BEST BEST & KRIEGER LLP
A CALIFORNIA LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS
LAWYERS
400 CAPITOL MALL, SUITE 1650
SACRAMENTO, CALIFORNIA 95814
(916) 325-4000
(916) 325-4010 FAX
BBKLAW.COM

RIVERSIDE
(909) 686-1450

INDIAN WELLS
(760) 568-2611

ONTARIO
(909) 989-8584

SAN DIEGO
(619) 525-1300

ORANGE COUNTY
(949) 263-2600

JENNIFER T. BUCKMAN
(916) 551-2845
JENNIFER.BUCKMAN@BBKLAW.COM

July 28, 2004

The Honorable Richard Pombo
Chairman, House Resources Committee

Re: Endangered Species Act

Honorable Richard Pombo:

Thank you for this opportunity to provide testimony to the House Resources Committee on the impacts of the Endangered Species Act (33 U.S.C. § 1531 et seq.) ("ESA" or "Act") on individuals and businesses. This office represents the Langell Valley Irrigation District and Horsefly Irrigation District (collectively, the "Districts") and has had extensive experience interacting with federal agencies during the Section 7 Consultation process provided in the ESA.

The Districts currently enjoy good working relationships with the Klamath Falls staff of the Fish and Wildlife Service and the Bureau of Reclamation. Our comments should not in any way be misinterpreted as being directed against either one of these agencies. Rather, these comments are only intended to address the past instances, dating back to 1992, when the Districts were affected by the failure of the local offices of these federal agencies to utilize accurate, reliable scientific data in formulating the Biological Opinions and their Reasonable and Prudent Alternatives which were then used to curtail the Districts' water supplies. We offer these comments and suggested revisions to the ESA as proposed solutions to some of the issues the Districts have encountered in their dealings with federal agencies regulating individuals and businesses under the ESA.

I. Despite the Lack of Any Scientific Basis, FWS Issued Biological Opinions Prohibiting Water Releases, Which Had Devastating Impacts on the Districts and Their Farmers

To understand why the Districts support reform efforts aimed at ensuring that regulatory actions taken under the ESA have sound scientific basis, you must first consider the Districts' experience with the 1992 and 1994 biological opinions. Langell Valley Irrigation District and Horsefly Irrigation District receive water from Clear Lake and Gerber reservoirs, which are owned by the Bureau of Reclamation and are considered part of the Klamath Project. Historically, stored water was released from these two reservoirs beginning about April 15 and ending about October 1 each year. These reservoirs are not large, but they provide the essential water supply to an otherwise arid area. In an average year, Clear Lake releases about 36,000 acre-feet of irrigation water, and Gerber releases about 40,000 acre-feet.

Clear Lake Reservoir contains populations of two species of fish which have been listed as endangered species, the Lost River sucker and the shortnose sucker. One of these species, the shortnose sucker, is also resident in Gerber reservoir. Bald eagles are also known to inhabit the Klamath Project area, and, in the early 1990s, the bald eagle was still considered to be "threatened."[1]

In 1991, at the request of FWS, the Bureau initiated formal consultation pursuant to Section 7 to assess the impact of the long-term operation of the Klamath Project on the suckers and the bald eagle. *See* ESA, § 7(a)(2); 16 U.S.C. § 1536(a)(2). Beginning on August 14, 1991, the FWS issued a series of biological opinions relating to Klamath Project operations. The August 14, 1991 biological opinion concluded that water releases from Upper Klamath Lake and Clear Lake reservoirs in 1991 were likely to jeopardize the continued existence of the Lost River and shortnose suckers. As a "reasonable and prudent alternative" to the purportedly harmful withdrawals, the FWS required the Bureau to either "immediately cease all water deliveries from Clear Lake" or ensure that Clear Lake maintained a minimum surface elevation of 4522.0 feet above mean sea level.

