

**APPENDIX F**

**COMMENT LETTERS AND RESPONSES TO COMMENTS**



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
PHOENIX AREA OFFICE  
P.O. BOX 10  
PHOENIX, ARIZONA 85001



IN REPLY  
REFER TO:  
Land and Water Resources  
(602) 379-4511

OCT 05 1998

OCT 13 '98

DATE	FILE TO	INITIALS
10/13	1000	JSS
10/13	1015	W
	1500	

Mr. Thomas G. Burbey, Area Manager  
Bureau of Reclamation  
Phoenix Area Office  
P. O. Box 9980  
Phoenix, Arizona 85068-0980

Subject: Comments to Draft Environmental Assessment - Construction of Fish Barriers on Aravaipa Creek - August 1998

Dear Mr. Burbey:

We have the following comments to the subject draft environmental assessment:

1. Has this document been provided to the allottees for their review and comment? 1-1
2. Page 4, Table 1: Blasting permits required by the county should probably be included in this table, in case blasting is necessary. 1-2
3. Page 6, Figure 2-2: "Overshute" should be "Overchute." 1-3
4. Page 7, 1<sup>st</sup> ¶, 5<sup>th</sup> line: Should add "and 013736." to end of sentence. Land was farmed on both allotments. 1-4
5. Page 7, last ¶: How frequently will the reach be monitored? 1-5
6. Page 8, 4<sup>th</sup> ¶: Don't understand "...provided the material is properly drained." 1-6
7. Page 8, Section C: Should add paragraph to summarize construction activities required for raising road in two locations. 1-7
8. Page 9, Section F: Will Contractor be prohibited from storing any hazardous materials including petroleum products on site? 1-8
9. Page 9, Section G: How frequent will the monitoring be? Annually? After floods? 1-9

- |  |      |
|--|------|
| 10. Page 15, subsection b, last sentence: At the public meeting it was suggested that an outside contractor be hired to review BOR's results - is this still being considered? Will road improvements be included in the final river model?  | 1-10 |
| 11. Page 15, Table 2: Checking the figures in the table and the inundation map, it seems there is more of a difference between the higher floods than 1.3 acres. Using overlays it appears there is more of a spread for the 100 year than the 50 year, than indicated by the table.   | 1-11 |
| 12. Page 21, 2 <sup>nd</sup> ¶: How did you get the 0.16 cfs from the 6,750 square feet? Needs more information.   | 1-12 |
| 13. Page 21, 3 <sup>rd</sup> ¶: Is it possible/likely that all water will go underground at the barrier site, due to the new restriction?  | 1-13 |
| 14. Page 21, subsection d: Define "momentary traffic delays" - will you require Contractor to keep the roadway open (at least one lane) at all times with no more than brief delays limited to 5 to 10 minutes? Will Contractor be required to provide signing/flag people?  | 1-14 |
| 15. Page 21, subsection d, 5 <sup>th</sup> line: Delete "or BIA requirements (BIA is the agency of jurisdiction for those portions of Aravaipa Road that are located on allotted land)."   | ..   |
| As it relates to the road surface, design standards, construction, and maintenance, the BIA is not the "agency of jurisdiction." The road is not on the BIA (IRR) road system and BIA does not have right-of-way. The road should be constructed to Pinal County standards. Pinal County has "implied authority" on the roadway surface as the maintaining entity. | 1-15 |
| 16. Page 21, subsection d, Public Road impacts: Add information in the report as to total length of road that would have to be constructed, to what height, additional width, to be to County standards with the barriers in place.  | 1-16 |
| 17. Page 22, last ¶, 3 <sup>rd</sup> line: Should "may" be "would"? Is it definitely known at this time that some stabilization will be necessary?   | 1-17 |
| 18. Page 4 24, last ¶, 3 <sup>rd</sup> line: Is 0.5 acre-ft correct? Seems like both barriers would store about the same amount of sediment.   | 1-18 |
| 19. Page 25, 2 <sup>nd</sup> ¶, 9 <sup>th</sup> line: Delete "momentary" - if erosion is increased for a short time it will still be an increase in overall erosion.   | 1-19 |

20. Figure 3-7: Text is difficult to read - suggest changing text to black print. 1-20
- 
21. Page 36, 2<sup>nd</sup> ¶, 2<sup>nd</sup> line: Where is Table 3-3? 1-21
- 
22. Page 36, last ¶: Is it possible/likely that listed species will travel downstream of the barriers and be trapped in pools that will eventually dry up? Isn't this a take? Could this be included in the monitoring program, and trapped listed species be transported back upstream? 1-22
- 
23. Page 37, 3<sup>rd</sup> ¶: I can envision all of a listed species being washed downstream of the barriers during a flood - is this possible? Please expand on last sentence. 1-23
- 
24. Page 47, Table 6, Aquatic Resources, 4<sup>th</sup> row: Delete "native." 1-24
- 
25. Page 52, Section D: It should provide more details of monitoring, including frequency. 1-25
- 
26. Page 53, Environmental Consequences: There should be further discussion on riprap impacts here. 1-26
- 
27. Page 53, 4<sup>th</sup> ¶, 1<sup>st</sup> line: Change "foreseeable" to "foreseeably"; 3<sup>rd</sup> line: add "and 013736." after 013622. 1-27
- 
28. Page 54, 2<sup>nd</sup> ¶, 5<sup>th</sup> line: Delete "or the requirements of the BIA (BIA is the agency of jurisdiction for the segments of Aravaipa Road located on allotted lands)." 1-28
- As it relates to the road surface, design standards, construction, and maintenance, the BIA is not the "agency of jurisdiction." The road is not on the BIA (IRR) road system and BIA does not have right-of-way. The road should be constructed to Pinal County standards.
- 
29. Page 54, Item 2: Allotment No. 013622 is currently fenced along the west and south sides. If a fence was added beginning at the west fence and following the roadway east past the fish barriers, it would probably be a great benefit to keeping the public away from the fish barriers (provided the fences are not damaged/destroyed by vandalism). This is a suggestion that might be beneficial for everyone - would need to ensure the allottees want such a fence. 1-29
- 
30. Page 61, 2<sup>nd</sup> ¶, 7<sup>th</sup> line: Change "the county road" to "Aravaipa Road." 1-30
- 
31. Page 63, 4<sup>th</sup> ¶, 5<sup>th</sup> line: Change "referred to as "implied rights"" to "federally reserved water rights." 1-31

32. Page 64, 1<sup>st</sup> ¶, 2<sup>nd</sup> line: After "adjudication," insert "The state adjudication process is under Arizona Revised Statutes §45-251 to 45-260 and is being conducted in the State Superior Court. The general adjudication of the Gila River System and Source has been assigned to the Superior Court for Maricopa County."

1-32

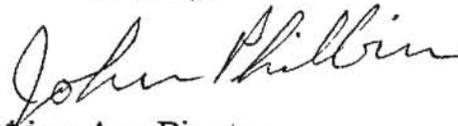
33. Appendix E, page E-1, 3<sup>rd</sup> line: Change "area" to "are."

1-33

Our realty staff have provided comments concerning right-of-way procurement that do not appear to have direct bearing on the EA. The comments are attached for your information (Memorandum dated September 24, 1998).

Please call Bobbie Ohler at (602) 379-4511 if you have questions concerning the comments.

Sincerely,

  
Acting Area Director

## Response to Letter of Comment from the Bureau of Indian Affairs

1-1. The draft EA was provided to allottees with property interests in Indian Trust Allotments 013736 and 013622.

