U.S. Department of Interior, Fish and Wildlife Service

RECORD OF DECISION

ROOSEVELT HABITAT CONSERVATION PLAN

FINAL ENVIRONMENTAL IMPACT STATEMENT (DATED DECEMBER 2002)

MARICOPA AND GILA COUNTIES, ARIZONA

FEBRUARY 27, 2003

This Record of Decision (ROD) has been developed by the U.S. Fish and Wildlife Service (Service) in compliance with the agency decision-making requirements of the National Environmental Policy Act (NEPA) of 1969, as amended. The purpose of this ROD is to document our decision for the selection of an alternative including implementation of the Roosevelt Habitat Conservation Plan (RHCP). Alternatives have been fully described in detail and evaluated and analyzed in the December 2002 Final Environmental Impact Statement (FEIS) and the RHCP.

This ROD is designed to: (1) state our decision, present the rationale for its selection, and portray its implementation; (2) identify the alternatives considered in reaching the decision; and (3) state whether all means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted in accordance with 40 CFR 1502.2.

Based upon our review of the alternatives and their environmental consequences described in the FEIS, our decision is to implement Alternative 2 - full operation of Roosevelt Lake and Dam (the preferred alternative). The selected action entails the issuance of a Section 10(a)(1)(B) permit to Salt River Project (SRP) to incidentally take southwestern willow flycatcher (*Empidonax traillii extimus*), bald eagle (*Haliaeetus leucocephalus*), Yuma clapper rail (*Rallus longirostris yumanensis*), and, if listed in the future, yellow-billed cuckoo (*Coccyzus americanus*), all four species referred to collectively as the "covered species." The RHCP will mitigate for take of these species by acquiring and managing in perpetuity replacement habitats, habitat restoration, management of habitats at Roosevelt Lake and nearby Roosevelt, various measures to protect nesting bald eagles, and additional conservation measures as specifically described in the RHCP.

The term of the permit is 50 years (2003-2053). All mitigation and minimization measures will be in place within 3 years, and mitigation properties will be managed in perpetuity. Of the 2,250 acres of habitat to be acquired and/or managed, over 750 acres

were acquired by the date of this ROD. At least another 750 acres will be acquired, 20 acres of habitat restoration will have been initiated, and a Forest Protection Officer to protect and manage habitats at Roosevelt will be in place within 1.5 years of permit issuance. Other measures in the RHCP include monitoring and adaptive management at Roosevelt Lake and on the acquired properties.

For further information, contact Sherry Barrett, U.S. Fish and Wildlife Service, Tucson Field Office, 110 South Church Avenue, Suite 3450, Tucson, Arizona 85701 (520/670-4617)

Background

SRP has applied to the U.S. Fish and Wildlife Service for an incidental take permit pursuant to section 10(a)(1)(B) of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531-1544, 87 Stat. 884). As part of the permit application, SRP has developed and would implement the RHCP to meet the requirements of a Section 10(a)(1)(B) permit. The issuance of an incidental take permit by the Service would allow SRP to continue the full operation of Theodore Roosevelt Dam and Roosevelt Lake (Roosevelt), its primary water storage reservoir, for a period of 50 years.

The Service is the agency delegated the authority by the Secretary of the Interior to approve or deny an incidental take permit in accordance with the Act. To act on SRP's permit application, we must determine whether the RHCP meets the approval (permit issuance) criteria specified in the Act including Federal regulations at 50 CFR 17.22 and 17.32. The issuance of an incidental take permit is a Federal action subject to NEPA compliance including the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR 1500-1508). The decision to approve and issue the incidental take permit will result in our entering into an Implementing Agreement with SRP to formalize assurances regarding implementation of the RHCP. The Implementing Agreement has been approved by the Department of the Interior's Office of the Southwest Regional Solicitor.

The Service issued the FEIS (Volume I) on November 29, 2002, to evaluate the potential impacts associated with issuance of an incidental take permit for implementation of the RHCP, and to evaluate alternatives (67 FR 71193). The final RHCP (Volume II) was issued on the same date as a companion document to the FEIS. Public comments and responses associated with the Draft EIS and Draft RHCP were included in Volume III.

