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U.S. Fish and Wildlife Service
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In Reply Refer To:
AESO/SE
22410-2007-F-0403

February 3, 2009

Ms. Marjorie Blaine
U.S. Army Corps of Engineers
5205 East Comanche Street
Tucson, Arizona 85707

RE: Rehabilitation of Nelson Dam

Thank you for your request for formal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (Act). Your request was dated July 28, 2008, and received by us on August 1. At issue are impacts that may result from the U.S. Army Corps of Engineers' (Corps) permitting of the Arizona Game and Fish Department's (AGFD) proposed Rehabilitation of Nelson Dam located in Apache County, Arizona. The proposed action may affect the Little Colorado spinedace (*Lepidomeda vittata*) and its designated critical habitat, and the Chiricahua leopard frog (*Litobates chiricahuensis*).

This biological opinion (BO) is based on information provided in the September 2007 biological evaluation (BE), August 2008 correspondence, telephone conversations, field investigations, and other sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the species of concern, dam rehabilitation and its effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file at this office.

Consultation History

December 10, 2007: We received your December 6, 2007, letter requesting our concurrence that the proposed project may affect, but is not likely to adversely affect the Little Colorado spinedace and its designated critical habitat, the Chiricahua leopard frog, and the southwestern willow flycatcher (*Empidonax trailli extimus*). You also concluded there would be "no effect" to the Mexican spotted owl (*Strix occidentalis lucida*). The September 2007 BE was included with that letter.

January 3, 2008: We informed you of the need to schedule a conference between our office, the Corps, and AGFD.

January 28, 2008: We transmitted our 30-day letter to your office. We concurred with your determination for the southwestern willow flycatcher, but did not concur with your determination for the Chiricahua leopard frog nor the Little Colorado spinedace and its critical habitat. We informed you that “no effect” determinations do not require our review.

January 31, 2008: A teleconference was set for February 5, between FWS, AGFD, and Senna Environmental Services (Senna).

February 5, 2008: Teleconference held between FWS, AGFD, and Senna. We contacted your office immediately following conference.

May 20, 2008: FWS personnel conducted site visit.

August 1, 2008: We received your letter dated July 28, 2008, requesting initiation of formal consultation.

August 11, 2008: We received your electronic mail correspondence, of the same date, clarifying your effect determinations.

August 19, 2008: We transmitted a letter indicating the BO will be delivered on or before December 14, 2008.

November 13, 2008: Draft BO transmitted to the Corps.

December 10, 2008: We received your electronic mail correspondence, of the same date, indicating that you will need an extension to reply to the draft BO.

January 21, 2009: We received the applicant’s edits to the BO, via email from your office.

January 22, 2009: We received your email indicating your approval to incorporate comments that will be provided by the U.S. Forest Service (USFS).

January 26, 2009: We received, via email, comments on the draft BO from USFS.

February 2, 2009: We informally transmitted, via email, a revised draft BO to the Corps.

February 2, 2009: We received an email from your office requesting release of a final BO.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action is the issuance of a permit or a Nationwide permit letter of verification under Section 404 of the Clean Water Act authorizing the rehabilitation and improvement of Nelson Dam to enhance dam safety. Due to its age, natural erosion has reduced the top-of-dam elevation and reduced the amount of rip rap on the face. Portions of the concrete spillway have deteriorated. Furthermore, seepage has resulted in ponding of water at the toe of the downstream face of the dam, compromising the integrity of the dam and complicating measurement of dam seepage. The ability to measure seepage rates is important for the monitoring of dam integrity and safety.

Nelson Dam is located along Nutrioso Creek at the north end of Nelson Reservoir, about 7 miles southeast of Springerville along U.S. Highway 180 in Apache County, Arizona (Section 29, T8N, R30E; see Figure 1 in BE). The top of the spillway is at an elevation of 7,412 feet. Nelson Dam is an earthen structure with a concrete and rock spillway and rip rap reinforcement on the upstream face of the dam. Outlet works and toe drain are located at the toe of the downstream face of the dam. There is a boat launch at the east end of the dam near a paved parking lot. The spillway discharges to Nutrioso Creek, which flows along the toe of the dam for approximately 200 feet then continues downstream to the north. Several debris dams have formed immediately downstream of the dam and a gauging staging is located on the east bank of the stream. Nutrioso Creek is a perennial stream with flow below the reservoir supported by consistent seepage through the dam. Nutrioso Creek joins the Little Colorado River about 16 river miles downstream.