1-2. A County blasting permit is not required according to the Pinal County Department of Civil Works.

1-3. This correction has been made in final EA.

1-4. The reference to "013736" has been added to the final EA.

1-5. The frequency of monitoring is undetermined at this time. We anticipate monitoring will be performed annually and following episodes of flooding. The final EA has been revised to reflect this information.

1-6. Dewatered alluvium would be more stable and easier to excavate than alluvium that is saturated with water.

1-7. A description of modifications to Aravaipa Road has been included in the final EA.

1-8. Fuel and lubricants would be stored in the contractor use area. Reclamation requires secondary containment with an impermeable lining for fuel storage areas on all construction projects.

1-9. See response 1-5.

1-10. Reclamation will have the final project design reviewed by an independent architect engineer as promised during the June 27, 1998, scoping meeting in Winkelman. The final EA includes this commitment as a mitigation measure (see chapter III, section L). Proposed road modifications will be included in the final river model.

1-11. The added flood effects listed in Table 2 were quantified from GIS data layers. These estimates, however, do not reflect the results of final river modeling which will be performed once all pertinent field data have been collected.

1-12. The depth to bedrock will be determined when the right-of-entry is obtained from the BIA to allow geologic investigations. Until the depth of alluvium is measured, we are assuming the center of the channel is 60 to 80 feet deep. If this assumption proves to be accurate, a permeable alluvial zone with a hydraulic height of 40 to 60 feet will exist between bedrock and the concrete barrier. Assuming a height of 50 feet with a stream width of 270 feet, the permeable area is 6,750 square feet. Using the standard formula for flow through a porous medium

$Q = KiA$       where: Q = flow  
K = coefficient of permeability, assume 0.3 cu  
ft/sq ft/min for clean sand and gravel  
I = average hydraulic gradient  
A = area normal to direction of flow

$$Q = (0.3 \text{ cu ft/sq ft/min})(0.006)(6,750 \text{ sq ft}) = 12.15 \text{ cubic feet/minute}$$
$$Q = 0.2 \text{ cfs}$$

Applying the same method to determine how much flow the barrier affects yields:

$$Q = (0.3)(0.0006)(5,400) = 0.16 \text{ cfs}$$

1-13. We anticipate the geomorphic and hydrologic characteristics of the project area will preclude flow from becoming entirely subterranean. The barrier sites are located on a reach of stream that is narrowly constricted by the mudstone walls of Aravaipa Canyon. Depth of alluvium is probably not much more than 80 feet (and possibly much less), and the alluvial bed is likely saturated due to confinement by surrounding bedrock. Normal monthly mean discharges of 12 cfs to 67 cfs should be sufficient to support surface flows through the project area. More will be known of the alluvial deposit once geologic investigations are completed.

1-14. At least one lane of travel will remain open. Flagmen will be provided by the contractor if traffic volumes and construction activities warrant additional measures to ensure safe passage through the work zone. The final EA has been revised to clarify this issue.

1-15. The final EA has been modified to reflect the current understanding of road status.

1-16. The final EA includes a description of anticipated road improvements.

1-17. The final EA has been changed to reflect stabilization will be necessary.

1-18. The correct amount is 0.5 acre-feet. The prevailing channel gradient through the project area is 0.6 percent, except for a section of stream above the lower barrier that approaches 0.9 percent. The portion of channel with the higher gradient would aggrade less.

1-19. Reclamation believes the added erosive potential resulting from a barrier collapse during a flood would be momentary and slight relative to the overall flood volume.

1-20. Figure 3-7 will be revised in the final EA.

1-21. Table 3-3 is actually Table 4. This reference was overlooked during a change in the table numbering format. The final EA has been corrected.

1-22. Loss of spokedace and loach minnow already occurs as downstream pools and backwaters periodically become isolated and dry up. The fish barrier project would not change this phenomenon. During periods of extreme drought, the lineal extent of active stream below the lower barrier will be reduced as flow volumes diminish. Consequently, fish mortality downstream of the lower barrier will increase as suitable habitat shrinks. However, impact to loach minnow and spokedace would not be significant because this reach of stream is well below their optimal habitat and population concentrations. The 1994 biological opinion included "take" provisions for activities necessary to implement the reasonable and prudent alternatives, such as the fish barrier project (see chapter III, section M of the final EA).

1-23. As noted in the EA's discussion regarding genetic isolation, these species are adapted to episodic flooding within Aravaipa Canyon and tend to persist even during conditions of extreme flood. The fish apparently seek shelter among the eddies and quieter waters of the rock strewn canyon walls.

1-24. This change has been included in final EA.

1-25. Monitoring protocol is not yet established; see response 1-5.

1-26. A discussion on bank stabilization has been added to the final EA.

1-27. This change has been included in final EA.

1-28. The road will be modified according to Pinal County road standards. The final EA includes a description of the proposed road modifications.

1-29. Reclamation will consider extending the fence beyond the lower barrier. We agree that allottees must concur with the fencing proposal before any permanent fence is installed.

1-30. This change has been included in final EA.

1-31. This change has been included in final EA.

1-32. This change has been included in final EA.

1-33. This change has been included in final EA.

# ARIZONA

**P.O. BOX 4637  
HUACHUCA CITY, ARIZONA 85616  
520-456-1008**



ACTION BY		
DUE DATE		
SEP 15 '98		
DATE	ROUTE TO	INITIALS
	1500	
CLASSIFICATION		

September 12, 1998

**U.S. Bureau of Reclamation  
PXAO-1500  
P.O. Box 81169  
Phoenix, AZ 85096**

Reference the Draft Environmental Impact Statement (EIS) pertaining to the installation of fish barriers on Aravaipa Creek/San Pedro River. Request a 60 to 90 day extension of the comment period, a copy of the Draft EIS and Federal Register notice announcing the availability of the Draft EIS.

2-1

I have received no notice or information on this current proposed action, even though I contacted your agency in January 1997 indicating my interest and desire to be informed on this project. At that time you did provide me several documents, but I have not had any information in over a year.

2-2

The following comments are based on the information in the September 13 article in the Arizona Daily Star.

Where is the science? Apparently there is a requirement to install two fish barriers, but it does not matter which river/creek they go on. The initial plan was to place them on the San Pedro River, now the requirement is for Aravaipa Creek. What is the impact is converting water from Aravaipa Creek to the Apache Indian Farm Land?

2-3

What is the date of the Biological Opinion which you are using for your information? When was it made available to the public for review and comments? The Biological Opinion I am aware of is over four years old. Nature and things change, so how can decisions be made on information in an outdated document if that is the document being used?

2-4

What is the proposed total cost of this project?

2-5

Sincerely

Rachel Thomas, President

cc: Senator Jon Kyl  
Senator John McCain  
Congressman Jim Kolbe

## **Response to Letter of Comment from Arizona People For the USA**

2-1. The draft EA was distributed on August 21, 1998, for a 31-day public review and comment period. Reclamation believes the comment period was sufficient. The draft EA was mailed to 84 individuals, agencies, and organizations. In addition, public notices were published in newspapers serving the communities of Winkelman and Mammoth, Arizona, which are located near the project area. News releases were also sent to various other news media, including the two major daily newspapers in Tucson. Federal Register notices are not required for EAs, and Reclamation did not prepare a notice for the Aravaipa Creek fish barriers EA.

2-2. We apologize for the oversight. A copy of the draft EA was mailed to your organization immediately following receipt of the letter dated September 12, 1998.

