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

FINDING OF NO SIGNIFICANT IMPACT

Phreatophyte Management at Caballo and Elephant Butte Reservoirs, September 2008-2013

Manager, Environment Division — Date: February 27, 2008

Area Manager, Albuquerque, New Mexico — Date: 2/29/08

FONSI Number: AAO-08-004

Summary of the Proposed Action

The Bureau of Reclamation, Elephant Butte Field Division, proposes to continue another five years of vegetation management for maintenance of woody phreatophytes on lands at Caballo and Elephant Butte Reservoirs to allow for continued treatments and studies. This work will continue and be evaluated annually as originally proposed in the September 2003 Programmatic Environmental Assessment/Biological Assessment for Phreatophyte Management at Caballo and Elephant Butte Reservoirs.

The original Phreatophyte Management at Caballo and Elephant Butte Reservoirs Environmental Assessment/Biological Assessment (EA/BA) was for a five year period beginning in 2003 and evaluated annually. Over the past five years, herbicide treatments have been made to 3,850 acres in addition to annual mowing.

Reclamation has made significant advances in treatment selection and monitoring during this period including completion of herbicide dissipation studies, evapotranspiration studies, and an investigation of efficacy for carpet roller applications.

Reclamation proposes to continue treatment of saltcedar (*Tamarix sp.*) and to a lesser extent screwbean mesquite (*Prosopis pubescens* - Caballo Reservoir only) with herbicide products currently labeled for use on range and pasture or noncropland in the State of New Mexico. Mowing will continue to be required at previously maintained areas to obtain a target vegetation height suitable for ground applied herbicide treatments.

The work will continue to be conducted to not affect any federally-listed species. Aerial treatments will be made in selected areas to facilitate vegetation management in limited access areas while reducing site disturbances.

Caballo Reservoir

Follow up treatments and periodic control measures will be used to reduce plant densities further. The management objective for screwbean mesquite is to reduce the occurrence of large stands (greater than five acres) that prohibits area recreational use. The work would include foliar broadcast applications, foliar individual plant treatments, carpeted roller treatments, basal bark and cut-stump applications (treatment would be dependant upon plant densities, proximity to water, presence or absence of other vegetation, and cost effectiveness). Follow up treatments at Caballo Reservoir would include the removal of dead trees with small stem diameters through a final clean up mow. Periodic control measures would continue to include individual plant treatments with herbicides to surviving saltcedar utilizing leaf spray and low-volume basal applications. All applicable laws and regulations pertaining to herbicide use would continue to be followed with emphasis given to minimizing impacts to non-target vegetation. Reclamation's long term goal is to reduce or eliminate mowing. This can only be accomplished through plant mortality as mowing alone does not kill saltcedar or screwbean mesquite and must be repeated periodically to suppress the spread and influence of both species.

Elephant Butte Reservoir

The desired objective at Elephant Butte Reservoir is to treat monotypic saltcedar stands below Silver Canyon only where a determination could be made that there would be no adverse impacts to the Federally endangered Southwestern Willow Flycatcher (*Empidonax trailii extimus*). These sites will continue to be selected based upon recent vegetation classification maps (2003) and current flycatcher survey results. Currently, suitable flycatcher habitat exists through the Narrows area of Elephant Butte Reservoir so treatments would be limited to areas south of Mitchell Point. The treatment sites will continue to vary in size; in general, the larger monotypic saltcedar areas are the prime targets for treatment. Upon review of the survey data, Reclamation would select appropriate treatment sites with the assistance of staff biologists. A ¼ mile buffer to any occupied flycatcher habitat would be maintained. The aerial applications will continue to be made with the assistance of global positioning systems (GPS) technologies in order to maintain the appropriate buffers. Herbicide applications north of the Narrows would only occur during September. Dead aerially sprayed vegetation at Elephant Butte Reservoir will continue to be left in place for potential fishery habitat when the reservoir water storage levels rise. 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. Periodic control measures will continue to include individual plant treatments with herbicides to surviving saltcedar utilizing leaf spray and low-volume basal applications. All applicable laws and regulations pertaining to herbicide use will continue to be adhered to and primary considerations will continue to be given to minimizing impacts to non-target vegetation.

Environmental Impacts

Soils

The five year extension of work (Herbicide Treatment) is expected to increase productivity of soils through improved soil moisture availability and reduced soil disturbances from maintenance equipment. The uncontrolled growth of saltcedar reduces available soil moisture for other plants. Thus, this project will continue to have a positive impact with regard to soils.

Range Condition

Current range conditions are poor to fair based upon the former Soil Conservation Service's (SCS) methods of range classification; however the overall productivity of floodplain sites is good due to the occurrence of Bermuda grass and saltgrass sods. The work will continue to create conditions favorable to range improvement through improved soil moisture relationships and reduced competition.

Noxious Weed Infestations

Under Federal law, noxious weeds are defined as those plants that are "of foreign origin, are new to or not widely prevalent in the United States, and can directly or indirectly injure crops, other useful plants, livestock, or poultry or other interests of agriculture, including irrigation or navigation, or the fish or wildlife resources of the United States or the public health." The work will continue to serve to minimize soil disturbances/bare ground situations thus reducing the likelihood of noxious weed infestations and spread. Noxious weeds will continue to be monitored and treated as necessary.

Grazing

There are currently sixteen grazing allotments within the project area, eight at each reservoir. These areas are managed cooperatively under Bureau of Land Management (BLM) permitting and oversight.

Reclamation lands constitute a percentage of the allotments and are supplemental to adjacent BLM grazing lands. The project will continue to not have a negative impact to grazing.

