



United States Department of the Interior



BUREAU OF RECLAMATION
Yuma Area Office
7301 Calle Agua Salada
Yuma, Arizona 85364

IN REPLY REFER TO:
YAO -7210
ENV -1.10

FINDING OF NO SIGNIFICANT IMPACT Proposed Yuma Desalting Plant Pilot Run

**U.S. Department of the Interior
Bureau of Reclamation
Yuma Area Office**

Introduction

In accordance with the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190 as amended), the Bureau of Reclamation (Reclamation) has issued the attached Environmental Assessment (EA) to disclose the environmental impacts resulting from the proposed Yuma Desalting Plant Pilot Run. The EA provides details on the Proposed Action and an analysis of potential impacts; it should be used as the basis for this Finding of No Significant Impact (FONSI).

Proposed Action

The purpose of the Proposed Action is to operate the Yuma Desalting Plant (YDP) as designed at a sufficient flow and appropriate duration to gather benchmark performance and cost data which can only be obtained through actual plant operations; determine whether any additional corrective actions to plant design or equipment would be necessary for long-term operation of the plant; and test changes and corrections (such as the fully-automated distributed control system) which have already been implemented at the YDP as part of maintaining its ready reserve status. The need for the Proposed Action is to obtain information regarding actual plant operation which will test theoretical analyses and provide information about the plant's operating capability to reliably produce product water which could be used for multiple end uses; as well as to verify the suitability of treatment processes and associated facilities during actual plant performance, determine baseline operating costs, test the effectiveness of completed plant improvements, and assess how plant equipment will respond to daily operation; and provide process related effluent and emissions data for a sufficient period of time to provide a basis to analyze, in a separate, future decision, potential environmental consequences of long-term YDP operation.

Resource Analysis

The EA focused on those resource areas identified as potentially impacted by the alternatives considered, including the No Action Alternative. Based on the location and nature of the Proposed Action, there would be no effects to aesthetics, cultural resources, geology and soils,

and land use. Potential negative effects of the Proposed Action were identified for air quality, biological resources, water resources, hazardous materials, Indian trust assets, environmental justice, noise, and climate change:

1. Air quality will be affected by the Proposed Action through increased particulate matter that is 10 microns in diameter or less (PM₁₀) emissions and ozone as a result of a slight increase in traffic to the YDP. However, the analysis in the EA indicates effects to PM₁₀ and ozone will be negligible and not significant.

2. Biological resources may be impacted from the Proposed Action due to the conveyance of drainage water into the Colorado River from the MODE 1 Diversion/Return Facility. However, because this type of conveyance is a routine operational practice which occurs regularly, and because the additional water will not result in any significant changes in salinity and river level, no effects to fish and wildlife, including endangered species in the U.S., will occur (U.S. Fish and Wildlife Service letter dated July 13, 2009). Reclamation will obtain a National Pollutant Discharge Elimination System permit for the discharge of product water from the YDP prior to initiating the Proposed Action. This discharge will not result in any significant impacts.

3. Potential impacts to water resources include the disposal of biosolids (a byproduct of the YDP) to the A-22 evaporative ponds. These biosolids, if not disposed of properly, could affect groundwater in the Yuma area. However, the A-22 ponds (evaporative cells) are lined, which will prevent biosolids from reaching the groundwater and adversely affecting groundwater. As appropriate, Reclamation will notify the Arizona Department of Environmental Quality of the proposed quantity change discharged to the A-22 cells for the Proposed Action. In addition, during operation of the YDP about 21,700 acre feet (AF) of desalinated product water and 7,300 AF of MODE flow will be conveyed to the Colorado River. As a result, depending upon the delivery of Intentionally Created Surplus (ICS) credits, temporary reduced releases from Hoover Dam may occur, thus producing slightly lowered water elevations along the river between Hoover and Imperial Dams. However, effects resulting from the lower elevation levels would be so small as to be immeasurable, and the change in water releases would not conflict with water delivery obligations, cause significant groundwater depletion, or alter existing drainage. There will not be any significant impacts on water resources.