2-3. The draft EA analyzed the potential environmental impacts of the fish barrier project. The analysis was prepared and reviewed by an interdisciplinary team of engineers, archeologists, biologists, and other environmental professionals. Requirement for two fish barriers on Aravaipa Creek was stipulated in the 1994 "Biological Opinion on Transportation and Delivery of Central Arizona Project Water to the Gila River Basin." The biological opinion requires additional barriers be constructed on the San Pedro River. The San Pedro River barriers, if built, would be constructed sometime after completion of the Aravaipa Creek barriers. Additional NEPA analysis will be completed by the BIA to evaluate the potential environmental impacts of stream water diversion, conveyance, and use should the Indian allottees decide to divert water.

2-4. The final biological opinion is dated April 15, 1994. Biological opinions are issued by the FWS on the possible impacts of Federal actions on listed species and designated critical habitat pursuant to Section 7 of the Endangered Species Act. Draft biological opinions are not distributed for public review and comment. The FWS believes the issues addressed in the 1994 biological opinion are still contemporary and valid.

2-5. The estimated cost for construction of the Aravaipa Creek fish barriers is \$2,000,000.



## **Response to Letter of Comment from Wheeler and Associates, Inc.**

3-1. Seven species of nonnative fishes are known to permanently reside or periodically invade Aravaipa Creek. One species in particular, the red shiner, is of considerable concern because of its documented adverse effects on spinedace and other native fishes. Red shiner first occupied Aravaipa Creek in 1991 but was removed from the stream by flooding the following year. Red shiner reappeared in 1997 (see page 34 of the final EA). Reclamation believes that barrier operation combined with periodic flooding and the nonnative fishes management activities described on page 48 of the final EA will prevent the permanent establishment of most nonnative fishes in Aravaipa Creek above the project area.

3-2. The project would be built within the lower end of Aravaipa Canyon. The floodplain in this area is relatively narrow and subject to recurrent and sometimes severe flooding. The plants and animals that occupy this riparian zone are adapted to repeated flood-induced disturbances. The aquatic biota, particularly fishes, of Aravaipa Creek have been studied since the early 1960s.

3-3. Your assertion that native and nonnative species have survived changes in geologic, physical, and climatic conditions for thousands of years is accurate. An important point that you overlook, however, is these native and nonnative species did not survive the last several millennia together. The exotics referred to in your letter are native to other regions of North America and were translocated to Arizona in an attempt to create new sport fisheries within the State. Over the last several decades, releases of nonnative game fishes (mostly predatory species) and bait species have created new competitive relationships. In many instances, introductions of nonnative fishes have depressed native fish populations, often causing serious decline or disappearance. Generally, native fish population declines are attributable to three environmental influences: loss of suitable habitat, exposure to environmental contamination, or interaction with nonnative species. These influences (and resultant population declines) mostly stem from human-induced activities and development rather than natural change. The purpose of the Endangered Species Act is to provide for the protection and recovery of species threatened or endangered by human activity.

3-4. The fish barriers are not intended by design or function to block surface or subsurface flow. Measurable hydrological effects will be confined to the immediate project area and a relatively short distance upstream and downstream of the barrier sites. The project will be located on the lower reach of Aravaipa Creek, well below optimal habitat of the threatened native fishes (see page 38 of the EA). Reclamation, the FWS, and the AGFD believe the project will have a positive effect on populations of threatened native fishes inhabiting Aravaipa Creek.



DATE	ROUTE TO	INITIALS
	1709 E. Ft. Lowell Rd. • Tucson, AZ 85719	
	(520) 927-2744 • FAX (520) 325-1664	
		9/17/98
CLASSIFIED BY		

7809 E. Wrightstown Rd. • Tucson, AZ 85715  
(520) 886-1499 • FAX (520) 886-1556

ARE YOU NUTS??  $\$$  2,000,000.00 ??  
 PLEASE?? LET THE WORLD EVOLVE NATURALLY!!

4-1

I LEFT CALIFORNIA FOR ARIZONA 6 YEARS AGO  
 BECAUSE OF ENVIRONMENTAL AND ENDANGERED SPECIES  
INSANITY!! I WAS PREVENTED FROM DEVELOPING A  
 19 ACRE INDUSTRIAL PARK BECAUSE OF THE LONG  
 TOED SACAMADER, A HOUSE BECAUSE OF A BLUE WINGED  
 BUTTERFLY, ANOTHER HOUSE BECAUSE OF THE SANTA CRUZ  
 TAR PLANT. I WAS FORCED TO SELL A BUSINESS OF  
 25 YEARS OVER 2 QTS OF SACAD OIL IN 35,000 GAL  
 OF WATER. MY ARTICLES APPEARED IN SEVEN NEWSPAPERS  
 AND ON THE ROSA LUIBAUGA SHOW TO NO AVAIL.

4-2

AN REAL ENDANGERED SPECIES IS ONE WITHOUT A  
 RADIO COLLAR, EAR TAG, AND TATTOO.

$\$$  2,000,000 TO SAVE MINNOWS ??  
 +  $\$$  5,000,000 TO RETURN 10 WOLVES TO N. ARIZ. ??  
 $\$$  7,000,000 WOULD BUILD A LIBRARY OR  
 SCHOOL!!

MARK ME DOWN AS OPPOSED!!

**Response to Letter of Comment from Horseplay Tack & Stuff**

4-1. Reclamation is legally obligated to comply with all Federal laws, including the Endangered Species Act. See also response 3-3.

4-2. Your other comments are noted.

9/16/98

TO WHOM IT MAY CONCERN,  
I AM DROPPING YOU THIS  
NOTE TO LET YOU KNOW  
THAT I AM ADAMANTLY  
OPPOSED TO CONSTRUCTING  
THE FISH BARRIERS IN  
ARAVAIPA CANYON. THIS IS  
A HUGE WASTE OF TAX  
PAYERS MONEY.

I THINK MOST PEOPLE  
WOULD RATHER SEE THE  
CREEK STOCKED WITH BASS  
& OTHER MORE DESIREABLE  
FISH! SCREW THE NATIVE  
SPECIES!

I HAVE ALSO CALLED &  
WRITTEN MY SENATORS &  
CONGRESSMEN. THANK YOU.  
BRIAN MORTON

[REDACTED]

5-1

**Response to Letter of Comment from Morton**

5-1. Your comments are noted.

Sept. 19, 1998

U.S. Bureau of Reclamation  
PXAD-1500

P.O. Box 81169

Phoenix, Arizona 85096

SEP 22 '98

PAID 1500

Dear Sirs:

Attn: Barriers on Aravaipa Canyon

I strongly regret your idea of barriers and destroying farm land & meadows. 6-1

There is a limited amount of farmland & it should be protected. Fish have managed over the years & they should be left alone. 6-2

I'm very familiar with the area having lived in Safford a long time & visited with residents in the canyon & enjoyed the canyon in the Kandyke area. More recently the other end of the Creek flowing into the San Pedro River, so I do not want any barriers. 6-3

It's also too costly - my husband joins me!  
Yours truly,

F-16

Frances J. Mosher  
Mrs. Frances J. Mosher

## **Response to Letter of Comment from Mooberry**

6-1. The project will be located within the lower portion of Aravaipa Canyon. Effects of the project will be confined to parts of the stream channel, floodplain, and less than 2.5 acres of upland desert. There are no farmlands or meadows within the project area that would be affected by the project. The project provides the opportunity to restore retired farmland on the allotted lands downstream of the lower barrier site.

