

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

MID-PACIFIC REGION

SACRAMENTO, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT


Anderson-Cottonwood Irrigation District Integrated Regional Water  
Management Program – Groundwater Production Element Project

FONSI 11-10-MP

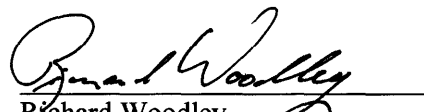
Recommended by:

 Date: 11/1/11  
Shelly Hatleberg  
Natural Resource Specialist  
Mid-Pacific Regional Office

Concurred by:

 Date: Nov. 1, 2011  
Lee Mao  
Chief, Program Management Branch  
Mid-Pacific Regional Office

Approved by:

 Date: Nov. 2, 2011  
Richard Woodley  
Regional Resources Manager  
Mid-Pacific Regional Office



RECLAMATION  
Managing Water in the West

## FINDING OF NO SIGNIFICANT IMPACT

### **Anderson-Cottonwood Irrigation District Integrated Regional Water Management Program – Groundwater Production Element Project**

#### **FONSI 11-10-MP**

#### **BACKGROUND**

In accordance with the National Environmental Policy Act (NEPA), the Bureau of Reclamation (Reclamation) prepared a Draft Environmental Assessment (EA) for the *Anderson-Cottonwood Irrigation District's Integrated Regional Water Management Program - Groundwater Production Element Project*, dated August 2011. A Final EA was prepared in October 2011.

Under the Sacramento Valley Integrated Regional Water Management Program (SVIWRMP) Grants Program, Reclamation provides financial assistance to support activities that promote the preparation and revision of written regional water management/conservation plans, implement activities identified in written water management plans, demonstrate new or previously unknown water management technologies and practices, and promote improved understanding of good water use practices and principles. Reclamation is providing financial assistance to the Anderson-Cottonwood Irrigation District (ACID or District) for their Groundwater Production Element Project (Proposed Project), which includes the installation of two groundwater wells to supplement existing District surface water and groundwater supplies. The Proposed Project would improve the flexibility and reliability of the District's water supply, particularly during dry and critically dry water years. In 2004, ACID's surface water rights were reduced from 165,000 to 121,000 ac-ft per year as part of the renegotiation of the 40-year Settlement Contract. Furthermore, the west side of the District's system has little to no downstream control. The Proposed Project would help with the flexibility and reliability required to meet agricultural water needs in the District's service area.

#### **FINDINGS**

In accordance with NEPA, as amended, the Mid-Pacific Regional Office of Reclamation has found that the Proposed Project is not a major federal action that would significantly affect the quality of the human environment. Consequently, an environmental impact statement is not required. This finding of no significant impact is based on the following:

##### **1. Surface Water Resources**

**Construction** - Effects on surface water quality could occur during the construction phase of the Proposed Project because of stockpile erosion and spoil piles. Prior to construction activities, the contractor would develop and implement an SWPPP to reduce sediment discharged from the site. Implementing the SWPPP, in conjunction with the use of best management practices, would reduce potential effects on surface water quality, thus resulting in no significant effects to surface water resources from construction activities.

**Operation** - Peak streamflow reductions represent less than two percent of the total streamflow measured, thus the Proposed Project would have no significant effects to surface water flows within the project area.

## **2. Groundwater Resources**

**Construction** - No effects on local groundwater levels are anticipated as part of the well drilling and installation process.

**Operation** - Annual groundwater production from Well No. 2 would be between June 1 and October 31 during noncritical water years. Groundwater production from both wells would be between April 1 and October 1 during critical water years. The modeled reduction in groundwater is projected to have no significant effect on shallow groundwater levels. Additionally, groundwater elevations would return to pre-project levels, because the subbasin would refill each spring, except possibly during multi-year droughts.

Forecast incremental drawdown, resulting from project implementation in the regional aquifer is projected to be no more than 25 feet by the end of the pumping season, with incremental drawdown near the groundwater production projects typically not exceeding 5 to 10 feet in most areas. A maximum incremental drawdown of approximately 25 feet is forecast in the immediate vicinity of Well No. 2 and is projected to dissipate to four feet within 0.5 mile of the well. Groundwater elevations would return to pre-project levels because the subbasin would refill each spring, except possibly during multi-year droughts.

