, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT

American Recovery and Reinvestment Act of 2009
New Wells Project—Region 1

FONSI 10-22-MP

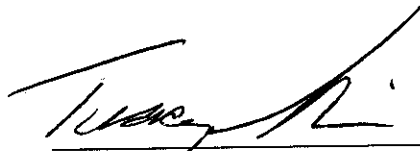
Recommended by:



Date: 7/13/10

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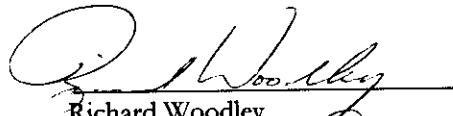
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RECLAMATION
Advancing Water to the West

FINDING OF NO SIGNIFICANT IMPACT

ARRA Drought Relief New Wells Project Region 1

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Mid-Pacific Regional Office of the Bureau of Reclamation (Reclamation), has determined that the approval and associated funding for the construction of up to 32 new wells within the Upper Delta-Mendota Canal area of the Central Valley Project (CVP), is not a major federal action that would significantly affect the quality of the human environment and an environmental impact statement (EIS) is not required

BACKGROUND

Reclamation has developed the Drought Relief Program to participate in efforts to aid farmers on the west side of the San Joaquin Valley. As has been widely reported, severe reduction in water deliveries over the last three years has caused a drop in agricultural production on the west side of the San Joaquin Valley, with secondary social and economic consequences in many San Joaquin Valley communities (including minority and low-income communities). Development of additional groundwater pumping capacity in the west side of the San Joaquin Valley is expected to alleviate these current and likely future drought impacts by providing supplemental water supplies to area farmers when Reclamation is not able to satisfy critical water needs.

Consistent with the Drought Relief Act, Reclamation is planning to use \$40 million from the American Recovery and Reinvestment Act (ARRA) to fund emergency drought relief projects that can quickly and effectively mitigate the consequences of the current and future drought in the San Joaquin Valley. ARRA funds are intended to assist west-side farmers by supplementing water supplies to preserve permanent crops, minimize economic loss for the surrounding community, and preserve employment. The overall program assists Reclamation in its management of the Central Valley Project (CVP) and the drought relief program. The primary benefit is to offset the effects of the drought on farmers that would otherwise receive surface water from Reclamation through the CVP. Further, the purposes of the Drought Relief Act could not be accomplished without the use of private wells.

Reclamation proposes to provide funding under Title IV of the ARRA for up to 32 new wells, referred to for the purposes of this analysis as Region 1. The purpose of these wells is to supplement the water districts' water supply in years when surface water allocation is constrained.

FINDINGS

Reclamation has prepared an EA (see attached) which analyzes the impacts of the Proposed Action. Based on the analysis in the EA, Reclamation has found that the construction of up to 32 new wells within the in the Upper Delta-Mendota Canal area of the Central Valley Project (CVP) would not result in significant impacts to the environment and does not require the preparation of an EIS. This Finding of No Significant Impact (FONSI) is based upon the following:

1. Water Resources: The Proposed Action would not result in significant effects on water resources, as described below.

a) Temporary water quality impacts from construction activities;

Construction of the Proposed Action would occur on relatively flat terrain (agricultural fields or orchards) in areas of low precipitation, so erosion potential would be very low.

b) Hydraulic interference (e.g., increased depth to water table) at nearby wells;

It is assumed that adjacent wells are constructed to operate within the historical fluctuations that have occurred over the modeled period. It is also assumed that existing well pumps are set low enough in the well to deal with cones of depression and the districts and landowners would continue to operate according to the guidelines provided in the approved groundwater management plans. Districts abiding by the groundwater management plan participate in monitoring groundwater levels and adjusting well use to ensure all users have an available supply.

c) Groundwater pumping overdraft (more than average sustainable recharge);

The long-term changes in the simulated groundwater elevations indicate that there would be no permanent groundwater overdraft effects from the new wells.

d) Land subsidence caused by pumping to below historical minimum water table level;

Historical subsidence is not a large problem in Region 1. In addition, because the simulated groundwater elevations were maintained within the historical range of groundwater elevations, future subsidence is unlikely.

e) Increased salinity of agricultural water supply and soils;

The salinity of pumped groundwater from the Proposed Action must be suitable for direct use on local crops.

f) Increased salinity of agricultural drainage and shallow groundwater; and

The amount of additional groundwater pumping from the Proposed Action represents only a small fraction of the total amount of water applied in the San Joaquin Valley

g) Reduced surface water (e.g., wetlands) as a result of groundwater pumping.

If the surface water is isolated from the groundwater either by dry soil or by an impermeable clay layer, groundwater pumping from the Proposed Action is unlikely to

affect surface water. The water table elevations are not expected to be close enough to the land surface to cause effects on wetlands, and no wetlands were observed during field surveys of the well locations.

2. Land Use:

The Proposed Action would not result in significant effects to land use. Under the Proposed Action, each well would have a temporary disturbance area of approximately 10,000 square feet, which would temporarily remove land from agricultural production. The total amount of important farmland that would be temporarily disturbed would be negligible compared to the total amount of important farmland in San Joaquin and Merced Counties. Additionally, the disturbance area would be only temporary, and the area would be returned to agricultural use following the completion of construction activities.