Proposed activities are targeted to restore the dam to its original dimensions, rehabilitate the spillway, and eliminate ponding of seepage at the toe of the downstream face of the dam (see Figure 3 in BE). Specific activities include (1) placement of fill to the top of the dam to restore its height to the 7,426-foot design elevation and replacement of monuments; (2) removal and replacement of gate on access road on dam crest; (3) resurfacing of the parking lot located just north of the dam; (4) construction of an access road/ramp from the existing parking lot to a location above the toe of the dam; (5) construction of headwall, sediment basin, and rip rap-lined channel to capture/convey runoff from parking lot that is currently conveyed by two 30"-diameter corrugated metal pipes (culverts); (6) removal of existing toe drain and installation of perforated pipe toe drain that drains into a constructed metering manhole, installation of pressure transducer in manhole and cable conduit to flow meter in existing parking lot/restroom area; (7) installation of 4"-diameter pvc drain pipe that conveys toe drain approximately 100 feet downstream and discharges to Nutrioso Creek via a toe drain headwall; (8) removal and replacement of weir box located at the outlet of the existing toe drain; (9) placement of riprap for an approximate distance of 200 feet on top of the east bank of Nutrioso Creek where it flows along the toe of the dam; (10) removal of large rocks from spillway, replacement of 12" slide gate, resurfacing of the spillway with concrete/gunite overlays and grouting, extension of the west wall (shotcrete and rip rap), replacement/construction of drain pipes, and construction of trail and fence on west side of the spillway.

Construction activities in jurisdictional waters of the U.S. (i.e., Nelson Reservoir, spillway, or Nutrioso Creek below the ordinary high water mark [OHWM]) are (1) the replacement of rip rap on the upstream face of the dam at and below the waters edge, (2) construction of concrete overlays, grouting, and replacement/construction of drain pipes in spillway bottom, and (3) replacement of weir box in Nutrioso Creek at toe of dam (manhole, drain pipe and headwall and rip rap along toe of dam will be placed above the OHWM of Nutrioso Creek).

Proposed activities were originally scheduled to take place from spring to fall of 2009. Although this may still occur, potential budgeting constraints may delay project implementation until 2010 or beyond. Construction may start as early as April and extend into October, as dictated by weather conditions and other factors and will use standard construction techniques and measures for the control of erosion and siltation. A draft Stormwater Pollution Prevention Plan (SWPPP) has been prepared as part of the construction plans and specifies best management practices to control erosion and siltation into waterways. These include (1) reseeding of disturbed areas with a native grasses and forbs, (2) installation of a stabilized construction entrance, (3) placement of silt fencing along the toe of the dam, from the end of the spillway to the toe drain headwall (4) installation of temporary sandbagging at storm drain inlets, and (5) construction of water bars along access road/ramp from top of dam to toe of dam on downstream face. Furthermore, a series of debris dams occur immediately downstream of Nelson Dam (see Figure 4 in BE). These will act as natural sedimentation basins and will further prevent or reduce downstream siltation in Nutrioso Creek. We expect changes to the dam to be relatively permanent.

STATUS OF THE SPECIES AND CRITICAL HABITAT

Little Colorado Spinedace

The Little Colorado spinedace was listed as threatened with critical habitat designated on October 16, 1987 (USFWS 1987). Threats were identified as habitat alteration and destruction, predation by and competition with non-native aquatic organisms, and recreational fishery management. Forty-four stream miles of critical habitat were designated: 18 miles of East Clear Creek immediately upstream and 13 miles downstream from C.C. Cragin Reservoir (formerly called Blue Ridge Reservoir) in Coconino County; eight miles of Chevelon Creek in Navajo County; and five miles of Nutrioso Creek in Apache County. Constituent elements of critical habitat consist of clean, permanent flowing water with pools and a fine gravel or silt-mud substrate.

