

RECLAMATION

Managing Water in the West

Record of Decision for the Carlsbad Project Water Operations and Water Supply Conservation Final Environmental Impact Statement



Summary of Action and Background

In this Record of Decision, the Bureau of Reclamation (Reclamation) adopts the proposed changes in water operations and water supply conservation designed to conserve the federally threatened Pecos bluntnose shiner (*Notropis simus pecosensis*) (shiner) and its designated critical habitat, while conserving the Carlsbad Project water supply, New Mexico. Proposed changes in Carlsbad Project operations include bypassing available inflows through Santa Rosa and Sumner Dams to meet a target flow of 35 cubic feet per second (cfs) as measured at the Taiban gage (the Below Taiban Creek Near Fort Sumner gage, USGS 08385522). Actions include guidance for block releases, the continued use of a fish conservation pool, implementation of an adaptive management plan (AMP), and implementation of a water acquisition program. Supplemental water will be acquired and managed to keep the Pecos River flowing to benefit the shiner.

The purpose of Reclamation's proposed Federal action is to conserve the Pecos bluntnose shiner, a federally threatened fish species,¹ and to conserve the Carlsbad Project water supply.² The underlying need for Reclamation action is compliance with the Endangered Species Act (ESA) and Reclamation's responsibility to conserve the Carlsbad Project water supply.

Reclamation is proposing changes in operations that benefit the shiner under its existing authorities and are consistent with its ESA section 7(a)(1) obligation to conserve and protect listed species. Within the exercise of its discretionary authority, Reclamation must also continue to avoid jeopardizing the continued existence of the shiner or destroying or adversely modifying designated critical habitat (ESA section 7(a)(2)). Because changes in Carlsbad Project operations to benefit the shiner could result in reduction to the available Carlsbad Project water supply, a variety of options for acquiring water to keep the project whole were considered and will be implemented. To benefit the shiner, supplemental water will also be acquired and managed to prevent river intermittency.

Reclamation and the New Mexico Interstate Stream Commission (NMISC) have completed a final environmental impact statement (EIS) that assesses the potential consequences of these proposed changes in Carlsbad Project operations and the implementation of a water acquisition program.

The Carlsbad Project is a Reclamation project located in southeastern New Mexico near the city of Carlsbad. The Carlsbad Irrigation District (CID) irrigates 25,055 acres of Project lands from just below Avalon Dam to the Black River area. Other Project features include

¹ Conserving the shiner means that Reclamation would ensure that any discretionary action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. Reclamation would continue to participate in interagency actions to protect federally listed species and designated critical habitats, within its legal and discretionary authority.

² Conserving the Carlsbad Project water supply means that Reclamation would deliver water to the project sufficient to meet all project purposes, when available.

Sumner Dam, Brantley Dam, and Avalon Dam which all divert and store water for the Project. Project water is also stored in Santa Rosa Lake, a U.S. Army Corps of Engineers (Corps) facility. The Pecos River from Santa Rosa Dam to Brantley Dam has a drainage area of approximately 15,220 square miles and traverses 225 miles.

Reclamation and the NMISC served as joint lead agencies in preparing the EIS. Reclamation is the Federal agency responsible for operation of the Carlsbad Project and the NMISC administers interstate stream compacts, oversees interstate litigation, and cooperates in the planning of Federal water projects. Cooperating agencies included: the CID, Corps, U.S. Fish and Wildlife Service (Service), New Mexico Department of Game and Fish (NMDGF), Pecos Valley Artesian Conservancy District, Fort Sumner Irrigation District (FSID), Pecos Valley Water Users Organization, Chaves County Flood Control District, Eddy County, Chaves County, DeBaca County, and Guadalupe County.

The EIS and this Record of Decision were prepared pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended; the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508); the Department of the Interior's NEPA Implementing Procedures (516 DM 1-15); and Reclamation's NEPA Handbook. The decision made herein is based on the information and analysis contained within the final environmental impact statement filed with the Environmental Protection Agency (FES 06-10) on June 1, 2006, and noticed by the Environmental Protection Agency in the *Federal Register* on June 9, 2006 (71 FR 33445).

