Before:

After:

The catalyst:

THE SOUTHWEST CENTER for BIOLOGICAL DIVERSITY

March 17, 1999

Mr. David P. Boergers

Federal Energy Regulatory Commission Secretary

Washington, DC

Mr. Charles Bazan

Tonto National Forest Supervisor

Phoenix, AZ

Mr. Fred Trevey

Coconino National Forest Supervisor

Flagstaff, AZ

Ms. Eleanor Towns

USDA Forest Service Southwest Regional Forester

Albuquerque, NM

Mr. Michael Dombeck

USDA Forest Service Chief

Washington, DC

Mr. Daniel Glickman

USDA Secretary

Washington, DC

Mr. David Harlow

USFWS Arizona Ecological Services Supervisor

Phoenix, AZ

Ms. Nancy Kaufman

USFWS Regional Director

Albuquerque, NM

Ms. Jamie Clark

USFWS Director

Washington, DC

Mr. Bruce Babbitt

US Department of Interior Secretary

Washington, DC

Dear Messrs. Boergers, Bazan, Trevey, Dombeck, Glickman, Harlow, and Babbitt, and Mesdames Towns, Clark, and Kaufman,

RE: Notice to Pursue Legal Action for violations of the Endangered Species Act with permitting and licensing of the continued diversion of the entire flow of Fossil Creek by the Arizona Public Service (APS) Childs/Irving power plants. Federally protected, imperiled species continue to be increasingly, adversely affected by the dewatering of nearly 14 miles of Fossil Creek to provide for the production of only 0.1% of APS' power and for 0.002% of the private company's 1998 earnings.

This correspondence (Notice) serves to advise you of our intention to pursue legal action against your agencies for violation of Sections 2, 7, and/or 9 of the Endangered Species Act with respect to federally protected species on the Tonto and Coconino National Forests. Your violations concern permitting and licensing of the diversion of the entire flow of Fossil Creek by Arizona Public Service (APS).

Several Federally protected imperiled species are adversely affected by your permitting APS' diversion of the entire flow of Fossil Creek. These species include Razorback Sucker (Xyrauchen texanus), Colorado Squawfish (Ptychocheilus lucius), Spikedace (Meda fulgida), Loach Minnow (Tiaroga cobitis), Gila Topminnow (Poeciliopsis occidentalis occidentalis) and Bald Eagle (Haliaeetus leucocephalus).

Loach Minnow, Spikedace and Bald Eagle are listed as threatened under Endangered Species Act (ESA). Colorado Squawfish, Gila Topminnow, and Razorback Sucker are listed as endangered under the ESA. The Verde River at the Childs Power Plant, the confluence of the Verde River and Fossil Creek, and the Verde River's 100 year floodplain in these areas are designated as Critical Habitat under the ESA.

All federal agencies are required by law to conserve species and to assure that their actions do not jeopardize the continued existence of federally protected species or do not destroy Critical Habitat or proposed Critical Habitat. When agencies contribute to the demise of federally protected species or to the destruction of the species' necessary habitat, they are in violation of law. Your agencies are in violation of law owing by permitting APS' dewatering of Fossil Creek.

Both the Forest Service and the Fish and Wildlife Service have been clearly expressive of the adverse effects of APS' dewatering of Fossil Creek on Razorback Sucker. On February 5, 1999, District Ranger Ken Anderson submitted to Federal Energy Regulatory Commission (FERC) Secretary Boergers "a report prepared by our fishery biologist in regards to the question of razorback sucker, an endangered species, in Fossil Creek and the effects relicensing of the Childs-Irving Hydroelectric Facility may have on the species..." The Forest Service report states:

".Based on our observations, and to some extent the opinion of the experts, Fossil Creek can sustain certain life stages of razorback sucker, and can contribute to long term recovery efforts for the species in the Verde River drainage. Thus, we disagree with the Report's conclusion that the project is anticipated to have no effect on razorback sucker.

.We believe it probable that razorback sucker persist in Fossil Creek.their survival there has great significance to recovery efforts for the species in the Verde River.

