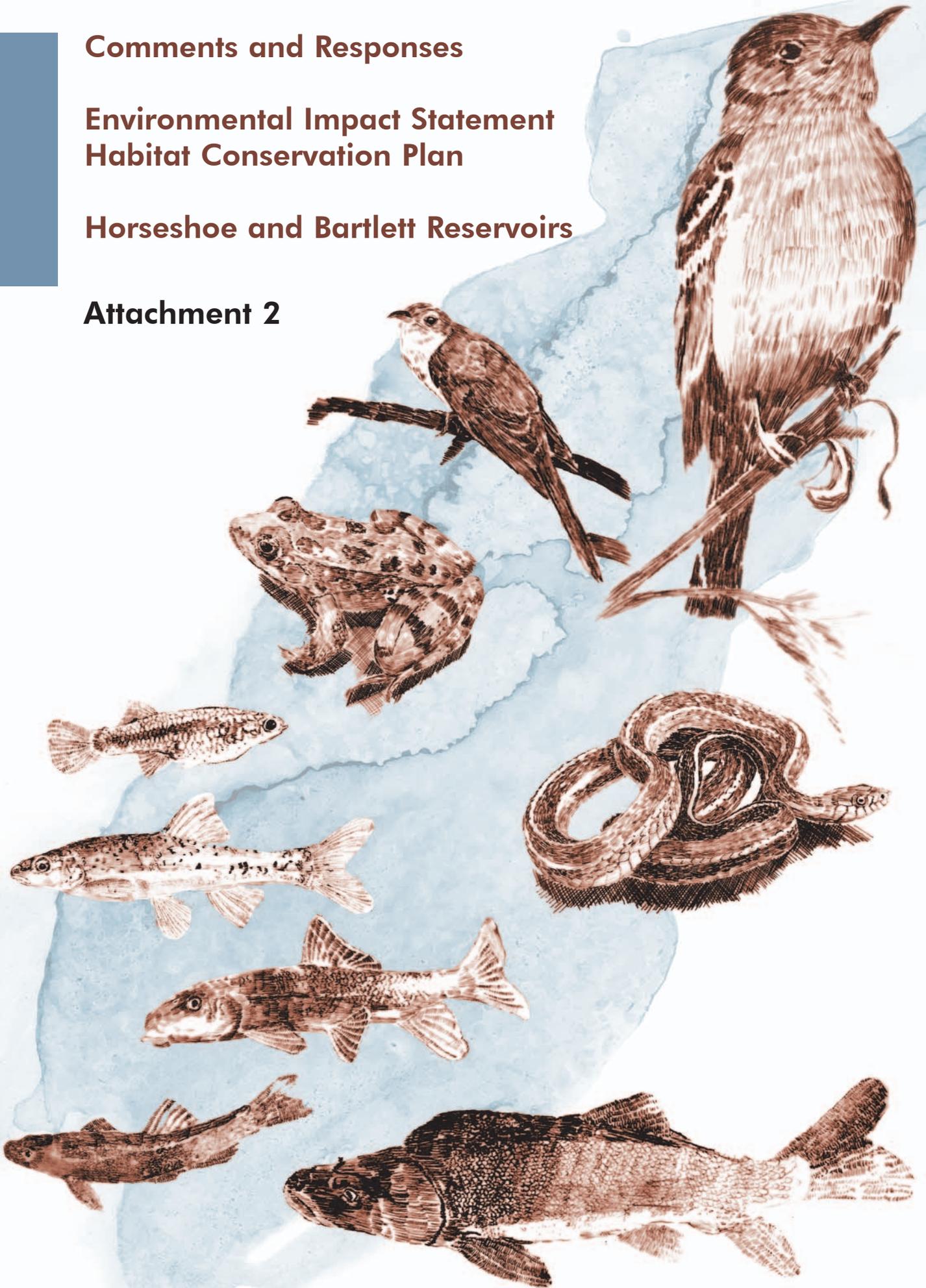


# Comments and Responses

## Environmental Impact Statement Habitat Conservation Plan

### Horseshoe and Bartlett Reservoirs

#### Attachment 2



**ATTACHMENT 2**

**COMMENTS AND RESPONSES**

**ENVIRONMENTAL IMPACT STATEMENT AND HABITAT CONSERVATION PLAN  
HORSESHOE AND BARTLETT RESERVOIRS**

## **COMMENTS AND RESPONSES**

### **ENVIRONMENTAL IMPACT STATEMENT AND HABITAT CONSERVATION PLAN HORSESHOE AND BARTLETT RESERVOIRS**

#### **Introduction**

The U.S. Fish and Wildlife Service (FWS) received a number of comments from the public, State and Federal agencies, tribal and local governments, businesses, and organizations on the draft Environmental Impact Statement (EIS) and draft Habitat Conservation Plan for Horseshoe and Bartlett Reservoirs (HCP). Responses to those comments are provided below.

#### **Public Hearing**

A public hearing on the draft EIS and HCP was held at the Salt River Project in Phoenix, Arizona on August 29, 2007, which was attended by approximately 22 people. The public hearing included presentations by the U.S. Fish and Wildlife Service and the Salt River Project on the EIS process and HCP. A question and answer session was provided, followed by an opportunity to make oral statements for the record. A total of 3 people gave formal statements at the hearing. An audio-video recording of the hearing is available for public inspection at the U.S. Fish and Wildlife Service Office, 2321 W. Royal Palm Road, Suite 103, Phoenix Arizona.

The statements at the public hearing were followed up by written comments submitted by those persons. Responses to those issues are provided in the next section.

#### **Responses to Written Comments**

Comments were received on both the draft HCP and the draft EIS. Below, FWS provides responses to written comments on both of these documents. Because the HCP and EIS contain similar material, response to some comments required changes to both documents. FWS, in cooperation with the Salt River Project (SRP), incorporated changes to both the final HCP and the final EIS (FEIS) as appropriate. Comments are addressed in the order they were processed, an alphabetical index is provided on the next page:

Attachment 2  
Comments and Responses  
Environmental Impact Statement and Habitat Conservation Plan  
Horseshoe and Bartlett Reservoirs

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Comment #	Letter 1	Response
<p>1-1</p> <p>1-2</p>	<div style="text-align: center;">  <p>THE STATE OF ARIZONA <b>GAME AND FISH DEPARTMENT</b> 2221 WEST GREENWAY ROAD PHOENIX, AZ 85023-4399 (602) 942-3000 • AZGFD.GOV</p>  </div> <div style="font-size: small; margin-top: 10px;"> <p><b>GOVERNOR</b> JANET NAPOLITANO</p> <p><b>COMMISSIONERS</b> CHAIRMAN, MICHAEL M. COLLENTY, FLAGSTAFF WILLIAM H. MCLEARN, GOLD CANYON BOB HERNBRODE, TUCSON JENNIFER L. MARTIN, PHOENIX JOE MELTON, YUMA</p> <p><b>DIRECTOR</b> DUANE L. SHROUFE</p> <p><b>DEPUTY DIRECTOR</b> STEVE K. FERRELL</p> </div> <hr/> <p>September 18, 2007</p> <p>Mr. Steve Spangle Field Supervisor, U.S. Fish and Wildlife Service 2321 West Royal Palm Road, Suite 103 Phoenix, AZ 85021.</p> <p>Re: Comment on DEIS and Draft HCP for Horseshoe-Bartlett Reservoirs</p> <p>Dear Mr. Spangle</p> <p>As you know, the Arizona Game and Fish Department (Department) has been a partner with the U.S. Fish and Wildlife Service and Salt River Project (SRP) throughout the development of the subject documents. We would like to take this opportunity to formally provide our comments on the documents. These comments were provided by a variety of Department biologists familiar with specific species or taxonomic groups, however please note that many of these folks may not have been closely involved on the Department's side of the above-mentioned partnership in the development of the EIS and HCP.</p> <p>The bald eagle is referred to as listed under the ESA as Threatened (e.g. in Table 1-1, p.63, &amp; likely elsewhere), but it was delisted in July 2007. I suggest this should not change any of the substantive discussion of the eagle in the documents since it is a species that will require continued management throughout Arizona, SRP is an important partner in that management, and from the SRP perspective re-listing remains at least a possibility during the 50-year term of this document, but editorial changes should be made to reflect the delisting.</p> <p>Region VI of the AGFD has records of lowland leopard frogs in the Houston/Squaw Creek drainage from 2000 and 2001, and Tangle Creek in 2000. Although not critical to the documents, this could be added to the references to known leopard frog locations as on page 85 of the EIS. The records are from the lower portions of both drainages near their confluences with the Verde but in areas normally not connected directly with mainstem Verde flows and its fish and crayfish. Both records are from unpublished Verde River trip reports available upon request.</p> <p>In Section 3.9.2.2 of the EIS (p.89) Bill Burger is cited in regard to Clapper Rails. The 2002 and 2003 surveys referenced should either be referred to as AGFD surveys or cooperative AGFD/FS surveys rather than FS surveys (Mike Ross and Bill Burger were the 2 people present on these</p>	<p>1-1 Appropriate editorial changes have been made in the final EIS and HCP to reflect the delisting of the bald eagle after the draft documents were published.</p> <p>1-2 References to these leopard frog locations listed in the comments have been added to the final EIS and HCP.</p>

Comment #	Letter 1 continued	Response
1-3	<p>Mr. Steve Spangle September 18, 2007 Page 2</p> <p>surveys). Mr. Burger did most of the rail surveys while Mr. Ross emphasized Willow Flycatchers. While the rest of the bullet in which Bill Burger is cited fairly represents his document, he disagrees with the following statement attributed to him; "Suitable habitat comprised of relatively large areas of cattail marshes used by this species does not occur at the reservoirs or along the Verde River below the dams." He further states that, based on the small size of habitat patches known to be used by Clapper Rails along the Gila River west of Phoenix, there is potential Clapper Rail habitat along the Verde below the dams, however that habitat is not known to be occupied by Clapper Rails. There is a record of Clapper Rails near Coon Bluff (Salt River 1-2 miles above Verde confluence) in 1985 and previously, but subsequent to then the only records known to Mr. Burger are upstream of Phoenix, 1 bird confirmed at Roosevelt in 2002, and a possible detection at Red Creek along the Verde in 2001. This Red Creek detection was mentioned in the same 2003 report cited in the EIS. In summary, we suggest the bullet would better read something like "While there is potential habitat for Clapper Rails along the Verde River, including areas below the dams, other than 1 audible detection of what was identified as a clapper Rail near Red Creek in 2001 there have been no records of Clapper Rails in or near the Verde since 1985. Clapper Rails are detected annually near the Salt and Gila confluence about 40 miles southwest of the Verde/Salt confluence but they are not currently thought to utilize areas along the Salt or Verde rivers northeast of Phoenix on anything more than a very intermittent basis".</p>	<p>1-3 The language suggested by AGFD for Yuma clapper rails has been incorporated into the final EIS and HCP.</p> <p>1-4 The frequency of mitigation property monitoring for flycatchers is defined in the HCP (pp. 180-181) as being every 2 years on average but not more than once every 3 years. The HCP also provides for adjustment to evaluate flycatcher and cuckoo population stability and parasitism rate estimation based on recommendations from the Service and the Department during annual meetings. The HCP will be revised to reflect that parasitism is not known to be a threat to cuckoos.</p> <p>1-5 The 3-year interval between surveys only occurs at Horseshoe; surveys at the mitigation properties occur every 2 years on average. The rationale for selecting the 3-year interval is explained in the HCP (p. 180) and is based on growth rates of vegetation and anticipated colonization and expansion of the flycatcher population at Horseshoe. Based on survey results at Horseshoe from 2002 to 2007, large annual increases or decreases in population are not expected (HCP, p. 41). Thus, the 3-year survey interval will reasonably capture population trends.</p> <p>1-6 The frequency and duration of Horseshoe flycatcher habitat inundation is difficult to precisely quantify over a period of 50 years because it depends on the height of the habitat as well as the timing of reservoir fluctuations. The estimated impacts in the HCP assume likely worst-case conditions – relatively short trees distributed throughout the bed of the reservoir (HCP, Subchapter IV.A.2). Based on those assumptions, about 90% of the habitat would be inundated on May 1 in about 3 of 10 years, a lesser amount would be inundated in 2 of 10 years, and none would be inundated in the remaining 5 of 10 years (HCP, Subchapter IV.B.1). However, because the reservoir is drawn down as quickly as possible under the Optimum Operation Alternative (empty 55% of the time and less than 25% full on average by June 1; see Committee Report), most of the inundated habitat would be exposed during the majority of the breeding season. To the extent that the trees are taller or concentrated in the upper end of Horseshoe (as they are now), the impacts will be significantly less than the predicted worst case.</p>
1-4	<p>In the HCP Section <u>Monitoring for covered Bird Species</u> (page 179) it is stated that the monitoring goal for both cuckoos and flycatchers at mitigation sites is to "monitor species status and population trends", however the frequency of monitoring for each site does not appear to be consistent or standardized during the Permit period, which would make determining population trends difficult. Also, in this section relating to cuckoos, it states "At mitigation sites, the goals are to monitor...cowbird parasitism." We were unaware that cowbird parasitism is a serious issue for cuckoos.</p>	
1-5	<p>In the HCP Section <u>Monitoring Species</u> (page 180) it states that "A 3-year survey interval was chosen because native riparian trees generally require a minimum of 3 years before they are an adequate size for nesting, and 3 years will be sufficient to monitor trends of occupied habitat in established vegetation". According to Department biologists, annual fluctuation of bird populations, particularly on a local basis, would make it quite difficult to determine any trend if monitoring surveys were only conducted at 3-year intervals. If monitoring surveys can not be conducted on an annual basis, we suggest monitoring every other year. This would be a much better alternative for collecting sufficient data for determining long-term population trends, especially in prime occupied habitat.</p>	
1-6	<p>One Department reviewer commented that the document lacked a clear indication of the amount of time that potential flycatcher habitat would be inundated. Perhaps you could clarify, based on historic hydrograph and expected operations, the probability of how long vegetation may be flooded.</p> <p>We appreciate the opportunity to provide feedback on the EIS for the issuance of an incidental take permit and the HCP for the continued operation for Horseshoe and Bartlett Reservoirs. Our</p>	