6-2. See response 3-3.

6-3. Your other comments are noted.



In my previous response to the BR dated July 7, 1998, I asked many questions that weren't answered regarding the literature provided at the June 27, 1998 scoping meeting. The information provided in this EA doesn't contain the pertinent information regarding the answers I'm seeking in relation to the construction of the FWS fish barrier project on the Aravaipa Creek.

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Through recent investigation (August 28, 1998), I learned that the FWS has already directed the BR to proceed with the Aravaipa Creek project. The directive to proceed has come well in advance of the distribution of this lengthy and costly \$119,240.00 draft to all interested parties. What reasons did the BR and FWS have for initiating the previous two meetings (February 1, 1997/June 27, 1998), other than pacifying the American public through legal formalities required by the federal government? As an end result, will this or any other opposing response to the construction of the proposed FWS fish barriers on the Aravaipa Creek matter? **Apparently Not!**

7-1

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As I reviewed this EA, which includes three decades of data collected by astute and documented wildlife biologists, along with many of their esteemed colleagues having distinguished titles, as well as references from cooperating agencies, I found two (2) alternatives. One is the construction of the costly \$2.756 million fish barriers and the other is the No Action Alternative. Surely in the course of thirty (30) years of painstaking, time consuming, tax dollar eating research, the BR, FWS and other cooperating agencies have been able to come up with more than two contingency plans, one of which is a do nothing. After reading this draft and the other literature provided at the two (2) previously insignificant (at least from a public viewpoint) appointed BR and FWS meetings, I favor the No Action Alternative as my choice.

7-2

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Why would the Secretary of the Department of the Interior, in conjunction with the FWS and other cooperating agencies support the construction of the CAP? This project has created a 355 mile long \$4,695,000,000.00 tax paid super-highway providing unlimited access for nonnative fishes and other aquatic species to readily invade all of Arizona's rivers, streams, creeks and their tributaries! Wasn't any research done prior to the construction? If not, why? If so, was the data collected wrong? If the collected data and research pertaining to the CAP was correct, did these cooperating agencies willingly proceed, therefore knowingly endanger the very existence of the spikedace and loach minnows, as well as every other native fish and aquatic species known to exist in Arizona's watersheds?

7-3

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The Department of the Interior, FWS and cooperating agencies approval of the CAP equates to approximately \$13,225,352.11 per mile to deliberately contaminate every watershed in Arizona with nonnative fishes and aquatic species. Now, the same assembly of agencies wants to spend another \$2,750,000.00 to build two (2) fish barriers in approximately eight hundred feet on the Aravaipa Creek in Pinal, County Arizona. This proposed fish barrier project equates to approximately \$3,437.50 per foot to hinder **NOT PREVENT** the cumulative destructive effects of nonnative introductions via the federally funded and approved CAP.

7-4

This EA states that several preferred sites were pursued unsuccessfully prior to the selection of allotted land belonging to San Carlos Apache tribal members, for the use of **NOT PURCHASE OF** the proposed FWS fish barriers.

In addition, the BR is currently and privately negotiating with the Bureau of Indian Affairs (BIA), on an acceptable amount of money (tax dollars) to be paid to San Carlos Apache tribal members for this acquisition. Upon requesting information regarding the amount being negotiated by the two (2) government agencies, I was politely informed, that this information was confidential and unavailable to the tax paying public. Now there's something **very wrong** with this picture! Tax paying citizens of the United States of America, supporting their government agencies through withheld taxes, are denied the right to know how many of their tax dollars are being spent to pay citizens of a different sovereign nation for the use of, **not purchase of** property to provide rights of entry and liability flood insurance for a proposed costly project, attempting to protect native fishes and aquatic species from nonnative fishes and aquatic species introduced through previous projects federally funded and approved by the BR, FWS and other cooperating agencies.

7-5

Recap of Proposed Project:

1. The Secretary of the Department of the Interior in conjunction with the FWS and cooperating agencies have approved a \$4,695,000,000.00 CAP, that has introduced nonnative fishes and aquatic species to all of Arizona's watersheds.

7-6

2. Thirty (30) years of research provided by representatives of the BR, FWS and cooperating agencies have identified, that there is now a threat to native fishes and aquatic species from nonnative fishes and aquatic species introduced through the federally funded and approved CAP.

3. In order to hinder the adverse effects of the BR, FWS and cooperating agencies previous decision to predestine the demise of all native fishes and aquatic species through the federally funded and approved construction of the CAP, it is now necessary to spend an additional \$2.756 million in effort to save the remaining native fishes and aquatic species in Aravaipa Creek, Pinal, County Arizona for an undetermined, but finite period of time.

7-7

4. FWS stated, that a \$2.756 million is reasonable and prudent in attempting to hinder adverse impacts caused by the introduction of nonnative fishes and aquatic species through the the federally funded and approved CAP. The realistic end result of the FWS fish barrier project will provide little more than short term relief from the inevitable?

7-8

## Recap Continued:

5. Through data provided by the BR and FWS in this EA as well as in the two (2) previous meeting, three (3) decades of research have produced evidence that self sustaining native fishes and aquatic species have survived quite well in conjunction with natural deterrents, therefore preventing permanent strongholds of nonnative fishes and aquatic species for more than short spans of time. Only green sunfish and yellow bullhead have been collected on more than one (1) occasion from the stream since monitoring in 1963. Red shiner minnows first appeared in 1990 and disappeared in 1991 after floods exceeded 3,000 cfs, which they commonly do.

7-9

6. The special status of this watershed is partially due as an end result of it's remote location and rugged terrain. It is also true, that many other factors potentially provide for this special status such as, canyon bound system, periodic flooding, natural flow velocities and sediment load. All of these factors cumulatively provide natural deterrents, rather than costly inadequate man made structural deterrents.

7-10

7. The BR and BIA are privately negotiating an acceptable price to pay the San Carlos Apache tribal members for the use of, not purchase of property to provide the FWS and cooperating agencies rights of entry and liability flood insurance for the proposed \$2.756 million FWS fish barrier project on the Aravaipa Creek.

8. Several other more suitable sites were identified as preferred, but were unobtainable for various reasons.

7-11

Isn't it interesting, that not one (1) resident landowner of the Aravaipa Creek was willing to sell rights of entry to the BR/FWS? Were all land acquisition proposals presented to resident landowners of the Aravaipa Creek equal to, what is privately being negotiated by the BR and BIA on the San Carlos Apache tribal members behalf? Who knows? Certainly not the tax paying American public!

Below is a list of some questions previously submitted (July 7, 1998), that were not answered:

1. If natural deterrents have worked since the beginning of creation, or at least for the last thirty (30) years monitored by the FWS, why won't they continue to work without the costly intervention of the FWS and the construction of their fish barrier project?

7-12

2. If, after thirty (30) years of monitoring by the FWS, nonnative fishes have been unable to secure permanent strongholds for more than short spans of time, what other than man made structures will promote such abilities?

7-13

3. According to literature provide by the FWS in June 27, 1998 meeting, a yet-to-be exotic species better able to adapt to Aravaipa Creek may be introduced. Again, is the FWS waiting for this super yet-to-be exotic species to evolve? If so, please provide an example of it's development and where this will occur.