.The growth of at least 13 fingerlings to subadult size from a single stocking at the springs confirms that Fossil Creek does have potential to rear razorback sucker. Extent of habitat for razorback sucker at the springs is extremely limited. Of the ca. 1/4 mile length of perennial water there, deep pool habitat appropriate for razorback sucker is less than a few hundred feet. The survival of 13 out of <10,000 fingerlings stocked is considerably higher than the survival rate of the millions that have been stocked in the Salt and Verde rivers, and is more than what is known to have been recently produced by the natural population in the lower Colorado River at Lake Mohave.

.little mention was made of its potential for a dramatically

different channel morphology under increased base flows, and what that would mean to habitat for razorback sucker. It has been amply demonstrated that channel morphology in the upper several miles of Fossil Creek will change from the current condition of shallow run habitat over bedrock substrate to one dominated by travertine dams forming complex, deep pool habitats. These conditions will be similar to what exists at the springs currently and where razorback sucker have survived and grown. Thus under increased minimum flows, habitat should be created that will contribute to enhanced and more extensive habitat for survival and growth of razorback sucker. Under full flows, the rate of habitat restoration will be even more rapid and dramatic.

.Recovery efforts for the razorback sucker will take many forms and, at least in the Gila River basin, will depend on incremental maximization of many small opportunities for providing elements needed by various stages of razorback sucker. The (draft) recovery plan for razorback sucker addressed restoration of natural ecosystems (quantity and quality of flow, physical habitat, biological environment), restoration of fish passage at barriers, and use of hatcheries and refugia as elements of recovery. It further stated "...recovery efforts might benefit from the establishment of natural refugia for razorback suckers. At times, there is excess hatchery production of the fish with no place to keep these fish." Fossil Creek could provide such a refuge, and under increased flows and restored ecological conditions, would allow fish to grow and move out of the stream into the Verde River. This would be a far more effective and ecologically desirable method of providing grow out areas for razorback sucker in the Verde River system than the alternative of construction and maintenance of artificial ponds.

.Under restored habitat conditions, Fossil Creek can contribute to the recovery efforts for razorback sucker in the Verde River system by providing at least habitat for growth of stocked fingerlings to subadult size and their subsequent movement into the Verde River. We believe that under increased base flows, habitat will be restored to a point where Fossil Creek can contribute to the long term recovery of the species in the Verde River.

.During rule making on critical habitat for razorback sucker, the Forest Service recommended to the U.S. Fish and Wildlife Service that Fossil Creek be considered for critical habitat designation. The recommendation was based on the survival and growth of fingerlings to subadult size at the springs, and the potential for habitat restoration when base flows were increased below the springs. When critical habitat was designated, Fossil Creek was not included because it did not include all of the primary constituent elements necessary for a viable population. But the final rule on critical habitat noted:

Areas outside of critical habitat that contain one or more of the primary constituent elements may still be important for conservation of a species. Also, some areas do not contain all of the constituent elements and may have those elements restored in the future. Such areas also may be important for the long term recovery of the species even if they were not designated as critical habitat. Areas not designated as critical habitat also may be of value in maintaining ecosystem integrity and supporting other species, indirectly contributing to recovery of a species.

We have always contended that the major issue regarding fisheries in this project was restoration of the natural ecological processes in Fossil Creek, rather than a focus on a single species. Responses of the experts in the Report support this concept. Increased minimum flows in Fossil Creek will begin to reestablish the natural ecological processes there. Over time ecosystem integrity will be enhanced and conditions improved for all the native biota in Fossil Creek. The Report indicates that Fossil Creek contains one or more of the primary constituent elements that is important for conservation of the species. Under restored habitat conditions, Fossil Creek can contribute to the recovery efforts for razorback sucker in the Verde River system by providing at least habitat for growth of stocked fingerlings to subadult size and their subsequent movement into the Verde River. We believe that under increased base flows, habitat will be restored to a point where Fossil Creek can contribute to the long term recovery of the species in the Verde River.

.In summary, we consider that Fossil Creek remains occupied habitat for razorback sucker, and it contains habitat elements that support certain life stages of the species. The Report supports our belief that increased flows may increase quality and quantity of habitat to an extent that Fossil Creek could contribute to the long term recovery of razorback sucker in the Verde River drainage. We consider the flow regime in Fossil Creek to be a significant variable affecting the stream's potential to support razorback sucker."

