U.S. Department of Interior
Fish and Wildlife Service
Ash Meadows National Wildlife Refuge

FINDING OF NO SIGNIFICANT IMPACT FOR THE FAIRBANKS SPRING AND SODA SPRING RESTORATION

Introduction

The U.S. Fish and Wildlife Service (USFWS) proposes to restore Fairbanks Spring, Soda Spring, and associated stream channels in an effort to comply with local and national planning and ultimately allow for more complete protection of endemic, endangered, and rare organisms at Ash Meadows National Wildlife Refuge (Refuge).

To this end, the USFWS analyzed a variety of alternatives in the 2009 Desert Wildlife Refuge Complex Comprehensive Conservation Plan and Environmental Impact Statement (CCP EIS) (USFWS 2009a) and has subsequently issued a Record of Decision (USFWS 2009b) indicating that implementation of *Alternative C- Improve Habitat for Endemic Species throughout Refuge and Increase Visitor Services* is the chosen alternative for this Refuge. As part of that alternative, it was determined that specific actions implementing the alternative at the Refuge level would require Environmental Assessments (EAs) at a later date and would "tier" to the CCP EIS. In accordance with this decision, an EA was prepared for the Fairbanks Spring and Soda Spring Restoration Project in October 2009 (USFWS 2009c), and is incorporated by reference. The EA assessed and disclosed the impacts of two alternatives: Alternative A, No Action; and Alternative B, Proposed Action.

Decision

After reviewing the EA, the Service selected Alternative B, the proposed action, for implementation because it most closely meets the purpose and need to restore and improve the ecological integrity of natural communities within the Refuge.

Alternatives Considered

Following is a brief description of the alternatives presented in the EA. For a complete description of each alternative, see the EA.

Alternative A: No Action
Under this alternative, no hydrological restoration would take place. The Refuge would continue to manage threatened and endangered species and habitat as in the recent past. Cattails would be removed and aquatic invasive species would be trapped as time and staffing allowed. The Ash Meadows speckled dace would continue to exist in only two spring systems in the southern half of the Refuge.

This alternative was not selected because it would not address the purpose and need for the action and would not help fulfill Refuge goals and objectives.

Alternative B: Proposed Action (Preferred Alternative)
Under this alternative the natural hydrology of the springs would be restored by excavating new stream channels in the vicinity of historic channels. Aquatic habitat enhancement and restoration activities would include spring source reshaping/modification, stream channel excavation and construction, installation of fish barriers for future invasive fish species control, and the installation of stream crossing structures along Longstreet Road. Obstructions to natural flow within the springs historic channels such as dams and old irrigation channels would be removed or filled in. Under the proposed action standard construction best management practices would be used to protect water quality and minimize erosion and sedimentation during and following construction.

Environmental Consequences

As described in the EA, implementing Alternative B will have no significant impacts on any of the environmental resources identified. To ensure that no significant impacts to the environment would occur, a number of mitigation measures have been incorporated into the scope of the project to avoid or minimize all potential effects. A summary of the impact analysis and conclusions follows.

- Air Quality - Construction activity would temporarily increase particulate matter and localized emissions. Localized emissions would be further reduced through use of equipment in good working order and by minimizing unnecessary idling of vehicles. To minimize the temporary increase of particulate matter construction techniques such as using water, mulching, and/or applying surfactants to minimize dust may be used as appropriate. No significant impact to air quality would occur.

- Threatened and Endangered Species – The proposed project would have long-term beneficial effects to threatened and endangered species and their habitat. Construction activities would have no effect on the southwestern willow flycatcher, Devils Hole pupfish, or Amargosa niterwort because there is currently no potential habitat for these species on the project site. Construction activities may affect the endangered Ash Meadows Amargosa pupfish, Ash Meadows speckled dace, Yuma clapper rail, and the threatened spring-loving centaury. Measures to avoid and minimize potential impacts to these species are incorporated into the project and are listed below. Construction activities would not adversely affect the population of these species. Therefore, there would be no significant impact to these species. Section 7 consultation was completed and resulted with a biological opinion dated October 16, 2009, that concluded the proposed project would not jeopardize any of the above listed species.

- Cultural and Historic Resources - No cultural resource sites are located within the proposed restoration, therefore, there would be no affect to any cultural resources.

- Recreation – Restoration activities that take place during hunting season would have the potential to displace wildlife and/or hunting opportunities. This impact would be temporary and minor because other areas on the Refuge would still be available for hunting and wildlife. Long-term benefits for recreational uses such as wildlife observation, wildlife photography, interpretation, education, hiking, and hunting are expected from the habitat improvements. No significant impact to recreational resources would occur.

