**FINDING OF NO SIGNIFICANT IMPACT**

**Programmatic Environmental Assessment/Biological Assessment**
**Carlsbad Project Vegetation Management Program**
**Eddy County, New Mexico**

U.S. Department of the Interior
Bureau of Reclamation
Albuquerque Area Office
Albuquerque, New Mexico

Recommended by:

Lon Robertson
Manager, Environment and Lands Division

September 15, 2004
Date

Approved by:

Area Manager, Albuquerque, New Mexico

September 21, 2004
Date

FONSI Number: AAO-04-05

**Summary**
The United States Department of the Interior, Bureau of Reclamation Albuquerque Area Office has prepared a draft programmatic environmental assessment/biological assessment (draft EA/BA) to assess potential environmental effects of the Carlsbad Project Vegetation Management Program (Vegetation Management Program or Program).

The Vegetation Management Program consists of a research component and a treatment component. The research component includes studies of a biological agents, herbicides, and mechanical methods; revegetation; and herbicide residue. The treatment component includes potential aerial application of an herbicide for treating saltcedar and some treatments of other invasives that would be implemented in cooperation with the Carlsbad Irrigation District (CID) and the Carlsbad Soil and Water Conservation District. The Vegetation Management Program, if implemented, is envisioned to further our knowledge of the most appropriate and most effective treatment and revegetation methodologies while simultaneously reducing the acreage currently impacted by saltcedar and other invasive plants.

The proposed project is in keeping with the Department of the Interior (DOI) goals to sustain biological communities on DOI managed and influenced lands and waters in a manner consistent with obligations regarding the allocation and use of water as stated in the fiscal year 2003-2008 Strategic Plan.

Currently, Reclamation, through cost share with the State of New Mexico, is maintaining the 33,000+ acres originally cleared in New Mexico. The State of Texas has withdrawn from the program. Under contract with the Carlsbad Irrigation District, these areas are still being mechanically cleared of any new salt cedar growth, utilizing Reclamation equipment, with labor being furnished by CID. These acreages are scattered on both sides of the Pecos River, from Santa Rosa, New Mexico, to the State line of Texas, with about 40% being south of Carlsbad, 40% being north of Artesia, to just north of Roswell and about 20% between Santa Rosa and Ft. Sumner Irrigation District.

**Alternatives Considered**
Alternatives were presented in the Draft EA/BA document. This included the no action alternative and the proposed action of establishing a Vegetation Management Program.

**Decision**
Reclamation has decided to implement the proposed action alternative as described in the EA/BA. This preferred alternative of Vegetation Management Program provides the opportunity to learn about the range of treatment methods, their effectiveness on Carlsbad Project lands, how to optimize invasive plant control through integration of methods, and how to reestablish native vegetation on treated lands to actually reduce the amount of acreage currently infested with saltcedar and other invasive plants.

**Environmental Impacts of the Vegetation Management Program**
The following resources and socioeconomic factors were evaluated in detail in the EA for anticipated impacts from implementation of the integrated methods: soils, range condition, noxious weed infestations, grazing, water quality, water, fisheries, wildlife, threatened and

endangered species, cultural resources, recreation and accessibility, socioeconomic considerations, and environmental justice. The following resources are discussed further:

**Soils**
The soils in the Research Project area vary from flat, alluvial loams to steep, rocky outcrops, to exposed caliche surfaces. Potentially better soil nutrient availability will result due to the treatment and research preformed in the project area. No equipment or facilities requiring permitting through the New Mexico Environment Department Air Quality Bureau (NMAQB) are proposed for the action.

**Range Conditions**
The treatments would be made to saltcedar occupying alluvial soils in the floodplain between Avalon and Brantley Dams (within the dam's floodplain). No impact will occur to geology, geomorphology, or topography as a result of the proposed action. No mitigation measures would be needed. The uncontrolled growth of saltcedar reduces available soil moisture for other plants.

**Noxious Weed Infestations**
Reclamation maintains an ongoing cooperative and joint effort with local, state, and other federal agencies in the identification, mapping, treatment and monitoring of noxious weeds. The Preferred Alternative would serve to minimize soil disturbances/bare ground situations thus reducing the likelihood of noxious weed infestations and spread. Noxious weeds would be monitored and treated as necessary.

**Grazing**
Carlsbad Project area grazing management, conducted only on lands below Brantley Dam, consists primarily of continuous, year-round stocking of cows and calves. The preferred alternative would provide for potential gains in forage under current grazing management, if vegetation management is extended below Brantley Dam. Thus the project would not have a negative impact to grazing.

**Water Quality**
Arsenal herbicide readily breaks down in water in the presence of sunlight and has extremely low mammalian and aquatic toxicity. Recently Imazapyr has received an aquatic label under product name Habitat herbicide. Reclamation would use approved herbicides according to the product label, state law, and Environmental Protection Agency (EPA) guidelines. The selection of application techniques would be used to minimize effects to non-target vegetation and avoid water quality impacts. At the reservoir, treatment may occur anywhere except within 50 feet of the wetted perimeter. Erosion, caused by bare ground and the resulting water quality impacts, is not expected to be substantial under the proposed action but the potential for some increased sediment load exists.