Through an interim biological opinion dated January 6, 1992, the FWS raised Clear Lake's minimum surface elevation to 4524.0 feet, thereby further curtailing the delivery of stored water. Although the FWS concluded that the 1992 operations of Clear Lake Reservoir were not likely to jeopardize the protected suckers, the interim biological opinion stated that a minimum lake level of 4524.0 feet was necessary as a "reasonable and prudent measure" to avoid "incidental take" of the fish. Although the FWS examined "new information" about Clear Lake in its March 27, 1992 biological opinion, the FWS did not change the provisions of the interim biological opinion. Thus, the March 27, 1992 biological opinion retained the 4524.0 feet minimum surface elevation.

On May 1, 1992, the FWS issued yet another biological opinion. At that date, only 8,000 acre-feet of water remained in the east lobe of Clear Lake. Because Clear Lake was originally designed as both an evaporation system for flood control and a water delivery system for irrigation, the reservoir's wide, shallow topography causes significant evaporation losses. According to the FWS' predictions, evaporation would completely desiccate Clear Lake's east lobe in 1992, even if no irrigation withdrawals were permitted. Consequently, the FWS concluded that the proposed withdrawal of 14,000 acre-feet of water posed no jeopardy to the suckers.

As a result of the minimum lake levels imposed by the draft biological opinions, and the water lost to evaporation before the FWS allowed any water releases, the Districts were not able to make their normal irrigation releases during the 1992 water year. Neither district received its

---

[1] The FWS subsequently determined that the bald eagle had recovered fully such that listing was no longer warranted, but, responding to pressure from environmental groups, the FWS has declined to de-list the bald eagle. FWS' inability or unwillingness to remove the bald eagle from the list of protected species, despite the lack of any scientific basis to keep it there, highlights one of the problems with the ESA.

first seasonal water delivery until May 15, 1992, a full four weeks later than normal. By that date, almost 12,000 acre-feet of the water that had been stored in Clear Lake in March 1992 had evaporated. The amount of water lost during this ten week period represents about 60% of L.V.I.D.'s total yearly withdrawal from Clear Lake Reservoir. As a result of the minimum lake levels and the evaporation losses, only 2,148 of the 16,800 irrigable acres within the L.V.I.D. received *any* Klamath Project water at all.

When water was finally released from Clear Lake in mid-May, it was not nearly as useful as it would have been earlier in the season. By this late point in the season, the uncertainty over the water supply had caused many farmers to postpone or severely curtail their annual crops so they could conserve water for their established alfalfa and pasture. The delay also dried out many of the crops that had been planted.

The lack of water reduced both acreage farmed and per-acre yields in 1992. For example, only 250 acres of alfalfa hay were harvested in L.V.I.D. in 1992, as compared with 1,612 acres in 1991 and 1,660 acres in 1990. The yield of alfalfa hay was only 1.0 ton per acre in 1992, a marked decline from the 1991 yield of 2.5 tons per acre and the 1990 yield of 4.0 tons per acre. As a result of these reduced yields, farm properties lost up to 70% of their assessed value in 1992.

The lack of water also hurt the region's cattle ranching operations. Due to the lack of water, some ranchers could not produce pasture for their cattle. Water users who could afford the extra expense purchased feed to sustain their herds. Others had to cut back substantially on their herds or sell their cattle.[2]

Wildlife also suffered as a result of the decision to impose minimum surface levels in the reservoirs. Because the Lost River obtains most of its water from releases from Clear Lake Dam and return from agricultural run-off, the water levels in the Lost River and its tributaries were exceedingly low in 1992. As a direct result, wildlife relying on Lost River water, including deer, sandhill cranes, hawks, turtles, frogs, ducks, and more, were all noticeably scarce that year.

On July 22, 1992, the FWS finally issued its final biological opinion on the long-term operations of the Klamath Project. The 1992 biological opinion characterized Clear Lake's sucker populations as "sizeable." The opinion also found that the recruitment of larvae into Clear Lake's adult sucker populations is relatively consistent and that the populations contain individuals of many different ages, indicating successful reproduction over a period of years. While the 1992 opinion conceded that "little" was known about Gerber Reservoir's shortnose sucker population, the opinion also reported "good numbers" of these fish and noted that the Gerber sucker population appeared to be successfully reproducing despite the lowered lake levels of the early 1990s.