Reclamation's Decision

It is the decision of Reclamation to select the Taiban Constant Alternative, which is identified as the preferred alternative in the *Carlsbad Project Water Operations and Water Supply Conservation Final EIS*. Under this alternative, Reclamation proposes to operate the Carlsbad Project to (1) divert to storage only when flows at the Taiban gage are greater than 35 cfs in order to prevent intermittency of flows and (2) deliver from storage Carlsbad Project water as contracted for irrigation consistent with applicable Federal and state laws. The decision includes implementation of an AMP as provided in the Final EIS, maintenance of a fish conservation pool, commitments to pursue additional water for the Carlsbad Project, supplemental water to prevent river intermittency, and implementation of measures identified in the Service's *Biological Opinion for the Bureau of Reclamation's Proposed Carlsbad Project Water Operations and Water Supply Conservation, 2006-2016* (May 18, 2006). These commitments are detailed below.

In making this decision, Reclamation has reviewed the alternatives and their predicted environmental, economic, and social impacts, and considered the comments and concerns of agencies, tribes, organizations, and the interested public. The Taiban Constant Alternative best meets the purpose and need. Proposed operations would target flow that will conserve the shiner while minimizing impacts to the Carlsbad Project water supply and the amount of additional water that would need to be acquired. It provides Reclamation operational flexibility and safeguards to avoid intermittency.

Alternatives Considered in the Final EIS

The Final EIS evaluated five action alternatives and the No Action Alternative. The action alternatives were: Taiban Constant, Taiban Variable, Acme Constant, Acme Variable, and Critical Habitat. Reclamation, the NMISC, and cooperating and participating agencies developed the alternatives through a systematic process that used public input, research and recommendations from technical workgroups, professional judgment, and agency coordination. The primary difference between all six alternatives is the proposed target flows by location; whether they are constant or variable by time of year; and whether hydrologic conditions are dry, average, or wet.

Under the No Action Alternative, Reclamation would continue to manage Pecos River Dam operations in accordance with the Service's *Final Biological Opinion for the Bureau of Reclamation's Proposed Pecos River Dam Operations, March 1, 2003, through February 28, 2006* (June 18, 2003), and Reclamation authorizations, water rights, and contractual obligations.

Each action alternative includes common guidance for block releases. The action alternatives include an AMP that is intended to monitor target flows and net depletions; to establish procedures when compliance with target flows are threatened; and to respond to new information and changing conditions. Under the action alternatives, Reclamation would cooperate with other agencies in ongoing and future shiner conservation measures. Reclamation participation would be limited by its authority and most of these measures would require additional permitting, Congressional authorization, and project-specific NEPA analysis.

Under all action alternatives, additional water would be acquired to ensure that the Carlsbad Project water supply would be conserved (termed Carlsbad Project water acquisition [CPWA] options) and for augmenting flows for the shiner (termed additional water acquisition [AWA] options). The 16 CPWA and 18 AWA options are detailed in the Final EIS, but fall into five general categories: water right purchase and retirement, water right lease and retirement, change in cropping patterns, development of well fields, and FSID gravel pit pumping. The options are not necessarily mutually exclusive and they are not linked to specific alternatives; rather they represent a suite of potential sources for water acquisition. Some water acquisition options may require additional environmental documentation and permitting and may need to be implemented by others.

Reclamation is required under NEPA to determine the "environmentally preferred alternative." Identifying the environmentally preferred alternative is not the same as selecting a "preferred alternative" for implementation. Determining the environmentally preferred alternative for this study was difficult because of the dual purpose and need of conserving the shiner and Carlsbad Project water supply, the uncertainty about the specific water acquisition options to be implemented and their environmental effects, and the modeled similarity of the direct environmental effects associated with the alternatives. The key biological indicators for the riverine aquatic habitat used by the shiner include changes in the frequency, extent, and duration of intermittency or extremely low flows. The differences

among the alternatives in modeled intermittency are negligible, but alternatives vary considerably in the amount of additional water that would need to be acquired to meet targets, to conserve the Carlsbad Project water supply, and in the potential for biological, socioeconomic, and cultural resource impacts associated with the need to acquire, deliver, and preclude other uses for large amounts of water.

The Taiban Constant and the Taiban Variable alternatives would address the key biological indicators for the shiner in a sustainable manner and would continue to maintain a wide range of beneficial uses. The Taiban Variable Alternative is slightly more environmentally preferred because it would provide higher base flows during the irrigation season and the variable target would be more responsive to natural wet, dry, and average conditions. Therefore, the Taiban Variable Alternative is the environmentally preferred alternative. However, this alternative was not selected because it did not provide sufficient water management flexibility to meet the purpose and need for action.