**Water**
Because native vegetation consumes less water than saltcedar, the preferred alternative has potential to salvage water though the savings maybe immeasurable.

**Fisheries**
Arsenal herbicide readily breaks down in water in the presence of sunlight and has extremely low mammalian and aquatic toxicity. Precautions according to product labels will be adhered to protect water quality. At the reservoir, treatment may occur anywhere except within 50 feet of

the wetted perimeter. No adverse impacts to fish are expected within the Carlsbad Project Vegetation Management Program area.

**Wildlife Species**
The Carlsbad Project Vegetation Management Program may have some short term impacts to animals that use saltcedar for cover, however overall plant species diversity would be potentially increased. The preferred alternative may potentially increase wildlife diversity under improving range conditions. No impacts would occur to endangered, threatened, or sensitive plant species in the proposed project area.

**Threatened and Endangered Species**
No impacts would occur to any federally listed endangered or threatened species in the proposed project area.

**Cultural Resources**
No impacts to cultural resources are expected from the Carlsbad Project Vegetation Management Program, as all identified sites will be avoided. No effect would occur to cultural resources.

**Recreation and Accessibility**
Impacts due to associated increased use are considered minor in relationship to the availability of public land present in the area at both Brantley and Avalon Reservoirs. Potentially improved human access to recreation sites could occur.

**Socioeconomic**
The proposed action would have a slight beneficial impact on employment because of the research and treatment associated work with the Carlsbad Project Vegetation Management Program, but no significant impacts on long-term demographic trends.

**Environmental Justice**
The Carlsbad Project Vegetation Management Program would not have any disproportionately high or adverse effects on minority or low-income populations.

**Indian Trust Assets**
No Indian Trust Assets have been identified in the project area, and no impacts to Indian Trust Assets are expected from the proposed action.

**Cumulative Impacts**
Cumulative Impacts are defined as: "The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."

In some cases sites occupied by saltcedar may permanently lose their soil and hydrological attributes i.e., increases to soil salinity, changes in water availability, surface velocity and silt deposition affecting their ability to support native climax plant communities (climax

communities are defined in ecological terms as being somewhat in equilibrium). The Preferred Alternative would not cause irreversible loss of the potential to support native vegetation.

Cumulative impacts as a result of the proposed action are expected to be low.

**Environmental Commitments**
Reclamation will meet all the environmental commitments listed in the environmental assessment and ensure monitoring and notification is performed as stated.

**Nature of Environmental Impacts**
Possible impacts include displacement of wildlife associated with the proposed treated saltcedar acreage. This would be due to the loss of vegetation if native species do not revegetate in the treated areas. Increases in sedimentation of surface waters within the project area may occur depending upon the results of the revegetation sites and the effectiveness of spraying saltcedar.

**Consultation and Coordination**
Reclamation performed consultation and coordination as follows:
1) On May 6th and 7th of 2003 Reclamation, Albuquerque and Denver Office met with the Carlsbad Irrigation District to discuss biocontrol, aerial herbicide applications and revegetation.
2) On March 12, 2004 in Carlsbad, New Mexico information was provided to the public on proposed Reclamation work to make field releases and conduct monitoring of an approved saltcedar biocontrol beetle. Individuals from the surrounding communities attended the meeting as well as various agencies (i.e. New Mexico State University, Pecos Valley Artesian Conservation District, and United Stated Department of Agriculture) involved and interested in the various saltcedar programs. The Artesia News and the Carlsbad Current-Argus Newspapers ran public notices on March 3, 2004 of the meeting for the Saltcedar Biocontrol Beetle Meeting.
3) On July 21 and 22, 2004 Reclamation staff conducted a site visit to chose treatment areas in conjunction with the Carlsbad Irrigation District.
4) Reclamation issued the draft EA/BA for public review in late August 2004. The Artesia News and the Carlsbad Current-Argus newspaper ran a public notice for the draft environmental assessment on August 27, 2004, comment period ending September 10, 2004.
5) A Carlsbad Project Vegetation Management Program Meeting was held on August 31, 2004 at the City of Carlsbad Public Library, in Carlsbad New Mexico to consult and coordinate with various agencies on treatments and research proposed within the area. Attendees included the New Mexico Game and Fish Department, Carlsbad Irrigation District, Bureau of Reclamation Denver Office, and the Carlsbad Soil and Water Conservation District.

**Changes to the EA/BA**
The final EA/BA was prepared after a careful review of agency comments. The following changes were made: 1) editorial corrections and other clarifications 2) additional map information included.

**Finding**
Based on the analysis presented in the programmatic EA/BA, Reclamation finds that there would be no significant impacts associated with implementation of the proposed action. Reclamation makes this Finding of No Significant Impact (FONSI) pursuant to the National Environmental

Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and the Council on Environmental Quality implementing regulations (40 CFR 1500). Reclamation has determined that the proposed action does not constitute a major federal action that would significantly affect the human environment. Therefore, no environmental impact statement will be prepared for this proposal.