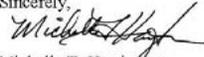
Comment #	Letter 1 continued	Response
1-7	<p>Mr. Steve Spangle September 18, 2007 Page 3</p> <p>Department fully supports the issuance of an Incidental Take Permit associated with the Optimum Operation Alternative as the preferred alternative. Furthermore, we feel that the mitigation and minimization measures identified in the Habitat Conservation Plan will adequately address the identified level of take allowed in the ITP.</p> <p>Sincerely,</p>  <p>Josh Avey Habitat Branch Chief</p> <p>JA:dw</p> <p>CC: Eric Gardner, Nongame Branch Chief Kirk Young, Acting Fisheries Branch Chief Chantal O'Brien, Research Branch Chief Rod Lucas, Region VI Supervisor</p>	<p>1-7 We appreciate the numerous comments in support of the proposed action and are confident that meaningful conservation will result from implementation of the HCP. In particular, we appreciate the comments, participation during the process, and technical support of AGFD for the HCP.</p>

Comment #	Letter 2	Response
2-1	 <p data-bbox="424 375 730 391">CENTER for BIOLOGICAL DIVERSITY</p> <p data-bbox="942 375 1054 391"><i>Because life is good.</i></p> <p data-bbox="346 477 491 493">September 24, 2007</p> <p data-bbox="346 537 625 615">U.S. Fish and Wildlife Service Attn: Horseshoe-Bartlett HCP 2321 West Royal Palm Road, Ste. 103 Phoenix, AZ 85021</p> <p data-bbox="346 639 984 677">Re: Comments on the Draft Horseshoe-Bartlett Habitat Conservation Plan and Draft Environmental Impact Statement</p> <p data-bbox="346 699 491 716">Dear Sir or Madam:</p> <p data-bbox="346 740 1050 860">The Center for Biological Diversity (Center) is a non-profit, public interest, conservation organization whose mission is twofold: (1) to conserve imperiled native species and their threatened habitat, and (2) to fulfill the continuing educational goals of our membership and the general public in the process. On behalf of our 35,000 members, please accept these comments for the above-referenced draft EIS and HCP being prepared as a condition of the Salt River Project's (SRP) application for a Section 10 Incidental Take Permit.</p> <p data-bbox="346 883 1054 1040">The Center appreciates the amount of time and effort on behalf of the U.S. Fish and Wildlife Service (FWS) and SRP in evaluating and proposing mitigation for the impacts of operating Horseshoe and Bartlett Reservoirs on the riparian habitat and native species in the Verde watershed. The Proposed Action of Optimum Operation described in the HCP should over time maintain and possibly increase habitat for the southwestern willow flycatcher and yellow-billed cuckoo, maintain or supplement prey species for desert nesting bald eagles, and provide important monitoring, protection and restoration of native fish. Some questions and concerns remain as to whether the HCP accomplishes this and are addressed below.</p> <p data-bbox="346 1063 1054 1203">Further, in implementing the Horseshoe-Bartlett HCP, we hope that SRP will continue to protect and preserve riparian mitigation lands identified as essential to the covered species. Part of this protection must include the protection of stream flow. The Camp Verde Riparian Preserve (CVRP), 124 acres of mitigation property acquired for the Roosevelt HCP, is threatened by local and upstream groundwater pumping and diversions including pumping in the Big Chino aquifer as proposed by the communities of Chino Valley, Prescott and Prescott Valley. Protecting and managing the CVRP requires that SRP protect stream flow by protecting the Big Chino aquifer.</p> <p data-bbox="346 1226 1054 1284">Likewise, riparian mitigation properties along the San Pedro and elsewhere are threatened by water use locally and upstream of the properties. In protecting Roosevelt and Horseshoe-Bartlett mitigation properties, SRP must exercise its resources to protect stream flow. Of</p> <p data-bbox="354 1333 1041 1365"><small>Tucson • Phoenix • San Francisco • San Diego • Los Angeles • Joshua Tree • Silver City • Portland • Washington, DC P.O. Box 39629 • Phoenix, AZ 85069-9629 tel: (602) 628-9909 fax: (602) 249-2576 www.BiologicalDiversity.org</small></p>	<p data-bbox="1178 1078 1976 1198">2-1 Yes, if some of SRP's mitigation lands no longer met the required characteristics, (see Subchapter V.C.2), other lands would have to be substituted under the terms and conditions of the proposed incidental take permit.</p>

Comment #	Letter 2 continued	Response
2-2	<p>particular concern to us is lands along the San Pedro threatened by proposed development at San Manuel, in addition to current and proposed groundwater pumping in the upper and lower San Pedro basins. If these mitigation lands are degraded by land use outside the property boundaries, will SRP purchase and protect other mitigation lands as a substitute?</p> <p><b>Flycatcher Mitigation and Adaptive Management</b> According to the final Recovery Plan for the southwestern willow flycatcher:</p> <p>“All efforts should focus on preventing loss of flycatcher habitat. However, where occupied, unoccupied suitable, or unoccupied potential habitat is to be lost, modified, fragmented, or otherwise degraded, habitat should be replaced, permanently protected and managed within the same Management Unit. All efforts should strive to acquire, protect, restore and manage compensation habitat prior to project initiation. Recent research explores adequate replacement of both the land area and functional values of riparian and other wetland systems (National Research Council 2001, Wilson and Mitsch 1996, Briggs et al. 1994). Field data collected at flycatcher sites show that currently-suitable habitat patches on free flowing rivers occupy up to 20% of the floodplain in any given year and change in spatial location over time (Stromberg et al. 1997; Hatten and Paradzick, in review). <b>Given the flycatcher’s endangered status and typically small population sizes, there is a high degree of uncertainty as to whether flycatchers will colonize compensation habitat. There also is uncertainty regarding the comparability of ecological values between affected lands and compensation lands and regarding the long-term success of compensation lands. Given these uncertainties and the available data, specific analyses must be conducted on a project-by-project basis to determine the amount of compensation habitat required to approach no net loss.</b> For instance, a relatively high compensation ratio may be required if the affected habitat has a higher than average population density; if the habitat has been occupied consecutively over the long-term; if the habitat contains a large population [&gt;25 territories]; or if compensation lands are not proximate to affected habitat or metapopulation.” (USFWS 2002, p. 82, emphasis added)</p> <p>This Recovery Plan, unlike the draft recovery document that suggested 3:1 mitigation, states that no net loss of flycatcher habitat should occur and that because of the unpredictability of comparability of mitigation sites to the habitat to be lost, the lands should be judged on a case-by-case basis. This would suggest that determining the sufficiency of 200 acres of mitigation property as replacement for a loss of 200 acres on average of high quality, tall, dense riparian habitat currently occupied by flycatcher prior to identifying that mitigation property is premature. If the replacement property is not of the same quality and currently supporting flycatcher populations of similar density and size, it cannot be considered as representing “no net loss.” We therefore suggest that more than 200 acres of replacement property may be required to equal losses at Horseshoe. Limiting adaptive management acreage to an additional 200 acres is inappropriate.</p> <p>CENTER for BIOLOGICAL DIVERSITY 2</p>	<p>2-2 As discussed in Subchapters V.C.1 and 2, the Horseshoe HCP uses both minimization and mitigation measures to fully address impacts from reservoir operations and provide a conservation benefit to flycatchers. We believe the one to one mitigation proposal does follow the Recovery Plan, as described in the bullets on page 166 of the HCP, which list the reasons that 200 acres of mitigation habitat is appropriate to satisfy those goals: 1) little or no impact is expected for 5 to 10 years but most of the mitigation land will be acquired immediately; 2) habitat loss at Horseshoe will not be permanent; 3) impacts at Horseshoe will be minimized through reservoir management; 4) the amount of available Horseshoe habitat is expected to increase over time due to reservoir operations; 5) SRP is committing staff and resources to manage the mitigation lands; 6) the scale of the mitigation allows for high quality blocks of habitat to be purchased; and 7) the mitigation lands will be acquired adjacent to other SRP flycatcher/cuckoo mitigation lands where there are synergistic benefits. See also Response to Comments 2-3 through 2-5, below.</p> <p>2-3 In the first 10 years, there is likely to be a significant net increase in habitat because the existing habitat in Horseshoe is very tall, which limits inundation impacts (e.g., no impact in 2005), and SRP will immediately acquire and begin to manage an additional 150 acres of habitat. Even though 50 acres of riparian habitat in the Verde Valley is very difficult to obtain, the FWS is interested ensuring that some land is purchased in the action area, if possible. For this reason, we have extended the timeframe for seeking the remaining 50 acres.</p>

Comment #	Letter 2 continued	Response
2-4	<p>The Recovery Plan further states in the above paragraph that replacement habitat should be acquired prior to project initiation, yet the HCP states on pages 169-170 that SRP will acquire 150 acres within the first year of the permit but allows up to 10 years to acquire the remaining 50 acres in the Verde Valley or elsewhere. While we understand that protecting additional habitat in the Verde Valley, particularly those lands contiguous with or in very close proximity to the CVRP, is an important priority, allowing a net loss of 50 acres of habitat for any length of time is not acceptable.</p>	2-4 These are the <u>maximum</u> estimated acreages and maximum impacts. Although it is true that 30% of the time only 60 acres will be available because the reservoir is full on May 1, reservoir water levels will almost always be falling after May 1 and by June 1 the reservoir is less than 25% full on average that the reservoir will be empty. The estimated impacts are unlikely to approach these values for decades, if ever; see Responses to Comments 2-2 and 2-3.
2-5	<p>The HCP states on page 118 (and figure IV-2 on page 119) that under the Optimum Operation Alternative, the available habitat for flycatcher could range in the future from approximately 60 acres to 450 acres, and that about 50% of the time, the full 450 acres would be available at the beginning of May. The HCP also concedes that about 30% of the time, only 60 acres would be available at the beginning of May. This means that 30% of the time, 390 acres, or 87% of the habitat, would be unavailable to flycatcher when they migrate to Horseshoe. Thirty percent is a significant figure equating to at least one breeding season for the short-lived flycatcher. Yet the HCP proposes to only mitigate for 200 acres because that's the average amount that will be lost each year.</p>	2-5 Although the concept of “no net loss” can be complicated in dynamic habitats such as the flycatcher’s, we believe the average impact is appropriate to use in this instance rather than the maximum short-term impact in the worst case because: 1) the impacts vary from year to year; 2) reservoir operations benefit habitat over the long-term; 3) flycatcher productivity will be increased due to the presence of additional habitat at Horseshoe and on mitigation lands; and 4) the impacts on habitat are not permanent. Also, see Responses to Comments 2-2 through 2-4.
2-6	<p>In order to fulfill an objective of “no net loss” of habitat, 390 acres of equivalent habitat with equivalent flycatcher occupancy, or more acres of habitat of any lesser quality or without similar flycatcher occupancy, would be required as mitigation.</p>	2-6 See Responses to Comments 2-2 through 2-5.
2-7	<p>Though the southwestern willow flycatcher population at Horseshoe has been considerably less than at Roosevelt, it should not be considered insignificant in the recovery of the species. As the metapopulation at this site increases, the opportunity for dispersal and colonization of other nearby sites increases. (USFWS 2002, p. 75) Thus, maintaining this population and providing or establishing habitat in the vicinity of Horseshoe remains a priority. The fact that habitat at Horseshoe will likely increase over time is extremely important for the protection and recovery of the flycatcher. Losing 87% of the habitat there 30% of the time could be considered a frequent stochastic event that will not be made up by replacing 200 acres, or 44% of the habitat, somewhere else.</p>	2-7 SRP intends to carefully select the location of mitigation lands in relation to long-term water supply and use its best efforts to protect stream flows and ground water levels for its mitigation properties. To that end, SRP has added an average annual expenditure of \$12,000 to the HCP budget specifically for special water supply protection projects that benefit the mitigation lands. Protecting the water supply for mitigation properties will also benefit native fish, frogs, and gartersnakes.
2-8	<p>The HCP and EIS should clarify or add to the list of changed circumstances to which additional conservation, mitigation or management would be required to include the loss of water or stream flow or reduced ground water levels such that riparian habitat is damaged or reduced. For example, SRP indicates that it will “acquire and permanently manage replacement riparian habitat” if a stream “channel shifts on mitigation lands such that riparian habitat is no longer anticipated to be available.” (USFWS 2007, p. 204) SRP should also “acquire and permanently manage replacement riparian habitat” if a “channel’s stream flow is reduced or water levels decline such that riparian habitat is permanently degraded or is no longer anticipated to be available” (suggested language).</p>	2-8 The bald eagle prey base will be maintained. Also, HCP mitigation measures are intended to improve native fish populations (Id.). The most recent observations of-large sucker populations and recruitment in the Verde River below Bartlett by the AGFD during fish surveys completed in summer 2007 will be incorporated into the HCP and EIS, which support the conclusion that the prey base is robust and will not be significantly impacted by the proposed future operation of the reservoirs.