- Invasive and Nonnative plants and animals – The proposed habitat improvements would result in a decrease in noxious weeds and aquatic invasive species in the project area as endemic species become re-established. These improvements would have long-term benefits for native species. The potential to introduce invasive species during construction would be minimized by using best management practices described below. Therefore, there would be no significant impact.

- Wetlands - Beneficial impact of an estimated 160-acre (65-hectare) increase in wetlands dominated by endemic species. Increased wetland function and improved habitat quality over time. No significant impact.

- Migratory Birds – Restoration of the historic hydrological regime would have positive long-term effects for both migrant and resident bird communities. Short-term construction impacts would include temporary displacement and disturbance of habitat. These effects would be minimized by careful construction scheduling as described below. Therefore these effects would be minor and temporary. No significant impact.

Mitigation Commitments

The following measures to avoid and/or minimize potential adverse effects have been incorporated into the proposed project:

Air Quality

- Construction techniques such as utilizing water, mulching, and/or applying surfactants may be used where appropriate to minimize dust emissions.

- Minimize the unnecessary idling of vehicles and use equipment in good working order.

Threatened and Endangered Species

- The following pertain to reducing the effects of the proposed action on threatened and endangered species:

    1. Plants occurring in or near the potential area of disturbance would be flagged and avoided to the extent feasible. Plants that cannot be avoided (if any), would be transplanted or their seed collected for use in re-vegetation after channel restoration is completed.

    2. Prior to implementation of habitat improvement activities, all work equipment would be washed and inspected for nonnative seeds and reproductive parts of nonnative plants (or earthen material that may contain them). Nonnative materials would be removed and disposed of appropriately. All equipment to be used for implementation would be thoroughly cleaned prior to mobilization to and from the project area. A USFWS biologist would monitor all activities in the project area.

    3. Equipment and human access zones would be delineated by fencing and flagging.

    4. Prior to or during restoration activities, fish would be salvaged to the greatest extent possible in coordination with Nevada Department of Wildlife and/or Ecological Services biologists, using standard techniques to capture, hold, acclimatize, and release pupfish.

    5. All buckets used as short-term salvage containers for transportation of fish to the holding tanks would contain Stress Coat® (a conditioner that replaces a fish's slime coat and reduces electrolyte loss). Additionally, all fish would be acclimated to respective holding locations as quickly as possible.

    6. A USFWS biologist would monitor all activities in the project area.

    7. The Refuge would provide to the Las Vegas Ecological Services office and Nevada Department of Wildlife reports on the success of plant transplantation efforts, pupfish salvaging, and dace reintroduction. Refuge staff would also work cooperatively with these agencies and the U.S. Geological Survey-Biological Resources Division to ensure all activities are carried out to minimize adverse effects.

Invasive and Nonnative Plants and Animals

- Best management practices to minimize the potential spread of invasive species will include the washing of construction equipment before and after project use, educating construction crews, and following a re-vegetation plan focused on

planting native vegetation. The use of mechanical controls and herbicides as appropriate may also be used.

- Fish barriers would be installed to reduce predation of invasive fish such as convict cichlid, sailfin molly, and gambusia on endemic fishes.

Migratory Birds

- Heavy equipment operations are anticipated to be completed prior to breeding bird season (March 15 through August 15). Because of construction scheduling, it may be necessary to conduct some work within this time-frame. In such a case, nest surveys would be completed prior to ground disturbance. Work would not proceed if an active nest is found until birds have fledged.

Public Availability

The Draft EA was available for public review and comment for a 15-day period from October 28, 2009 through November 11, 2009. The document was available on the Refuge's website. A notice was placed in the local newspaper to notify the public. No comments were received.

Conclusions

Based on review and evaluation of the information contained in the supporting references, it is my determination that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). Accordingly an environmental impact statement is not required.

This Finding of No Significant Impact and supporting references are on file at the U.S. Fish and Wildlife Service, Ash Meadows National Wildlife Refuge. These documents are available to the public. This document will be placed on the Refuge's website to notify interested and affected parties of our decision.

Margaret J. Kolar

Assistant Regional Director, Refuges
Pacific Southwest Region

11/17/09

Date

References:

[USFWSa] U.S. Fish and Wildlife Service. 2009. Final Comprehensive Conservation Plan and Environmental Impact Statement. Desert National Wildlife Refuge Complex.

[USFWSb] U.S. Fish and Wildlife Service. 2009. Final Comprehensive Conservation Plan and Environmental Impact Statement Record of Decsion. Desert National Wildlife Refuge Complex.

[USFWSc] U.S. Fish and Wildlife Service. 2009. Environmental Assessment for Fairbanks Spring and Soda Spring Restoration. EA #84550-10-01. Ash Meadows National Wildlife Refuge. October 2009.