FINDING OF NO SIGNIFICANT IMPACTS

EA Number: **AZ410-2007-0001**
Lease/Serial/Case File No.: **NA**
BLM Office: **Safford Field Office**

Based upon Environmental Assessment AZ410-2007-0001, I conclude that the proposed action is in conformance with the approved land use plan, Safford District Resource Management Plan and the Gila Box Riparian National Conservation Area Management Plan, and with the mitigation measures below will result in no significant impact to the human environment. Therefore, preparation of and Environmental Impact Statement is not necessary.

RATIONALE

The proposed project would protect the existing native fish assemblage in Bonita Creek and secure habitat for repatriation of imperiled native Gila River basin fishes identified in the RNCA Management Plan, while allowing for continued withdrawals of municipal water supplies by Safford including operation, maintenance, and possible capacity upgrade of the water system. Implementation of the action would also satisfy a required conservation measure of the 2001 Central Arizona Project (CAP) biological opinion to construct a fish barrier in Bonita Creek.

Repatriation of loach minnow, spike dice, desert pupfish, and Gila top minnow into Bonita Creek is an important step toward conservation and recovery of these species. Although procedures for restoration of native fish populations vary with site-specific considerations, such as stream complexity and species composition, the approach most successfully used for decades in the United States is to chemically eradicate nonnative fishes from waters isolated by natural or constructed barriers, and repatriate the system with native fishes from wild or hatchery populations (Finlayson et al. 2005). This management tool has been used in several New Mexico and Arizona streams to restore purely native fish assemblages (see Appendix B of EA AZ410-2007-0001).

Opportunities for restoration of native fishes in the Gila River basin are extremely limited because of lack of suitable habitat, challenges of controlling or removing firmly established nonnative fish populations, and land ownership issues. A combination of factors makes Bonita Creek distinctive when compared to most other streams within the Gila River basin.

- Bonita Creek supports suitable habitat for the four species that are proposed for reintroduction;
- a native assemblage of five fish species including the endangered Gila chub persists in the stream indicating it has high potential for assisting in recovery of other native Gila River basin fishes, if long-term security against upstream invasion of nonnative fishes can be provided by a fish barrier;
- natural bedrock landforms provide solid anchor points for a barrier;
- nonnative fishes have not successfully invaded the upper reach of stream above the water system infiltration gallery operated by Safford;

- seasonal low-flow conditions are conducive to piscicide treatments to remove nonnative fishes and to construct a fish barrier;
- the action area is relatively remote and is used very little as a sport fishery for nonnatives, providing ideal conditions for restoring and emphasizing a native fishery; and,
- the proposed fish barrier site is located on Federal land.

The proposed native fish repatriation project would be conducted within the conceptual framework of sustaining Bonita Creek as a municipal water source. Bonita Creek is a significant source of potable water for the City of Safford and other Gila Valley water customers, and population growth within the service network has placed greater demands on available water supplies. The memorandum of understanding between the City of Safford and BLM including the Bonita Creek Water Production and Delivery System 10 Year Operation and Maintenance Plan would provide much of the future water supply for Safford while affording protection and enhancement of the natural resources of the Bonita Creek watershed. Implementation of the actions contained in the MOU and Operation and Maintenance Plan would not result in significant impacts.

MITIGATION AND REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

See attachments 1 and 2.

AUTHORIZED OFFICER: Tom Schad **DATE:** 7/13/07

DECISION RECORD

EA Number: AZ410-2007-0001
Lease/Serial/Case File No.: NA
BLM Office: Safford Field Office

DECISION: It is my decision to implement the proposed action as described and stipulated in the Native Fish Restoration in Bonita Creek Environmental Assessment (EA), AZ410-2007-0001 and Finding of No Significant Impacts. Implementing the proposed action will improve the recovery status of five Federally-listed fish species and maintain a healthy native fishery in Bonita Creek consistent with existing uses and Bureau of Land Management (BLM) management of the Gila Box Riparian National Conservation Area (RNCA).

Under the Proposed Action, Bureau of Reclamation (Reclamation) will construct a fish barrier in Bonita Creek on BLM, approximately 1.3 miles upstream from the Gila River. After the barrier is constructed, the Arizona Game and Fish Department will renovate a 1.7-mile perennial segment of Bonita Creek between the barrier and an existing water facility dike. Stream renovation will consist of the following elements: (1) native fish salvage, (2) application of the piscicide rotenone or antimycin A, (3) piscicide neutralization, (4) post-treatment monitoring, and (5) return of salvaged native fishes, including Gila chub. Following renovation, loach minnow, spikedace, desert pupfish, and Gila topminnow will be restored to lower and upper Bonita Creek in the RNCA.