Comment #	Letter 2 continued	Response
2-9	<p><b>Bald Eagle Mitigation and Adaptive Management</b></p> <p>It is crucial that the prey base for bald eagles be maintained in the action area. The documents state "...no measurable impacts on bald eagle forage base or productivity are expected because ongoing operations will not appreciably change community composition or the abundance or distribution of individual species, and the small increase in predation and competition is mitigated to the maximum extent practicable..." (USFWS 2007a, p. 187) The HCP and EIS should include recent and current population trends of native suckers and other prey species in the action area and identify the benchmarks or factors indicating that action or adaptive management would be necessary to provide or supplement bald eagle forage base.</p>	2-9 The suggested alternative of regularly operating Horseshoe to benefit native species in the winter and spring was considered but rejected due to concern that frequently maintaining water levels in Horseshoe might be more likely to benefit nonnative fish recruitment, and higher levels in the spring would reduce availability of flycatcher habitat.
2-10	<p><b>Native Fish Mitigation and Adaptive Management</b></p> <p>In general, the mitigation proposed under the Optimum Operation Alternative appears to have undergone a great deal of consideration, and the complexities of the issues are recognized. Ecological theory supports the conclusions that because native fish tend to spawn earlier than nonnatives, raising the Horseshoe reservoir level during winter-spring could provide native fish with more habitat for spawning and for the young to grow. Floodplain vegetation that grew during the reservoir draw down could also be beneficial for native fish. The reservoir would then have to be lowered when nonnative fish spawn, during April and May. Keeping the reservoir high during the late spring and summer would benefit nonnative predators. But operations based on theory obviously have to be tested out over several years to determine exact timing and effects, and chances are very real that it wouldn't be workable.</p>	2-10 As discussed in the HCP (pp. 195, 196), the focus of fish monitoring during the early years will be near Horseshoe to evaluate the extent of upstream movement from the reservoir, and the conservative trigger of 1 tagged fish was selected precisely for the reason that the comment suggests – one tagged fish found in a sample likely represents a number of other tagged fish and untagged progeny. A comprehensive and intensive monitoring and measurement plan to delineate trends in the fish community composition was discussed during development of the HCP but rejected because of the many other factors affecting the fish populations and their habitat in the action area, including: 1) the pre-existence of self-sustaining populations of nonnative fish species throughout the action area; 2) state and tribal nonnative fish stockings and the direct and indirect effects of sportfish management (e.g., bag limits and baitfish use and releases by anglers); 3) drought stress; 4) groundwater and upstream diversions; and 5) catastrophic wildfire in the watershed causing high ash runoff and fish kills. These factors confound any clear link between reservoir operations and fish community composition. Consequently, the proposed monitoring focuses on a clear metric to assess if the HCP is meeting its intended goals, as well as the need for adaptive management, and/or permit amendment – the movement of tagged nonnative fish from Horseshoe.
2-11	<p>The Optimum Operation Alternative includes triggers for mitigation, including that if "more than 1 Horseshoe-tagged fish is found in one year or 1 tagged fish is found in successive years" additional measures will be taken. (USFWS 2007a, p. 222) However, holding to this arbitrary mitigation trigger does not properly account for the greater possibility of the progeny of Horseshoe fish moving upstream or that 1 tagged fish captured may equate to tens, hundreds or thousands of Horseshoe fish dispersal. Monitoring and comparison of population trends of non-native fish and native fish in the HCP-identified reaches should be considered in the success or failure of the mitigation and adaptive management measures.</p> <p><b>Watershed Management as a Mitigation Measure</b></p> <p>SRP indicates in the HCP on page 191 that it would not continue to pursue "watershed management" activities if they were unable to get an Incidental Take Permit for operations of Horseshoe and Bartlett Reservoirs. SRP's watershed management efforts were given a total credit of 8.0 river miles or 11% of their mitigation credits in the Native Fish Mitigation Measures matrix (USFWS 2007a, Appendix 9, Table 9-1). SRP also indicates on page 150 of the HCP that the water supply impacts for replacing water under the no permit alternative would cost \$5.0 to \$5.6 million per year for 11,000 acre-feet/year that would not be available for use. It certainly then seems that it would indeed be cost-effective for SRP to continue "watershed management" activities that could protect their rights to the many thousands of acre-feet/year of Verde River base flows currently under threat by groundwater pumping at the headwaters and groundwater pumping and diversions in the Verde Valley. The Big Chino aquifer supplies roughly 15,000 acre-feet/year of upper Verde River flows, but could be significantly and permanently reduced</p>	2-11 There would be much less incentive for SRP to maintain and expand watershed management measures if a permit was not issued and storage was curtailed. The watershed management efforts minimize the impact of reservoir operations on the covered species, provide benefits to those species and their habitat, and are therefore entitled to credit.

Comment #	Letter 2 continued	Response
2-12	<p>due to proposed groundwater pumping by municipalities. SRP would likely continue its watershed management activities whether or not they it was able to obtain a permit, and though the Center supports many of the watershed management activities SRP performs because of their positive impact on stream flow and threatened and endangered native species, they should not be considered as mitigation under the HCP.</p> <p><b>Conclusion</b></p> <p>The Center recognizes the complexity of this issue and favors a solution that both aids in the recovery of the southwestern willow flycatcher and other avian threatened, endangered and candidate species, as well as aids in the recovery of native fish in the Verde. Given that raising the reservoir for the benefit of flycatcher will likely be in conflict with the needs and goals of native fish restoration, quantifiable goals, monitoring (including trends analysis) and assurances of the success of mitigation must be included in the HCP prior to the issuance of an Incidental Take Permit.</p> <p>SRP is gaining a reputation as a steward of the Verde River rather than just a dependent. The benefits to the River and the native species that depend on it have the potential to be immense. Having profited from the Verde for several generations, SRP should embrace their role in protecting it.</p> <p>Additionally, FWS must fully embrace their responsibilities under the Endangered Species Act to work towards the protection and recovery of endangered and threatened species. Section 7 of the Act states that all Federal agencies "utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered and threatened species." Avoiding most adverse effects is not sufficient in fulfilling the responsibilities of the Act. FWS must actively work to reverse the downward population trends of the native fish, southwestern willow flycatcher and other threatened and endangered species in and dependant on the Verde River.</p> <p>The Center looks forward to continuing participation in this process. Please contact Ms. Michelle Harrington at (602) 628-9909 or <a href="mailto:mharrington@biologicaldiversity.org">mharrington@biologicaldiversity.org</a>, for any further information. Our mailing address is Center for Biological Diversity, P.O. Box 39629, Phoenix, AZ 85069-9629.</p> <p>Sincerely,    Michelle T. Harrington  Rivers Program Director</p> <p>CENTER for BIOLOGICAL DIVERSITY <span style="float: right;">5</span></p>	<p>2-12 Consistent with the Center's comment, the HCP is balanced among the covered species, quantifies the impacts from reservoir operations, quantifies how the minimization and mitigation measures offset those impacts and contribute to species conservation, and incorporates monitoring and adaptive management measures.</p>

Comment #	Letter 2 continued	Response
	<p><b>References</b>  USFWS 2002. U.S. Fish and Wildlife Service, Southwestern Willow Flycatcher Recovery Plan, Albuquerque, New Mexico, August 2002.</p> <p>USFWS 2007. U.S. Fish and Wildlife Service, Draft Environmental Impact Statement, Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs, Arizona, July 2007.</p> <p>USFWS 2007a. U.S. Fish and Wildlife Service, Draft Habitat Conservation Plan, Horseshoe and Bartlett Reservoirs, Arizona, Attachment I of the Draft Environmental Impact Statement, Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs, (submitted to USFWS by Salt River Project), July 2007.</p> <p>CENTER for BIOLOGICAL DIVERSITY <span style="float: right;">6</span></p>	

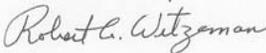
Comment #	Letter 3	Response
<p>3-1</p> <p>3-2</p>	<p>From: Colleen Pelles Madrid District Ranger Cave Creek Ranger District 40202 N. Cave Creek Rd. Scottsdale, AZ 85262 (480) 595-3301 FAX (480) 595-3346</p> <p>Sent: 09/18/2007 04:01 PM</p> <p>To: <a href="mailto:Horseshoe-BartlettHCP@fws.gov">Horseshoe-BartlettHCP@fws.gov</a></p> <p>cc: Todd E Willard <a href="mailto:twillard@fs.fed.us">twillard@fs.fed.us</a></p> <p>Subject: .Fw: Horseshoe-Bartlett HCP Comments</p> <p>Please accept the Cave Creek Ranger District input [on] the HCP detailed below. Thanks.</p> <p>We have reviewed the draft Horseshoe-Bartlett EIS and HCP and would like to provide the following comments.</p> <p>Page 68 of the EIS states : "Thus, no significant adverse impacts to woody plant species composition, vegetation density, canopy cover and vegetation structure, or patch mosaic are anticipated due to future (dam) operations." The statement is supported by data collected by Stromberg et al. (2007) reflecting that floodplain and riparian habitat is dynamic below the dams, and woody plant species composition and structure was similar above and below the dams.</p> <p>High flow events are infrequent on the Verde River. High flows events are one of the primary mechanisms woody species utilize to disperse seeds downstream that eventually may grow and contribute to riparian woody species composition. The areas downstream of Horseshoe and Bartlett Dams are not subjected to high flows with the same frequency, intensity and duration as the Verde upstream of Horseshoe, due to dam operations. Although vegetation may be similar above and below the dams, reduced high flow events below the dams has likely reduced the potential for woody species seed dispersal, germination, and growth. We do not agree that dam operations do not significantly adversely impact woody plant species composition, density, canopy cover and vegetation structure.</p> <p>Additionally, the HCP does not identify the 4.1 mile stretch of river downstream of Horseshoe Dam to the gauge, which is flycatcher critical habitat, as having potential to develop into suitable habitat. That portion of the Verde has occasionally had flycatchers nest and may develop into suitable habitat in the future. Horseshoe Dam operations that mimic upstream flows, especially during high flow events, would likely help establish additional woody riparian vegetation the flycatcher may use in the future.</p> <p style="text-align: center;">1</p>	<p>3-1 The HCP and EIS contain extensive analyses of the relationships between Verde dam operations, hydrology, geomorphology, and woody riparian vegetation (HCP pp. 82-85, 90, 91, 100, 101, 121, 144, Appendix 3 pp. 4-9, Appendix 4; EIS pp. 50-60). All information was considered, including the most-recent, site-specific science, which supports the conclusions in the HCP and EIS that Verde reservoir operations do not have a <i>significant</i> adverse impact on downstream woody riparian vegetation.</p> <p>3-2 The HCP identifies and evaluates the impacts on the 4.1 mile reach of the Verde River below Horseshoe that is designated as critical habitat for flycatchers (pp. 121-123). The suggestion to operate Horseshoe to mimic upstream flow was specifically evaluated in Appendix 3 of the HCP and was eliminated from further consideration.</p>

Comment #	Letter 3 continued	Response
<p>3-3</p> <p>3-4</p>	<p>We strongly recommend that a ratio of greater than one to one (replacement habitat) be considered for flycatcher habitat that may be inundated or lost within Horseshoe. The Southwestern Willow Flycatcher Recovery Plan (P82, #3) addresses the importance of gaining additional habitat for flycatchers, especially if habitat gained is not proximate to affected habitat or metapopulation.</p> <p>Habitat may be gained near Safford, which is over 130 air miles from occupied habitat at Horseshoe, therefore we recommend that a greater than one to one ratio of property be acquired to offset loss of habitat at Horseshoe.</p> <p>Thank you for the opportunity to comment.</p> <p>TODD WILLARD  Fishery &amp; Wildlife Staff  Cave Creek Ranger District, Tonto NF  40202 N. Cave Creek Road  Scottsdale, AZ 85262  (480) 595-3300  Fax (480) 595-3346</p> <p style="text-align: center;">2</p>	<p>3-3 As discussed in Responses to Comments 2-2 through 2-5, the HCP fully minimizes and mitigates the impact of continued reservoir operations and provides a net conservation benefit to the covered species.</p> <p>3-4 We believe the one to one ratio is appropriate for this project, as discussed in Response to Comment 2-2 above. The mitigation habitat to be acquired near Safford is: 1) immediately available, 2) within critical habitat located in the same Recovery Unit identified in the Flycatcher Recovery Plan, 3) within the movement distance of flycatchers from one year to the next, and 4) contains very high quality habitat as evidenced by the 148 flycatchers occupying the adjacent Roosevelt HCP mitigation land in 2006.</p>

Comment #	Letter 4	Response
<p>4-1</p> <p>4-2</p>	<div style="text-align: center;">  </div> <p>14 August 2007</p> <p>Steve Spangle, Field Supervisor  U.S. Fish and Wildlife Service  2321 W. Royal Palm Road, Suite 103  Phoenix, Arizona 85021</p> <p>Dear Mr. Spangle,</p> <p>This letter is in response to the request for public comment on the Horseshoe/Bartlett HCP. My comments are confined to issues involving three species, <i>Thamnophis eques</i>, <i>Thamnophis rufipunctatus</i>, and <i>Rana yavapaiensis</i>. As you know, I have considerable professional experience with at least two of these species and am considered an authority on their biology. In my opinion, the assessment of the biological effects of continued operation of these reservoirs on these three species is largely on-target and accurate. Specifically, although definitive data are lacking, the best scientific evidence available strongly suggests that non-native fishes are a significant factor in the decline (including local extirpations) of these three species. In my opinion, the HCP's assessment of the contribution of the dams to the presence and abundance of non-native fishes in upstream habitat is inadequate and probably underestimates contributions of these reservoirs to non-native fish populations in the Verde River; specifically with regard to fish reproduction in warm reservoir waters. Opinions and input from scientific authorities on southwestern fish population biology should be incorporated in this document.</p> <p>The monitoring and survey provisions in the HCP are <u>grossly inadequate</u> and do not allow for any meaningful assessment of these species status or trends in the action area. Specifically, they will not yield data that will allow confident inferences on 1) status of the species in the action area, 2) effects of continued operation of the reservoirs on these species, or 3) effects (positive or negative) of the mitigation (e.g. fluctuating reservoir levels) on status or trends in these species. The stated goal of the monitoring is, "to assess species status and general population trends." This is an overly broad goal, and I would encourage the applicant to establish much more specific research objectives. More specific questions lend themselves to better experimental design and better science. As it stands, the HCP does not adequately identify research (monitoring) objectives and is bereft of defensible scientific design that can address these objectives. The notion that 6 days of survey effort (every five years) over 189 stream miles is adequate for determining anything (even presence/absence) is beyond preposterous. Layer the fact that these 6 survey days must be used to assay status of three very different species that occupy different habitats and are monitored by very different methodologies, and the proposal passes beyond all credulity.</p> <div style="text-align: center;"> <p>MAIN CAMPUS</p> <p><b>COLLEGE OF LIBERAL ARTS AND SCIENCES</b></p> <p>School of Life Sciences</p> <p>P.O. Box 874501, Tempe, AZ 85287-4501  (480) 965-0803 Fax: (480) 965-6899</p> </div>	<p>4-1 The HCP addresses the future impacts of SRP's ongoing operation of all water conservation storage space at Horseshoe and Bartlett. The HCP and supporting Fish and Watershed Committee Report provide a thorough evaluation of the impact of the continued operation of the reservoirs on the presence and abundance of nonnative fish in the action area. As cited in those documents, literature, opinions, and input from scientific authorities on Southwestern fish population biology were extensively used in the analysis, including the opinions of experts.</p> <p>4-2 As stated in the HCP Handbook, "Monitoring measures described in the HCP should be as specific as possible, and be commensurate with the projects scope and severity of its effects." The proposed monitoring is commensurate with anticipated impacts from reservoir operations when the fish monitoring effort is also considered.</p> <p>HCP monitoring efforts focus on the specific adverse impacts of the reservoir operations on covered fish, frog and gartersnake species (i.e., monitoring of tagged fish that emigrate upstream from Horseshoe). The focus on movement of fish out of Horseshoe reflects the difficulty in detecting the impact of reservoir operations on population trends of particular aquatic species amid the myriad of factors that impact and influence those populations (see Response to Comment 2-10).</p>