Purpose and Need

The purpose of the section 10(a)(1)(B) permit would be to authorize incidental take associated with SRP's continued full operation of Roosevelt, consistent with its purpose for water storage and power generation, including periodic inundation and dessication of habitat as Roosevelt Lake levels rise and recede. The permit would also allow SRP to clear dead trees if necessary to alleviate safety and operational concerns.

Roosevelt is a multi-purpose facility that is operated, together with other SRP facilities, to provide hydroelectric power; flood control; water supplies for municipal, industrial, and agricultural uses; and recreation. Completed in 1911, Roosevelt has been operated and maintained since 1917 by SRP pursuant to a contract with the U.S. Bureau of Reclamation. Numerous entities have vested and contractual rights to water stored by SRP facilities, including SRP shareholders; the cities of Phoenix, Scottsdale, Tempe, Avondale, Chandler, and others; several irrigation and water conservation districts; and several Indian tribes. SRP delivers an average of 1-million acre feet of water each year to these entities within a service area of approximately 375 square miles. Most of SRP's water deliveries are to cities and urban irrigation districts for delivery to more than 1.6 million people, meeting a large portion of the total water supply needs for the greater Phoenix (AZ) metropolitan area.

Key Issues and Relevant Factors

Key issues and relevant factors were identified through public scoping, an Advisory Group of agencies and concerned groups, and comments from the public. These issues and factors focused on: 1) impacts relative to covered species and their habitat at Roosevelt, 2) adequacy of mitigation for those impacts, and 3) potential water shortages and economic impacts if water supplies were reduced. These issues were thoroughly examined in the draft and final EIS and RHCP. No new significant issues were raised following publication of the FEIS and RHCP.

The Selected Alternative

The selected alternative is the Full Operation or preferred alternative (Alternative 2) described in the FEIS. This alternative provides for the issuance of an incidental take permit to SRP for take that would occur incidental to the continued operation of Roosevelt by SRP consistent with pre-permit operational objectives for full operation of the reservoir up to the maximum storage elevation of 2,151 feet. This alternative includes implementation of RHCP measures to minimize and mitigate the potential take of federally-listed and candidate species to the maximum extent practicable. The intent of this alternative is to minimize the biological, environmental, and socioeconomic impacts from future reservoir operations; continue water storage and power generation at Roosevelt; and satisfy the habitat, species, and issuance criteria of section 10 of the Act.

Other Alternatives Considered

Two additional alternatives were considered in the FEIS.

Alternative 1 — No Permit Alternative (No Action by the Service). Under this alternative, a section 10 incidental take permit would not be issued. SRP would do everything within its control to avoid any take of federally listed and candidate species associated with its continued operation of Roosevelt. This would require managing reservoir operation for a target maximum reservoir elevation of 2,095 feet.

Alternative 3 — Re-operation Alternative. Under this alternative, we would issue an incidental take permit authorizing incidental take associated with operation of

Roosevelt modified in a fashion to reduce the short-term impact of reservoir operations on listed and candidate species. Roosevelt would be re-operated to allow a maximum reservoir elevation of 2,125 feet. This alternative includes measures to minimize and mitigate the potential take of federally listed and candidate species to the maximum extent practicable.

Environmentally Preferable Alternative

The environmentally preferable alternative is defined as the alternative "that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural and natural resources" (NEPA 1969 and Council on Environmental Quality section 1505.2[b]). The environmentally preferable alternative is further defined as the alternative that best promotes the national environmental policy criteria as established in NEPA.

Each of the three alternatives evaluated in the FEIS meet some of the provisions of the national environmental policy goals. The selected action (Alternative 2) is the environmentally preferable alternative because it surpasses other alternatives in realizing the full range of environmental policy goals. This alternative provides a high level of resource protection by acquiring and managing suitable habitat in perpetuity, as well as other conservation actions to protect and enhance habitat at Roosevelt and elsewhere. The selected action provides the widest range of neutral and positive beneficial uses of the environment, maintains an environment that supports a diversity and variety of individual choices, and provides the best overall balance integrating resource protection while allowing a high standard of living for regional human populations dependent on the water supply provided by Roosevelt.