4. Hazardous materials to be used on-site during the proposed YDP Pilot Run will increase. Hazardous materials will continue to be managed in accordance with Environmental Protection Agency and Occupational Safety and Health Administration requirements. The existing Risk Management Plan/Process Safety Management Plan (RMP/PSMP) documents which outline preventative actions to avoid an accidental release will be revised before the Proposed Action is initiated in order to continue to ensure employee, public, and environmental safety due to the greater amounts of chemicals necessitated by the YDP Pilot Run. In addition, hazardous waste generated from the Proposed Action would continue to be transported to an off-site hazardous waste facility for treatment or disposal in accordance with state regulations. There will be no significant impact resulting from hazardous materials.

5. The Proposed Action will not affect Indian trust assets (ITA). Reclamation will continue to coordinate with the Quechan and Cocopah tribes to ensure ITA's remain unaffected.

6. The Proposed Action will not affect environmental justice considerations. It will not result in any disproportionately high and adverse human health or environmental effects on minority or low-income populations in the U.S.

7. A slight increase in ambient noise levels is anticipated as a result of the Proposed Action. However, because sensitive noise receptors are in locations which are sufficiently distant from the YDP, and existing mechanisms to minimize noise are in place, impacts will not be significant.

8. Based on the Pilot Run's short term duration, the Proposed Action will not be affected by global climate change. The Proposed Action will not cause any significant contribution of hydrocarbons to the environment; therefore, no significant climate change impact will result.

Connected Actions

The potential environmental impacts of two connected actions were also analyzed in the EA: (1) the potential approval of ICS credits associated with the proposed YDP Pilot Run; and (2) Reclamation actions within the U.S. that are documented in the "Joint Report Of The Principal Engineers Concerning U.S.-Mexico Joint Cooperative Actions Related To The Yuma Desalting Plant (YDP) Pilot Run And The Santa Clara Wetland" (Joint Report). Neither of these actions were determined to result in significant environmental impacts for the reasons identified in the EA.

NEPA Finding

Based on the analysis of the environmental impacts and mitigation measures as presented in the EA, Reclamation has determined that implementation of the Proposed Action of conducting a Pilot Run of the Yuma Desalting Plant would not significantly impact the human environment and that preparation of an environmental impact statement is not warranted. The Proposed Action does not exceed any of the significance criteria outlined in the NEPA implementing regulations at 40 CFR Section 1508.27. In addition, Reclamation has determined the implementation of the two connected actions addressed in the EA would not significantly affect the human environment.

International Considerations

Under the proposed Pilot Run, flows in the Bypass Drain would be reduced by approximately 29,000 AF, while salinity levels would be increased by about 540 parts per million (expressed as total dissolved solids). A number of public comments on the EA focused on this potential impact of the proposed Pilot Run on the environmental resources of the Cienega de Santa Clara (Cienega). As noted in Section 1.6 of the EA, the statutory provisions of NEPA and the Council on Environmental Quality implementing regulations do not require assessment of environmental impacts in the sovereign territory of a foreign nation. However, in the spirit of bi-national cooperation, with regard to the ecology of the Colorado River's Limitrophe Division and its Delta as established in Minute No. 306, Reclamation, through the International

Boundary and Water Commission, initiated consultation with Mexico regarding the proposed YDP Pilot Run.

The outcome of this consultation is Joint Report, dated July 17, 2009. The United States, Mexico, and a partnership of non-governmental organizations, as stated in commitment letters from each party and further outlined in the Joint Report, will each arrange for 10,000 AF of water (for a total of 30,000 AF) in connection with the reduction in flow and increase in salinity level. Furthermore, the United States, Mexico, and a partnership of non-governmental organizations committed to working through the Colorado River Joint Cooperative Process, pursuant to Minute 306, to continue to address long-term approaches to maintain the environmental values of the Cienega. The Joint Report and other related documents are included in the EA for informational purposes as Appendix C.

Decision

In light of the foregoing, I hereby approve:

- 1) implementation of the Proposed Action to initiate a Pilot Run of the YDP; and
- 2) implementation of the Reclamation actions outlined in the Joint Report.

Jennifer McCloskey

Jennifer McCloskey, Area Manager
Yuma Area Office

SEP 30 2009

Date