Comment #	Letter 4 continued	Response
<p>4-3</p> <p>4-4</p> <p>4-5</p>	<div style="text-align: center;">  </div> <p>The amount of effort and type of effort is something that cannot be determined or assessed until the authors define the monitoring objectives much more explicitly than they have in the present document. At a minimum, I recommend picking three sites along the action area (broadly distributed and at historic localities if possible) and monitoring these every three to four years. A perusal of recent survey reports from Arizona Game and Fish Department should provide insights into the amount of effort necessary to even detect some of these species at even moderate population densities. Assessing broad variables like population “status” or “trends” requires even more effort. If the latter is an objective of this HCP (and it should be), then it should plan for on the order of months of survey effort every 3<sup>rd</sup> or 4<sup>th</sup> year at each site, at a minimum. These criticisms apply not only to the monitoring effort for the three amphibian and reptile species, but also to the monitoring objectives and design for the fish surveys.</p> <p>Again, I think it would be beneficial for the applicant to consult scientific expertise with regard to identification of monitoring objectives and with regard to the appropriate methods and design for addressing those objectives. Both taxon-specific expertise and expertise on scientific design needs to be incorporated into this woefully inadequate proposal.</p> <p>Finally, I’m concerned that these three species were not considered in the development of the HCP for Roosevelt Reservoir. All three of these species occur in both watersheds (Tonto Creek and Salt River) affected by the Roosevelt HCP. All three species are certainly just as negatively affected by the presence of non-native fishes breeding in Roosevelt Reservoir, and similar mitigation and monitoring initiatives should be in place there as well.</p> <p>Respectfully,</p> <p>Andrew T. Holyeross, Ph.D.  Assistant Research Professor  School of Life Sciences  Arizona State University  Tempe, AZ 85287-4501</p> <div style="text-align: center; margin-top: 20px;"> <small>MAIN CAMPUS</small>  <b>COLLEGE OF LIBERAL ARTS AND SCIENCES</b>  <small>School of Life Sciences</small>  PO Box 874501, Tempe, AZ 85287-4501  (480) 965-0803 Fax: (480) 965-0899 </div>	<p>4.2 (Continued)  Flexibility in monitoring efforts should allow adaptation to new information and result in maximum effectiveness. Survey design will be discussed during annual coordination meetings (HCP, p. 198).</p> <p>In summary, the collective level of monitoring provided by the HCP should provide insight on the effects of the action, and with adaptive management, will provide valuable information on the species and identify further opportunities for conservation.</p> <p>4-3 See Response to Comment 4-2.</p> <p>4-4 See Responses to Comments 4-1, 4-2, and 2-10.</p> <p>4-5 The Roosevelt Lake HCP is not the subject of this public comment period.</p>

Comment #	Letter 5	Response
5-1	 <p data-bbox="357 592 483 609">August 29, 2007</p> <p data-bbox="357 633 619 730">Ms. Debra Bills Arizona Ecological Services Office U.S. Fish and Wildlife Service 2321 W. Royal Palm Rd., Suite 103 Phoenix, AZ 85021</p> <p data-bbox="357 755 472 771">Dear Ms. Bills:</p> <p data-bbox="357 795 1050 852">On behalf of the 2300 members of the Maricopa Audubon Society here in central Arizona, we wish to comment on the HCP Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs.</p> <p data-bbox="357 876 1071 1031">Flowing rivers in Arizona have become scarce as diamonds. The Verde River, Gila River, San Pedro, Bill Williams, Big Sandy, Santa Maria, Agua Fria, Pinto Creek, and even the mighty Colorado River are mere fragments of the lush riparian vegetation which they formerly supported and which once graced this state. The riverine habitats of birds such as the Southwestern Willow Flycatcher, Western Yellow Flycatcher, and the Desert-Nesting Bald Eagle are focal points of great ecological concern to our members and to all conservation-minded Arizonans. The ongoing changes and degradation of the riparian habitats of these rivers are tragic, continuing impacts to our state's avifauna, native fish and other biota.</p> <p data-bbox="357 1055 1071 1112">The rapid return of flycatcher and cuckoo habitat only required some seven years of drought at Horseshoe Reservoir. This illustrates how painful were the historic losses of Verde River habitat following construction of man-made, fluctuating-level, "bath-tub ring" reservoirs.</p> <p data-bbox="357 1136 1050 1242">The Verde River is one of the important sources of renewable water for metropolitan Phoenix. Formerly its dams largely supplied agribusiness. As SRP's agribusiness farmlands have been replaced by homes and urban development, the Verde riparian ecosystem still continues to be stretched to the limit. We as a society must show a firm resolve if we are to retain these ever precious riparian fragments.</p> <p data-bbox="357 1266 1071 1307">We wish to compliment SRP for purchase and selection of mitigation lands along the Lower San Pedro, and locations on the Verde and Gila Rivers.</p>	5-1 Thank you, see Response to Comment 1-7.

Comment #	Letter 5 continued	Response
	<p><u>Vulnerability and maintenance of mitigation properties:</u></p> <p>The purchase of over \$20,000,000 worth of mitigation properties by SRP has been noteworthy and historic. Maintaining and protecting these properties is now most important. What will that cost be? In many places at these properties Audubon members have observed fences have been cut by scoflaws and ORV's have invaded them. ORV's have destroyed riparian habitat. Itemizing the cost figures for maintenance of these mitigation properties is critical.</p> <p>The ongoing threats to the Lower San Pedro River mitigation properties are a great concern. The Australian mining giant, Broken Hill Proprietary, a partner in the proposed Resolution Copper Company land swap, is proposing a huge, destructive real estate development at San Manuel. Newspaper articles have discussed the proposal by BHP of 35,000 homes for construction. Such a build-out size will have grave and disastrous consequences for these SRP mitigation properties on the San Pedro. Such losses must be factored in and adjusted over time. Please keep us informed regarding any changes in the species and habitat status of the mitigation properties.</p> <p>Construction of a San Pedro alternate route to parallel I-10 would have disastrous implications for these mitigation properties. This should be evaluated in the overall impacts to the San Pedro mitigation properties. Likewise Prescott diversions of the Big Chino, as well as agricultural and urban encroachments on the Verde are a threat to the Verde River/Cottonwood mitigation properties. Copper mines at Safford and elsewhere, New Mexico diversions below the Gila at Hooker and Conner proposed dam sites would also impact SRP's Gila properties. What plans are being made to compensate for and address these changes and threats?</p> <p><u>Results of recent and past U.S. Fish and Wildlife Cuckoo and Flycatcher surveys:</u> What are the numbers and breeding success of these listed species for this year compared to last year and the years before? What riverine reaches are up or down in numbers? These will give the public vital information on the status of these birds and allow us to focus correctly on any appropriate measures to improve and nurture their status.</p> <p><u>What will be the regime of Verde River spring releases?</u> Will Verde River spring seasonal releases in any way change following this HCP? Will those flows or times of the year be changed? This has an impact on sucker and other fish prey being available for Desert-Nesting Bald Eagles. What are the population changes or studies shown regarding native fish for this year, and by comparison with past years?</p> <p>Thank you for this opportunity to respond. Please keep us informed of all updates and information and decisions regarding this important HCP process.</p> <p>Sincerely,</p>  <p>Robert A. Witzeman, M.D., Conservation Chair 602 840-0052, <a href="mailto:witzeman@cox.net">witzeman@cox.net</a></p>	<p>5-2 The combined maintenance and protection costs for flycatcher-cuckoo mitigation measures for the Horseshoe-Bartlett and Roosevelt OSM cost is approximately \$400,000/year. This does not include the annual costs for monitoring, reporting, adaptive management, or mitigation measures for eagles, fish and other species. SRP conducts regular patrols to fix fences, weekly on average. Fencing destroyed by flood events is replaced as soon as practicable.</p> <p>5-3 SRP recognizes the importance of maintaining San Pedro stream flows and is using its best efforts to actively protect the riparian corridor and its mitigation properties. FWS and SRP have participated in a number of meetings with Resolution Copper, BHP, and other stakeholders to identify and address issues of mutual interest, including protection of riparian habitat.</p> <p>5-4 SRP agrees with the with the concern regarding possible I-10 alternate routes through the San Pedro and has met with and submitted comments to ADOT regarding potential impacts. SRP also intends to be vigilant on the Gila River to protect its riparian mitigation properties. Fortunately, the Gila River Indian Water Right Settlement, which SRP is a part of, has provisions to protect and increase the flows of the Gila River at the lower end of the Safford Valley where the mitigation properties are located.</p> <p>5-5 As suggested, SRP and FWS updated the final HCP and EIS with the most recent species survey results available.</p> <p>5-6 No change is anticipated in the seasonal quantity of flow below the dams. Thus, no significant change is anticipated in fish communities. A detailed analysis and summary of information to support this conclusion is explained in the HCP (pp. 128 – 130). The most recent survey (field observations during roundtail chub collection) on the lower Verde River below Bartlett by the AGFD in 2007 verified that native suckers were highly abundant and recruitment (small size classes) was noted. These recent observations have been added to the HCP.</p>

Comment #	Letter 6	Response
	<div data-bbox="604 289 814 414" data-label="Image"> </div> <p data-bbox="340 467 514 490">September 24, 2007</p> <p data-bbox="340 532 672 636">Mr. Steve Spangle Field Supervisor U.S. Fish &amp; Wildlife Service 2321 West Royal Palm Road, Suite 103 Phoenix, AZ 85021</p> <p data-bbox="340 657 1045 738">Re: Notice of Availability and Request for Public Comments for Draft Environmental Impact Statement, Section 10 Permit Application, Draft Horseshoe-Bartlett Habitat Conservation Plan, and Draft Implementing Agreement for Incidental Take by the Salt River Project, Maricopa and Yavapai Counties, Arizona</p> <p data-bbox="340 760 493 782">Dear Mr. Spangle,</p> <p data-bbox="340 803 1045 885">The City of Phoenix ("City") submits its comments to the U.S. Fish &amp; Wildlife Service's Draft Environmental Impact Statement ("EIS") and Salt River Project's ("SRP") Draft Habitat Conservation Plan ("HCP") and Draft Implementing Agreement For Incidental Take (72 Fed. Reg. 40892 dated July 25, 2007).</p> <p data-bbox="340 925 1066 1177">The City has a vital interest in the outcome of the Salt River Project's application for a permit ("ITP") pursuant to Section 10 (a) (1) (B) of the Endangered Species Act ("ESA") that would authorize the incidental take of species protected by the ESA associated with the continued operation of Horseshoe Dam and Reservoir and Bartlett Dam and Reservoir on the Verde River. Phoenix' unique interest in this ITP and HCP relates to a water right issued in 1948 to the yield created by additional storage space created by the installation of spillway gates at Horseshoe Dam (commonly referred to as "gateway") and from the City's receipt of SRP water it receives pursuant to the water rights for "SRP eligible lands" delivered pursuant to contracts described in detail in Chapter I.E. and Appendix 1 of the HCP. In total, the City serves over 1.5 million people and the Verde River currently supplies, on average, about 20% of its total water demand.</p> <p data-bbox="340 1198 1066 1364">Due to the importance of Verde River water to the citizens of Phoenix and due to the unique circumstances of the relationship between the City and SRP, the City has been an active participant with SRP in this process and is paying over half the costs associated with the HCP and its implementation. Selection and implementation of the FWS' preferred alternative, the Optimum Operation alternative, will protect this vital water source, while fully complying with the requirements of the ESA and will provide for the long-term protection and conservation of habitat for covered species. The importance of this water supply is illustrated by the discussion contained in Appendix 3,</p> <p data-bbox="367 1388 1050 1421">200 West Washington Street, 12th Floor • Phoenix, Arizona 85003 • 602-262-6941 • FAX: 602-261-8327 • TTY: 602-534-5500 Recycled Paper</p>	