Basis of Decision and Issues Evaluated

This decision was reached after careful consideration of economic, social, and technical factors, as well as the potentially significant environmental effects analyzed in the EIS, and after reviewing comments and concerns of agencies, tribes, public and private organizations, and individuals. This decision appears to provide the best means to minimize or avoid environmental harm and meet the purpose and need. Nonetheless, certain adverse environmental effects of this alternative may not be avoided.

Alternatives were formulated and the environmental analyses were conducted by representatives of task and technical workgroups, resource specialists, and cooperating agencies. Resources assessed included water resources, water quality, agricultural soil and land resources, biological resources, regional economy, recreation, cultural resources, Indian trust assets, and environmental justice. The major issues of public concern included water resources and special status species including the shiner and the Interior least tern (*Sterna antillarum athalassos*).

To select the preferred alternative, each alternative was evaluated against a set of criteria established by the Executive Committee consisting of the Manager of Reclamation's Albuquerque Area Office and the Director of the NMISC. Through this process, the Taiban Constant Alternative was determined to best meet the purpose and need, to avoid or minimize adverse impacts, and to meet eight decision criteria formulated by the Executive Committee. The eight criteria were: (1) ensuring that Reclamation's actions do not jeopardize the shiner or the Interior least tern, (2) minimization of river intermittency, (3) amount of additional water needed to meet target flows, (4) ease of operation, (5) minimal restrictions on block releases, (6) likelihood of the Service accepting the alternative, (7) stability of the biological opinion, and (8) flexibility of the alternative. These criteria are explained below:

1. Ensuring that Reclamation's Actions Do Not Jeopardize the Shiner or the Interior Least Tern

A primary decision criterion was ensuring that Reclamation's action avoided jeopardizing the continued existence of listed species. Reclamation determined that the Taiban Constant Alternative provides target flows and water management flexibility sufficient to avoid jeopardizing the shiner and to avoid adversely affecting critical habitat. In its 2006 biological opinion, the Service concluded that the proposed action is not likely to jeopardize the continued existence of the shiner or destroy or adversely modify its critical habitat. It is also the Service's opinion that this action is not likely to jeopardize the continued existence of the tern.

2. Minimization of River Intermittency

Avoiding intermittency is the priority for conserving the shiner. The Biology Work Group of the EIS recommended that keeping all sections of the river connected with continuous flows (avoiding intermittency) is more important to species conservation than higher flows in specific reaches of the river. This is because maintaining connection between the river segments allows migration of the species to and through critical habitat and prevents isolation of individuals or populations that could contribute to jeopardy. Avoiding intermittency will also prevent recession of the river which can cause mortality of the fish species. With bypass water only, all of the alternatives are essentially the same in the amount of modeled intermittency. Under all alternatives modeled, intermittency occurred at the Near Acme gage one percent or less of the time. With additional water acquisitions and monitoring under the AMP, the risk of intermittency would be further reduced.

3. Amount of Additional Water Needed to Meet Target Flows

The amount of additional water needed is an important consideration because of the need to conserve the Carlsbad Project water supply and to respect existing water rights and Pecos River Compact obligations. Reclamation is limited in its authority to implement options to acquire water. The demand for water is high, and financial and environmental costs are associated with the need to obtain greater amounts of additional water. Therefore, alternatives with a low amount of additional water needed are more desirable from a cost and environmental standpoint and are more sustainable over the long term. The Critical Habitat Alternative and the Taiban Constant Alternative have the lowest estimated average annual additional water needed of all of the alternatives at 620 acre-feet and 720 acre-feet, respectively. The additional water needed for the other alternatives range from 1,400 to 9,500 acre-feet.

4. Ease of Operation

Ease of operation refers to the location of the target gages, the ease with which changes in flows can be made, and whether target flows are adjusted by hydrologic condition or season. The use of the Taiban gage is preferred because it is generally reliable, the travel time for flows from Sumner Dam is shorter, its proximity allows Reclamation to react to rain events, and its location upstream of the critical habitat allows better monitoring of drying conditions. Target flows under the Taiban Constant Alternative do not change by hydrologic condition or season; thus, the amounts of water required would be more easily calculated.

5. Minimal Restrictions on Block Releases

Block release restrictions can limit the timely delivery of Carlsbad Project water to irrigators. The Taiban Constant Alternative and all of the action alternatives would have the same block release restrictions and would include a six-week avoidance period around August 1.