(Correspondence from Ken Anderson, District Ranger, Beaver Creek/Sedona Ranger Districts, USDA Forest Service Coconino National Forest, to David Boergers, Acting Secretary (Attn: Diane Rodman), Federal Energy Regulatory Commission, February 5, 1999. Attached report: Review of Childs &

Irving Biological Report-Razorback Sucker, October 1998 prepared by EnviroNet, Inc., for Arizona Public Service Company by Jerome A. Stefferud, Fishery Biologist, Tonto National Forest)

The US Fish and Wildlife Service has also affirmed the fact that APS' continued diversion of the entire flow of Fossil Creek adversely affects Federally protected species and adversely modifies Critical Habitat. In correspondence to FERC, dated December 8, 1997, the Fish and Wildlife Service states:

"Given the historic condition of the creek [Fossil Creek], with its travertine pools and potential for restoring that habitat if less water is diverted from the creek, we believe Fossil Creek has a substantial potential for supporting razorback sucker and is therefore an important recovery component. The [Draft] EA [produced by FERC, August 1997] also does not recognize that designated critical habitat for razorback sucker includes the Verde River at Childs and at the confluence of the river and Fossil Creek, as well as the river's 100 year floodplain in those areas. Those areas are modified by the proposed project. The Service believes that the proposed project may adversely affect razorback sucker survival and recovery and its designated critical habitat."

(Correspondence, Sam Spiller, Field Supervisor, US Fish and Wildlife Service, Arizona Ecological Services State Office, Phoenix, to Kevin Madden, Acting Director, FERC, December 8, 1997.)

On October 28, 1998, APS submitted to FERC a report to FERC concluding that continuing APS' dewatering of fourteen miles of Fossil Creek would not harm Razorback Sucker. In response, the Fish and Wildlife Service was even more emphatic.

In correspondence to FERC, dated March 15, 1999, Fish and Wildlife Service states:

".we disagree with the conclusions reached by APS and their consultants as a result of the work for bald eagle (Haliaeetus leucocephalus) and razorback sucker (Xyrauchen texanus).The Service [US Fish and Wildlife Service] agrees with the points made in the USFS February 1999 report.we would like to reemphasize our position that it is not only the presence of razorback sucker that is important, but also the role which Fossil Creek can play in recovery of this seriously imperiled species. The Service continues to conclude the proposed relicensing is likely to adversely affect razorback sucker.The Service continues to believe the proposed relicensing is likely to adversely effect the bald eagle."

(Correspondence, David L. Harlow, Field Supervisor, US Fish and Wildlife Service, Phoenix, to Mr. David P. Boergers, Acting Secretary, FERC, Washington, DC, March 15, 1999)

The Fish and Wildlife Service has also been expressive about the value of habitat for species survival and recovery. In an internal document, dated May 30, 1991, and in an official document dated April 15, 1994, the Fish and Wildlife Service states:

"...The long-term survival of an endangered or threatened species may require implementation of recovery actions as well as basic protection. Preclusion of recovery opportunities may jeopardize survival. The purposes of Congress in setting forth the Endangered Species Act are very clear. Section 2(b) of the Act states:

"The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved..."

Conserve is defined in section 3(3) to mean:

"...to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary..."

Thus, the conservation of any threatened or endangered species under the Act clearly requires recovery of that species and protection of ecosystems which would support that recovery. Loss of significant portions of recovery habitat would then be contrary to the purposes of the Act...A major recovery strategy for endangered and threatened southwestern fishes is their reestablishment within historic range..."

(U.S. Fish and Wildlife Service, Draft Endangered Species Act Section 7 Biological Opinion on the Transportation and Delivery of Central Arizona Project Water to the Gila River Basin (Hassayampa, Agua Fria, Salt, Verde, San Pedro, Middle and Upper Gila Rivers and Associated Tributaries) in Arizona and New Mexico, document #2-21-90-F-119, May 30, 1991, and

U.S. Fish and Wildlife Service, Final Endangered Species Act Section 7 Biological Opinion on the Transportation and Delivery of Central Arizona Project Water to the Gila River Basin (Hassayampa, Agua Fria, Salt, Verde, San Pedro, Middle and Upper Gila Rivers and Associated Tributaries) in Arizona and New Mexico, document #2-21-90-F-119, April 15, 1994.)