7-14

4. The purpose of the FWS fish barrier project on the Aravaipa Creek is to minimize or hinder the upstream incursion of nonnative fishes during periods when there is sufficient flow to establish a direct water connection with downstream habitats. How will these costly FWS fish barriers prevent or hinder nonnative fishes from being deposited and/or carried to the upper reaches of the Aravaipa Creek by terrestrial wildlife and/or humans? 7-15

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5. The design of the costly FWS fish barriers are supposed to exceed the swimming and leaping abilities of nonnative fishes. Who measured the swimming and leaping abilities of nonnative fishes, and how do they compare with the swimming and leaping abilities of native fishes? What tools were used to obtain this data? By what means will the FWS remove the pesky nonnative fishes that do swim faster and leap higher than anticipated? 7-16

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6. Isn't the unsuccessful FWS Virgin River fish barrier project costing tax payers millions of dollars indicative of the proposed FWS fish barrier project on the Aravaipa Creek? If the fish barriers are built on the Aravaipa Creek, how many efforts will be unsuccessfully attempted by the FWS and other cooperating agencies trying to remove nonnative fishes, and how much more will this cost the tax paying public? 7-17

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7. In the February 1, 1997 meeting the FWS stated that many unsuccessful attempts at colonization by nonnative fishes must occur before becoming successful. Again, how many unsuccessful attempts are required before becoming successful, and what data will substantiate this answer? 7-18

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8. Before one (1) of the floods in the 1980's, there was at least one (1) resident landowner on the Aravaipa Creek having nonnative fishes contained in an earth structure continuously fed by the natural flow of the creek itself. After the flood, the earth structure was damaged severely and nonnative fishes were released readily into the natural flow of the Aravaipa Creek. How have the FWS and other cooperating agencies determined, that most if not all nonnative fishes found in the creek are not remnants of the ones unintentionally released during this period of time? How does the FWS and other cooperating agencies know, that there weren't other residents unknowingly harboring pesky nonnatives that eventually escaped into the natural flow of the Aravaipa Creek? 7-19

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9. As an end result, will the predators that consume spikedace and loach minnows cease to exist if their diets are changed to red shiner and fathead minnows? Will the natural flow of the Aravaipa Creek be any less natural if spikedace and loach minnows are forced to live in the presence of nonnative fishes introduced through the federally funded and approved CAP? 7-20

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10. NEPA: National Environmental Policy Act, was established in the early 1970's by the federal government through an overwhelming response by the American public in order to create and ensure policies pertaining to specifically identified endangered and threatened species. Isn't it time for the American public to re-establish control of the authority given to the FWS and their freedom to take charge in any manner they dictate? **I THINK SO!** 7-21

In addition to all of the current and proposed expenditure for the construction of the FWS fish barrier project on the Aravaipa Creek, the BR is required to compensate the FWS in the amount of \$250,000.00 a year for twenty five (25) years from the date of the first funding transfer. The first funding transfer shall occur no later than three (3) months after the date of this biological opinion and the amount shall be prorated to reflect the percent of the current fiscal year remaining. This money will be used by the FWS at their discretion for uses of but not limited to the status, biology, ecology, habitat and life history of the spikedace and loach minnows, gila topminnow, razorback sucker and other Gila River Basin listed or candidate fish species. This equates to approximately \$6,250,000.00 tax dollars in addition to the proposed \$2,750,000.00 construction of the FWS fish barriers on the Aravaipa Creek.

7-22

This is just another perfect example of our government agencies totally out of control! How many individuals, departments and/or agencies have been held accountable for the destruction caused by the approval of the CAP? Many agricultural users prefer sources other than CAP (when possible), because of the cost per acre feet. Even more preposterous is the fact, that the city of Tucson, Arizona (primary user) upon receipt of the water provided by the CAP, has declined to use it for it's intended purpose and now discharges it into the ground attempting to replenish their own natural aquifer. The whole thing is absolutely ludicrous!

How much longer will the tax paying citizens of the United States of America stand for such foolishness? I'm fed up with the FWS and cooperating agencies radical viewpoints and nonsense like this being imposed on the American public!

Finally, I present you with the two (2) way street concerning the issue of incidental take. During the flood of 1993, the FWS denied Jep O. White, long time resident of Aravaipa Creek permission to access the creek with a single piece of heavy equipment, attempting to save a large portion of his property. This decision was solely made by FWS representative Sally Stefferud, who feared that a spikedace or loach minnow may be harmed during Mr. White's attempt to save his property. Sally Stefferud is identified in this EA, as promoting the use of multiple pieces of heavy equipment in the creek to construct the fish barrier project. Her stand, as well as all the other individual supporters and cooperating agencies also identified in this EA is based on the premise, that incidental take during the construction of the fish barrier project, which as an end result, will only hinder NOT PREVENT the encroachment of nonnative fishes and aquatic species is permissible and acceptable.

Where do we draw the line, and who do we hold accountable for such blatant disregard for the veritable needs of American citizens, and the abuse of the our tax dollars? I say we draw the line HERE, and revoke the abused authority given to the FWS by the American public NOW, and in so doing, establish new and practical guidelines with reasonable priorities and practices, carried out by less radical and more responsible representatives of our government agencies.

In closing I submit to you, that if an animal (bird, fish or mammal) has been elevated to higher status in today's society than a man, who's home and property are being threatened by and act of God, there is something terribly wrong! It is time to remove those few, who are dictating such ridiculous and radical views to the many, who are financially supporting something less than their best interests. Once again, how can any of the government agencies (federal/state) identified in this EA, deny a tax paying American citizen the use of reasonable means and access in a time of disaster, for fear of accidental death to a threatened species, when these same government agencies are knowingly and willingly planning the intentional extermination of a countless number of the same threatened species, in attempt to hinder a problem they have created?

Not only do I oppose this project, **I ADAMANTLY OPPOSE** it and any other recommended FWS proposal identified in this EA.

Sincerely,



Bobby R. Blake

Resident of Aravaipa Creek

Tax Payer, Registered Voter and Citizen of the United States of America

cc: Senator John McCain  
Senator Jon Kyl  
Congressman J.D. Hayworth  
Congressman Jim Kolbe

## **Response to Letter of Comment from Blake**

7-1. Although Reclamation must construct fish barriers on Aravaipa Creek pursuant to the Endangered Species Act, compliance with the National Environmental Policy Act (NEPA) is still required. In this situation, the NEPA process serves to allow public input regarding discretionary aspects of the project such as location, design, and mitigation of construction and operation impacts. The two meetings you refer to were conducted to gather information and identify issues of public importance regarding the fish barrier project. The June 27, 1998, meeting was held to formally scope issues that should be addressed in the EA. Public scoping meetings are intended to gather information to focus the analysis; they are not intended to tally support or opposition. No attempt to pacify attendees was intended.

7-2. Numerous conceptual approaches and alternative actions were considered during ESA Section 7 consultation. These alternatives are referred to on page 11 of the EA and discussed in greater length in Appendix A.

7-3. In 1968, Congress passed the Colorado River Basin Project Act, which authorized construction of the CAP to convey Colorado River water to central and southern Arizona. Reclamation was directed by Congress to build the CAP. The "cooperating agencies" you refer to did not necessarily support (or oppose) construction of the CAP. They were identified as cooperating agencies in the draft Aravaipa Creek fish barriers EA because they possess special expertise or jurisdiction by law over issues relevant to the fish barrier project. Cooperating agency status under NEPA does not imply support for a proposed action. An environmental statement on the consequences of construction and operation of the CAP was completed by Reclamation in 1972. The environmental statement was finalized one year before Congress enacted the ESA; therefore, the analysis did not address impacts to threatened and endangered species or the consequence of fish movement through the CAP. Numerous agencies and organizations, including the FWS, commented on the adequacy of the 1972 analysis. Comments focused on issues considered important at that time. The FWS did not state support for or opposition to the CAP in their comments.