The spinedace is a small (about 4 inch) minnow native to the Little Colorado River (LCR) drainage. This fish occurs in disjunct populations throughout much of the LCR drainage in Apache, Coconino, and Navajo counties. Extensive collections summarized by Miller (1963) indicated that the spinedace had been extirpated from much of the historical range from 1939 to 1960. Although few collections were made of the species prior to 1939, the species is believed to have inhabited the northward flowing LCR tributaries of the Mogollon Rim, including the northern slopes of the White Mountains.

Food habits of spinedace include chironomid larvae, dipterians, filamentous green algae, and crustaceans (Runck and Blinn 1993, Blinn and Runck 1990). Spinedace are late-spring to early-summer spawners (Blinn 1993, Blinn and Runck 1990, Miller 1961, Minckley 1973,

Minckley and Carufel 1967) although some females have been found to contain mature eggs as late as October (Minckley and Carufel 1967). A complete discussion of the taxonomic, distributional, and life history information of the spinedace has been compiled in the Little Colorado Spinedace Recovery Plan (USFWS 1998).

Mitochondrial DNA work on the spinedace indicated the existence of three sub-groups (Tibbets *et al.* 1994): the East Clear Creek drainage, Chevelon Creek, and the upper Little Colorado River including Nutrioso and Rudd creeks. The study concluded that the genetic patterns seen were likely the result of populations isolated by both natural and human-caused events. The East Clear Creek and Chevelon Creek sub-groups possess unique haplotypes. Individuals from the upper Little Colorado sub-group are more similar to each other. Tibbets *et al.* (1994) recommend that all of these populations be maintained to conserve genetic variation in this species.

The spinedace is assumed to still occupy the streams it is known from historically (Chevelon, Silver, Nutrioso, East Clear Creek, and the LCR proper). Populations are generally small and the true population size for any occupied stream is unknown due to yearly fluctuations and difficulty in locating fish. Spinedace have a tendency to disappear from sampling sites from one year to the next and may not be found for several years. This ephemeral nature makes management of the species difficult since responses of the population to changes within the watershed cannot be measured with certainty. However, all of the known populations have decreased since 1993 and drought conditions continue to put additional strain on all known populations.

Chiricahua leopard frog

The Chiricahua leopard frog was listed as a threatened species without critical habitat June 13, 2002. Included was a special rule to exempt operation and maintenance of livestock tanks on non-Federal lands from the section 9 take prohibitions of the Act. The frog is distinguished from other members of the *Lithobates pipiens* complex by a combination of characters, including a distinctive pattern on the rear of the thigh consisting of small, raised, cream-colored spots or tubercles on a dark background; dorsolateral folds that are interrupted and deflected medially; stocky body proportions; relatively rough skin on the back and sides; and often green coloration on the head and back (Platz and Mecham 1979). The species also has a distinctive call consisting of a relatively long snore of 1 to 2 seconds in duration (Davidson 1996, Platz and Mecham 1979). Snout-vent lengths of adults range from approximately 2.1 to 5.4 inches (Stebbins 2003, Platz and Mecham 1979). The Ramsey Canyon leopard frog (*Lithobates "subaquavocalis"*), found on the eastern slopes of the Huachuca Mountains, Cochise County, Arizona, has recently been subsumed into *Lithobates chiricahuensis* (Crother 2008). However, the listing for *chiricahuensis* has not yet been revised so for now these populations are not protected by the Act.

The Chiricahua leopard frog is an inhabitant of cienegas, pools, livestock tanks, lakes, reservoirs, streams, and rivers at elevations of 3,281 to 8,890 feet in central and southeastern Arizona; west-central and southwestern New Mexico; and in Mexico, northern Sonora, the Sierra Madre Occidental of northern and central Chihuahua, and possibly as far south as northern Durango (Platz and Mecham 1984, Degenhardt *et al.* 1996, Sredl *et al.* 1997, Sredl and Jennings 2005). Reports of the species from the State of Aguascalientes (Diaz and Diaz 1997) are questionable. The distribution of the species in Mexico is unclear due to limited survey work and the presence of closely related taxa (especially *Lithobates lemosespinali*) in the southern part of the range of the Chiricahua leopard frog. In New Mexico, of sites occupied by Chiricahua leopard frogs from 1994-1999, 67 percent were creeks or rivers, 17 percent were springs or spring runs, and 12 percent were stock tanks (Painter 2000). In Arizona, slightly more than half of all known historical localities are natural lotic systems, a little less than half are stock tanks, and the remainder are lakes and reservoirs (Sredl *et al.* 1997). Sixty-three percent of populations extant in Arizona from 1993-1996 were found in stock tanks (Sredl and Saylor 1998). The species has been extirpated from about 80-85 percent of its historical localities in Arizona and New Mexico.