Also, BLM will execute the Memorandum of Understanding (MOU) between the City of Safford and BLM, including the Bonita Creek Water Production and Delivery System 10-year Operation and Maintenance Plan, concurrent with native fish restoration actions. Over-all purpose of the MOU is to provide an understanding of the needs, concerns, objectives, intent, duties, and responsibilities of the Parties, and provide a framework for cooperation in meeting their respective rights and obligations in management of the Bonita Creek watershed.

Under the No Action alternative, Reclamation and BLM would not implement the native fish restoration project or the MOU. Safford would continue to operate, maintain and possibly upgrade the Bonita water system under the 1986 Cooperative Management Agreement and existing rights-of-way. No action by Reclamation and BLM would result in continued disruption of natural ecological processes in lower Bonita Creek by nonnative fishes. The native fish community in upper Bonita Creek could also be jeopardized if future flood events damage an existing dike and provide sufficient connectivity of flow through an intermittent reach at the City's infiltration gallery to allow nonnative fishes to move into the upper system.

Several alternative actions were considered and eliminated from detailed analysis because they did not fully meet the purpose and need for the project. These alternatives consisted of the following:

1. Alternative barrier sites.
2. Alternative stream renovation methods.

3. Stream renovation without a barrier.
4. Barrier without stream renovation.

RATIONALE FOR DECISION: A FONSI has been signed; therefore, there were no significant impacts to the environment that would require an Environmental Impact Statement. By selecting the proposed action the Bureau of Land Management, Safford Field Office is implementing this portion of the Safford District Resource Management Plan.

MITIGATION MEASURES AND REASONABLE AND PRUDENT MEASURES: See attachments 1 and 2.

APPEAL: This decision is subject to a 30-day appeal period in accordance with 43 Code of Federal Regulations Part 4, General Appeal procedures, and may not be implemented until conditions under this regulation have been met.

COMPLIANCE MONITORING: The mitigation and monitoring requirements identified in the EA and stipulations will be implemented by BLM.

Authorized Officer: Tom Schade **Date:** 7/13/07

ATTACHMENT 1: MITIGATION
EA Number: AZ410-2007-0001

Water Resources

- A CWA Section 401 Water Quality Certification has been issued by ADEQ for fish barrier construction. Terms and conditions of the certification, including water quality monitoring, would be integrated into the project.
- A CWA Section 402 storm water pollution prevention plan with pollution control BMPs has been prepared for fish barrier construction. Coverage under the Arizona Pollutant Discharge Elimination System (AZDPES) general permit for storm water discharges associated with construction would be obtained.
- Reclamation received a CWA Section 404 permit on October 28, 2003 to construct fish barriers (including the Bonita Creek barrier) required under the 2001 CAP biological opinion. Terms and conditions of the permit would be integrated into the project.
- A Water Control Plan will be prepared by the contractor before construction begins with measures to protect water quality and care of the stream during fish barrier construction. Temporary culverted stream crossings placed in the construction area, temporary stream bypass channels, and settling ponds for foundation dewatering discharges would be employed as necessary to reduce water quality impacts. Reclamation will coordinate with BLM to implement this stipulation.
- All construction equipment would be periodically inspected for leaks. Any significant leaks would be promptly corrected.
- Piscicide applications would be conducted only during periods of low stream flow (1 to 25 cfs) by certified applicators.
- USGS stream flow monitoring station would be installed below the fish barrier and monitored regularly (Figure 3).
- The existing pit toilet at the City Campground would be replaced with a vault toilet (Figure 3).
- Safford would consult with BLM prior to reducing or eliminating any beaver ponds.

Soils

- Coverage for the fish barrier under the AZDPES general permit for storm water discharges associated with construction would be obtained. A storm water pollution prevention plan with pollution control BMPs would be implemented.
- Existing roads would be used for construction haulage during construction of the fish barrier.
- No stockpiles of material would remain following fish barrier construction.
- Safford would consult with BLM prior to any road construction or relocation, within their existing right-of-way, required for operation of the water system.
- All road construction and maintenance would follow jointly agreed upon standards and stipulations.

Visual and Recreation Resources

- The barrier would be appropriately colored to enhance its visual compatibility with surrounding substrates.