Although there would be a permanent loss of important farmland (approximately 0.66 acres for the 32 new wells), the purpose of the wells is to supply water in dry years to maintain agricultural production. Without the additional wells, there would be potential for land to be taken out of agricultural use because of lack of water. Therefore, the benefits of the well installation would outweigh the small loss of important farmland. Constructing and operating the 32 wells would be consistent with the agricultural land use designations of the San Joaquin, Stanislaus, and Merced General Plans.

3. Biological Resources:

Proposed Action would not significantly affect biological resources, including special-status species. Reclamation will employ environmental commitments and mitigation measures to avoid significant impacts to biological resources. These commitments and measures are described on Table 1 and explained in further detail in Chapter 3 of the EA.

Species	Environmental Commitment/Mitigation Measures
San Joaquin Kit Fox and American Badger	• Conduct Preconstruction Den Surveys for San Joaquin Kit Fox and American badger and Avoid or Protect Dens • Provide Escape Ramps or Cover Open Trenches at the End of Each Day to Avoid Entrapment of San Joaquin Kit Fox and American badger
Western Burrowing Owl	• Mitigation Measure BIO-MM-1: Conduct Preconstruction Surveys for Burrowing Owl

	• Mitigation Measure BIO-MM-2: Avoid & Minimize Effects on Burrowing Owl
Migratory Birds	• Mitigation Measure BIO-MM-3: Avoid Construction during the Nesting Season of Migratory Birds or Conduct Preconstruction Survey for Nesting Birds

4. Air Quality and Climate Change:

The Proposed Action would not result in significant effects to Air Quality and Climate Change.

a. Construction

Construction emissions are expected neither to exceed the federal *de minimis* thresholds nor be regionally significant (i.e., more than 10 percent of the regional emissions inventory). Construction would last only two months and emit minimal levels of diesel particulate matter (DPM). In addition, the emissions related to installation of the proposed new wells are minuscule compared to state, national, and federal GHG emissions and would cease once construction activities are complete.

b. Operations

GHG emissions from Proposed Action operations tend to accumulate in the atmosphere because of their relatively long lifespan. It is unlikely that the GHGs emitted as part of the Proposed Action would have an individually discernable effect on global climate change.

c. Climate Change Effects on the Proposed Action

The Proposed Action would not be affected by climate change conditions. In fact, the increased flexibility in water supply for the San Joaquin Valley may help limit the effects of climate change on agricultural production in the valley.

5. Noise: With the identified mitigation (described below), the Proposed Action would not result in significant impacts related to noise.

a. Construction

There are no noise-sensitive land uses within 1,000 feet of the wells in San Joaquin and Merced County. Under the reasonable worst-case construction noise assumption, construction noise could exceed the Stanislaus County noise standard. Reclamation will employ noise-reducing construction practices at these sites so that construction noise does not exceed 50 dBA L_{eq} between the hours of 7:00 p.m. and 10:00 p.m., or 40 dBA L_{eq} between the hours of 10:00 p.m. and 7:00 a.m. (excluding drilling). A noise reduction plan will be approved by Reclamation prior to construction.

b. Operation

Reclamation would meet sound ordinances when the wells are within 200 feet of residences so that operational noise does not exceed 55 dBA L_{eq} during daytime hours, or 45 dBA L_{eq} during nighttime hours.

6. Cultural Resources: Because cultural resources would not adversely be affected pursuant to 36 CFR Part 800.5(b), the Proposed Action would result in no impacts to cultural resources as evaluated through the Section 106 process.

7. Indian Trust Assets: Potential impacts on ITAs resulting from implementation of the Proposed Action have been reviewed, and no significant effects on ITAs would occur as a result of the Proposed Action.

8. Utilities and Infrastructure: The Proposed Action would not result in significant impacts to utilities and infrastructure. The Proposed Action would involve tying into existing utility lines to provide a connection to a power source for each of the 32 well pumps. Localized planned temporary electrical outages would be necessary to tie into the electrical line, which would result in short-term loss of power for utility users in the area of the wells. Few users would be affected as the area is largely rural with scattered homes and agricultural users, PG&E would coordinate the outages and notify users of the temporary loss of electricity.

The increase in electricity consumption related to the Proposed Action for each county would be relatively low. Given the relatively low energy use for these primarily agricultural counties, these increases are negligible.

9. Socioeconomics: Constructing and placing into operation the 32 groundwater wells in Region 1 would increase employment and income as a result of expenditures made to drill and place the wells into operation and to design and construct pumps, pipes, and control equipment. In addition, the water produced by the wells is considered a supplemental water supply so it would benefit employment and income generated in the agriculture sector and the sectors that supply goods and services to the agriculture sector by helping ensure that agricultural lands remain in production during periods of water shortage. Keeping agricultural lands in production would help maintain, but not substantially increase, agriculture-related economic activity in Merced, San Joaquin, and Stanislaus Counties during dry periods. There would be a slight beneficial effect on employment and income.

10. Environmental Justice: There would be no environmental justice effects resulting from the Proposed Action. Potential impacts on minority and low-income populations resulting from implementation of the Proposed Action have been reviewed, and no population, including minority or low-income populations, would bear a disproportionate environmental or human-health effect as a result of the Proposed Action.

11. Cumulative Impacts:

The Proposed Action would not result in significant cumulative impacts to water resources, land use, biological resources, air quality/climate change, noise, cultural resources, ITAs, utilities/infrastructure, socioeconomics or environmental justice.