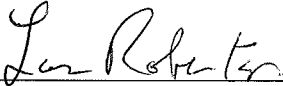


U.S. Department of the Interior
BUREAU OF RECLAMATION
Albuquerque, New Mexico

Albuquerque Area Office

Finding of No Significant Impact


Environmental Assessment
for
Integrated Pest Management in the Pecos River Basin
(Sumner, Brantley and Avalon Dams);
Carlsbad Project, New Mexico
2007-2012



Manager, Environment Division

Feb 8, 2007

Date



107 Area Manager, Albuquerque Area Office

2/9/07

Date

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Background

A proposal to authorize the Bureau of Reclamation, including cooperators (Carlsbad Irrigation District and Brantley Lake State Park, Sumner Lake State Park, New Mexico Department of Energy, Minerals, and Natural Resources) and contractors, to use pesticides to control undesirable native and non-native plants on facilities and lands managed by Reclamation on the Pecos River, New Mexico (Carlsbad Project), was analyzed in an Environmental Assessment (EA). The “project area” includes: (1) Sumner, Brantley, and Avalon Dam Faces and Structures; (2) riparian Areas on the River and Lakebeds; and (3) Brantley Lake and Sumner State Park Recreation Sites. In addition, the proposed treatment of weed and insect pests at Brantley Lake and Sumner Lake State Parks also was evaluated. The EA describes two alternatives: (1) Alternative A - No Action and (2) Alternative B - the Proposed Action to use herbicides as part of an Integrated Vegetation/Pest Management Strategy. Under the No Action Alternative, pesticides would not be used on Reclamation lands, but cooperators would continue to use manual and mechanical control methods that were authorized under other environmental analyses. Under the Proposed Action, pesticides would be used on an annual basis to control vegetation that threatens the structural integrity of dam structures, or adversely affects the adequate flow-carrying capacity of water conveyance. In addition, this analysis will also address the management of weeds invading recreation sites at Brantley Lake and Sumner Lake State Parks and control of insect pests that damage trees near facilities and recreation sites or insects that are considered to be a nuisance to visitors.

Summary of the Proposed Action

The proposed action is to authorize Reclamation, cooperators, and contractors to use herbicides to control noxious weeds (plant species listed by state or federal laws or regulations), invasive plants (native or non-native plants that have the potential to dominate sites), and hazardous vegetation (plant species that have the potential to cause injury to humans or animals) on Reclamation lands along the Pecos River, New Mexico. Approved herbicides include: Clopyralid, dicamba, glyphosate, imazapy, methsulfuron methyl, oryzalin, pendimethalin, picloram, sulfometuron methyl, and triclopyr, 2,4-D. Insecticides considered for use at Sumner Lake State Park will include malathion, acephate, carbaryl to control or prevent insects attacking shade trees, and hydramethylnon (a bait to control harvester ants).

Principles of adaptive management and managerial flexibility will be used during these projects. Pesticide treatments would allow decision makers to take advantage of new information that becomes available after a decision has been made. It is possible that a new product, approved and labeled by the U.S. Environmental Protection Agency (EPA), could become available during implementation. If implementation monitoring shows that the herbicides/insecticides analyzed in the EA are not effective in meeting the purpose and need and a new or improved product is available, the new product could be considered for use without further analysis. This

would be the case only if the new or improved product fits within the same effects analysis disclosure for the herbicides covered in this EA. An analysis would be done by the Reclamation's Environment Division to determine the similarities of effects and if the decision should be amended to include new herbicide product. Unless revised, this EA will remain in effect through 2012.

The EA describes the potential effects of the No Action alternative, not authorizing the use of herbicides/insecticides, and the Proposed Action to authorize the use herbicides/insecticides. Mitigation measures and Best Management Practices (also included in IPM/IVM plans) would be followed during implementation to mitigate the risk of adverse impacts to (1) humans; (2) non-target vegetation, including threatened, endangered, and sensitive plants; (3) non-target terrestrial and aquatic animals, including threatened, endangered, and sensitive animals; and (4) water quality. The proposed action would have no effect on any threatened or endangered species, and thus a Biological Assessment is not needed.

Alternative B, the proposed use of herbicides/insecticides, would be selected because it best meets the purpose and need as described in the EA (Chapter 1). It would allow Reclamation employees, cooperators, and contractors to effectively and efficiently control undesirable plant and insect species on Agency lands and facilities along the Pecos River.

The potential environmental effects and risks associated with the proposed use of herbicides/insecticides for humans and the environment were considered.

The alternatives considered in detail included Alternative A (No Action, i.e., no use of herbicides/insecticides), and Alternative B (the Proposed Action to use herbicides/insecticides).

Alternative A was not selected. Effective and economical control of undesirable vegetation and insect pests on Brantley Lake and Sumner Lake State Parks could not be achieved solely by the use of manual, mechanical, and preventive measures that are available. Manual and mechanical methods have proven to be ineffective for several species of sprouting plants, especially perennial species with deep root systems. In addition, the expense of controlling the remaining species of undesirable plants and insect pests was considered to be excessive under this alternative.

Alternative B was selected because it provides Reclamation managers with the full range of proven methods, including the use of herbicides/insecticides, to achieve effective and efficient Integrated Pest and Vegetation Management.