Based on Painter (2000) and the latest information for Arizona, the species is still extant in most major drainages in Arizona and New Mexico where it occurred historically; with the exception of the Little Colorado River drainage in Arizona and possibly the Yaqui drainage in New Mexico. It has also not been found recently in many rivers, valleys, and mountains ranges in Arizona.

Threats to this species include predation by nonnative organisms, especially bullfrogs, fish, and crayfish; disease; drought; floods; degradation and loss of habitat as a result of water diversions and groundwater pumping, poor livestock management, altered fire regimes due to fire suppression and livestock grazing, mining, development, and other human activities; disruption of metapopulation dynamics; increased chance of extirpation or extinction resulting from small numbers of populations and individuals; and environmental contamination.

Recent evidence suggests a chytridiomycete skin fungi, *Batrachochytrium dendrobatidis* (Bd), is responsible for global declines of frogs, toads, and salamanders (Speare and Berger 2000, Longcore *et al.* 1999, Hale 2001). In Arizona, Bd infections have been reported from several populations of Chiricahua leopard frogs in southeastern Arizona, as well as populations of other several other frogs and toads (Sredl and Caldwell 2000, Davidson *et al.* 2000, Hale 2001, Bradley *et al.* 2002, U.S. Fish and Wildlife Service 2007). The role of the fungi in the population dynamics of the Chiricahua leopard frog is as yet undefined.

Additional information about the Chiricahua leopard frog can be found in Painter (2000), Sredl *et al.* (1997), Jennings (1995), Degenhardt *et al.* (1996), Rosen *et al.* (1996, 1994), Sredl and Howland (1994), Platz and Mecham (1984, 1979), Sredl and Jennings (2005), and U.S. Fish and Wildlife Service (2007).

ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

Description of the Action Area

The action area includes those areas at and near Nelson Dam that would be directly or indirectly affected by the action, including the top of the dam, parking lot north of the dam, the toe of the dam, and Nutrioso Creek for a distance of 200 feet from the toe of the dam. Within Nutrioso Creek, water is generally present in the lower half of the action area only. The upper half of the action area is seasonally wet when high spring flows and summer monsoons allow for reservoir spill.

A. Status of the Species and Critical Habitat within the Action Area

Little Colorado spinedace

Recent surveys conducted by AGFD have found spinedace above Nelson Reservoir, but they have not found spinedace immediately below Nelson Reservoir. In surveys from 1994-2000 spinedace were common below Nelson Reservoir (Lopez et al. 2001). The species has been also documented in the Little Colorado River, from Springerville downstream to St. Johns (Dorum and Young 1995) outside the action area. In 2005, the species was found below the action area in Rudd Creek, whose confluence with Nutrioso Creek is located approximately 1.2 miles downstream of the dam. However, this survey only detected one spinedace nearly one mile upstream of Rudd Creek, and did not detect any spinedace between Rudd Creek and the dam.

Based upon AGFD surveys from 2005-2006, 128 spinedace were recorded upstream of Nelson Reservoir, no spinedace were recorded in or near the action area below the reservoir (Carter *et al.* 2006). The largest concentration of spinedace was found on the EC Bar Ranch (about 5 miles upstream of the action area). Much of Nutrioso Creek below Nelson Reservoir dried up at some point between 2000 and 2004 (Carter *et al.* 2006), perhaps accounting for the recent negative survey results. Additionally the first 100 feet of the spillway below the dam does not contain perennial flow. Based on these factors, we believe that the likelihood of spinedace occurrence in the action area is low. However, the action area is important for the species. Five miles of Nutrioso Creek, from the Apache-Sitgreaves National Forests boundary upstream to Nelson Reservoir Dam, have been designated as critical habitat for this species, including the action area. The quality of the primary constituent elements is variable, with perennial streamflow being absent from the upper half of the action area.