7-4. Construction of the CAP was formally authorized by Congress and was not subject to approval by Federal agencies. The purpose of the CAP is to provide a renewable water supply to municipal, industrial, agricultural users who otherwise would be dependent on diminishing supplies of groundwater. Conveyance of fish has never been an objective of the CAP. The possible effects of fish movement through the CAP were not fully recognized or analyzed until the 1990s. Your other comments are noted.

7-5. The negotiation for this acquisition is between Reclamation and the BIA as Trustee for certain members of the San Carlos Apache tribe. An appraisal has been prepared by Reclamation and is under review by the BIA. The appraisal is confidential until the offer is accepted. Under the provisions of the Freedom of Information Act (FOIA), Exemption 5, Privileged Information,

Reclamation cannot reveal to the public the amount of compensation disclosed by the appraisal, which, if approved, will be the amount offered to tribal members for the acquisition. Once an agreement is reached and the appropriate documents are signed, public disclosure of the settlement amount is permissible.

7-6. The 1994 biological opinion addresses only the potential movement of nonnative aquatic species through the CAP to the Gila River basin. The CAP is not interconnected to all the riverine systems of Arizona.

7-7. The more than 30 years of research cited in the EA and referenced in your letter examined only the aquatic biota of Aravaipa Creek. This research did not address the possible effects of CAP operation. Your suggestion that the CAP will "predestine the demise of all native fishes and aquatic species" is overstated and inaccurate.

7-8. As far as we know, the FWS has not commented on the reasonableness of costs incurred to implement provisions of the 1994 biological opinion. The biological opinion identified the fish barrier project as a reasonable and prudent measure to protect loach minnow and spikedace, two species listed as threatened under the authority of the Endangered Species Act. Estimated project costs are not discussed in the biological opinion. The fish barrier project would not have received serious consideration during Section 7 consultation if there was little chance of it having a positive effect on spikedace and loach minnow recovery. Assuming appropriate recovery measures are implemented, extirpation of spikedace and loach minnow from Aravaipa Creek, or their total extinction, is not inevitable.

7-9. Your assertion that only green sunfish and yellow bullhead have been collected on more than one occasion is not accurate. Several species are now routinely encountered below the proposed project area (see page 33 of the EA). The recent appearance of red shiner in Aravaipa Creek is particularly troublesome. Red shiner first appeared in Aravaipa Creek in 1990, were removed by flooding the following year, then reappeared in 1997. Red shiner is an aggressive competitor that is also known to feed on the larva of spikedace and other native species. Displacement of native fishes (including spikedace) by red shiner has been documented in other riverine systems. Red shiner prefers silty, sandy, rocky pools, and occasionally riffles of creeks and small to medium-sized rivers (conditions quite evident on Aravaipa Creek). Permanent establishment of red shiner in the upper and middle reaches of Aravaipa Creek could seriously threaten resident populations of spikedace and loach minnow.

7-10. The rugged terrain and remote location of Aravaipa Creek have little causal relationship with the possible spread of nonnative fishes through the Gila River basin to Aravaipa Creek. The isolation of Aravaipa canyon, however, has limited the extent of development along the creek. Habitat alteration and fragmentation caused by human developments have had an adverse effect on native fishes in other streams and rivers in Arizona. Periodic flooding does appear to have deterred nonnative fish incursion and permanent establishment in the canyon reaches of Aravaipa Creek thus far. However, the invasion of Aravaipa Creek by nonnative fishes is only a recent

phenomenon. Most of the nonnative species currently encroaching on Aravaipa Creek first appeared in the creek during the 1980s (see page 34 of the EA). Other nonnative species inhabiting the Colorado River, CAP, and parts of the Gila River basin could spread to Aravaipa Creek in the future. See response 7-9 regarding red shiner.

7-11. Your comments are noted. See also response to comment 7-6.

7-12. See response 3-3.

7-13. Researchers from several organizations including Arizona State University have studied Aravaipa Creek since the early 1960s. The FWS has not monitored fishes in the creek for 30 years, as your letter asserts. See response 7-14.

7-14. Several species of nonnative fishes found in the Colorado River system and Gila River below Ashurst-Hayden Dam have not yet spread to Aravaipa Creek. Other species of fish are expanding their ranges in North America and could be introduced to the Colorado River and Gila River Basin by human transfer (see Appendix A of EA, page 14). Many of these species could eventually spread to Aravaipa Creek. The immigration of additional nonnative fish species to Aravaipa Creek could adversely affect the survival of native fishes.

7-15. You are correct in pointing out the barriers are designed to impede only the upstream movement of fishes in Aravaipa Creek. Other methods of conveyance are possible, including human transfer. Page 1 of the EA identified bait bucket transfers as a means by which nonnative species are sustained in the Gila River basin. Problems associated with human transfer of nonnative species are also discussed in Appendix A of the EA. The transfer of fishes Reclamation proposes to install fencing between Aravaipa Road and the barriers to restrict access and reduce the possible human transfer of fish at the barrier sites.

7-16. Reclamation contracted with Arizona State University to conduct a literature review of what was known of the swimming and leaping abilities of nonnative fishes. Various researchers conducted these studies using methodologies that are generally too complex to describe in the EA. Reclamation can provide a copy of this report upon request. No research has been specifically conducted on maximum swimming and leaping abilities of native fishes. As stated in the EA, the zone between the barriers will be periodically surveyed and nonnative fishes that transgress the lower barrier will be removed by either mechanical means (nets) or by use of a fish toxin.

7-17. It is impossible to predict how many nonnative fish transgressions past the barriers may occur by natural means, but the expectation is that they will be rare, if they occur at all. As noted in the EA, human transfer of nonnative fishes is possible and likely occurs elsewhere in the Gila River basin. Unauthorized human transfer of fishes cannot be predicted or effectively controlled. The Virgin River fish barriers (not a Reclamation project) was not successful because nonnative fish species had already become established in the river by the time the project was implemented.

7-18. Reclamation's responses to questions posed by Aravaipa Creek property owners at the February 1, 1997, meeting included an explanation of how nonnative fish invasions often follow a pattern of several unsuccessful attempts before colonization is achieved. It is not, however, a matter of unsuccessful attempts being necessary before an invasion is deemed "successful." It is certain that numerous successful invasions have occurred from a single attempt, as evidenced by the many new species that have established themselves in Arizona waters through intentional stockings to improve sport fisheries. Many biologists familiar with the 1990 red shiner invasion of Aravaipa Creek consider it extremely lucky that it was unsuccessful.

7-19. Reclamation does not have information on the composition of fish species in private impoundments affected by flooding in the 1980s. The nonnative fishes present in Aravaipa Creek also occur elsewhere in the Gila River basin, including the San Pedro River. These fishes are capable of directly accessing Aravaipa Creek during periods when flow volumes are sufficient to establish a connection with the San Pedro River (usually several times per year). As noted in the EA, human transfers are also possible.

7-20. In addition to predation, the EA describes other threats to native fishes posed by interaction with nonnatives. See also response 7-10 regarding red shiner. Flow characteristics of Aravaipa Creek are not affected by fish. However, species composition would not be "natural" if natives are displaced by nonnatives.