6. Likelihood of the Service Accepting the Alternative

Reclamation is required to consult with the Service on the effects of its preferred alternative on federally threatened or endangered species. Therefore, in assessing the alternatives, Reclamation considered whether each alternative would be seen as an acceptable basis for a long-term biological opinion on Carlsbad Project operations. Reclamation determined that the Taiban Constant Alternative best met the needs of the species and the purpose and need for action. The Service's 10-year biological opinion is that the Taiban Constant Alternative is not likely to jeopardize the continued existence of the shiner or the tern. The biological opinion is provided in the Final EIS and the reasonable and prudent measures are incorporated into the Environmental Commitments.

7. Stability of Biological Opinion

A long duration of a biological opinion was an important decision criterion. "Stability" refers to whether the alternative and measures in the biological opinion would be sustainable in the long term by Reclamation. Reclamation has determined that the reasonable target flows, amount of additional water needed, use of the Taiban gage, and the adaptive management process under the Taiban Constant Alternative would meet this goal better than the other alternatives.

8. Flexibility of the Alternative

Maintaining flexibility in operating the Carlsbad Project is critical in allowing Reclamation to quickly respond to the needs of the shiner while maintaining Carlsbad Project water supply. All action alternatives include flexibility tools, such as the adaptive management process, to respond to changes in river conditions and the use of a suite of water acquisition options. Because the Taiban Constant Alternative requires less additional water purchases, Reclamation would have more flexibility to choose among water acquisition options and obtain sufficient water than would be available under other alternatives.

Summary of Comments Received on the Final EIS

Reclamation received two comment letters during the 30-day waiting period which ended on July 1, 2006. One letter was from a representative of a Native American tribe who expressed no immediate concerns with the project, but asked that they be kept informed on the project and any further cultural resource issues. Reclamation will continue to consult with this tribe and other Native American tribes with cultural or trust interests in the project area.

The other letter was received from an environmental organization that asserted that their comments on the Draft EIS were not sufficiently addressed, that the EIS fails to use the best available science regarding the requirements of the shiner, that Reclamation's actions will result in extinction, that the scope of the EIS and alternatives is too narrow, that a

supplemental EIS is needed, that the biological assessment and consultation process was flawed, that Reclamation is responsible for intermittency, and that Reclamation failed to use discretionary authority and resources to conserve the shiner. The organization also referenced its intent to sue Reclamation over alleged violations of the ESA. Reclamation has reviewed these comments and believes that its actions are fully compliant with NEPA and the ESA and that its commitment to avoid intermittency and keep the various areas of habitat connected conforms with the best available science and that its actions described in this ROD will conserve the shiner.

Environmental Commitments

This section provides the environmental commitments that will be implemented as part of the Taiban Constant Alternative. These commitments are intended to avoid, minimize, mitigate, or compensate for adverse environmental effects that would otherwise occur and are outlined in the Final EIS and biological opinion.

1. Water Acquisition Programs

Reclamation will acquire water as needed to help meet target flows and to conserve the Carlsbad Project water supply. The acquisition of water by the United States is contingent upon appropriation or allotment of funds by the United States Congress. All options that involve water or land leasing or purchasing would be conducted on a willing-seller basis. The NMISC, in partnership with Reclamation, is developing an annual accounting method that may be used to track changes in Carlsbad Project water supplies, which could help forecast future acquisition needs. Further environmental compliance actions and permitting would be completed as required.

2. Adaptive Management Plan

Reclamation will implement an AMP as provided as Attachment 2 in the Final EIS. The AMP will be implemented to guide how management actions should be adjusted over time based on results of monitoring. The core components of the AMP are criteria, triggers, monitoring, and responses. The AMP provides guidance for addressing changing conditions in the future management of river operations by modifying operations within established parameters. It also provides a framework to ensure that the Taiban Constant Alternative satisfies the purpose of and need for the proposed action. Communication for the AMP will be carried out primarily through conference calls among the Pecos River Stakeholder Group and preparation of an annual Adaptive Management Plan report. Members of the Pecos River Stakeholder Group include the Service, Reclamation, CID, FSID, NMDGF, New Mexico Office of the State Engineer, NMISC, Corps, and interested non-governmental stakeholder groups. Other stakeholders (such as the United States Geological Survey) will be contacted when specific information or input is needed.

3. Agricultural Lands

To minimize soil erosion, any retired farmlands should be reseeded to native perennial grasses. This could require short-term maintenance to obtain adequate cover. In retiring lands, marginal or unproductive lands should be targeted rather than prime farmland.