Chiricahua leopard frog

Nelson Reservoir was known to be previously occupied by the frog from surveys conducted in 1971, 1973, 1976, 1979, and 1989. However, more recent surveys conducted in 1987, 1992, 1993, and 1995 have not detected the frog at Nelson Reservoir, though the action area provides suitable habitat when water is present. Water is generally present in the lower half of the action area, but the upper half of the action area is only seasonally wet.

B. Factors Affecting Species Environment and Critical Habitat within the Action Area

Our files indicate that the following consultations have included the action area as a portion of larger areas covered by each consultation: Transfer of Funds from the FWS Federal Aid Program to the Arizona Game and Fish Department for Exotic Fish Stocking in Nelson Reservoir, Blue Ridge Reservoir, and Knoll Lake, May 25, 2001 (22410-1992-F-0403); Rainbow Trout stocking into Nelson, Knoll, and Blue Ridge Reservoirs, May 25, 2001 (22410-1992-F-403R); Eagar South Wildland Urban Interface Project, May 12, 2006 (22410-2005-F-0640); and Nutrioso Wildland Urban Interface Fuels Reduction Project, June 5, 2006 (22410-2005-F-0385); and Use of Fire Retardant on Forest Service Lands, January 31, 2008 (22410-2008-F-0149).

Little Colorado spinedace

All of these projects have had adverse effects on the spinedace. The consultation for Use of Fire Retardant on Forest Service Lands resulted in a jeopardy finding for the spinedace and adverse modification of critical habitat. Incidental take of spinedace was anticipated for each project, but was determined to be unquantifiable. Implementation of reasonable and prudent measures may have limited the amount of take.

We believe the aggregate effects of fish stocking and urban wildland management on the status of the spinedace and critical habitat in the action area are negative. Since the upper half of the action area is seasonally dry, it does not consistently provide suitable conditions for spinedace occupation, nor consistency of the primary constituent elements of critical habitat. Nelson Reservoir is operated and maintained for sport fishing by the AGFD. The State's management of Nelson Reservoir may play a role in the intermittent nature of aquatic habitat in the action area (i.e. through the operation and maintenance of the dam).

Chiricahua leopard frog

Effects to the frog were addressed in the Nutrioso Wildland Urban Interface Project, but no jeopardy or incidental take were anticipated. We believe the aggregate effects of fish stocking and urban wildland management on the status of the frog in the action area are adverse. However, because the action area is very small and the upper portion is seasonally dry, it does not consistently provide suitable habitat conditions. As discussed above, State management of Nelson Reservoir may play a role in the intermittent nature of aquatic habitat in the action area.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated and interdependent with that action, that will be added to the environmental baseline. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

Little Colorado spinedace

Conveyance of dam seepage 100 feet downstream of where it currently discharges will result in the elimination of the small upper pools located directly adjacent to the toe of the downstream face of the dam, but will allow the maintenance of flow downstream through a drain. Although spinedace are not known to occur near the dam, this action will preclude any future establishment of habitat for the species in the upper half of the action area. Although ensuring dam safety will provide public benefits, an adverse effect to the species is expected because dewatering will ensure the upper half of the action area is unable to provide spawning or foraging habitat. Also, conservation opportunities will be unavailable in this 100-foot stretch of Nutrioso Creek.

Constituent elements of critical habitat consist of clean, permanent flowing water with pools and a fine gravel or silt-mud substrate. The action would preclude the maintenance of primary constituent elements in this 100-foot stretch of critical habitat and conservation opportunities will be unavailable. We consider this to be an adverse effect to critical habitat because dewatering will ensure the upper half of the action area is unable to support the primary constituent elements. It is anticipated that sediment control structures would reduce or eliminate downstream effects.