7-21. Your comment appears to confuse the National Environmental Policy Act with the Endangered Species Act. Please see page 71-72 of the final EA for brief descriptions of these two Acts. Your other comment is noted for the record.

7-22. Your other comments are noted.



# GAME & FISH DEPARTMENT

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000

www.gf.state.az.us

Director  
Duane L. Shroufe

Deputy Director  
Thomas W. Spalding

RECEIVED BY

SEP 27 1998

September 21, 1998

Mr. Thomas Burbey, Area Manager  
Bureau of Reclamation  
Phoenix Area Office  
P.O. Box 81169  
Phoenix, AZ 85069-1169

DATE	ROUTE TO	INITIALS
9/24	1000	JLB
9/17	1015	
	1500	

Re: Draft "Environmental Assessment on Construction of Fish Barriers on Aravaipa Creek, Pinal County, Arizona"

Dear Mr. Burbey:

The Arizona Game and Fish Department has reviewed the draft "Environmental Assessment on Construction of Fish Barriers on Aravaipa Creek, Pinal County, Arizona" and we submit the following comments.

Game and Fish has been involved with this project since the time of issuance of the "Biological Opinion on Transportation and Delivery of Central Arizona Project Water to the Gila River Basin (Hassayampa, Agua Fria, Salt, Verde, San Pedro, middle and upper Gila Rivers and associated tributaries) in Arizona and New Mexico" in 1994. We note that a variety of site alternatives were investigated in the process of selecting the proposed sites. Issues including effective barrier height following aggradation and effects of the barrier on stream gradient have been discussed during the process. Effects of these and other factors on effectiveness of the structures as fish barriers, and associated tradeoffs, have been discussed as well. Recognizing this past analysis, we ask, however, that information on aggradation be verified.

We note on page 22, paragraph 2, that "The extent of the sedimentation is expected to reach approximately 1200 feet upstream of the upper barrier, where the raised stream channel would converge with the existing channel grade." Also we note discussion of similar sedimentation above the lower barrier, which could result in sediment build up 3-5 inches up the lower face of the upper barrier. Several reviewers inferred a gradient of 0.3% above the upper barrier based on the discussion of sedimentation noted above.

Based on this inference, the sediment build up would exceed 3-5 inches on the downstream side of the upper barrier. Clarification

8-1

Mr. Thomas Burbey  
September 21, 1998  
2

to us of the relationship between the grade and sedimentation would be beneficial to our complete understanding of the issue of continuing effectiveness of the barriers, and maintenance requirements.

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Game and Fish supports the concept of the mitigation proposal for impacts to riparian habitat on page 50 and 51 and inclusion of the "Additional Mitigation Measures."

Thank you for the opportunity to review this draft document. If you have any questions feel free to contact me at 602-789-3607.

8-2

Sincerely,



William E. Werner  
Aquatic Habitat Coordinator  
Habitat Branch

WW

CC: Sally Stefferud, USFWS, Phoenix  
✓ John McGlothlen, USBR, Phoenix

## **Response to Letter of Comment from the AGFD**

8-1. The prevailing stream gradient through the project area is approximately 0.6 percent. For a short distance upstream of the lower barrier, stream gradient increases to almost 0.9 percent before returning to 0.6 percent near the upper barrier site. Sediment aggradation between the two barrier would be less due to the steeper gradient (see page 22 of the final EA).

8-2. Your other comment is noted.

September 16, 1998

To: Tom Terry, Mike McQueen

From: Steve Knox, ORP

Subject: Review of Draft EA for Construction of Fish Barriers on Aravaipa Creek - Comments

FAX TRANSMITTAL		BLM
Safford Field Office		Phone (520) 348-4400
711 14th Ave., Safford AZ 85546		# of pages
To: John McGlothlin	From: Tom Terry	
Fax #	Fax # (520) 348-4450	
Dept/Agency	Date 10-6-98	

I have reviewed the draft EA and offer the following comments for consideration in the final document.

General Comments

1. While this project is a number of miles downstream of Aravaipa Canyon Wilderness, the EA does not address if there will be any effects on wilderness resources. It seems from reading the analysis of impacts to other natural and cultural resources there will be no impacts to the wilderness, but the document does not say.

9-1

Wilderness is an issue that should be addressed in the EA. If there are no anticipated impacts to wilderness, then that should be stated in the EA, and no further analysis needed. If there are impacts, then obviously they should be addressed in the appropriate level of detail in the EA.

I am specifically interested in knowing that the barrier structures will not impact the hydrology of Aravaipa Creek back into the wilderness. For example, will raising the stream bed 8 feet at the project site (once the barriers silt in) affect the water flow, stream bed, pools, riffles, etc. in the wilderness? It doesn't appear that the effects will occur much distance either upstream or downstream of the project area, but we need to make certain we are not affecting the wilderness resources.

9-2

2. Same comment for wild and scenic river resources. Aravaipa Creek, in the wilderness, has been recommended for designation under the Wild and Scenic Rivers Act.

3. Will there be a temporary pool of water behind the upper barrier, until it silts in? If so, there should be a discussion of that pool, and potential environmental consequences. For example, how long will it take for the pool to silt in? In the interim, will the pool provide habitat for non-native species. Will people camping near the barrier transport non-native fish to the pool, providing an avenue to non-native fish into Aravaipa Creek above the barriers? Will presence of the pool attract further unauthorized recreation use? Etc.?

9-3

Specific Comments

1. page 9, E. - what is the anticipated construction schedule? Is there any potential it would overlap with our West Aravaipa Ranger Station construction schedule this fall and winter? If so, there might be issues to coordinate (construction traffic, etc.).

9-4

2. page 21, d. - same construction schedule comment as above.

3. page 21, e., and page 22 - how long will the temporary pool remain behind the barriers? The EA never says. Also, will sedimentation affect the hydrology of Aravaipa Creek upstream of the 1,200 foot sedimentation zone? Could it affect the wilderness and wild and scenic river resources?

9-5

4. page 25, B. 1. - the document refers to "The upper reaches of Aravaipa Creek is considered one of the premier examples of high-quality riparian vegetation, as well as one of the last remaining refugia for native fish in the Sonoran Desert." While this portion of Aravaipa Creek is above the project area, it is actually in the lower reaches of the watershed.

9-6

5. page 26, second line - "Winkleman" should be "Winkelman".

6. page 43, Aquatic Habitat - would the effects to instream habitats be limited to the sedimentation zone, or would they extend upstream above the project area (to the wilderness)? See General Comment 1.

9-7

7. page 45, h. - how long will there be a temporary pool behind the upper barrier (before it silts in)? Won't that pool need to be monitored as well?

9-8

If you have any questions, let's visit.

*Steve Knuf*

## **Response to Letter of Comment from the BLM**

9-1. Project-related impacts to Aravaipa Canyon Wilderness Area are not expected. As you have noted, the wilderness area is several miles upstream of the fish barrier project area. The anticipated environmental effects of the project are confined to small portions of Indian Trust Allotment 013736 and three upstream private properties. The EA examines these possible impacts, none of which affect the wilderness area. Reference to the Wilderness Act of 1964 was inadvertently omitted from section M of chapter III, List of Related Environmental and Cultural Resource Laws and Directives. This information has been added to the final EA

9-2. The project would raise the stream bed 4 feet at each barrier. The extent of aggradation upstream of the upper barrier is approximately 1200 feet. The aggraded sedimentation zones, as described in the EA, also generally delineate upstream hydrologic effects of the project under conditions of normal stream flow. Potential project-induced flood effects are also discussed in the EA. The upstream distance and higher elevation of the wilderness area relative to the barrier sites would preclude any foreseeable hydrologic effect to stream resources in the Aravaipa Canyon Wilderness Area.

