

**FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD**

Environmental Assessment AZ-130-2007-0042

Tamarisk Control

Grand Canyon – Parashant National Monument/Arizona Strip District

Bureau of Land Management

345 East Riverside Drive

St. George, Utah 84790

435-688-3200

October 2007

FONSI: Based on the analysis of potential environmental impacts contained in the attached environmental assessment (EA-AZ-130-2007-0042), and with due consideration of public response, the National Park Service (NPS) and Bureau of Land Management (BLM) have determined that the proposed action does not constitute an action that normally requires the preparation of an environmental impact statement. Both agencies have determined that the proposed action will not have a significant effect on the human environment and an environmental impact statement is therefore not required.

Negative environmental impacts that could occur are negligible to minor in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region.

There are no highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence identified. Implementation of the action would not violate any federal, state, or local environmental protection law. Therefore, in accordance with the National Environmental Policy Act of 1969, and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement will not be prepared for this project.

DECISION: It is our decision to implement the Tamarisk Control project on the BLM portion of the Grand Canyon – Parashant National Monument, as described in the Proposed Action, Alternative A. of EA-AZ-130-2007-0042. BLM and NPS would hand pull, use chainsaws and/or hand saws to manually cut tamarisk (and other non-native, invasive tree species, if discovered), and/or treat with chemical herbicides to extirpate tamarisk (and other non-native, invasive tree species), where it occurs, within the Grand Canyon – Parashant National Monument, excluding the area below the high water mark of the shoreline of Lake Mead.

Depending on the age and size of individual stems, the density of stems, and the degree of intermingling with native vegetation, one of the following methods would be used to treat these woody non-native, invasive species:

Tree Cutting, Herbicide Application, and Hand pulling

Arizona certified herbicide applicators, under direct supervision of BLM and/or NPS certified personnel, would apply triclopyr. Application of herbicide will be conducted in accordance

with the manufacturer's label directions and an approved BLM and NPS Pesticide Use Proposal.

Cut-stump Application: Trees with stems greater than six inches in diameter (at ground level), would be cut near ground level with chainsaws, except in wilderness, where they would be cut with hand saws. Triclopyr and vegetable oil mixture would be applied to the cut stumps. A mixture of triclopyr and water would be applied to the cut stumps near wet areas. Cut stems would be pulled away from native vegetation and left to decompose on site.

Low Volume Bark Application at Stem Base: On trees with stems less than six inches in diameter (at ground level), a mixture triclopyr and a vegetable oil would be applied with backpack sprayers to the trunk of trees, from the ground level interface, up the stem approximately 18". Triclopyr would be applied according to label requirements.

Foliar Application: A mixture of triclopyr with water and a surfactant would be sprayed on small, individual trees, where at least 50% of the foliage of the tree could be sprayed, by hand with the herbicide mixture. This application would not occur where non-target species could be effected directly, or by drift.

Hand pulling of seedlings: Individual stems, usually less than 0.5 inches in diameter and up to 13" in height would be hand pulled, by the roots, from the ground.

Access: Access to the individual project sites would be by way of existing routes and dry washes, using standard ½ ton and ¾ ton trucks, and ATVs. On occasion, cross country transportation may be required. Where cross country transportation is necessary and any tracks would remain visible for more than two years, these tracks would be rehabilitated. During implementation, personnel will avoid walking in saturated areas which contain obvious spring flows and gravel substrate.

Mechanical transport is required to haul chemicals, tools, and large quantities of water into wilderness, over long distances, in some times very hot temperatures. While working in wilderness, project personnel would conduct all activities in accordance with existing wilderness area policies, utilizing a *Leave No Trace* approach.

Project personnel would receive a briefing on the goals and objectives of the treatment, and include information regarding protection of desert tortoise. The briefing would include information on employee and visitor safety.

Monitoring:

Implementation monitoring would consist of:

- a. Completion of BLM and NPS Pesticide Application Report within 24 hours of application,
- b. Documentation of proposed treatments in the BLM MIS System and NPS Pesticide Proposal reporting system at the beginning of each fiscal year, and
- c. Documentation of treatment completion in the BLM MIS System and NPS Pesticide Reporting System at the end of each fiscal year.

