

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION**

MID-PACIFIC REGION

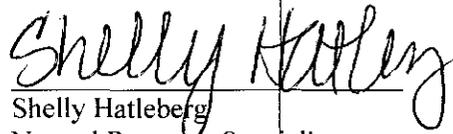
SACRAMENTO, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT

**American Recovery and Reinvestment Act of 2009
New Wells Project—Region 4**

FONSI 10-30-MP

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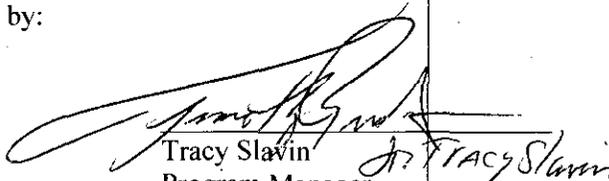


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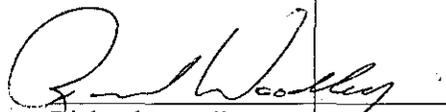


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RECLAMATION
Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

American Recovery and Reinvestment Act of 2009 New Wells Project—Region 4

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 six new wells within the Grassland Water District (GWD) and the California Department of Fish and Game North Grassland Wildlife Area 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

California's San Joaquin Valley recently has experienced historic drought conditions, which has significantly limited the amount of refuge water available to meet incremental level 4 water needs. Providing this incremental water is mandated by CVPIA section 3406 (d)(3) of the Central Valley Project Improvement Act. The Reclamation States Emergency Drought Relief Act of 1991, as amended (Drought Act), authorizes the Secretary of the Interior to undertake construction, management, and conservation activities that will minimize, or can be expected to have an effect on minimizing, losses and damages resulting from drought conditions. Included in this authority is the protection and restoration of fish and wildlife resources.

Consistent with the Drought 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 drought in the San Joaquin Valley. Along with preserving permanent crops, minimizing economic loss for the surrounding community, and preserving employment, ARRA funds are intended to protect San Joaquin Valley Wildlife Areas and private wetlands (refuges) by supplementing water supplies. 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 to refuges 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 has developed the Drought Relief Program to participate in efforts to mitigate the impacts of sustained drought in California. One area that has been significantly impacted from reduced water supplies during this period of time is San Joaquin Valley refuges. Development of additional groundwater pumping capacity in Grassland Resources Conservation District (RCD) and California Department of Fish and Game North Grassland Wildlife Area will help mitigate these current and likely future drought impacts by helping provide alternative water supplies for refuges when Reclamation is not able to purchase water from willing sellers in order to satisfy critical refuge water needs.

Reclamation proposes to provide funding under Title IV of the ARRA for drought relief for up to six new wells, referred for the purposes of this analysis as Region 4. The purpose of these wells is to supplement 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 six new wells 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 impact on water quality from construction activities

Construction of the Proposed Action would occur on relatively flat terrain 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

Potential lowering of groundwater elevations in the vicinity of existing wells is not a significant impact because it is assumed that adjacent wells are constructed to operate within the historical fluctuations that have occurred over the modeled period. 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 plan. 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 recovery of the simulated groundwater elevations in both the upper and lower aquifers indicates 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

Subsidence is unlikely to be a significant Proposed Action impact because historical subsidence was not a large problem in Region 4. In addition, because the simulated groundwater elevations were maintained within the historical range of groundwater elevations, future subsidence is unlikely.

e. Increased salinity of water supply and soils

Because groundwater from the new wells would be used for flooded wetlands, water use would be restricted only by the requirements of the wetland plants or forage crops and the availability of surface water to blend with the groundwater. Because landowners would be able to blend well water with surface water, most new wells are expected to have

acceptable water quality with TDS of less than 1,500 mg/l. Direct salinity impacts of the Proposed Action on wetland plants or forage crops would not be significant.

f. Increased salinity of drainage and shallow groundwater

The amount of additional groundwater pumping from the Proposed Action represents only a small fraction of the total amount of water applied to the wetlands and associated crops in Region 4. Poor water quality in shallow groundwater is a problem in some regions of the San Joaquin Valley, but the problem would not be substantially increased by the Proposed Action.