Comment #	Letter 6 continued	Response
6-1	<p>Mr. Steve Spangle 9/24/2007 Page 2</p> <p>Section IV. of the HCP which details constraints on replacing reductions in this valuable resource.</p> <p><u>Water Resources Impacts to the City related to the No Permit Alternative</u></p> <p>If the No Permit alternative were chosen, the projected gateway loss to the City would be 3600 acre-feet per year on average and the City would also lose additional SRP surface water deliveries projected at 1200 acre-feet per year on average, as described in Appendix 5, Table 2 of the HCP. The estimated cost to the City to replace this amount of water using the replacement costs shown in the HCP in Subchapter IV. C. 1. d., would be between \$2.2 and \$2.4 million per year. This would be a large burden to the City's residents and is a significant reason why the No Permit alternative is not an acceptable operational scheme.</p> <p><u>The Requirements of Section 10 and the Code of Federal Regulations are met.</u></p> <p>There are five criteria which must be met so that an ITP can be issued. They are:</p> <ol style="list-style-type: none"> <li>1. The taking will be incidental to an otherwise lawful activity;</li> <li>2. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;</li> <li>3. The applicant will develop the HCP and ensure adequate funding for the HCP will be provided;</li> <li>4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and</li> <li>5. The applicant agrees to implement other measures that FWS may require as being necessary or appropriate for the purposes of the HCP.</li> </ol> <p>Collectively, the HCP, the Implementing Agreement and the Incidental Take Permit meet the five criteria listed above.</p> <p><u>Term of the Incidental Take Permit</u></p> <p>In addition to the reasons enumerated in Chapter 1, section I.B.4. of the HCP that support a 50-year permit period the City believes that there are other factors which justify the 50-year term. The City prepares its water resources plan on a 50 year planning horizon. Thus, management of the City's water supplies will benefit from the certainty that will result from the issuance of a 50-year Incidental Take Permit that allows for the continued availability and use of the full amount of the City's SRP and gateway supplies. The City is also required by the terms of the State of Arizona's 1980 Groundwater Management Act to demonstrate that it has a 100-year supply of renewable water resources for its customers. For that purpose, a term longer than 50 years could provide even greater certainty. Lastly, the City believes that Adaptive Management, Funding Assurances, Monitoring, and Changed Circumstances measures</p>	<p>6-1 The permit term of 50 years represents a balance between the longer term desired by SRP, Phoenix, and other water users for water supply certainty, and the greater biological certainty desired by FWS and others from a shorter term of permit. Also, SRP can apply for a renewal of the permit prior to the end of the expiration period.</p>

Comment #	Letter 6 continued	Response
6-2	<p>Mr. Steve Spangle 9/24/2007 Page 3</p> <p>presented in the EIS and HCP provide strong assurances that the covered species will be both protected and benefited during the entire 50-year term of the permit.</p> <p><u>Phoenix Supports Issuance of the Incidental Take Permit</u></p> <p>The City recognizes that NEPA requires a comprehensive look at a broad range of environmental factors and believes the EIS meets that requirement. The FWS' EIS takes the so called "hard look" required by NEPA.</p> <p>The City of Phoenix fully supports selection of the FWS' preferred alternative, the Optimum Operation alternative and Issuance of the Incidental Take Permit to SRP associated with the Optimum Operation alternative and the approval of the HCP. In addition, the City supports the signing of the Implementing Agreement and implementation of the minimization and mitigation measures of the HCP. Issuance of the Incidental Take Permit and implementation of the HCP creates a win-win situation for both water users and the environment.</p> <p>Sincerely    Tom Buschatzke  Water Advisor</p>	6-2 Thank you, see Response to Comment 1-7.

Comment #	Letter 7	Response
<p>7-1</p> <p>7-2</p>	 <p><b>Grand Canyon Chapter • 202 E. McDowell Rd, Ste 277 • Phoenix, AZ 85004</b>  Phone: (602) 253-8633 Fax: (602) 258-6533 Email: grandcanyon.chapter@sierraclub.org</p> <p>September 24, 2007</p> <p>Ms. Debra Bills  Attn: Horseshoe – Bartlett HCP  U.S. Fish and Wildlife Service  2321 West Royal Palm Road, Suite 103  Phoenix AZ 85021</p> <p><b>Subject: Comments regarding the Draft Environmental Impact Statement, Incidental Take Permit for the Operation of Horseshoe and Bartlett Reservoirs, July 2007; Draft Habitat Conservation Plan.</b></p> <p>Dear Ms. Debra Bills:</p> <p>Please accept these comments on behalf of the Sierra Club’s Grand Canyon Chapter and our 14,000 members in Arizona. The Sierra Club appreciates the opportunity to comment on the Draft Habitat Conservation Plan (HCP) and Draft Environmental Impact Statement (EIS). We also appreciate the amount of time and effort the U.S. Fish and Wildlife Service (USFWS) and the Salt River Project (SRP) took to evaluate and propose mitigation for the impacts of operating Horseshoe and Bartlett Reservoirs on the riparian habitat and native species in the Verde watershed as well as on the native species that inhabit this area.</p> <p>The Proposed Action of Optimum Operation described in the draft HCP should provide a long-term opportunity to maintain and possibly increase habitat for the southwestern willow flycatcher and yellow-billed cuckoo. Although it appears to have limited impact on bald eagles, the potential negative impacts on native fishes are significant. We appreciate that the plan calls for some monitoring, protection and restoration of native fish, but we would like to see a more conservative approach to protecting these imperiled species.</p> <p>For the HCP to be successful, it is critical that SRP also act to protect and preserve mitigation lands that are important to the species covered in the HCP and to act aggressively to protect the watershed. Development and the associated groundwater pumping via the actions of Prescott, Prescott Valley and Chino Valley, as well as various developers in these areas, threaten the Big Chino and thus the stream flows in the upper portion of the Verde. If allowed to go forward unchecked, these actions could threaten existing mitigation lands such as those in the Camp Verde Riparian Preserve.</p> <p>Below are some questions and comments on the draft HCP:</p>	<p>7-1 The HCP minimizes and mitigates all impacts on covered native fish species from continued reservoir operations and provides a net conservation benefit to those species (HCP, pp. ES-4 to ES-6).</p> <p>7-2 SRP is using and will use its best efforts to protect the water supply for mitigation lands in the Verde Valley and elsewhere. Also, see Response to Comment 2-7.</p>

Comment #	Letter 7 continued	Response
7-3	<p><b>Southwestern Willow Flycatcher</b> (<i>Empidonax traillii extimus</i>)</p> <p>While the Recovery Plan states that replacement habitat should be acquired prior to project initiation, the HCP allows up to 10 years to acquire the last 50 acres of these replacement lands in the Verde Valley or elsewhere. This is inappropriate. The plan should require all lands to be acquired prior to the project moving forward. Additionally, we suggest that the HCP include provisions for three-to-one mitigation, as is stated in the Southwestern Willow Flycatcher Final Recovery Plan. Because of habitat variability and the difficulty of predicting the success with mitigation sites, a conservative protective approach is warranted to ensure that there is no net loss of willow flycatcher habitat. The proposed replacement habitat of 200 acres is inadequate.</p>	7-3 See Responses to Comments 2-2 and 2-3.
7-4	<p>Furthermore, we ask that the USFWS clarify the list of changed circumstances that would trigger additional conservation, mitigation or management to include the loss of water or stream flow or reduced ground water levels such that riparian habitat is damaged or reduced. With the current threats to the Verde River and other flowing streams in the state and with the uncertainty associated with long-term drought and climate changes, it is essential that any negative impacts be appropriately mitigated and that the USFWS is conservative in protecting these species.</p>	7-4 The loss of water is not addressed in the list of changed circumstances. However, if SRP mitigation lands no longer meet the required characteristics due to a loss of water supply, other lands would have to be substituted under the terms and conditions of the proposed incidental take permit. Also, see Response to Comment 2-7.
7-5	<p><b>Bald Eagle</b> (<i>Haliaeetus leucocephalus</i>)</p> <p>The most essential aspect of this HCP relative to bald eagles is that the prey base be maintained in the action area. While the document indicates that there will be no significant change to the forage base for eagles, it should also include monitoring and any triggers that would indicate that adaptive management actions are necessary to supplement any losses of bald eagle forage base.</p>	7-5 See Response to Comment 2-8.
7-6	<p><b>Native Fish:</b> Razorback sucker (<i>Xyrauchen texanus</i>), Colorado pikeminnow (<i>Ptychocheilus lucius</i>), Gila topminnow (<i>Poeciliopsis occidentalis occidentalis</i>), Spikedace (<i>Meda fulgida</i>), Loach minnow (<i>Tiaroga cobitis</i>), Roundtail chub (<i>Gila robusta</i>), Longfin dace (<i>Agosia chrysogaster</i>), Sonora sucker (<i>Catostomus insignis</i>), Desert sucker (<i>Catostomus clarki</i>), Speckled dace (<i>Rhinichthys osculus</i>)</p> <p>We are strongly supportive of any efforts to protect, recover and promote native fishes. Many of Arizona's native fishes are in serious trouble with uncertain futures, unless aggressive action is taken to stop proposals that cause them further harm. In general, we are supportive of the mitigation proposed in the Optimum Operation Alternative. We are not convinced that the trigger for mitigation is adequate, however. Monitoring and comparison of population trends of non-native fish and native fish in the HCP-identified reaches should be considered in the success or failure of the mitigation and adaptive management measures.</p>	7-6 Minimization and mitigation measures for native fish will be initiated immediately upon issuance of a permit; a trigger is not required (HCP, pp. 190-194). Monitoring will also commence immediately and adaptive mitigation will occur if changed circumstances are identified (HCP, pp. 194-197).
7-7	<p>Sierra Club volunteers participated with the Arizona Game and Fish Department in the installation of fish habitat structures in Bartlett Reservoir in 1993. The structures were placed (recollection only) at 12-25 foot depths. It is unknown what the water level was at the time. Will Bartlett's referenced drawdown expose these structures?</p> <p>We were pleased to note the ample mention of Bonar, S. L. Leslie, and C. E. Velez; references, pages 112 &amp; 212, Appendix VI. Our volunteers worked with the researchers and collectively donated 100 plus hours in 2002 and 2003.</p> <p>Printed on Recycled Paper</p>	7-7 Implementation of the HCP is unlikely to increase the exposure of fish habitat structures in Bartlett except for short, infrequent periods when Horseshoe may be temporarily filled to inundate flycatcher habitat during a drought. The frequency of such temporary fills is estimated to be 1 in 13 years (HCP, p. 118). Additionally, Bartlett Lake is expected to have an entirely nonnative fish community. Adverse effects to nonnative fish species from project implementation do not require mitigation as they are not covered by the incidental take permit.

Comment #	Letter 7 continued	Response
7-8	<p><b>Summary</b></p> <p>We are strongly supportive of efforts to protect and recover the species covered in the draft Habitat Conservation Plan, including the southwestern willow flycatcher, the yellow-billed cuckoo and the bald eagle, as well as the native fishes mentioned above and the two species of reptile and one species of amphibian identified in the plan. We do not favor protecting one to the detriment of another, however. Raising the reservoir for the benefit of the flycatcher could potentially harm native fish restoration; therefore, it is essential that quantifiable goals, monitoring and assurances of the success of mitigation must be included in the HCP prior to the issuance of an Incidental Take Permit.</p> <p>Again, thank you for the opportunity to comment. Please keep us apprised of any activities relative to this project.</p> <p>Sincerely,</p>  <p>Sandy Bahr Conservation Outreach Director Sierra Club – Grand Canyon Chapter</p> <p>Printed on Recycled Paper</p>	7-8 See Response to Comment 2-12.

Comment #	Letter 8	Response
	<div data-bbox="373 354 541 412" data-label="Text"> <p>City of Tempe 255 E. Marigold Lane Tempe, AZ 85281</p> </div> <div data-bbox="779 345 1024 418" data-label="Image"> </div> <hr/> <div data-bbox="373 422 590 441" data-label="Section-Header"> <p><b>Water Utilities Department</b></p> </div> <div data-bbox="373 470 525 490" data-label="Text"> <p>September 20, 2007</p> </div> <div data-bbox="373 505 556 522" data-label="Text"> <p><i>Via E-mail and Regular Mail</i></p> </div> <div data-bbox="373 537 665 636" data-label="Text"> <p>Mr. Steve Spangle Field Supervisor U.S. Fish and Wildlife Service 2321 West Royal Palm Road, Suite 103 Phoenix, AZ 85021</p> </div> <div data-bbox="373 657 1026 714" data-label="Text"> <p><b>Re: City of Tempe comments on the Draft Environmental Impact Statement and Draft Habitat Conservation Plan for the Operation of Horseshoe and Bartlett Dams on the Verde River</b></p> </div> <div data-bbox="373 735 512 755" data-label="Text"> <p>Dear Mr. Spangle,</p> </div> <div data-bbox="373 771 1029 985" data-label="Text"> <p>Thank you for the opportunity to provide our comments on the Horseshoe-Bartlett draft Environmental Impact Statement (EIS) and draft Habitat Conservation Plan (HCP). We believe the Horseshoe-Bartlett HCP is a comprehensive plan backed by years of extensive research and data collection. The City of Tempe supports the selection of the Proposed Action in the draft HCP and EIS: Optimum Operation of Horseshoe and Bartlett Dams. The Proposed Action alternative will provide for continued full operation of Horseshoe and Bartlett reservoirs up to their maximum storage elevations while adding operational elements that support the viability of tall, dense riparian habitat at the upper end of Horseshoe to minimize impacts to the Southwestern Willow Flycatcher (SWF) and other covered bird species, and managing Horseshoe reservoir levels to minimize impacts to covered fish, amphibian and reptile species.</p> </div> <div data-bbox="373 1005 1029 1200" data-label="Text"> <p>The City of Tempe provides water service to a population of over 171,000 people in our water service area, in addition to a large concentration of industries, businesses, and educational institutions in the heart of the greater Phoenix metropolitan area. Salt/Verde River surface water supplies delivered to Tempe by the Salt River Project (SRP) are the largest component of Tempe's water resources portfolio. Tempe utilizes surface water supplies from the Salt and Verde Rivers pursuant to senior priority decreed water rights (1910 Kent Decree), stored surface water for SRP member lands in Tempe, and surface water stored in the Roosevelt Dam New Conservation Storage (NCS) capacity. Surface water supplies from the Verde River are a vital component of the water delivered by SRP to Tempe and other cities in the Phoenix area each year<sup>1</sup>.</p> </div> <div data-bbox="373 1222 1020 1258" data-label="Footnote"> <p><sup>1</sup> "Annual surface water diversions by SRP average about 900,000 AF, of which approximately 40 percent is provided through the Verde River system." <i>Draft Horseshoe-Bartlett HCP at Pg. ES-3.</i></p> </div> <div data-bbox="1014 1295 1026 1310" data-label="Page-Footer"> <p>1</p> </div>	

Comment #	Letter 8 continued	Response
8-1	<p>The Proposed Action in the HCP, Optimum Operation of Horseshoe and Bartlett Dams, clearly provides the greatest level of protection to the covered species identified in the plan over the long-term and the flexibility to respond to changing environmental and hydrological conditions. Optimum Operation of Horseshoe and Bartlett Dams provides a number of opportunities for riparian habitat preservation and habitat restoration at mitigation sites, and provides the greatest level of certainty for water users and recreational users. The City of Tempe supports the selection of the Proposed Action in the draft HCP and EIS: Optimum Operation of Horseshoe and Bartlett Dams.</p> <p>We appreciate the opportunity to comment on the Horseshoe-Bartlett draft HCP and EIS.</p> <p>Sincerely,    Eric Kamienski  Water Resources Administrator  Tempe Water Utilities Department  (480) 350-2608  <a href="mailto:eric_kamienski@tempe.gov">eric_kamienski@tempe.gov</a></p> <hr data-bbox="380 1252 1031 1256"/> <p style="text-align: right;">2</p>	8-1 Thank you, see Response to Comment 1-7.