4. Land Disturbance

Any activities implemented under this ROD that disturb the land would follow best management practices including soil stabilization (e.g., mulching and watering), revegetation, and noxious weed control. Appropriate environmental studies would be conducted to comply with laws and regulations. These could include archeological and biological surveys, Native American consultation, and hazardous waste assessments.

5. Avoiding Intermittency

Reclamation will augment base flows to avoid river intermittency.

6. Fish Conservation Pool

Reclamation will maintain the fish conservation pool to store 500 acre-feet of water in Sumner and/or Santa Rosa Reservoirs for the purpose of providing riverine habitat, and will pursue enlarging the fish conservation pool.

7. Forbearance Program with FSID

Reclamation will continue to administer a forbearance program with FSID through 2007 allowing the fallowing of land on a willing participant basis in order to put more water in the river. Forbearance may be converted to water banking in the future.

8. Water Banking

In conjunction with the fish conservation pool, Reclamation will continue to develop a water banking/exchange program to supply additional water from Sumner or Santa Rosa Reservoirs at critical times to avoid river intermittency and protect designated shiner critical habitat.

9. Pumping to the River

Reclamation will continue to maintain a lease agreement for 1,180 acre-feet of artesian well water located about 10 miles upstream of the Acme gage. This water will continue to be pumped to the river when the Acme gage flow drops below 10 cfs. Reclamation will also enter into a lease agreement with the NMISC for approximately 1,800 acre-feet of groundwater in the Fort Sumner area. The NMISC also plans to build a pipeline and pump water to the river. Reclamation will lease water at this location to help augment flows for riverine habitat.

10. Refugia

Reclamation will fund and assist in the capture and holding of shiner in refugia, if necessary. Reclamation proposes to meet with the Service in the spring of each year to discuss: (1) hydrologic conditions, including snowpack levels, estimated runoff, and current and estimated reservoir storage; (2) preliminary plans for irrigation season operations; (3) current condition of the shiner; and (4) if a risk of intermittency exists. If it is determined that intermittency could possibly occur, then Reclamation will assist the Service in implementing

shiner refugia for that particular year. The refugia would provide a second shiner population should any unforeseen circumstances (e.g., disease, parasites) impact the wild population. It would also provide an opportunity to refine handling or develop propagation methodologies for shiner in captivity should future conditions warrant the need to expand the refugial population. The Service will collect and transfer shiners to the Dexter National Fish Hatchery and to the New Mexico Fisheries Resource Office.

11. Bitter Lake National Wildlife Refuge

Reclamation will attend meetings and work cooperatively with Federal, state, and private entities to support and enhance shiner habitat restoration at the Bitter Lake National Wildlife Refuge.

12. Habitat Improvements North of Dexter Bridge and Adjacent to Brantley

Reclamation will attend meetings and work cooperatively with Federal, state, and private entities to support and enhance related hydrogeomorphic processes improvements to the reach of the Pecos River north of Dexter Bridge and adjacent to the Bureau of Reclamation's Brantley Wildlife Management Area.

13. Habitat Improvements Between Dexter and Hagerman

Reclamation will partner with Federal, state, and private entities to complete habitat improvement projects totaling two meandering sequences 0.5-1 mile in length between Dexter and Hagerman.

14. Habitat Monitoring and Videography

Reclamation will partner with Federal, state, and private entities to monitor the success of habitat restoration projects in terms of winter and summer habitat conditions through the use of color infrared videography, at least four cross-sections within the site, and fish population and habitat use data. Videography may be used to map riparian habitat within each restoration site including in-channel and riparian habitats.

15. Flow Monitoring

Because of gage error, fluctuations in river flow, and accessibility to the river, it is difficult to determine when intermittency in flow occurs on the Pecos River. Because of these difficulties, Reclamation will continuously monitor flows at numerous locations when the Taiban Gage approaches 40 cfs, and/or Acme Gage approaches 10 cfs, and/or there are other non-operational factors which cause concern over river flows. Reclamation, in coordination with the Service, will intensively monitor the river by the best methods available at the time, including website gage readings, field site verification and surveys, flights to monitor river connectivity, monitoring the video camera, or other technology as it becomes available. Reclamation will verify as soon as sudden changes in flows in the range of the above levels occur and/or when flows approach the levels described.