Effectiveness monitoring would consist of:

Treatment areas would be monitored on a yearly basis to evaluate the success of removal treatments, and for colonization of native and non-native vegetation. Re-sprouts of treated tamarisk would be treated, and newly colonized non-native species would be treated. Monitoring would occur for a minimum of 20 years, but would likely continue beyond that time frame.

Impairment of National Park Service Resources or Values

In addition to reviewing NEPA significance criteria, National Park Service (NPS) staff have determined that implementation of the proposed action (Alternative A -preferred alternative) will not constitute an impairment of NPS resources or values or alter opportunities for the enjoyment of the Monument. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, agency and public comments received, and the professional judgment of the decision-maker in accordance with the *NPS Management Policies 2006*. As described in the environmental assessment, implementation of the selected action (preferred alternative) will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Lake Mead National Recreation Area and the Presidential Proclamation of the Grand Canyon – Parashant National Monument; (2) key to the natural or cultural integrity of the Monument; or (3) identified as a goal in the Lake Mead National Recreation Area *General Management Plan* or other relevant National Park Service planning documents.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that will promote NEPA, as expressed in Section 101 of NEPA. Alternative A. will satisfy the following requirements:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable or unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and,
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

RATIONALE for DECISION: The decision to authorize the proposed action has been made in consideration of the environmental impacts of implementation.

The action is in conformance with the Arizona Strip Resource Management Plan, 1992, as amended, and the Lake Mead General Management Plan, 1986.

It is consistent with:

The Grand Canyon – Parashant National Monument Proclamation and Interim Management Policy, as well as with the Draft BLM RMP,

The National Park Service Organic Act (1916): To “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”, and

The National Park Service Strategic Plan for Managing Invasive Nonnative Plants on National Park Service Lands (1996). To: 1) Prevent invasion, 2) Increase public awareness, 3) Inventory and monitor non-native plants, 4) Conduct research and transfer technology, 5) Integrate planning and evaluation, and 6) Manage invasive non-native plants.

Potential adverse impacts on wilderness character (solitude and naturalness) were resolved through use of hand tools, “Leave No Trace” practices, and minimum tool considerations during activity planning. Concerns regarding wildlife habitat were addressed in the project design.

The No Action Alternative was not selected because it is not in conformance with existing direction, and would not protect National Monument objects, wilderness character, and important ecological and social resources.

The following Alternatives were Considered but not Analyzed in Detail

Prescribed Fire

The use of fire to control tamarisk has repeatedly been found ineffective when used as the sole control method. Tamarisk shows a remarkable ability to recover from fire as it is a fire-adapted species. Fire used with a follow up herbicide application has proved effective in areas with a dense population of tamarisk. However, tamarisk in the project area does not necessarily occur in dense thickets. Also, tamarisk usually occurs intermixed with desirable, fire-intolerant, native woody species. It would be impossible to burn and kill tamarisk without adversely impacting the desired native species.

Cutting Only

Cutting tamarisk trees without herbicide application has also proven to be ineffective. Tamarisk has the ability to crown sprout and recovers quickly from cutting. This tool is not viable, when used alone.

Use of Alternative Herbicide

An alternative was considered to use the herbicide “Habitat” (Isopropylamine salt of Imazapyr) for control of tamarisk around water. Although “Habitat” is approved for aerial use on open water, it is generally most effective for treating large thickets of tamarisk near open water, using the foliar application method. Because tamarisk has not yet developed into large, dense thickets on the Monument, this use of Habitat as a control agent is not particularly applicable; therefore, this alternative was not further evaluated.

Public Review and Comments

This EA was posted on the Arizona BLM website and was made available for public and agency comment during a 30-day review period beginning August 23, 2007 and ending September 23, 2007. The Grand Canyon – Parashant National Monument sent a Notice of Availability to 118 federal and state agencies, individuals, businesses, grazing permittees, and organizations, notifying them of the availability of the EA and the methods of accessing the document. The announcement and document were published on the BLM internet NEPA website. Individuals and organizations could request the environmental assessment in writing, by phone, or by e-mail.