Comment #	Letter 9	Response
9-1	<p style="text-align: center;"><b>arizona municipal water users association</b>  4041 north central avenue • suite 900 • phoenix, arizona 85012 • phone (602) 248-8482 • fax (602) 248-8423</p> <p style="text-align: center;">September 19, 2007</p> <p>Mr. Steve Spangle  Field Supervisor  U.S. Fish &amp; Wildlife Service  2321 West Royal Palm Road, Suite 103  Phoenix, Arizona 85021</p> <p>Dear Mr. Spangle:</p> <p>The Arizona Municipal Water Users Association (AMWUA) staff has reviewed the July 2007 Draft Environmental Impact Statement (DEIS) for the Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs and the associated draft habitat conservation plan. We believe the habitat conservation plan is a balanced, comprehensive plan and implementation of the proposed Optimum Operation Alternative would best minimize any adverse impacts to the biological, environmental and socioeconomic resources from future operation of the Verde River reservoirs. As a result of this review, we urge the U.S. Fish &amp; Wildlife Service to approve the habitat conservation plan and issue the requisite incidental take permit.</p> <p>The AMWUA members--the Arizona Cities of Avondale, Chandler, Goodyear, Glendale, Mesa, Peoria, Phoenix, Scottsdale and Tempe, and the Town of Gilbert--collectively represent 3.29 million persons, or over 87% of the population of Maricopa County, Arizona. With the exception of Goodyear, the AMWUA members collectively rely on the Salt River and Verde River reservoirs for a significant portion of their municipal water supplies. Lands within the water service area of the Salt River Project (SRP) are urbanizing rapidly and it is likely that virtually all irrigated lands within SRP will be urbanized by 2010. Consequently, most of the SRP water will be delivered to AMWUA members in the not too distant future.</p> <p>The DEIS at Section 1.7 and the draft habitat conservation plan at Chapter 1.F accurately describe the importance of the Verde River reservoirs in the operation of the Salt River Project and for the water supplies developed through coordinated operation of the Salt River and Verde River reservoirs. AMWUA and its members would be very concerned about any action which would serve to reduce the amount of Salt and Verde River water available for delivery in the future.</p> <p>We appreciate the opportunity to comment on the DEIS.</p> <p>Sincerely,    Steve L. Olson  VCD:ma  H:/val/DEISVerdeHCP</p> <p style="text-align: center;">A voluntary, non-profit corporation established by cities in the urban area  of Maricopa County for the development of an urban water policy.</p> <div style="text-align: right;">  </div>	9-1 Thank you, see Response to Comment 1-7.

Comment #	Letter 10	Response
	<div data-bbox="321 354 1066 446" data-label="Image"> </div> <p data-bbox="384 511 527 532">September 28, 2007</p> <p data-bbox="384 553 646 651">Ms. Debra Bills Arizona Ecological Services Office U.S. Fish and Wildlife Service 2321 W. Royal Palm Road Suite 103 Phoenix, AZ 85021</p> <p data-bbox="384 695 1012 751">RE: Draft Environmental Impact Statement for Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs <u>and the Draft Habitat Conservation Plan for Horseshoe and Bartlett Reservoirs.</u></p> <p data-bbox="384 794 495 812">Dear Ms. Bills:</p> <p data-bbox="384 834 1016 1032">The Arizona/New Mexico Chapter of the American Fisheries Society (AZ/NM Chapter) would like to submit the following comments regarding the draft EIS for the incidental take permit and Draft HCP for Bartlett and Horseshoe reservoirs. The AZ/NM chapter is comprised of over 400 fisheries and aquatic science professionals from federal, state and tribal agencies, colleges and universities and diverse private employers, including students and retirees. The Arizona/New Mexico Chapter was established in 1974 to facilitate communication and exchange of information among members and the public to help improve the conservation and sustainability of Arizona and New Mexico's aquatic resources. We thank the FWS and SRP for the opportunity to provide input on the draft EIS and HCP and submit the following comments for your consideration.</p> <p data-bbox="384 1055 1016 1273">The AZ/NM Chapter commends SRP for being proactive about native fish management and initiating a long EIS and HCP process. Although a long process, it is a necessary step to aid in the recovery of our native fish. We support the proposed action and the concept of stocking native fish in the Verde River drainage, but are concerned that doing so in the mainstem of the Verde River below Peck's Lake would be futile unless an aggressive non-native removal action takes place first. The razorback stocking program in the middle Verde is currently not effective due to non-natives, and we fear stocking smaller bodied native fish (e.g. other suckers, loach minnow, spikedeace, etc.) will produce similar results. These fish are not likely to survive in the presence of non-natives due to predation and competition. We recommend that recovery efforts are considered in the Upper Verde River and its perennial tributaries. Currently there are tributary stocking</p> <div data-bbox="884 1276 1115 1377" data-label="Image"> </div>	

Comment #	Letter 10 continued	Response
10-1	<p>and restoration projects that may have a higher benefit than initiating a stocking program in the middle Verde River. If stocking the mainstem is a priority, the HCP would be more effective if it complemented the Verde River mainstream barrier project currently proposed by the Bureau of Reclamation CAP Biological Opinion. The HCP could focus on stocking native fish after the barrier is constructed, and the waters above the barrier are chemically renovated. This action could provide a refuge in which the native fish could not only survive, but thrive.</p>	10-1 The priority for stocking native fish is in the area most directly affected by reservoir operations and least affected by other human activities, i.e., the portion of the Verde River upstream from Horseshoe that has been designated Wild and Scenic; however, the stocking can occur elsewhere in the Verde watershed if that is the priority for FWS and AGFD, which would include the locations identified in the comments (HCP, p. 191).
10-2	<p>We also support the HCP's adaptive management plan to manage Horseshoe for a grow-out location for razorback suckers. It would provide a needed source of razorback suckers for the Verde and other systems and do so with water that is not currently exposed to the invasive Quagga mussel. We would like to see Horseshoe Reservoir managed with this goal as a priority, as existing sources are infected with Quagga mussels.</p> <p>The AZ/NM Chapter appreciates the opportunity to submit comments on this issue and requests that we be included in any future correspondence regarding our comments and the outcome of the comment process. If you have any questions regarding our comments, please contact Jason Kline, Environmental Affairs Chair, at (520)-388-4452 or email at <a href="mailto:jkline@azgfd.gov">jkline@azgfd.gov</a>.</p> <p>Sincerely,</p>  <p>Pamela Sponholtz Past President Arizona/New Mexico Chapter of the American Fisheries Society</p> <p>Cc: Western Division AFS Matt Rinker, Secretary-Treasurer AFS</p>	10-2 The recommended priority to operate Horseshoe as a grow-out location for razorback sucker was considered as an alternative but was rejected due to concern that frequently maintaining water levels in Horseshoe might be more likely to benefit nonnative fish recruitment and would reduce availability of flycatcher habitat. Also, it would not be a reliable grow-out facility because it is frequently empty for the entire year or longer. However, one of the HCP's goals is to expand the capacity of the Bubbling Ponds Native Fish Hatchery, including grow-out ponds, to produce razorback sucker for the Verde and other locations, which will partially satisfy an objective to produce more razorback sucker in a quagga-free location.

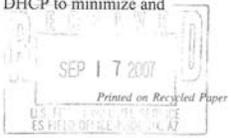
Comment #	Letter 11	Response
11-1	 <p data-bbox="483 316 913 349">United States Department of the Interior</p> <p data-bbox="577 349 814 370">BUREAU OF RECLAMATION</p> <p data-bbox="604 370 787 425">Phoenix Area Office 6150 West Thunderbird Road Glendale, Arizona 85306-4001</p>  <p data-bbox="346 414 441 470">IN REPLY REFER TO: PXAO-1500 ENV-6.00</p> <p data-bbox="651 435 756 462">SEP 14 2007</p> <p data-bbox="619 548 756 568">MEMORANDUM</p> <p data-bbox="346 630 1008 669">To: Mr. Steve Spangle, Field Supervisor, U.S. Fish and Wildlife Service, 2321 W. Royal Palm Road, Suite 103, Phoenix, Arizona 85021</p> <p data-bbox="346 690 798 730">From: Bruce D. Ellis <i>Bruce D. Ellis</i> Chief, Environmental Resource Management Division</p> <p data-bbox="346 747 1029 787">Subject: Comments on Application for Incidental Take Permit for Salt River Project's Operation of Horseshoe and Bartlett Reservoirs, Arizona</p> <p data-bbox="346 808 1029 990">Thank you for the opportunity to review the draft Environmental Impact Statement on issuance of an incidental take permit to Salt River Project (SRP) for the operation of Horseshoe and Bartlett reservoirs. However, due to time constraints and other priorities, our comments are focused on the habitat conservation plan (HCP) submitted by SRP as part of their permit application pursuant to section 10(a)(1)(B) of the Endangered Species Act (ESA) of 1973, as amended. The draft HCP is well-written, easy to follow, and full of useful biological and hydrological information, tables, and figures. Our comments are provided in two sections; those that are primarily about the Southwestern Willow Flycatchers and riparian habitat, and those related to native fish.</p> <p data-bbox="346 1010 793 1031"><b>A. Southwestern Willow Flycatcher and Riparian Habitat</b></p> <p data-bbox="399 1047 1039 1250">p. 42. 2<sup>nd</sup> para. (10) Status of Flycatchers at Horseshoe and Bartlett. "...flycatchers have not been documented below Bartlett...No suitable flycatcher habitat has been found in or surrounding Bartlett and is unlikely to occur in the future due to the steep, rocky shoreline and reservoir operations." It is worth noting that there is the potential for at least some willow flycatcher habitat to develop downstream of Bartlett Dam. For example, the Needle Rock area has the potential to support willow flycatcher habitat if recreation impacts are controlled. The floodplain is wide, with vegetated islands and fingers of marshy backwaters. Adjacent mesquite woodlands provide additional buffer to upland desert. We do acknowledge that this area is under Tonto National Forest management and is not the responsibility of SRP.</p> 	11-1 Controlling recreation impacts in this reach of river very difficult due to its proximity to the Phoenix metropolitan area. The development of this area as potential flycatcher habitat is speculative, but would not affect the conclusions of the HCP or EIS in any event.

Comment #	Letter 11 continued	Response
11-2	<p style="text-align: right;">2</p> <p>p. 91-94, a) Historical Vegetation and p. 100-101, e) Human-induced Vegetation Changes. We recognize the positive and negative impacts on vegetation above Horseshoe Dam, but the Human-induced Vegetation Changes section is somewhat unclear on downstream effects of dam operations. "Dam operations..., which change flow and sediment patterns, have had little effect on tall woody vegetation, except new stands have been created on the Horseshoe inflow delta." Yet, Stromberg et al. (2007) state "Smaller-scale recruitment events, associated with smaller floods, are likely to be pre-empted [or occur less frequently...] along such rivers." According to the Southwestern Willow Flycatcher Recovery Plan (FWS 2002), the channel downstream from Horseshoe and Bartlett dams is now smaller and less complex than before construction of the dams. Flood flows have been significantly reduced, limiting the active component of the downstream channel. Dam operations may allow vegetation to persist along the narrow channel due to more consistent flow downstream, but the smaller-scale recruitment events that now occur less frequently preclude wider patches of habitat from developing. Although the total amount of habitat may be similar, habitat may not be as suitable as pre-dam conditions when the river meandered more often and flood flows deposited greater amounts of sediment conducive to riparian regeneration over a larger area. Riparian vegetation now exists as long, narrow, linear corridors downstream of the dams instead of as variable-sized patches interspersed throughout the floodplain. Wide habitat patches are more suitable for willow flycatchers and Yellow-billed Cuckoos than long, narrow, linear habitat. The opportunity for wider patches to develop downstream are now restricted to major flood events. There are certainly other factors currently impacting development of suitable habitat, but reservoir operations have contributed to reducing the suitability of willow flycatcher downstream.</p>	11-2 As described in Response to Comment 3-1, the HCP and EIS contain extensive discussions of the relationship between Verde dam operations, hydrology, geomorphology, and woody riparian vegetation (HCP pp. 82-85, 90, 91, 100, 101, 121, 144, Appendix 3 pp. 4-9, Appendix 4; EIS pp. 50-60). In summary, the most recent available science, which includes Verde-specific studies conducted after the Recovery Plan was issued, supports the conclusions in the HCP and EIS that dam operations do not have a <i>significant</i> adverse impact on downstream woody riparian vegetation.
11-3	<p>p. 91-94. a) Historical Vegetation. What we are most interested in for comparison purposes is the pre-dam historical riparian baseline without the influence of heavy livestock grazing. Although the historical influence of livestock grazing on the amount of vegetation present is valid, it is a negative impact being addressed through other consultations. Prior to heavy livestock grazing and construction of the dams, riparian habitat would have continuously scoured and regenerated. We suggest including a statement stating that the pre-dam historical riparian vegetation baseline without heavy grazing is unknown but may have been greater than what is shown or estimated from historical photos. Verde River surveys conducted by the Forest Service over the past 10 years have documented significant riparian habitat improvement following removal of livestock upstream of Horseshoe Dam.</p> <p>p. 165. 1<sup>st</sup> para. 2. Mitigation Habitat Acquisition and Management. "In the future, the maximum amount of potentially occupied flycatcher and cuckoo habitat predicted to be unavailable due to the operation of Horseshoe and Bartlett is 200 acres...However, the 200 acres is not expected to be permanently lost, rather the amount unavailable will vary spatially and temporally in the reservoir."</p>	11-3 We have added the requested statement.