16. Pecos Bluntnose Shiner Monitoring

In cooperation with the Service and NMDGF, Reclamation will continue population monitoring of the shiner using methods and sites that are consistent with the surveys that have been conducted over the last three years. Monthly monitoring will be required until the

third trimester of 2010. Monitoring frequency will be reassessed after 2010, but will be conducted at a minimum of six times per year.

New sample protocols may be implemented; however, sampling consistent with methods used over the last three years must continue concurrently with the new method for at least five years so comparisons of the data sets can be made. Reclamation will continue to rely on the New Mexico Fisheries Resource Office and the New Mexico Department of Game and Fish to conduct population monitoring.

17. Interior Least Tern Habitat Improvements

Reclamation will continue its normal operations and maintenance (O&M) activities along the Brantley Reservoir shoreline. Normal O&M typically includes removal of vegetation and stubble to reduce nutrient loading and algae production in the reservoir, but this activity may not occur each year. The O&M work may incidentally result in habitat conditions attractive to terns, but it would not be the specific purpose of normal O&M.

Reclamation will enhance and/or maintain habitat for terns each year at least three times the size of the 28-acre 2004 tern colony at Brantley Reservoir, equaling 84 or more acres of nesting and brood-rearing habitat by 2007. This habitat will include the 56 acres cleared in 2006. Tern habitat enhancement sites will be based on: (1) Service recommendations where they are applicable; (2) site analyses by NMDGF and other tern experts; (3) new or existing scientific, peer-reviewed research at this or similar sites; and (4) consultation with the Service. Potential site enhancements will incorporate important characteristics of the occupied habitat at Brantley Reservoir, as well as new or existing research on tern breeding habitat preferences, movements, and establishment of territories at Brantley Reservoir and similar habitats throughout the subspecies' range. Reclamation will follow the Service's requirements for physical conditions for tern nesting, brood-rearing, and foraging habitats as outlined in the biological opinion.

Reclamation will enhance 21 or more acres as tern nesting habitat, and approximately three or more times this amount as brood-rearing habitat, using elevated areas around Brantley Reservoir as close to the full "conservation pool" level and the 2004 colony site as feasible. Tern nesting and brood-rearing habitats will be created and maintained in at least the following three areas: (1) directly above and behind the 2004 colony site, (2) across the Seven Rivers inlet north of the 2004 colony site, and (3) on a suitable portion of the reservoir where human access is restricted and where predation is minimized. In areas designated for enhancement or clearing where migratory birds may be concurrently nesting, Reclamation will survey for active nests and ensure that neither migratory bird eggs nor young will be killed while enhancing habitat for terns.

Reclamation will incorporate tern habitat enhancements, such as creation of sandbars and removal of vegetation from nesting and brooding habitat, into the habitat improvement projects for the shiner, in coordination with the Service.

Reclamation will work with other willing land managers to create a buffer zone of at least one quarter mile to be maintained around areas where terns are exhibiting breeding behavior

and around active colonies to protect them from human disturbance. Signs and/or fences may be used to enforce zone closure during tern breeding season.

Reclamation will coordinate with and update the Service on the implementation of these terms and conditions biweekly during April and May of each year. Reclamation will again meet with the Service if terns establish nests that could be subject to take. If terns do not successfully nest in habitat enhancements areas, Reclamation, in consultation with the Service, will use adaptive management methodology to annually modify habitat enhancement locations and/or techniques until a stable colony of terns is established.

18. Interior Least Terns Monitoring

Reclamation will survey and monitor terns throughout the action area and consult with the Service if terns are detected at new sites. Reclamation will submit interim monitoring reports to the Service at biweekly intervals from June through August. A final report will be submitted to the Service by December 15 of each year.

19. Participation in Conservation Measures

Reclamation will cooperate with other agencies in other ongoing and future conservation measures not discussed above, including developing wells and pumping infrastructure for supplementing short-term flows, removing non-native riparian vegetation, and other direct and indirect actions to enhance shiner conservation. Reclamation participation would be limited by its authority, and most of these measures would require additional permitting, Congressional authorization, and project-specific environmental documentation.

Implementation

Implementation of the Taiban Constant Alternative will begin 30 days after signing of this Record of Decision. The Service's *Biological Opinion for the Bureau of Reclamation's Proposed Carlsbad Project Water Operations and Water Supply Conservation, 2006-2016* (May 18, 2006) will be implemented immediately upon signing this Record of Decision.

Approved:



Regional Director
U.S. Bureau of Reclamation, Upper Colorado Region
Salt Lake City, Utah

7/19/06

Date