Other Federally protected, imperiled species will significantly benefit from the return of full flows to Fossil Creek. Colorado Squawfish, Spikedace, Loach Minnow, and Gila Topminnow all also existed in Fossil Creek or at the convergence of Fossil Creek and the Verde River. Secure, self-sustaining habitat is also the primary impediment to the recovery of these species.

The struggling desert nesting Bald Eagle population is also adversely affected by APS' continued dewatering of Fossil Creek. The desert nesting Bald Eagle population remains imperiled, not only owing to the fact that the population is a closed population of low numbers, but also owing to the ongoing threat of habitat loss and limited habitat recovery. The return of fourteen miles of secure, self-sustaining, functioning stream will help Bald Eagle significantly also.

The increasing uniqueness and importance of Fossil Creek was addressed in correspondence from the Southwest Center for Biological Diversity (SWCBD) to FERC and to the Forest Service, dated January 29, 1999:

".As flows in other tributaries of the Verde River, and as flows in the Verde River itself, continue to be reduced by groundwater pumping and water diversions, the importance of the constancy of Fossil Creek flows will continue to increase. Other riparian areas on the Tonto National Forest, including Tonto Creek and the Salt River cannot assure compliance with the NFMA [National Forest Management Act] requirements for viability.

Tonto Creek now flows only intermittently for most of its course. The Salt River has a significant problem with exotic species. Maintenance of the Razorback Sucker and Colorado Squawfish populations in the Salt River have only been marginally successful. Roundtail Chub, Speckled Dace, Loach Minnow, and Spikedace are not found in the Salt River.

Dwindling riparian habitat for native fish species is occurring similarly on the Coconino National Forest as it is on the Tonto National Forest. Desert Sucker, Gila Chub, Loach Minnow, Longfin Dace, Razorback Sucker, Roundtail Chub, Sonora Sucker, Speckled Dace, and Spikedace exist on the Coconino National Forest. Colorado Squawfish and Gila Topminnow once were found there. None of the populations of these fish are stable on the Coconino National Forest. In fact, on the Coconino National Forest, habitat for each of these species continues declining."

(Correspondence from SWCBD to Mr. Charles Bazan, Tonto National Forest Supervisor, Mr. Fred Trevey, Coconino National Forest Supervisor, and Mr. David P. Boergers, Federal Energy Regulatory Commission Secretary, January 29, 1999)

Our correspondence to FERC and to the Forest Service, dated January 29, 1999, also included a statement from the Arizona Riparian Council (ARC) concerning Fossil Creek's increasing importance for species survival. The ARC correspondence to FERC discusses the significance of Fossil Creek's constant base flow of 43 cubic feet per second and places the value of Fossil Creek in perspective:

".The ARC is a statewide professional organization dedicated to the exchange of information on the status, protection, and management of riparian systems in Arizona.In our earlier comments, we pointed out the value of Fossil Creek, the unique restoration opportunity which it offers, and we urged that the base flow of 43 cubic feet per second (cfs) be returned to the stream. We urged that flow be returned to the stream because of the almost singular stream restoration opportunity it represents in the Southwest.

Many low to mid-elevation streams with perennial flow have been affected by diversions, damming, groundwater pumping, overgrazing, water quality degradation, urbanization, invasion by exotic species, and other impacts. This trend will, in all likelihood, continue, especially in view of the state's projected population growth. Fossil Creek, with the exception of grazing impacts, has been little touched by these problems and, with the opening of a gate, could have its flow fully restored. Not only could it be more valuable from a recreation and habitat perspective, but also from a scientific perspective it could be a standard against which other streams are evaluated.