Comment #	Letter 11 continued	Response
<p>11-4</p> <p>11-5</p>	<p style="text-align: center;">3</p> <p>The Recovery Plan (FWS 2002, p. 82) recommends that “a relatively high compensation ratio may be required if the affected habitat has a higher than average population density; if the habitat has been occupied consecutively over the long-term; if the habitat contains a large population; or if compensation lands are not proximate to affected habitat or metapopulation.” Although habitat loss at Horseshoe Reservoir will be temporary and intermittent, it is likely to further impact the already small willow flycatcher population on the Verde River. Unfortunately, replacement property away from the Verde River will not compensate for this loss. We agree that if property cannot be purchased on the Verde River, purchasing occupied willow flycatcher habitat in the Safford Valley adjacent to occupied habitat owned and managed by SRP is a worthwhile goal. We also recommend following the Recovery Plan guidelines to provide a higher compensation ratio than one to one for replacement habitat because these properties are far from the affected habitat.</p> <p>p. 181, 4<sup>th</sup> para. 3. Monitoring for Covered Species. We can appreciate that determining actual parasitism rates for a few willow flycatchers on small mitigation properties will be difficult. While we understand the dilemma and the potential value in using surrogates to obtain a statistically valid data set, parasitism data on other bird species may not be similar to willow flycatchers. Pooling parasitism rates of all species can mask the actual parasitism rate of willow flycatchers (either greater or less than) due to the variation in the frequency and outcome of parasitism among species. Some species are more prone to deserting and reneating immediately after cowbird parasitism occurs, while others are more prone to raise the cowbird young. Parasitism may not be a problem if the host species can successfully fledge its own young in the same or subsequent nesting attempts early enough in the nesting season.</p> <p>We also understand that willow flycatchers will not be banded, making positive individual identification difficult and sometimes incorrect if new individuals move into a territory. Even so, it may be more useful to concentrate efforts on tracking nesting attempts of individual willow flycatcher females (at the territory level) as much as possible throughout the breeding season to document reneating following parasitism, even though the sample size may be small.</p> <p><b>B. Native Fish</b></p> <p>From the native fish perspective, Reclamation agrees the draft HCP “will not appreciably reduce the likelihood of survival and recovery of the species in the wild.” We believe impacts of Verde River reservoir operations to native fishes are relatively minor compared to the baseline impacts that non-native species introductions have already made. We also believe, however, that the stated assumption “areas close to reservoirs are valued higher than more distant locations” unnecessarily limits the mitigation options considered and restricts the benefits of mitigation options to recovery of native fishes. Some of the proposed mitigation measures intended to offset native fish impacts are worthwhile, but others may be of limited value.</p>	<p>11-4 The initial intent was to purchase land in the Verde Management Unit. However, given the very limited private land and lack of available land for sale in this area, SRP opted to look elsewhere in the same Recovery Unit. We believe the mitigation plan in the HCP is consistent with and supports the Recovery Plan for the southwestern willow flycatcher by: 1) managing lake levels to maintain and improve habitat in Horseshoe (a key recommendation in the Plan), 2) high priority efforts to acquire and manage mitigation habitat in the nearby Verde Valley, and 3) to prioritize mitigation land acquisition in the Recovery Unit to support additional territories (see Subchapter V.A.1). Only one component of the minimization and mitigation measures for flycatchers is in the more distant Safford Valley (which is still part of the same Recovery Unit), most of the actions to offset or avoid impacts will occur at Horseshoe itself and in the Verde management unit. We are still committed to purchase some land in the Verde Management Unit. Also, see Response to Comment 2-2.</p> <p>11-5 Additional monitoring efforts to evaluate cowbird parasitism are discussed in the HCP (p. 182); the remainder of these comments will be considered during the adaptive management process to monitor, assess, and manage cowbird parasitism (HCP, pp. 183-186).</p>

Comment #	Letter 11 continued	Response
11-6	<p style="text-align: right;">4</p> <p>We are not in agreement with the approach that meaningful benefit to razorback sucker recovery can be achieved through additional support of the existing stocking program. This long-practiced program has failed to produce substantive recovery progress in the Salt and Verde rivers beyond the occasional documentation that a few fish may survive for a few years. Long-term survival or reproduction of stocked razorbacks in the Salt/Verde mainstem rivers has never been documented, and there is no reason to expect that continuing that approach will result in a different outcome. Although we support the measure to monitor movements of stocked razorbacks and believe such monitoring could potentially illuminate new recovery options; in general, we do not believe the Verde River razorback stocking program is effective in its current configuration.</p> <p>Hyatt (2004) specifically examined the razorback/pikeminnow stocking programs in the Salt and Verde rivers and recommended conditioning of hatchery fish prior to release into the wild to acclimate them to riverine currents. Perhaps this approach could increase survival of stocked fish. However, we believe the evidence is overwhelming that recovery of razorback sucker in the Gila River basin is unlikely without significant control of non-native species, which the HCP acknowledges is an intractable problem in mainstem rivers. Faced with the prospect that easy recovery of razorback sucker in the action area is dim, we would prefer the HCP redirect its mitigation away from razorback sucker and instead more strongly embrace the concept of “recovery in lieu of threat removal” and apply its native fish recovery efforts toward other species away from the action area.</p>	11-6 The amount of fish taken by the proposed action through community interactions with nonnative species which benefit from Horseshoe operations will be offset by stocking efforts and other mitigation activities. It is not the responsibility of the applicant to ensure recovery of the native fish community in the action area, but rather to minimize and mitigate take from their action to the maximum extent practicable. . During development of the HCP, other conservation actions were considered (p. 189), and criteria for determining the highest value of mitigation actions were developed by a team involving biologists from the Service, AGFD, and SRP. The proposed mitigation measures are the most cost-effective and biologically meaningful, and are consistent with current AGFD fish management actions – thus, these measures had the highest conservation value. If fisheries management or reintroduction location priorities change in the future, or other actions (e.g., barrier construction, mechanical nonnative removal) are deemed more beneficial to conserve these or other covered species, existing funding can be redirected upon approval of FWS, in cooperation with AGFD (HCP, p. 195).
11-7	<p>In this light, Reclamation agrees that SRP support of Bubbling Ponds Native Fish Hatchery (BPH) is an excellent proposal, provided that support is applied in the right areas. Specifically, blind support for razorback production for stocking in the Verde River should be avoided unless significant changes to the program are made. Instead, those dollars should be applied to the newly developed facility at BPH intended to propagate and maintain other listed fishes such as loach minnow and spikedace. Reclamation already provides support for that facility, but additional assistance with hatchery staff and operation/maintenance costs is needed. Because that facility is focused on preventing population extinctions and propagates fish intended for repatriations into protected wild streams where non-native fishes have been removed, we anticipate its success in assisting recovery processes.</p>	11-7 The HCP funding of Bubbling Ponds Hatchery improvements and operation will likely be used to support propagation of a number of the covered fish species. SRP intends to work closely with AGFD, FWS, and other hatchery stakeholders (which include Reclamation) to identify priorities for producing and stocking native fish (HCP, pp. 190, 191).
11-8	<p>In conclusion, Reclamation would prefer to see SRP’s limited mitigation budget wholly directed toward segregating native fishes from non-natives in protected (barriered) streams that may lie outside the immediate action area. The HCP proposal to construct a fish barrier on Lime Creek is an excellent example of this approach, one which should be replicated on other tributary streams that can be rid of non-native fishes.</p> <p>If you have any questions concerning our comments please contact Mr. Henry Messing at 623-773-6257.</p> <p>cc: PXAO-1000 (Chandler), 1500 (Sferra, Clarkson)</p>	11-8 The package of minimization and mitigation measures is based on consensus among representatives of FWS, AGFD, ADWR, and SRP. However, if those measures are ineffective, the remaining funds will be used for other actions, which may include nonnative fish removal upstream of fish barriers (HCP, pp. 195, 196).

Comment #	Letter 11 continued	Response
	<p style="text-align: right;">5</p> <p>Hyatt, M.W. 2004. Assessment of Colorado pikeminnow and razorback sucker reintroduction programs in the Gila River basin. Final Report to U.S. Fish and Wildlife Service, Arizona Ecological Services, Tucson, Arizona, Cooperative Agreement 1448-20181-02-J849. Arizona Game and Fish Department, Phoenix.</p>	

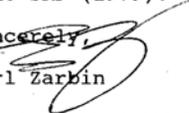
Comment #	Letter 12	Response
12-1	 <p style="text-align: center;"> <b>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY</b>            REGION IX            75 Hawthorne Street            San Francisco, CA 94105-3901            September 14, 2007         </p> <p>           Mr. Steve Spangle            Field Supervisor            U.S. Fish and Wildlife Service            2321 West Royal Palm Road, Suite 103            Phoenix, AZ 85021         </p> <p>           Subject: Draft Environmental Impact Statement the Operation of Horseshoe and Bartlett Reservoirs, Arizona [CEQ# 20070289]         </p> <p>Dear Mr. Spangle:</p> <p>           The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Fish and Wildlife Service's (USFWS) Draft Environmental Impact Statement (DEIS) for the Operation of Horseshoe and Bartlett Reservoirs. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act (CAA).         </p> <p>           The Salt River Project (SRP) has submitted an application for an incidental take permit (Permit) under the Section 10(a)(1)(B) of the Endangered Species Act (ESA). The Permit would authorize the incidental take of 16 species including the southwestern willow flycatcher, yellow-billed cuckoo, bald eagle, razorback sucker, Colorado pikeminnow, Gila topminnow, spikedeace, and loach minnow. Due to dry conditions in central Arizona for the past several years, reservoir levels behind Horseshoe and Bartlett dams have been below normal, resulting in riparian trees and shrubs growing in space historically used to store water. These newly established riparian areas have been colonized by species that use this habitat, such as the southwestern willow flycatcher. A Permit is needed because continued operation of the reservoirs may adversely affect the habitat used by the covered species.         </p> <p>           SRP has prepared a Draft Habitat Conservation Plan (DHCP) and DEIS to meet the requirements of the ESA and to evaluate the potential impacts associated with issuance of the Permit. The DHCP and DEIS are well organized and provide much useful information regarding habitat conservation planning and the potential impacts associated with the Permit. We commend the USFWS on a well-written, comprehensive set of documents. The Preferred Alternative authorizes the continued full operation of Horseshoe and Bartlett Reservoirs with the addition of operating objectives designed: 1) to support stands of tall riparian vegetation at the upper end of Horseshoe to minimize impacts to covered bird species; and 2) to manage Horseshoe Reservoir levels to minimize impacts to covered native fish, frog, and gartersnake species. The Preferred Alternative includes implementation of all measures described in the DHCP to minimize and mitigate the potential take of covered species.         </p> 	12-1 Thank you, see Response to Comment 1-7.

Comment #	Letter 12 continued	Response
<p>12-2</p> <p>12-3</p>	<p>Based on our review, we have rated the DEIS as Lack of Objections (LO) (see enclosed "Summary of Rating Definitions"). We have concerns about the acquisition of off-site mitigation habitat and the status of the Biological Opinion. The DEIS states that as part of the proposed action, SRP would acquire and manage 200 acres of suitable riparian habitat (pg. 32). Table 2-3 states that 50 acres would be located in Verde Valley if feasible; 150 acres would be located in Safford Valley; and that the balance of habitat would be located in San Pedro or elsewhere in Central Arizona. We are concerned that the off-site mitigation areas may not be located in proximity to the Horseshoe and Bartlett Reservoirs. Although we understand that it is advantageous to purchase large parcels of riparian land, we recommend that off-site mitigation areas be purchased within the same watershed, if at all possible.</p> <p>The DEIS also states that formal consultation will terminate with the preparation of a Biological Opinion. The Biological Opinion will provide the USFWS determination as to whether the proposed action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of designated critical habitat (pg. 12). We recommend that the results of the Biological Opinion be summarized within the FEIS.</p> <p>We appreciate the opportunity to review this DEIS. When the Final EIS is released for public review, please send one hard copy and one CD ROM to this office at the same time it is officially filed with our Washington D.C. office. If you have any questions, please contact me at (415) 972-3846 or Ann McPherson, the lead reviewer for this project. Ann can be reached at (415) 972-3545 or at <a href="mailto:mcperson.ann@epa.gov">mcperson.ann@epa.gov</a>.</p> <p>Sincerely,</p>  <p>Nova Blazej, Manager Environmental Review Office</p> <p>Enclosures: Summary of EPA Rating Definitions</p>	<p>12-2 Most of the riparian areas in the Verde watershed, except for the Verde Valley are under federal ownership; thus, not suitable for mitigation efforts under an HCP. The Verde Valley contains private floodplain lands and is a high priority location because it is close to the reservoirs. However, it will be difficult to acquire even 50 acres of suitable mitigation habitat due to small parcel sizes, land title issues, reluctant sellers, and urban encroachment (HCP, pp. 170-174). Fortunately, in part through re-operation of Horseshoe, it is highly likely that the amount of flycatcher habitat at the reservoir itself will substantially increase and be available more often (HCP, p. 166).</p> <p>12-3 The order for the completion of documents by the FWS is as follows: final EIS, final biological opinion, and final Record of Decision. We will make every effort to ensure that the biological opinion made available to the public.</p>