9-3. Partial backfilling of the barriers will be accomplished during the project's construction phase to facilitate natural aggradation of sediment and minimize potential pooling. Nevertheless, some water will temporarily be impounded on the upstream side of the barriers following construction. These pools will gradually fill with sediment deposited by normal stream flow and may totally disappear with the first flood. USGS records indicate a flow event of 5,000 cfs or greater is possible every three years, which may be sufficient to fully aggrade the stream channel and eliminate pooled water. The EA also describes measures (installation of fencing and locked gates) that would eliminate unauthorized vehicle access to and reduce trespass recreational use of the project area from the lower barrier to the first upstream private property. These access restrictions will reduce the possible human transfer of fishes at the barrier sites.

9-4. Construction would begin around mid to late summer 1999 and last 4 to 8 months.

9-5. See response 9-1 and 9-2.

9-6. Corrections have been made in the final EA.

9-7. Effects to aquatic habitats would be confined to the barrier sites and sedimentation zones.

9-8. See response 9-3. Reclamation will perform periodic fishery surveys above both barriers on Indian Trust Allotment 013736. Reclamation does not have permission to access private properties upstream of the allotment.



# CENTRAL ARIZONA PROJECT

P.O. Box 43020 • Phoenix, Arizona 85080-3020 • 23636 North Seventh Street (85024)  
 (602) 869-2333 • www.cap-az.com

ACTION BY		
DATE		
SEP 22 '98		
DATE	FOR THE	INITIALS
	1500	
CLASSIFICATION		
CENTRAL ARIZONA PROJECT		
FUNDING		
PROJECT		
SUBJECT		

September 18, 1998

John McGlothlen  
 U.S. Bureau of Reclamation  
 Attn: PXAO-1500  
 P.O. Box 81169  
 Phoenix, Arizona 85069-1169

Subject: Comments on Draft Environmental Assessment for Construction of Fish Barriers on Aravaipa Creek

Dear Mr. McGlothlen:

The Central Arizona Water Conservation District (CAWCD) submits the following comments on the Bureau of Reclamation's (Reclamation) draft environmental assessment regarding the construction of fish barriers on Aravaipa Creek.

CAWCD continues to oppose the use of Central Arizona Project (CAP) funds to construct these fish barriers. Reclamation's only reason for building the barriers is that they were identified as one component of a reasonable and prudent alternative in a 1994 biological opinion (BO) on CAP water deliveries issued by the U.S. Fish and Wildlife Service. CAWCD has demonstrated, however, that the BO is arbitrary and capricious because it contradicts previous consultations and biological opinions on the CAP, ignores readily available data, and applies a discriminatory standard. Two lawsuits challenging the validity of the BO are currently pending in U.S. District Court.

10-1

If Reclamation builds the fish barriers and the BO is subsequently overturned, then Reclamation will have wasted significant effort and funds. Delaying construction, on the other hand, causes no harm because the barriers are intended to protect against a long-term, rather than immediate, threat. Therefore, the only prudent course of action for Reclamation to take would be to suspend all work on the barriers until the legal challenges to the BO are resolved.

In addition, for the past two years Congress has expressly denied Reclamation's request for appropriations to construct these fish barriers. Thus, any expenditure by Reclamation

10-2

John McGlothlen  
September 18, 1998  
Page 2

for barrier construction is in violation of appropriations laws.

We appreciate the opportunity to provide these comments.

Very truly yours,



Thomas W. McCann  
Attorney

to  
twm\mcglothlen.ltr

## **Response to Letter of Comment from the Central Arizona Project**

10-1. The Aravaipa Creek fish barrier project is a required element of the 1994 biological opinion. Reclamation must complete the project by December 31, 1999, to avoid a violation of the Endangered Species Act. The biological opinion is the product of more than 3 years' extensive negotiation between Reclamation and FWS. Both Reclamation and FWS believe the biological opinion is legally adequate. Your other comments are noted.

10-2. Past Congressional Conference Reports do contain language prohibiting the expenditure of funds on fish protection activities, such as the fish barrier project. However, this prohibition has not been included in an appropriations bill enacted by the full Congress and signed into law by the President. Reclamation must comply with the binding obligations of Federal law, including the Endangered Species Act. According to the Department of Interior solicitor's office, the Conference Report language does not dispense Reclamation from meeting its legal obligations.



## **Response to Letter of Comment from the FWS**

11-1. Your comment regarding the absence of significant impacts is noted.

11-2. The contractor will be required to provide spill kits for equipment operated in the active stream channel.

11-3. The final EA has been revised to acknowledge the existing fishing prohibition on Aravaipa Creek.



DEPARTMENT OF THE ARMY  
LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
TUCSON PROJECT OFFICE, REGULATORY BRANCH  
5205 EAST COMANCHE STREET  
DAVIS-MONTHAN AFB, ARIZONA 85707-5000

REPLY TO  
ATTENTION OF:

September 14, 1998

Office of the Chief  
Regulatory Branch

Bureau of Reclamation  
Phoenix Area Office  
ATTN: Mr. John McGlothlen  
PO Box 81169  
Phoenix, Arizona 85069-1169

File Number: 954-0517-MB

Dear Mr. McGlothlen:

This letter provides comments to the draft environmental assessment (DEA) dated August, 1998 for the proposed fish barriers in Aravaipa Creek (Section 3, T7S, R17E), Pinal County, Arizona.

Review of the DEA indicates an individual permit (IP) under Section 404 of the Clean Water Act will most likely be required for this activity. A detailed alternatives analysis in accordance with the Section 404(b)(1) guidelines will be necessary to determine the least environmentally damaging, practicable alternative to accomplish your purpose and need.

12-1

While our comments to the DEA are limited, we would suggest that mention of the jurisdictional waters determination is made within the description of the affected environment rather than on page 69 under related laws. In addition, the discussion of impacts to aquatic resources should specifically mention the types of waters of the U. S. impacted. For example, there are special aquatic sites (riffles) within the project area which will be impacted during construction. These should be specifically mentioned and perhaps a figure included to demonstrate their location. Finally, while the Bureau mentioned there would be no mitigation for stream channel impacts, the Corps shall require mitigation for impacts to special aquatic sites.

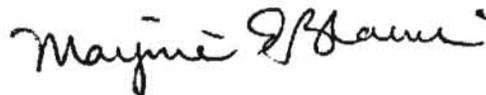
12-2

12-3

ACTION BY		
OF DUE DATE		
SEP 15 '98		
DATE	ROUTE TO	INITIALS
	1500	
CLASSIFICATION		

We appreciate the opportunity to provide comments on your DEA. We look forward to working with the Bureau during the permitting of this action. If you have questions, please contact me at (520) 670-5021.

Sincerely,



Marjorie E. Blaine  
Senior Project Manager  
Arizona Section, Regulatory Branch

## **Response to Letter of Comment from the COE**

12-1. An individual Clean Water Act Section 404 permit application for the fish barrier project was submitted to the COE on September 17, 1998.

12-2. The affected environment and environmental consequences sections of the final EA were revised to include a discussion of the jurisdictional waters determination and presence of riffles within the project area.

12-3. Mitigation for impacts to riffles is being addressed under the Section 404 permit application process. The final Section 404 permit will identify any special conditions that are required by the COE to mitigate for impacts to riffles.