In order to put the importance of Fossil Creek's constant 43 cfs base flow in perspective, we need to compare it to other tributaries, as well as other segments of the Verde River. The East Verde River, a major tributary of the Verde, has a mean monthly flow of less than 43 cfs during eight months of the year. Also, its median flow is 30 cfs compared to Fossil Creek's 43 cfs. A segment of the upper Verde River near the U.S. Geological

Survey's Paulden Gage, which is located 10 miles downstream from the headwaters at Sullivan Lake, has the most intact native fish community in the Verde. Average monthly flows at this location are less than 43 cfs during 10 months of the year and the median flow in this segment is 25 cfs. Comparison with other tributaries and segments of the Verde would also underscore the fact that Fossil Creek is a major, and constant, stream in the Verde River system (U.S.G.S 1979 [U.S. Geological Survey. 1979. Statistical summaries of Arizona streamflow data. Water Resources Investigations 79-5.])

(Correspondence, Arizona Riparian Council to Secretary Lois D. Cashel, Federal Energy Regulatory Commission, Washington, D.C. 20426, September 10, 1997.)

The Endangered Species Act is clear. Section 2 states:

(b) PURPOSES. - The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate...

(c) POLICY. - (1) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.

Section 7 states:

Sec. 7 (a) Federal Agency Actions and Consultations. - (2) Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section...

(3) Subject to such guidelines as the Secretary may establish, a Federal agency shall consult with the Secretary on any prospective agency action at the request of, and in cooperation with, the prospective permit or license applicant if the applicant has reason to believe that an endangered species or a threatened species may be present in the area affected by his project and that implementation of such action will likely affect such species.

(4) Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under section 4 or result in the destruction or adverse modification of critical habitat proposed to be designated for such species...

Section 9 states:

SEC 9. (a) GENERAL - (1) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of fish or wildlife listed pursuant to section 4 of this Act it is unlawful for any person subject to the jurisdiction of the United States to -

(B) take any such species within the United States...

(G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of the Act and promulgated by the Secretary pursuant to authority provided by this Act.

(2) Except as provided in sections 6(g)(2) and 10 of this Act, with respect to any endangered species of plants listed pursuant to section 4 of this Act, it is unlawful for any person subject to the jurisdiction of the United States to -

(B) remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area...

(E) violate any regulation pertaining to such species or to any threatened species of plants listed pursuant to section 4 of the Act and promulgated by the Secretary pursuant to authority provided by this Act.

(g) VIOLATIONS. - It is unlawful for any person subject to the jurisdiction of the 'United States to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in this section.

Federal agencies must not jeopardize the continued existence of Federally protected species. Federal agencies must not adversely modify Critical Habitat without consultation that explores and offers alternatives to the proposed action.

While this Notice primarily discusses the adverse effects of continued diversion of the entire flow of Fossil Creek by APS on Razorback Sucker, the adverse effects on Loach Minnow, Spikedace, Colorado Squawfish, Gila Topminnow and Bald Eagle are similarly substantive. Survival of all these species now depends on functioning, secure riparian habitat like that that will recover as soon as full flows are returned to Fossil Creek.

APS' Childs/Irving power plants have diverted the entire flow of the 14 perenial (year round) miles of Fossil Creek for 80 years. Eighty years ago, perenial streams were not rare. Native fish were not imperiled then. Times have changed dramatically.

No other alternative, functional, self-sustaining, riparian habitat promises long term survival either the Tonto or the Coconino National Forests. Diversion of Fossil Creek's entire flow for the production of 0.1% of Arizona Public Service's power and 0.002% of the private company's 1998 earnings is ludicrous.

If you believe any of the above information is in error, if you rectify your violations of the law, or if you have any questions concerning this notice letter or the violations of law, please contact us immediately. You can contact: Dr. Robin Silver, SWCBD, P.O. Box 39629, Phoenix, AZ 85069-9629, Phone: (602) 246 4170, Fax: (602) 249 2576, or by Email: rsilver@sw-center.org.

If you do not take satisfactory steps to remedy your violations of law in 60 days, we intend to file suit United States District Court to force you to comply with the law.

Sincerely,

Robin D. Silver, M.D.

Conservation Chair

CC: Mr. Jay Tutchton, Esq., Earthlaw

Mr. William Post, APS CEO