Although the No Action alternative (Alternative 1) provides for the immediate protection of existing listed and candidate species, it may not provide for the long-term habitat needs of those species. Short-term protection of habitat would result in adverse effects to other natural resources, recreation, the local and regional economy, and the use of renewable resources. No long-term measures to provide preservation of habitat would be implemented. The Re-operation alternative (Alternative 3) would have impacts intermediate between the No Action and Preferred alternatives. Re-operation provides for an intermediate level of protection of existing habitat, but the long-term availability of habitat would vary with reservoir water levels, and the preservation of suitable riparian habitat in perpetuity would be limited to habitat protection measures provided by previous actions.

Measures to Minimize and Mitigate Impacts

Measures to avoid, minimize and mitigate to the greatest practical extent the environmental effects that could result from implementation of the selected alternative have been incorporated into the decision. The RHCP includes actions to minimize and mitigate incidental take of covered species to the maximum extent practicable. Minimization and mitigation measures include habitat acquisition and management along

with additional habitat conservation and species-specific protection measures in perpetuity. Mitigation measures provide for the acquisition and/or management of 2,250 acres of riparian habitat at locations on the Salt River, Verde River, San Pedro River, and possibly other locations, if necessary, in central Arizona for the benefit of flycatchers, cuckoos, and bald eagles. As of the date of this ROD, over 750 acres have been acquired and are being managed. An additional 1,000 acres will be acquired within 1.5 years of permit issuance, and the remainder within 3 years. Included within the habitat conservation measures is funding for a Forest Protection Officer to protect and manage habitat at Roosevelt, acquisition of water rights to maintain streamflow through riparian habitats, and acquisition of buffer lands surrounding suitable habitat. Measures are included to rescue eaglets and eggs from nests that would be inundated, and other species-specific actions.

Planned riparian and wetland habitat creation at the Rockhouse site on the Salt River arm of Roosevelt would provide suitable habitat for Yuma clapper rails, as well as flycatchers, cuckoos, and possibly bald eagles. Additional mitigation measures for bald eagles include rescue of nestling bald eagles threatened by inundation, funding of a Nestwatch Program, maintenance of a nest platform at Pinto Creek, a good faith effort to work with the Fort McDowell Yavapai Nation on riparian habitat restoration on the lower Verde River, and bald eagle management actions that provide for surveys, monitoring, and other management assistance.

Coupled with the habitat acquisition and management program is an on-going monitoring program at Roosevelt and mitigation sites to evaluate habitat condition, species populations and trends, and the effectiveness of mitigation and minimization measures. Results from the monitoring program will feed into biological adaptive management, which will include various management measures in response to changed circumstances at mitigation sites. Should habitat impacts exceed those anticipated in the RHCP, SRP would implement program adaptive management measures, as well. Program adaptive management includes acquisition of additional habitat of up to 500 acres for flycatchers, up to 800 acres for cuckoos, and up to 5 acres for Yuma clapper rail. See Tables 1 and 2 for monitoring provisions and implementation schedule.

Decision

The Service's decision is to implement the preferred alternative (Alternative 2), as it is described in the Final EIS. This decision is based on a thorough review of the alternatives and their environmental consequences. Implementation of this decision entails the issuance of an incidental take permit, including all terms and conditions governing the permit. Implementation of this decision requires adherence to all of the minimization and mitigation measures specified in the RHCP, as well as monitoring and adaptive management measures. In addition, we will enter into an Implementing Agreement with SRP to formalize assurances regarding implementation of the RHCP. This Record of Decision will be made available to members of the public requesting copies of the final RHCP permit package.

Rationale for Decision

The preferred alternative (Alternative 2) has been selected for implementation based on a variety of environmental and social factors including potential impacts and benefits to covered species and their habitat, the extent and effectiveness of minimization and mitigation measures, and social and economic considerations.

In order for the Service to issue a section 10(a)(1)(B) incidental take permit, the RHCP must meet the criteria set forth in 16 U.S.C. § 1539(a)(2)(A) and (B). These criteria and how the RHCP satisfies these criteria are summarized below.

1. The taking will be incidental. We find that the take will be incidental to otherwise lawful activities, including the continued operation of water storage and releases at Roosevelt, the generation of hydropower, and the periodic removal of dead trees within the reservoir storage space. The take of individuals will be primarily in the context of changes in habitat associated with fluctuating reservoir levels.

2. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such takings. SRP has committed to a wide variety of conservation measures, management activities, monitoring, adaptive management, and other strategies designed to avoid and minimize harm to the covered species and mitigate for any unavoidable loss. The periodic loss of habitat at Roosevelt from ongoing water storage operations will be offset by the acquisition and management of suitable replacement habitat in perpetuity. Additional habitat conservation measures including acquisition of water rights, buffer lands, funding for a Forest Protection Officer at Roosevelt, and other habitat creation and restoration activities that will provide further mitigation measures for take of covered species and habitat. We find that the RHCP has met this criterion under the Act and has provided for mitigation and minimization of take to the full extent required, as noted in the Findings document accompanying the RHCP.

3. The applicant will develop an HCP and ensure that adequate funding for the HCP will be provided. SRP has developed the RHCP and committed to fully funding all of the obligations necessary for its implementation. These obligations include the cost for purchase of riparian habitat, water rights, and buffers. Funding is also provided for activities in support of the mitigation efforts, such as management of mitigation lands in perpetuity, enforcement of conservation easements, monitoring of species populations and habitat at Roosevelt and mitigation lands for 50 years, and employment of a full-time coordinator to oversee implementation of the RHCP. In addition, SRP has committed to adaptive management measures that require additional habitat acquisition and conservation, should predicted impacts be exceeded. To accomplish RHCP implementation, SRP estimated in the RHCP that costs could total up to $25-30 million. SRP has fully committed to fully meeting the actual costs of implementing the RHCP regardless of whether actual costs exceed estimates.

The Service's HCP No Surprises Assurances are discussed in the RHCP and measures to address changed and unforeseen circumstances have also been identified. Adaptive

management in the form of conservation, mitigation, or management measures and monitoring will be implemented to address changed circumstances over the life of the permit that were able to be anticipated at the time of RHCP development. Unforeseen circumstances would be addressed through the Service's close coordination with SRP in the implementation of the RHCP. SRP has committed to a coordination process to address such circumstances.

The Service has, therefore, determined that SRP's financial commitment, along with SRP's willingness to address changed and unforeseen circumstances in a cooperative fashion, is sufficient to meet this criterion.

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. As the Federal action agency considering whether to issue an incidental take permit to SRP, we have reviewed the issuance of the incidental take permit under Section 7 of the Act. Our biological opinion concluded that issuance of the incidental take permit will not jeopardize the continued existence of the southwestern willow flycatcher, Yuma clapper rail, bald eagle, or yellow-billed cuckoo (should it become listed). No critical habitat has been designated for these species, thus none will be affected. Incidental take of listed animals anticipated is quantified in terms of occupied habitat for flycatchers, clapper rails, and cuckoos, because a precise estimate of individuals anticipated to be incidentally taken could not be derived. The maximum amount of take anticipated per habitat inundation or dessication event includes flycatchers occupying 1,250 acres of habitat, yellow-billed cuckoos occupying 1,113 acres of habitat, Yuma clapper rails occupying 10 acres of habitat, 18 fledgling bald eagles due to reduced productivity, and loss of bald eagles associated with loss of nest or perch trees due to inundation or desiccation at Roosevelt Lake in conjunction with the permitted activity and over the life of the permit. The amount of incidental take is at a level we have determined to be reasonable.

5. The applicant agrees to implement other measures that we may require as being necessary or appropriate for the purposes of the HCP. We and the Office of the Regional Solicitor, U.S. Department of the Interior, have been involved with SRP in the development of the RHCP and Implementing Agreement. We commented on draft documents, participated in Advisory Group meetings, and worked closely with SRP in every step of plan and document preparation to ensure involvement by the Bureau of Reclamation, Tonto National Forest, Arizona Game and Fish Department, other partners, and interested members of the public, so that conservation of the covered species would be assured and recovery would not be jeopardized. The RHCP incorporates our recommendations for minimization and mitigation, as well as steps to monitor the effects of the RHCP and ensure success. Annual monitoring, coordination, and reporting mechanisms have been designed to ensure that changes in conservation measures can be implemented if measures prove ineffective or impacts exceed estimates. It is our position that no additional measures are required to implement the intent and purpose of the RHCP than those detailed in the RHCP, Implementing Agreement, and associated Incidental Take Permit.