Biological Resources

- Pursuant to the CWA Section 404 permit issued by the COE for the 12 fish barriers required under the 2001 CAP biological opinion, Reclamation agreed to mitigate impacts for all the barriers in one location prior to actual construction activities. Reclamation purchased a Conservation Easement (CE) on 1,420 acres of land encompassing 300 acres of riparian habitat, creating a "mitigation bank". As the barrier projects are completed, the mitigation required for each barrier would be determined and then subsequently subtracted from the 300 acres of riparian habitat total until all acres have been utilized.
- If any federally listed species (other than fish) are identified in the project area, construction activities would be halted until appropriate consultation with the FWS can be initiated.
- All construction areas not required for permanent facilities would be scarified and recontoured.
- Contractor use areas affecting undisturbed upland habitat would be scarified, recontoured and revegetated with native species.
- The contractor would exercise care to preserve the natural landscape and conduct operations so as to prevent unnecessary destruction, scaring, or defacing of the natural surroundings in the vicinity of the work.
- Construction personnel would be instructed not to collect, disturb, or molest wildlife species.
- Contractor would comply with the statutes of the Arizona Native Plant law.
- Reclamation would conduct one year of post-project, yellow-billed cuckoo surveys to observe potential changes in yellow-billed cuckoo territory locations.
- Safford would consult with the BLM prior to constructing any temporary roads, relocating roads, diverting stream flow, breaching beaver dams, and clearing vegetation beyond the 15 foot pipeline limit or if nesting wildlife is found.

Environmental Health and Public Safety

- Applicators would be trained and certified to apply the piscicide in use.
- Piscicide application would adhere strictly to the product label instructions.
- Supplemental detoxification stations using permanganate compounds would rapidly neutralize the piscicide at the lower end of the treatment area.
- The treatment area would be closed to the public during application of the piscicide (2 to 3 days in total).
- Dead fish would be collected and buried onsite.

Air Quality

- Roads and active construction areas would have watering requirements to limit dust generation.
- Corrective repairs or adjustments would be required for construction equipment and vehicles that show excessive tailpipe exhaust emissions.

Noxious Weeds

- Heavy construction vehicles and equipment would be power washed before entering the project area.
- Weed-free erosion control material (hay bales, ground matting, etc.) would be used.
- Contractor use areas on upland sites would be reseeded with a weed-free native seed mix.

Hazardous Material and Solid Waste

- A Spill Containment Plan would be prepared for the proposed native fish restoration project.
- All construction equipment used in construction of the fish barrier would be periodically inspected for leaks. Any significant leaks would be promptly corrected. No vehicle maintenance would be performed within the 100-year floodplain.
- Secondary containment would be provided for all on-site hazardous materials and hazardous waste storage, including fuels and lubricants, used in construction of the fish barrier. In particular, fuel storage (for construction vehicle and equipment) would be a temporary activity occurring only for as long as is needed to support construction activities. All storage would occur at the designated contractor use areas outside the 100-year floodplain of Bonita Creek.
- A storm water pollution prevention plan would be required for the fish barrier construction site to ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water and other media.
- All waste would be removed from the fish barrier site following construction and transported to an appropriately permitted disposal facility.

Threatened and Endangered and Other Listed Species

- See attachment 2: Biological Opinion for Restoration of Native Fishes in Lower Bonita Creek and Implementation of a MOU and 10-Year Operation Plan between the BLM and the City of Safford: Reasonable and Prudent Measures and Terms and Conditions Section.
- There will be no significant impacts to listed species as a result of implementation of the proposed action. Coordination with Reclamation, Fish and Wildlife Service, Arizona Game and Fish Department, BLM, and the City of Safford as resulted in specific mitigation summarized in the following measures:
    - Should any listed species be identified during construction or maintenance activities all work would come to a halt until appropriate measures are taken.
    - Disturbed areas will be scarified and recontoured should natural recovery be insufficient.
    - Any disturbing activity will be conducted in a manner as to limit resulting impacts.

Cultural and Paleontological Resource

- Any archaeological or historical artifacts or remains, or vertebrate fossils discovered during construction, maintenance and use shall be left intact and undisturbed; all work in the area shall stop immediately and the Program Manager for Planning and Monitoring shall be notified immediately. Commencement of operations shall be allowed upon clearance by the Program Manager.
- An additional cultural and paleontological resource survey may be required in the event that the project location is changed or additional surface disturbing operations are added to the project after the initial survey. Any such survey would have to be completed prior to commencement of operations.
- If in connection with operations under this authorization, any human remains, funerary objects, sacred objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (P.L. 101-601; Stat. 3048; U.S.C. 3001) are discovered, the permittee shall stop operations in the immediate area of the discovery, protect the remains and objects, and immediately notify the Program Manager of the discovery. The permittee shall continue to protect the immediate area of the discovery until notified by the Program manager that operations may resume.