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. Because the new wells would be screened below the Corcoran Clay there would be almost no effect on groundwater elevations in the unconfined aquifer.

2. Land Use: The Proposed Action would not result in significant effects to land use. Under the Proposed Action, Well G-1 would have a temporary disturbance area of approximately 10,000 square feet in an area designated as important farmland. However, because the area around the proposed well is not currently used for agriculture, there would be no loss of production. The total amount of important farmland that would be temporarily disturbed would be negligible compared to the total amount of important farmland in the County. Additionally, the disturbance area would be only temporary, and the area would be returned to its original use following the completion of construction activities.

Under the Proposed Action, Grassland WD would have increased water supply during dry years. This increase in supply would allow the Grassland RCD to have better management of refuges during years when they have lower surface water elevations, which would help maintain their use under their conservation easement.

Under the Proposed Action, five wells would be located in either open space or public/quasi public land, which would permanently affect approximately 0.10 acre. However, water supply from the wells would help sustain the refuges in the surrounding area during dry years, which would not be a conflict with existing land use. Additionally, the proposed wells would not conflict with adjacent land uses, as the surrounding lands are used for similar purposes.

3. Biological Resources: The 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.

Table 1. Environmental Commitments & Mitigation Measures for Special-status Species, Migratory Birds and Waters of the U.S.

Species	Environmental Commitment/Mitigation Measure
Giant Garter Snake	<ul style="list-style-type: none"> • Conduct Mandatory Biological Resources Awareness Training for All Project Personnel and Implement General Requirements • Provide Escape Ramps or Cover Open Trenches at the End of Each Day to Avoid Entrapment of Giant Garter Snake, San Joaquin Kit Fox, and American Badger • Avoid and Minimize Effects on Giant Garter Snake • Install Erosion Control Measures near Aquatic Habitat • Monitor Initial Ground-Disturbing Activities and Vegetation Removal in Suitable Habitat for Giant Garter Snake • Restore Temporary Loss of Upland Habitat for Giant Garter Snake
San Joaquin Kit Fox and American Badger	<ul style="list-style-type: none"> • 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

<p>Western Burrowing Owl</p>	<ul style="list-style-type: none"> • Mitigation Measure BIO-MM-3: Conduct Preconstruction Surveys for Burrowing Owl • Mitigation Measure BIO-MM-4: Avoid & Minimize Effects on Burrowing Owl
<p>Migratory Birds</p>	<ul style="list-style-type: none"> • Mitigation Measure BIO-MM-5: 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 in the valley.

5. Noise: The Proposed Action would not result in significant effects to Noise. There are no noise-sensitive land uses within 1,500 feet of the wells in Region 4. Noise from operational pumps is not anticipated to exceed Merced County noise standards within 1,500 feet of nearby residences.

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:** The nearest ITA is more than 77 miles away and the Proposed Action would not affect the Santa Rosa Rancheria. 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. Few users would be affected as the area is largely rural, and only six wells would need to be connected. The increase in electricity consumption related to the Proposed Action for Merced County would be relatively low. These increases are negligible and would not raise usage to a level that would adversely affect utilities in the county.
9. **Socioeconomic Resources:** Constructing and placing into operation the six wells in Region 4 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 controls. Although beneficial, the change in employment and income is not expected to be substantial compared to the overall economic activity occurring in Merced County because only six wells would be installed and construction would be completed within a few months. Operating the six wells in Region 4 would enhance the supply of water used for refuges within and potentially outside of the Grassland WD. Because water produced by the wells is considered a supplemental water supply, it would benefit employment and income generated in the recreation sector and the sectors that supply goods and services to recreation by helping ensure that wetland habitats are maintained during water shortages. Maintaining the quality of wetland habitats would help maintain related economic activities in Merced County.
10. **Environmental Justice:** There would be no environmental justice effects resulting from the Proposed Action. Populations, including minority or low-income populations, would not 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, or environmental justice.