



# United States Department of the Interior

## BUREAU OF RECLAMATION

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JUL - 3 1997

WCS-CSeale  
ENV-6.00

Subject: ~~Submission~~ of FONSI and Final Supplemental Definite Plan Report/Environmental Assessment, Paradox Valley Unit, Colorado River Basin Salinity Control Project, Colorado

Dear Interested Party:

Enclosed are a Finding of No Significant Impact (FONSI) and a copy of the Final Supplemental Definite Plan Report (SDPR) and Environmental Assessment (EA) for the Paradox Valley Unit, Colorado. The SDPR describes the present operation of Reclamation's Paradox Valley deep-well injection facility located approximately 1.2 miles south of Bedrock, Colorado. The EA describes the environmental effects of the operation.

If further information is desired concerning this report, please contact Ralph Pasquale, Chief, Land, Recreation, and Environmental Resources Group at (970) 385-6567.

Sincerely,

Patrick J. Schumacher  
Southern Division Manager

Enclosures *Library*

*See 6/13/97 LTR TO EPA ENV 6.00  
SUBMITTAL OF FONSI & SDPR/EA*

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L. Towne, A. Nicholas, R. Pasquale (w/o encls)  
*S. Powers*

CSeale:bjw:6/20/97:11regrp/seale/intpty.ltr

# Finding of No Significant Impact

## Long-term Operations of the Paradox Valley Unit of the Colorado River Basin Salinity Control Project

Bureau of Reclamation

Western Colorado Area Office, Southern Division  
WCS-FONSI-97-01

# Finding of No Significant Impact

Long-term Operations of the Paradox Valley Unit


of the

Colorado River Basin Salinity Control Project

Recommended for Approval

  
\_\_\_\_\_  
Chief, Land, Recreation & Environmental  
Resources Group

5-30-97  
Date

  
\_\_\_\_\_  
Archaeologist, Land, Recreation & Environmental  
Resources Group


5/30/97  
Date

Recommended for Approval:

  
\_\_\_\_\_  
Southern Division Manager

5-30-97  
Date

Approved:

  
\_\_\_\_\_  
Western Colorado Area Office Manager

6/6/97  
Date

## Background

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act of 1969 (40 CFR Part 1500-1508), the Bureau of Reclamation has determined that an Environmental Impact Statement is not required for the Proposal for Long-term Operations of the Paradox Valley Unit (Unit) of the Colorado River Basin Salinity Control Project

The Unit was among those authorized by the Colorado River Basin Salinity Control Act of 1974, Public Law 93-320 (88 Stat. 266, June 24, 1974) (Act) as part of a basin-wide program for the enhancement and protection of the quality of water available in the Colorado River for use in the United States and the Republic of Mexico. The program would help to control salinity levels in the Colorado River.

This Unit of the Colorado River Basin Salinity Control Project is located in Southwestern Colorado and is designed to control natural brine inflows into the Dolores River. Without control, based on 1981 - 1987 data, as the river enters the valley the salt load typically averages 141,000 tons per year. As the river leaves the valley the salt load averages 343,000 tons per year—an average gain of over 200,000 tons. Data gathered during testing indicate operation of the Unit would reduce the salt load leaving the valley.

Original NEPA compliance for construction and operation of the salinity control units authorized by the Act was completed with the approval of the 1977 Final Environmental Statement (FES 77-15) - Colorado River Water Quality Control Program. A subsequent Final Environmental Statement (INT FES 79-14) was developed specifically for the Unit. NEPA compliance for construction and testing of the Unit was achieved through a Final Environmental Assessment (EA) (UC-EA-86-03) and Finding of No Significant Impact (FONSI) (UC-FONSI-86-03) issued in July 1986. Because of modifications to the implementation plans and operations, a Draft Supplemental Definite Plan Report (DPR) and Environmental Assessment (EA) was developed and circulated for comment in October 1996. Comments were received and the final DPR/EA now presents the final salinity features of the Unit.

A system of 18 brine production wells and 68 ground water monitoring wells has been constructed. The production wells were drilled and individually pumped in short tests during the summer of 1977.

As explained in the Supplemental DPR, a decision was made to test the brine injection method. The method has been tested and proven, and Reclamation now wants to put the test unit into permanent operation.

This decision was based, in part, on the Environmental Protection Agency's opinion that injection was the environmentally preferred solution. The method was discussed as an alternative in the original DPR but had been dismissed on the assumption that a combined pumping rate of 5-cubic-feet-per-second (cfs) was necessary to achieve the desired results and that this pumping rate was too high for the geologic formations to absorb. However, the subsequent analysis of the results produced by the testing program indicates that a pumping

rate of about 2 cfs would suffice and that the lower pumping rate would not over load the geologic formation into which the brine would be pumped. In August 1985, the final design for a deep-well injection testing program was completed.

Construction of Test Injection Well No. 1 and the required supporting facilities began in July 1986 and was completed in January 1990. The shakedown run to correct deficiencies was completed in July 1991, and injection testing was initiated.

#### Proposed Action

The proposed action is to bring the test wells of Paradox Valley Unit of the Colorado River Basin Salinity Control Program into long-term operations.

#### Summary of Impacts

The Draft Supplemental Definite Plan Report and Environmental Assessment (DPR/EA) was distributed for public comment to state and federal agencies, public and private entities, and interested individuals. The final supplemental DPR/EA has been modified, where appropriate, to incorporate public comments.

The predominant concerns received from the public were related to the potential seismic/tectonic effects of long-term injection. These concerns have been addressed and copies of the comment letters are included in the DPR.

Data and analysis led to the following:

1. The Biological Opinion from the U.S. Fish and Wildlife Service states that Reclamation's continued participation in the San Juan River Recovery Implementation Program serves as the reasonable and prudent alternative to avoid destruction or adverse modification of endangered fishes critical habitat caused by the project's depletion. (see appendix I)
2. The aquatic resources in the Dolores River below the Unit will benefit from the proposed action because of water quality improvements.
3. There will be no impacts to hydropower generation.
4. There will be no impacts to cultural resources.
5. There will be no impacts to Indian Trust Assets.
6. There will be beneficial impacts to wetland and riparian areas.
7. Operation of the deep well injection unit will deplete 1,300 acre-feet less than would have been used in the evaporation pond proposed in the former Final Environmental Statement.

## FINDING

Based on the data and analysis found in the final supplemental DPR/EA, Reclamation has determined that implementation of the preferred alternative will not significantly affect the quality of the human environment or the natural resources of the area. This Finding of No Significant Impact has therefore been prepared and is submitted to document environmental review and compliance with the National Environmental Policy Act.