Water Quality

Reclamation will continue to use approved herbicides according to the product label, state law, and Environmental Protection Agency (EPA) guidelines. Reclamation believes that the herbicides proposed for use, properly applied with the field conditions present, will have no effect on groundwater. No spraying will occur where surface water will be impacted. Therefore, no adverse impacts to water quality are expected from the continued work.

Fisheries

The continued work is not anticipated to adversely impact fisheries. Reclamation will continue to use approved herbicides according to the product label, state law, and EPA guidelines.

Wildlife

The work may potentially increase wildlife diversity under improving range conditions. The proposed five year extension of work does not involve changes in land use or management while potentially enhancing wildlife habitat.

Threatened and Endangered Species

The flycatcher occurs in the headwaters area of Elephant Butte Reservoir, but not within the proposed treatment areas. Flycatchers are riparian obligates (i.e., they reside exclusively in riparian areas), and were first reported at Elephant Butte Lake State Park in the 1970s, although the exact locations of the sightings were not documented (Hubbard 1987). Reclamation has conducted surveys for flycatchers in the Elephant Butte headwaters area since 1996. The Rio Grande provides important habitat for flycatchers during migration (Yong et al., 1995). There is no designated critical habitat for flycatchers within the project area (Federal Register 97-19209; July 21, 1997). The absence of a critical habitat designation does not preclude consultation with the Service under Section 7 of the Endangered Species Act when an action "may affect" a listed species. Reclamation would select appropriate treatment sites with the assistance of staff biologists. A ¼ mile buffer to any occupied flycatcher habitat would be maintained. The aerial applications will continue to be made with the assistance of global positioning systems (GPS) technologies in order to maintain the appropriate buffers. 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. The five year extension of work will not have any effect on the flycatchers or silvery minnows. If during the course of the next five years there becomes any potential to affect endangered species, the FWS will be immediately consulted.

Cultural Resources

At Caballo Reservoir, the majority of the recorded cultural resource sites occur at elevations above and outside of the location of the proposed action. Therefore, the continued work will not impact archaeological and culturally significant resources occurring within the area. No Class III Cultural Resource Survey had been performed at Elephant Butte Reservoir to this date; due to the method of treatment (aerial application), the continued work will not impact any archaeological or culturally significant resources.

Recreation and Accessibility

The continued work will improve accessibility to recreation by removing physical barriers to the river channel (below Elephant Butte Dam) and reservoirs. Impacts due to associated increased use are considered minor in relationship to the availability of public land present in the area at both Caballo and Elephant Butte Reservoirs. Increased "use" will be dispersed at both reservoirs.

Socioeconomic Considerations and Environmental Justice

The local economy derives a benefit from this area primarily supporting recreation that occurs in the project. The New Mexico Department of Game and Fish stocks this portion of the Rio Grande below Elephant Butte Dam with trout species and Caballo Reservoir with walleye for fishing opportunities. Tourists and local citizens utilize the area for primitive camping, hiking, and equestrian use. Local ranchers lease the area under a grazing allotment system managed by BLM for beef production. The five year extension of work will continue to increase the potential user base through better accessibility.

Indian Trust Assets

Indian Trust Assets (ITA) are "legal interests" in assets held in trust by the Federal Government for Indian tribes or individual Indians. Examples of things that can be ITAs are lands, minerals, water rights, hunting and fishing rights, other natural resources, money, or claims. A characteristic of an ITA is that it cannot be sold, leased, or otherwise alienated without the approval of the Federal government. Secretarial Order 3175 and Reclamation ITA procedures require Reclamation to assess the impacts of its projects on identified ITAs. Reclamation, in cooperation with American Indian Tribes impacted by a given project, must inventory and evaluate assets, then mitigate or compensate for adverse impacts to the assets held in trust for federally recognized American Indian Tribes or Indian individuals. Both Caballo and Elephant Butte Reservoirs occupy withdrawn and acquired lands for the purposes of reservoir operations. No ITAs have been identified within these projects and therefore no effects to ITAs are anticipated due to the five year extension of work.

Environmental Justice

Environmental justice refers to the protection of human rights; particularly minority and low income populations, for any government action affecting both the human and natural environment. Environmental justice is included in this EA/BA in compliance with the Executive Order 12898, signed in 1994: Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires that "each Federal Agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies and activities on minority populations and low-income populations." A memorandum to heads of departments and agencies that accompanied Executive Order 12898 state that "each Federal Agency shall analyze the environmental effects on minority communities and low-income communities, when such analysis is required by NEPA." There are no anticipated effects on minority or low income populations arising from this five year extension of work.

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 five year extension of the original proposed work will not cause irreversible loss of the potential to support native vegetation.

Irreversible and Irretrievable Commitments of Resources

This section describes unavoidable adverse impacts to the resources discussed in the September 2003 Programmatic EA/BA that would occur with the implementation of the proposed action. Unavoidable adverse impacts are impacts that are unavoidable and unmitigable.

During project implementation, materials such as fossil fuels, labor, and materials would be needed to accomplish the proposed work. Generally speaking, these materials are not retrievable, but are not considered in short supply. Their use would not have an effect on continued resource availability. State and Federal public funds, which are not retrievable, would be utilized for the proposed work.

Conclusion

The work proposed for 2008-2013 is the same scope as the work analyzed in the original EA/BA. Environmental conditions have not changed significantly and the range of potential environmental effects described originally still adequately applies to the new five years of proposed work. All work will be confined so as to have no effect on endangered species.

Based on the analysis presented in the September 2003 Final Programmatic EA/BA which remains valid today, Reclamation finds that there would be no significant impacts associated with the proposed five year extension of work. 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 five year extension of work does not constitute a major Federal action that would significantly affect the human environment.