Table 1 - Comparison of alternatives

Measurement Parameters	Alternative A - No Action (No Herbicide Use)	Alternative B – Preferred Alternative (Includes Herbicide Use)
Addresses the purpose and need?	<p>No. Vegetation on dam faces, especially deep-rooted trees and shrubs, could not be effectively controlled by manual or mechanical methods. Public safety and protection of property would be at risk due to the potential failure of dams and structures. Also, management of saltcedar and other non-native plant species invading lakebeds, in and around facilities, and other sites on Reclamation lands could not be effectively achieved. On Brantley Lake and Sumner Lake State Parks, it would not be possible to maintain or improve the health of planted trees by manual methods. Finally, harvester ant colonies could not be effectively managed, and they would diminish the recreational experience of visitors.</p>	<p>Yes. Allows for the selection of a full range of Integrated Pest and Vegetation Management options, including the use of herbicides and insecticides. Offers the best protection of dams by removing deep-rooted plants that could compromise the structural integrity and provides for the safety of the public and property. Control of undesirable plant infestations in lakebed would provide an opportunity to re-introduce native plant communities. The ability to effectively manage vegetation and insect pests at Brantley and Sumner Lake State Parks would provide the best opportunity to maintain or improve recreational conditions for visitors.</p>



Measurement Parameters	Alternative A - No Action (No Herbicide Use)	Alternative B – Preferred Alternative (Includes Herbicide Use)
Consistent with statutes, regulations, and other plans?	No. Not responsive to Reclamation policy to protect dams, structures, and facilities to provide for the protection of public safety and property. Also, the mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public would not be met. Finally, it would not be possible to restore native plant communities in lakebed and other Reclamation lands.	Yes. This alternative would allow Reclamation and cooperators and contractors to effectively manage vegetation and insect pests to achieve the stated mission and policies.

Environmental Impacts Related to the Resources of Concern

Based on the EA, it was determined that the proposed use of pesticides is not a major federal action that will significantly affect the quality of the human environment; therefore, an Environmental Impact Statement will not be prepared. The determination is based on the following:

- **Human Health**

The *risk to humans* associated with toxic effects of herbicides and insecticides would be negligible.

The disclosure of effects using herbicides/insecticides on the quality of the human environment nearly always generates some level of controversy. The concerns by the public over pesticide use will be considered, but the level of response is not expected to be substantial and



the effects may not be *highly controversial*.

The possible effects described in the EA are not *highly uncertain* nor do they involve *unique or unknown risks*. The environmental effects are typical for this type of program using herbicides/insecticides to control unwanted pests. The analysis of possible effects is based on the best available information, science, and the judgment of pest management and land management specialists with Reclamation. The predicted environmental consequences are based on published information and each herbicide/insecticide, expected patterns of use, risk assessments developed for the USDA Forest Service for herbicides, and a summary of potential risks to humans and non-target species (Chapter 4), which were incorporated by reference.

- **Non-target Vegetation**

None of the pesticides proposed for use will have any significant affect (direct, indirect, or cumulative) on non-target vegetation. This action is limited to herbicide/insecticide use to control vegetation and insect pest on Reclamation lands and facilities on the Pecos River. Reclamation has proposed, and could propose in the future, the use of herbicides or insecticides to control certain pest species on the Pecos River. These proposals will be evaluated through the NEPA process and the effect of the actions in combination with treatments will be evaluated for *cumulatively significant impacts*.

- **Non-target Terrestrial and Aquatic Animals**

The proposed action with proposed mitigation measures identified in the IPM/IVM plans *will have no effect on any endangered, threatened, or proposed species; or designated or proposed critical habitat areas; or nonessential experimental populations*.

- **Water Quality**

There would be no direct, indirect, or cumulative impacts to water quality from the proposed use of herbicides or insecticides.

- **Indian Trust Assets**

There are no native American Indian Trust lands or assets in the vicinity of the proposed project area.

- **Environmental Justice**

Implementing the preferred plan would result in no disproportionately adverse effects to minority or low-income populations.

- **Irreversible and Irretrievable Commitment of Resources**

No irreversible or irretrievable commitment of resources is expected by adopting Alternative B, Proposed Action (Integrated Pest Management), involving the use of herbicides and insecticides. Even under a worst-case scenario, the effects of the proposed use of herbicides and insecticides would be negligible.

- **Cumulative Impacts**

No cumulative impacts would occur to people, non-target vegetation, terrestrial wildlife, and water quality from the proposed action, Alternative B.

Environmental Commitments

The application of pesticides is tightly controlled by state and federal agencies. Reclamation is required to follow all state and federal laws and regulations applicable to the application of pesticides. The mitigation measures listed in Chapter 5 would be followed when applying pesticides.

Coordination

Reclamation has coordinated with Sumner Lake State Park, Brantley Lake State Park, and the Carlsbad Irrigation District, in the preparation and approval of integrated pest management plans.

Conclusion

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and based on the analysis in the EA, the Bureau of Reclamation has determined that implementing the preferred plan presented in the EA for integrated pest management would not result in a significant impact on the human environment and does not require preparation of an environmental impact statement.