ATTACHMENT 2: REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the BLM and BR must comply with the terms and conditions of the following reasonable and prudent measures, and report implementation of these terms and conditions to us. These terms and conditions are non-discretionary. The reasonable and prudent measures, with the implementing terms and conditions are designed to minimize or avoid the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, the level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided.

We believe that the following reasonable and prudent measure is necessary and appropriate to minimize take of listed fish:

1. Conduct all proposed actions in a manner that will minimize direct mortality of listed fish species.

The following terms and conditions will implement reasonable and prudent measure 1:

1.1 To the extent practicable, all activities in the stream channel will be conducted outside the reproductive season of all listed fish species addressed under this consultation. This includes construction and barrier maintenance activities, and water use facilities maintenance, but does not include monitoring. If activities cannot be conducted outside the breeding season of listed fish species for barrier construction and maintenance, BR will coordinate with FWS to minimize effects to listed fish species; if activities associated with water use cannot be conducted outside the breeding season of listed fish species for water use facilities maintenance, BLM will coordinate with City of Safford to minimize effects to listed species.

1.2 An appropriate spill response kit for cleaning up accidental releases of petroleum products (or other appropriate substances) will be available at the fish barrier construction site whenever work is ongoing, and at least one person present shall have training in use of that kit.

2. Conduct all proposed actions in a manner that will minimize loss and alteration of habitat (including the aquatic faunal community) of listed fish species.

The following terms and condition will implement reasonable and prudent measure 2:

2.1 The methodology for recontouring the channel and floodplain following fish barrier construction will be discussed with BLM and FWS prior to implementation.

3. Monitor the effects of the proposed action on the lower Bonita Creek fish communities and habitat to document levels of incidental take, and report the findings to the FWS. Reclamation shall be responsible for this monitoring for barrier construction and maintenance. The BLM shall be responsible for other activities under the proposed action.

The following terms and conditions will implement reasonable and prudent measure 3:

3.1 BR or the BLM shall have available to advise and assist in the application of these terms and conditions a qualified fisheries biologist as funding allows. However, the biologist does not need to be on-site at all times during activities covered under this opinion.

3.2 A written report shall be submitted by the BLM to the FWS annually documenting Bonita Creek activities for the year that resulted in documented take. The report will include a discussion of compliance with the above terms and conditions and will be due March 15. Reclamation shall provide information for this report to BLM for activities related to barrier construction and maintenance.

4. Minimize the loss of fish habitat due to fire suppression and prescribed fire use.

The following term and condition will implement reasonable and prudent measure 4:

4.1 The BLM shall apply the reasonable and prudent measures and terms and conditions for Gila chub, as well as the reporting requirements, from the BLM LUP Amendment BO to any new listed fish species established in Bonita Creek.

In addition to the reasonable and prudent measures and terms and conditions necessary and appropriate to minimize take that are listed above, the reasonable and prudent measures and terms and conditions necessary and appropriate to minimize take listed in the Safford/Tucson Grazing BO, Gila Box RNCA BO, and BLM LUP Amendment BO also apply for Gila chub in Bonita Creek.

Review requirement: The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. If, during the course of the action, the level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The BLM/BR must immediately provide an explanation of the causes of the taking and review with us the need for possible modification of the reasonable and prudent measures.

The following terms and conditions will implement reasonable and prudent measure 3:

3.1 BR or the BLM shall have available to advise and assist in the application of these terms and conditions a qualified fisheries biologist as funding allows. However, the biologist does not need to be on-site at all times during activities covered under this opinion.

3.2 A written report shall be submitted by the BLM to the FWS annually documenting Bonita Creek activities for the year that resulted in documented take. The report will include a discussion of compliance with the above terms and conditions and will be due March 15. Reclamation shall provide information for this report to BLM for activities related to barrier construction and maintenance.

4. Minimize the loss of fish habitat due to fire suppression and prescribed fire use.

The following term and condition will implement reasonable and prudent measure 4:

4.1 The BLM shall apply the reasonable and prudent measures and terms and conditions for Gila chub, as well as the reporting requirements, from the BLM LUP Amendment BO to any new listed fish species established in Bonita Creek.

In addition to the reasonable and prudent measures and terms and conditions necessary and appropriate to minimize take that are listed above, the reasonable and prudent measures and terms and conditions necessary and appropriate to minimize take listed in the Safford/Tucson Grazing BO, Gila Box RNCA BO, and BLM LUP Amendment BO also apply for Gila chub in Bonita Creek.

Review requirement: The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. If, during the course of the action, the level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The BLM/BR must immediately provide an explanation of the causes of the taking and review with us the need for possible modification of the reasonable and prudent measures.