Chiricahua leopard frog

Conveyance of dam seepage 100 feet downstream of where it currently discharges will result in the elimination of the small upper pools located directly adjacent to the toe of the downstream face of the dam, but will allow the maintenance of flow downstream through a drain. The action will eliminate an estimated 0.10 acre of habitat for the frog. Although ensuring dam safety will provide public benefits, an adverse effect to the species may occur because dewatering will ensure the upper half of the action area is unable to provide breeding or foraging habitat and conservation opportunities will be unavailable. Measures that will be implemented for control of erosion and siltation will prevent sedimentation impacts on possible habitat further downstream in Nutrioso Creek. Critical habitat has not been designated for the frog, therefore none will be affected.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Since the land within the action area is managed by the Apache-Sitgreaves National Forest, most activities that could potentially affect these species are Federal activities and subject to additional section 7 consultation. Private introduction of non-native fish into Nutrioso Creek, including the action area, is a concern. Additionally, the non-Federal operation of Nelson Reservoir as a recreational facility continues to influence downstream flows in Nutrioso Creek. However, since half of the action area will be permanently dewatered, these stressors will no longer apply. Authorized fish stocking by the AGFD is subject to Intra-Service consultation between Ecological Services and our Federal Aid program. Therefore, we do not foresee any significant cumulative effects.

CONCLUSION

After reviewing the current status of the Little Colorado spinedace and critical habitat, and the Chiricahua leopard frog, the environmental baseline for the action area, the effects of the proposed Rehabilitation of Nelson Dam and the cumulative effects, it is the FWS's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the Little Colorado spinedace or Chiricahua leopard frog, and is not likely to destroy or adversely modify designated critical habitat for Little Colorado spinedace. No critical habitat has been designated for the Chiricahua leopard frog, therefore, none will be affected.

This biological opinion does not rely on the regulatory definition of “destruction or adverse modification” of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statutory provisions of the Act to complete the following analysis with respect to critical habitat.¹

We present this conclusion for the Little Colorado spinedace for the following reasons:

- Although the upper half of action area (100 feet of stream) will not longer provide suitable for spinedace, no major populations nor important breeding or foraging sites will be affected.
- Although implementation of the proposed action will render 100 feet of critical habitat non-functional, the upper portion of the action area represents a relatively small proportion of available critical habitat rangewide. Furthermore, critical habitat below the action area would continue to serve the intended conservation role for the species because seepage from the dam would be released from a drain.

¹ see December 27, 2004, memo from Acting Director Fish and Wildlife Service

We present this conclusion for Chiricahua leopard frog for the following reasons:

- Although suitable habitat would be eliminated, no major frog populations nor important breeding or foraging sites will be affected.
- The area to be dewatered is 100 feet of stream bed, a very small portion of available habitat for the species.

The conclusions of this biological opinion are based on full implementation of the project as described in the Description of the Proposed Action section of this document, including any Conservation Measures that were incorporated into the project design.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. “Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is further defined (50 CFR 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. “Harass” is defined (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. “Incidental take” is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

AMOUNT OR EXTENT OF TAKE

The FWS does not anticipate the proposed action will incidentally take any Little Colorado spinedace or Chiricahua leopard frog for the following reasons:

- These species are not reasonably certain to occur in the action area when the area will be dewatered.

EFFECT OF THE TAKE

No incidental take is anticipated.

Disposition of Dead or Injured Listed Species

Upon locating a dead, injured, or sick listed species initial notification must be made to the FWS's Law Enforcement Office, 2450 W. Broadway Rd, Suite 113, Mesa, Arizona, 85202 (telephone: 480/967-7900) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve the biological material in the best possible state.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

We recommend the Corps and AGFD:

1. Continue to participate in the implementation of the recovery plans for these species.

In order for the FWS to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the FWS requests notification of the implementation of any conservation recommendations.

REINITIATION NOTICE

This concludes formal consultation on the action outlined in your request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

The FWS appreciates the Corps' and AGFD's efforts to identify and minimize effects to listed species from this project. For further information please contact Mike Martinez (x224) or Debra Bills (x239).

Please refer to the consultation number, 22410-2007-F-0403 in future correspondence concerning this project.

Sincerely,

/s/Debra Bills for

Steven L. Spangle
Field Supervisor

cc (electronic):

Wildlife Biologist, Fish and Wildlife Service, Flagstaff, AZ (Attn: Shaula Hedwall)

cc (hard copy):

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
Regional Supervisor Arizona Game and Fish Department, Pinetop, AZ
Forest Supervisor, Apache-Sitgreaves National Forests, Springerville, AZ

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