One comment letter, from the Grand Canyon Chapter of the Sierra Club was received during the 30-day review period. The Sierra Club supports the project, with concerns, which are addressed as follows:

"Significant use of herbicides"

Use of herbicides would be minimized and confined to larger stems, where root systems are well established and control would not be affected by hand-pulling. Individual stems, usually less than 0.5 inches in diameter and less than 13" in height, would be hand pulled by the roots, from the ground.

"Garlon 4 should not be used near water, but we are also concerned about potential drift"

Garlon 3A would be the primary chemical used, Garlon 4 would be used only away from water (>30 ft) in accordance with the label and policy. Close proximity spray application would be by hand, and be applied by individuals who are trained to minimize drift while spraying. BLM and NPS shares the concerns about the impacts of Garlon 4 on aquatic systems and would take the necessary precautions to ensure nearby water was not contaminated.

"Specific care should be given to areas in which the threatened Mojave desert tortoise does or could occur"

The Proposed Action was informally consulted on with the US Fish and Wildlife Service, July 30, 2007. The Service agreed to a finding of No Impact, as long as the Terms and Conditions of the 1998 Biological Opinion and RMP Amendment would be implemented. The Terms and Conditions would be implemented.

"Areas that cannot be accessed by existing routes should be entered via foot, including all wilderness areas. The EA does not state that vehicles will not be used in the four wilderness areas that occur within the monument"

Because the Monument is vast and has a relatively low road density, and for the safety of the personnel implementing the project, the Minimum Guidance Worksheet resulted in determining the minimum tools to achieve the objectives as follows:

Although there would be short term disruptions to the solitude and unimpaired wilderness character from implementing Alternative A., the proposed action would

restore the wilderness to within the range of historic natural variability, restore ecosystem function and condition, and protect other wilderness values, as well as reduce the long term need for intensive human intervention to restore ecological functions. Mechanical transport is required to haul chemicals, tools, and large quantities of water, over long distances, in some times very hot temperatures.

"Proposed vehicle speeds are also a cause for concern"

The Proposed Action is in conformance with the Terms and Conditions of the 1998 Biological Opinion and RMP Amendment, as stated:

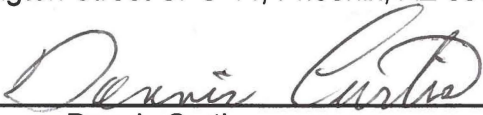
f. In DWMA/ACECs, vehicles associated with Bureau-authorized projects traveling on unpaved roads in desert tortoise habitat shall not exceed speed limits established by the Bureau as necessary to protect desert tortoises. These speed limits will generally not exceed 40 mph even on the best unpaved roads but may be much less on some roads.

"We also recommend the use of photo-logs to monitor recovery of native vegetation and any changes to the landscape"

The NPS Exotic Plant Management Team, that would implement this project, has a pre- and post-treatment monitoring system in place, which will be used prior to and post-implementation. In order to track treatment effectiveness and site recovery, photo-logs and other monitoring are routinely carried out by the Exotic Plant Management Teams. The BLM and NPS would be interested in cooperating with the Sierra Club and volunteers to implement this work, including the development of photo-logs.

BLM IMPLEMENTATION AND APPEAL

Within 30 days of receipt of the decision for BLM lands, an appeal may be filed with: Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203. A copy of the notice of appeal must also be filed in these offices: Grand Canyon – Parashant National Monument, 345 East Riverside Drive, St. George, Utah 84790; as well as with: Office of the Field Solicitor, U S Courthouse Suite 404, 401 West Washington Street SPC 44, Phoenix, AZ 85003-2151.

Approved:  10/30/07
Dennis Curtis Date
Manager, Grand Canyon Parashant National Monument

NPS IMPLEMENTATION

As soon as practicable, the selected actions described in Environmental Assessment AZ-130-2007-0042 may be implemented on NPS lands.

Recommended: _____
Jeff Bradybaugh Date
Superintendent, Grand Canyon Parashant National Monument

Approved: _____
Jonathan B. Jarvis, Regional Director Date
Pacific West Region