We determine that the preferred alternative best balances the protection and management of suitable habitat for covered species, while allowing continued operation of water storage in Roosevelt Lake. Considerations used in this decision include: 1) proposed mitigation will benefit southwestern willow flycatchers, Yuma clapper rails, bald eagles, and yellow-billed cuckoos by providing suitable habitat, managed for these species in perpetuity, as well as other conservation measures to protect and enhance habitat; 2) suitable habitat for covered species will remain at Roosevelt, although the amount will vary annually relative to periodic inundation and dessication of habitat as Roosevelt Lake levels rise and recede; and, 3) the RHCP is consistent with the Southwestern Willow Flycatcher Recovery Plan. The No Permit and Re-operation alternatives were not selected due to unacceptable social and economic costs associated with developing replacement water sources necessary for SRP to meet its water delivery obligations and due to greater impacts to the federally listed species by maintaining consistently low reservoir levels that result in less habitat for the covered species in the long-term, as compared to the preferred alternative.

Acting Deputy Regional Director

2/26/03
Date

Table 1. Roosevelt Habitat Conservation Plan minimization and mitigation schedule (all values in estimated acres).

Location	Phase I (Pre permit)		Phase 2 (Within 1.5 years of Permit)		Phase 3 (Within 3 Years of Permit)		Total	
	Habitat Acquisition and Management	Additional Habitat Conservation	Habitat Acquisition and Management	Additional Habitat Conservation	Habitat Acquisition and Management	Additional Habitat Conserva-tion	Habitat Acquisition and Management	Additional Habitat Conserva-tion
Roosevelt								
Rockhouse	–	–	20	–	–	–	20	
Enforcement/Management	–	–	–	300[1]	–	–		300
Verde								
Camp Verde	–	–	90	30	–	–	90	30
Other sites	–	–	30	10	–	–	30	10
San Pedro and Safford Valleys								
Reclamation Preserve	403	220	–	–	–	–	403	220
Reclamation additional					200[2]		200	
SRP	75	140	492	30	190	20	757	190
Gila or Other[3]			Remainder	Remainder	Remainder	Remainder		
Totals	478	360	632	370	390	20	1,500	190
Total for Phase	838		1,002		410		2,250	

[1] Estimated at a present value of $1.35 million for enforcement time and expenses divided by $4,500/acre (average habitat acquisition and long-term management costs for San Pedro mitigation sites). The present value of $1.35 million represents a non-wasting capital account generating $78,000/year at 6 percent interest plus an additional $50,000 in first year costs.

[2] SRP would be responsible for any remaining balance

[3] "Remainder" means any acreage tha SRP is unable to establish or acquire in the Rockhouse, Verde, or San Pdero And Safford valleys, or if management at Roosevelt is determined to be ineffective, will be acquired at other locations along the Gila or other rivers.

Table 2. Flycatcher, Yuma clapper rail, and cuckoo monitoring schedule.

Year	Habitat Conservation Properties		Roosevelt			Rockhouse Site	
	Flycatchers and Cuckoos	**Habitat**	**Flycatchers**	**Yuma Clapper Rails and Cuckoos**	**Riparian vegetation**	**Flycatchers, Yuma Clapper Rails, and Cuckoos**	**Habitat Creation**
2003*	@	^	Reclamation	X	–	--	X
2004	@	^	Reclamation	X	–	--	X
2005	@	^	Reclamation	–	–	--	X
2006	@	^	Reclamation	–	Reclamation	--	X
2007 to 2053	#	#	#	#	X	#	X

* Or first spring and summer following issuance of the Permit

@ Flycatchers and cuckoos will be surveyed by SRP during the first 2 years following acquisition.

^ Baseline survey by SRP when the property is acquired to determine the quantity of mitigation credits on the property that meets the riparian habitat criteria.

Variable frequency of monitoring by SRP to be determined by the Service and SRP depending on vegetation, population trends, and other factors. Monitoring of flycatchers, Yuma clapper rails, and cuckoos will be conducted on average every two years but at least every three years

X Annual data collected by SRP except as noted in text