The Proposed Project would not cause a permanent lowering of groundwater levels, because the subbasin would refill each spring, with the possible exception of multi-year droughts. Given the forecast minimal drawdown effects, no inelastic land subsidence is anticipated.

Groundwater modeling shows that operation of the project wells would not alter the pre-existing distribution of groundwater quality in the basin; therefore, project operations would have no significant effects on groundwater quality.

## **3. Land Use/Agricultural Resources**

**Construction** - No land use impacts would result from the construction of the Proposed Project. The proposed well locations are both unoccupied, and neither site is currently in use for agricultural purposes.

**Operation** - Operation of the Proposed Project would not conflict with existing land use designations and would have no effect on existing land use. The Proposed Project would be implemented to maintain existing agricultural land uses within the surrounding ACID service area; therefore, resulting in a minor beneficial effects on existing land uses and agricultural resources.

#### **4. Biological Resources**

**Construction** - Construction activities would not result in effects on biological resources, sensitive species, or habitats at the proposed Well No. 1 location due to lack of habitat for any such species. Construction activities could result in effects on biological and special-status species at the proposed Well No. 2 location. If construction activities occur during the nesting season, construction of the Proposed Project could result in effects on nesting birds, such as red-tailed hawk, at the Well No. 2 location. Construction of Well No. 2 would commence during the non-breeding season for nesting birds (September 1 through February 14) to avoid potential effects on nesting birds. No other listed species were observed within either project impact areas; therefore, no significant effects on biological resources or sensitive species and habitat are anticipated.

**Operation** - There would be no effects on biological resources as a result of operational activities associated with this project.

#### **5. Cultural Resources**

The Proposed Project is the type of activity that has the potential to affect historic properties. A records search, a cultural resources survey, and Tribal consultation identified historic properties within the Area of Potential Effect. All project activities would not adversely affect historic properties pursuant to 36 CFR Part 800.5(b). Constructing the proposed wells and connecting the discharge pipeline to the ACID Main Canal would not diminish the structural integrity and would not adversely impact the historic characteristics that make the canal eligible for listing on the NRHP. The function of the canal would not change. Since no historic properties would be adversely affected, no cultural resources would be impacted as a result of implementing the Proposed Project. The SHPO concurred with Reclamations' determinations and findings on October 20, 2011 and Reclamation concluded the Section 106 compliance process.

#### **6. Indian Trust Assets**

There would be no effects on Indian Trust Assets (ITAs). The Redding Rancheria is 10 miles from the proposed wells and would not be affected by either project construction or operation.

#### **7. Environmental Justice**

**Construction** - Construction activities associated with the Proposed Project would require a local or regional contractor, who would likely employ local or regional workers. If workers were temporarily relocated into the area during the construction phase, the construction effort would likely result in local revenue for lodging, food, and construction-related materials and equipment. Construction-related environmental justice effects are expected to be positive; no significant effects would occur.

**Operation** - Implementing the Proposed Project would increase water supply reliability resulting in beneficial effects on agricultural production-related employment. Project-related environmental justice effects are expected to be positive; no significant effects would occur.

## **8. Air Quality**

**Construction** - The short-term increase in emissions during construction would not have a significant effect on air quality, because construction for the Proposed Project would generate minimal emissions, and incremental emissions would be less than federal and state standards.

**Operation** - Operation activities for existing conditions would be the same as expected for no action. Operation activities associated with the Proposed Project would also be similar to the no action alternative, because the proposed production wells would be electrically operated. Therefore, there would be no effects on air quality as a result of operational activities associated with the Proposed Project.

## **9. Climate Change**

**Construction** - Construction and operation of the Proposed Project could generate greenhouse gas (GHG) emissions. Construction activities would include activities that emit GHGs, such as exhaust emissions from heavy equipment and associated construction vehicles. Construction would result in a minor, short-term increase in GHG emissions (approximately 100 metric tons of CO<sub>2</sub>).

**Operation** - Operation of the Proposed Project would include using electricity-operated pumps. Operation is not expected to generate additional indirect GHG emissions associated with the electricity use for the new pumps. Emissions from electricity use are considered indirect emissions, and the Proposed Project would not include a direct GHG emissions source, such as a stationary source.

## **10. Cumulative Impacts**

No cumulative impacts are anticipated as a result of the Proposed Project.