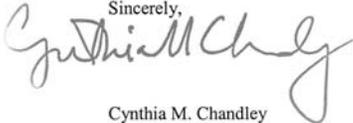
Comment #	Letter 12 continued	Response
	<p style="text-align: center;"><b>SUMMARY OF EPA RATING DEFINITIONS<sup>1</sup></b></p> <p>This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.</p> <p style="text-align: center;"><b><u>ENVIRONMENTAL IMPACTS OF THE ACTION</u></b></p> <p style="text-align: center;"><b>"LO" (Lack of Objections)</b></p> <p>The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.</p> <p style="text-align: center;"><b>"EC" (Environmental Concerns)</b></p> <p>The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.</p> <p style="text-align: center;"><b>"EO" (Environmental Objections)</b></p> <p>The EPA review has identified significant environmental impact that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.</p> <p style="text-align: center;"><b>"EU" (Environmentally Unsatisfactory)</b></p> <p>The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.</p> <p style="text-align: center;"><b><u>ADEQUACY OF THE IMPACT STATEMENT</u></b></p> <p style="text-align: center;"><b>"Category 1" (Adequate)</b></p> <p>EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.</p> <p style="text-align: center;"><b>"Category 2" (Insufficient Information)</b></p> <p>The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.</p> <p style="text-align: center;"><b>"Category 3" (Inadequate)</b></p> <p>EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.</p> <p><sup>1</sup> From EPA Manual 1640, <a href="#">Policy and Procedures for the Review of Federal Actions Impacting the Environment</a>.</p>	

Comment #	Letter 13	Response
<p>13-1</p> <p>13-2</p>	 <p style="text-align: center;"><b>Fort McDowell Yavapai Nation</b></p> <p style="text-align: center;">P.O. Box 17779, Fountain Hills, AZ 85269 Phone (480) 837-5121 Fax (480) 837-1630</p> <hr style="border: 1px dashed black;"/> <p style="text-align: center;">President Raphael Bear    Vice President Bernadine Burnette    Treasurer Pamela Mott  Council Member Paul Russell    Council Member Owen Doka    Council Secretary Pansy Thomas</p> <p>Sept 27, 2007 <i>JMP</i>  <del>July 24, 2007</del></p> <p>Steven L. Spangle  US DOI  US Fish and Wildlife Service  AZ Ecological Services Field Office  2321 W. Royal Palm Rd., Suite 103  Phoenix, AZ 85021-4951</p> <p>Dear Mr. Spangle</p> <p>This letter is in regard to the U.S. Fish and Wildlife Service's Draft Environmental Impact Statement (EIS) on issuance of an incidental take permit (ITP) (72 Fed. Reg. 40892 of July 25, 2007) to the Salt River Project (SRP) and SRP's Draft Habitat Conservation Plan (HCP).</p> <p>The proposed 'Optimum Operation's Plan' for SRP operation of Horseshoe and Bartlett Reservoirs appears to be the preferred alternative by Fish and Wildlife Service (FWS). From what we understand this plan protects the Verde River water storage system over other alternative plans. This plan proposes to operate in such a way that it also protects threatened and endangered (T&amp;E) species. FWS approval of the application for a ITP would be in accordance with continued full operation of Horseshoe and Bartlett with the addition of operating objectives to support stands of tall riparian vegetation at the upper end of Horseshoe to minimize impacts to covered bird species, and to manage Horseshoe Reservoir levels to minimize impacts to covered native fish, frog, and gartersnake species.</p> <p>The Optimum Operation's Plan states that it would not effect any current water settlements, including those held by the Fort McDowell Yavapai Nation (herein the Nation). The Nation requests a letter from each FWS and SRP guaranteeing this statement as we are unclear that this operational plan can be fulfilled given the long-term drought.</p> <p>The ITP issuance is requested for a 50 year period. What is being proposed to set aside monies for continuing monitoring and data collection over this timeframe? How will this data be monitored and shared with the Nation? Given changes in environmental variables, how will modifications be made to the ITP?</p> 	<p>13-1 The Fort McDowell Water Rights Settlement, which was approved by Congress and the Gila River Adjudication Court, is binding on SRP and the United States, and cannot be altered by the HCP or Permit. Because of the settlement and the many other water storage contracts and obligations, the Optimum Operation alternative only involves redistributing water between Horseshoe and Bartlett – it does not affect the combined amount of storage in the two reservoirs, or the timing and amount of releases from Bartlett, regardless of drought or other water supply conditions. The FWS has written a letter to Ft. McDowell reiterating these points.</p> <p>13-2 As described in the HCP, a permanent fund will be established to pay for mitigation, monitoring, and management for the 50-year permit period or in most cases, in perpetuity (HCP, pp. 200-202). Relevant data will be provided to the Fort McDowell Yavapai Nation upon request, and the annual reports will be posted on the FWS website, which will contain much of the data. The HCP describes the modifications that will be made in response to changes in environmental variables and other changed circumstances (HCP, pp. 203-205).</p>

Comment #	Letter 13 continued	Response
13-3	<p>In general, we support the issuance of the ITP to SRP in association with the Optimum Operation Plan with one caveat. If bald eagles establish nest below the high water mark of the reservoirs SRP is to discuss with Arizona Game and fish (AGFD) and FWS the need to rescue eggs or chicks threatened by inundation for subsequent reintroduction into the original nest after the water subsides or introduction into a foster nest in another territory if the nest is destroyed. Fort McDowell Yavapai Nation believes that SRP should develop a coordinated plan with FWS, AGFD along with the Nation to identify when rescue actions would be required and the process to rescue any bald eagles, bald eagle eggs, or nestlings at Horseshoe or Bartlett. We believe that; 1) given this area was once part of the Yavapai territory; and 2) the eagle is inextricably part of the Yavapai culture we should be included in decision plans and consultations. Our involvement in this plan is further supported by the fact that the nesting bald eagle is no longer considered a T&amp;E species and little protection is afforded to eagle habitat (outside the Bald and Golden Eagle Protection Act). Given what is stated above, the reservoirs proximity to the Nation, and our continuous efforts to protect the eagle we should be apart of any plan that directly or indirectly involves these species.</p> <p>I look forward to receiving the requested aforementioned information. Please contact Dr. Carole Klopatek if you have any additional comments or questions or wish to discuss this issue further. She can be reached at (480) 816-7161.</p> <p>Sincerely,</p>  <p>Raphael R. Bear President</p> <p>cc: Charles Paradizick, SRP</p>	<p>13-3 We appreciate the Nation's interest in the development of the bald eagle rescue plan and welcome your, and other Southwest Bald Eagle Management Committee member's recommendations.</p>

Comment #	Letter 14	Response
14-1	<p>July 31, 2007</p> <p style="text-align: right;"><b>RECEIVED</b> JUL 31 2007 Environmental Compliance Environmental Services</p> <p>Ms. Debra Bills Arizona Ecological Services Office U.S. Fish and Wildlife Service 2321 West Royal Palm Road, Suite 103 Phoenix, AZ 85021</p> <p>Dear Ms. Bills:</p> <p>After reviewing the "DRAFT Environmental Impact Statement, Incidental Take Permit for Operation of Horseshoe and Bartlett Reservoirs, July 2007," this is written to support the Salt River Project's (SRP) application for a permit to operate Horseshoe Dam and Reservoir and Bartlett Dam and Reservoir "consistent with their purpose to store and release water." As we understand it, "The permit would authorize the incidental take of species protected by the ESA [Endangered Species Act]..."</p> <p>We also would like to call your attention to an error concerning the official date of creation of the Salt River Valley Water Users' Association, one of two organization making up today's SRP. The "DRAFT Environmental Impact Statement" states in Appendix 1, page 1:</p> <p>"The Salt River Valley Water Users' Association...since its establishment as an Arizona Territorial corporation on February 9, 1903."</p> <p>The Salt River Valley Water Users' Association was established two days earlier, February 7, 1903, with the filing of Articles of Incorporation at the Maricopa County Recorder's Office, Phoenix, Arizona. To quote from my book, <i>Roosevelt Dam: A History to 1911</i>,</p> <p>"The articles were filed with the county recorder at 4:15 p.m. Saturday, February 7."</p> <p>The citation, footnote 95, states, in part:</p> <p>"Book 13, Articles of Incorporation, Maricopa County Recorder's Office, pp. 603-630, Phoenix, Arizona;..."</p> <p>February 7, 1903, also is the date used on p. 87 in <i>The Taming of the Salt</i>, 2nd edition, published by the SRP (1979).</p> <p style="text-align: right;">Sincerely,  Earl Zarbin</p> <p>cc Charles E. Paradzick</p> <p>3803 E. St. Catherine Ave. Phoenix, AZ 85042-5013 Tele: 602-437-2665</p>	<p>14-1 Thank you, see Response to Comment 1-7.</p> <p>14-2 This typographical error has been corrected in the final HCP. Note: February 9, 1903 is the date that the Articles of Incorporation were filed with the Secretary of the Territory.</p>

Comment #	Letter 15	Response
	<div data-bbox="289 293 762 367">  <p>ATTORNEYS Ryley Carlock &amp; Applewhite A PROFESSIONAL ASSOCIATION</p> </div> <div data-bbox="905 321 1064 412"> <p>One North Central Avenue Suite 1200 Phoenix, Arizona 85004 Telephone 602-258-7701 Facsimile 602-257-9582</p> </div> <div data-bbox="371 440 543 500"> <p>Cynthia M. Chandley Direct Line: 602-440-4851 Direct Fax: 602-257-6951 E-mail: cchandley@rcalaw.com</p> </div> <div data-bbox="961 431 1064 505"> <p>Offices in: Phoenix, Arizona Denver, Colorado www.rcalaw.com</p> </div> <div data-bbox="640 526 795 550"> <p>September 24, 2007</p> </div> <div data-bbox="371 571 672 699"> <p>HAND-DELIVERED Mr. Steve Spangle Field Supervisor United States Fish and Wildlife Service 2321 West Royal Palm Road, Suite 103 Phoenix, Arizona 85021</p> </div> <div data-bbox="735 561 976 714">  </div> <div data-bbox="480 716 1071 784"> <p>Re: Comments of Freeport-McMoRan Copper &amp; Gold Inc. in support of Salt River Project's Application for Habitat Conservation Plan Approval for Continue Operation of Horseshoe and Bartlett Reservoirs</p> </div> <div data-bbox="371 803 516 826"> <p>Dear Mr. Spangle:</p> </div> <div data-bbox="371 842 1071 953"> <p>This law firm represents Freeport-McMoRan Copper &amp; Gold, Inc. ("Freeport"). We appreciate this opportunity to submit comments in support of the Salt River Project's ("SRP") application for approval of an incidental take permit and habitat conservation plan relating to the continued operation of the Horseshoe and Bartlett dams on the Verde River.</p> </div> <div data-bbox="371 969 1073 1101"> <p>The SRP reservoir system plays a vital role in central Arizona's present and future water security. As you know, Arizona's arid climate is characterized by long periods of drought and highly seasonal precipitation. The ability of SRP to continue to operate its reservoir systems to capture and store seasonal flood flows and snow melt from higher elevations is imperative to providing a reliable and secure source of water, and power, to the Phoenix metropolitan area.</p> </div> <div data-bbox="371 1115 1075 1310"> <p>Numerous stakeholders rely upon the delivery of water from Horseshoe and Bartlett reservoirs each year. Horseshoe and Bartlett reservoirs have been integral components of SRP's system since 1945 and 1939, respectively. These two reservoirs presently supply 40% of SRP's surface water supplies on average, approximately 360,000 acre-feet of water each year. In addition to the thousands of SRP shareholders, numerous cities, Native American communities, irrigation districts and private entities have contractual entitlements to storage and/or delivery of water from Horseshoe and Bartlett reservoirs, including the City of Phoenix, the Fort McDowell Yavapai Nation, the Salt River Pima-Maricopa Indian Community, and Freeport's subsidiary Phelps Dodge Corporation.</p> </div> <div data-bbox="375 1364 428 1393"> <p>866175.1 9/24/07</p> </div>	

Comment #	Letter 15 continued	Response
15-1	<p data-bbox="375 329 527 391">Mr. Steve Spangle September 24, 2007 Page 2</p> <p data-bbox="821 326 1066 363"> Ryley Carlock &amp; Applewhite</p> <p data-bbox="375 435 1066 602">Denial of SRP's application for an incidental take permit and habitat conservation plan approval would provide only limited short-term benefits to the protected wildlife species under consideration. Without continued operation of Horseshoe and Bartlett, extended periods of drought could ultimately harm wildlife dependent on riparian habitat in the long-term. Furthermore, the cost of those short-term benefits would be extremely high. Central Arizona would lose an essential source of renewable water supplies. Development of replacement water supplies will place further demand on non-renewable groundwater supplies and have broad economic consequences on primary and secondary stakeholders.</p> <p data-bbox="375 626 1066 813">The action proposed by SRP (Optimum Operation Alternative) will permit continued full operation of Horseshoe and Bartlett as water storage facilities for the benefit of its shareholders, contractors and other stakeholders, while minimizing and mitigating potential adverse impacts to protected species of wildlife. The Service itself has recognized that SRP's proposed action is the environmentally preferred alternative in seeking to protect the biological, environmental, recreational and socioeconomic resources under consideration under its Draft Environmental Impact Statement. Consequently, Freeport strongly urges approval SRP's habitat conservation plan and the granting of an incidental take permit to SRP to allow continued operation of Horseshoe and Bartlett for the next 50 years.</p> <p data-bbox="375 836 1066 878">Freeport would like to thank the Service for consideration of this letter in support.</p> <p data-bbox="600 922 953 1045">Sincerely,  Cynthia M. Chandley</p>	15-1 Thank you, see Response to Comment 1-7.