---

[2] In 1992, there was only enough water available to support 1,669 acres of irrigated pasture in the entire Langell Valley Irrigation District. In each of the previous two years, over 7,700 acres of pasture land had been grazed.

Despite this *undisputed* evidence, the 1992 biological opinion concluded that continuing to operate the Project, including Clear Lake and Gerber reservoirs, in its historic manner was likely to jeopardize the continued existence of both protected fish species. As a "reasonable and prudent alternative," the July 22, 1992 biological opinion prohibited water deliveries from Clear Lake Reservoir when the minimum surface elevation dropped to 4521.0 feet and required that Gerber Reservoir maintain a minimum surface elevation of 4799.6 feet. The Bureau accepted the FWS' recommendations and informed the FWS that it intended to comply with the restrictions imposed by the 1992 biological opinion, prompting the Districts and two of the individual farmers to sue the federal agencies.

In 1994, while the litigation was pending, the Bureau requested reinitiation of consultation for Clear Lake, based on new data discovered during the drought of 1992. In October 1992, Clear Lake dropped to its fifth lowest elevation on record. Not only did Clear Lake's sucker populations successfully withstand these conditions, they enjoyed successful spawns in 1993. Given this new information, the Bureau asked the FWS to re-evaluate its biological opinion finding that withdrawing stored water from Clear Lake "jeopardized" the suckers.

The FWS' 1994 biological opinion, which covered only Clear Lake, noted that that reservoir had large and healthy populations of both species of protected suckers, and that each population was successfully reproducing. Nonetheless, the 1994 opinion concluded that continuing the historic operating methods for Clear Lake Reservoir posed jeopardy to the suckers. As "reasonable and prudent alternatives," the FWS imposed the same conservation measures that the Bureau had proposed in its request for reinitiation of consultation: a minimum lake level of 4521.0 feet.

II. Many ESA-Imposed Regulations Actions Have Lacked Sound Scientific Bases

As you may already be aware, the Districts were forced to bring suit to protect themselves from the unjustified, and extremely damaging, regulation being imposed on them under the ESA. Unfortunately, even after the federal district court entered judgment invalidating the jeopardy conclusions and Reasonable and Prudent Alternatives of the 1992 and 1994 biological opinions, FWS openly defied this Judgment. (One FWS staff person, who is no longer with the Klamath Falls office, told District staff that the court's Judgment finding no scientific basis for the was virtually meaningless because it related only to the 1992 and 1994 biological opinions, and FWS would just issue a new biological opinion imposing the same restrictions on water use.) The Districts were forced to bring several additional motions to enforce the Court's rulings and to bring FWS into compliance with the law. At each stage of the legal proceedings, the Districts prevailed, based largely on the fact that FWS simply had *no* scientific evidence to justify its actions.

Unfortunately, the Districts are not alone in this regard. The biological opinions issued for the various Klamath Project operations provide just one of many examples where the federal agencies charged with implementing the ESA are acting "haphazardly, on the basis of

speculation or surmise." For example, in the biological opinion invalidated in *Arizona Cattle Growers' Ass'n v. United States Fish & Wildlife*, 273 F.3d 1229 (9th Cir., 2001), FWS admitted that there had been no reported sightings of the protected razorback sucker in the area since 1991, but FWS nonetheless issued an Incidental Take Statement based on theoretical prospective harm resulting from the proposed grazing activities. *Id.* at 1243-44. In that case, as in ours, the regulated parties were unable to obtain relief from the unjustified regulatory actions and were forced to turn to the courts for assistance. The Ninth Circuit noted that the "unsupported speculation" relied on by the FWS was "woefully inadequate" to meet the "best scientific and commercial data" standard imposed by the ESA. *Id.* at 1244. Yet in that case, as in the Districts', FWS had imposed regulations depriving people of their right to use their property, *despite the lack of any evidence of harm to a protected species. See id.* at 1233, 1246, 1247.

III. The Standard for Best Available Scientific and Commercial Data Should Reflect the Prevailing Standard for Admission of Scientific Evidence.

The Districts believes there are measures Congress can take to ensure that actions taken by federal agencies to implement the ESA are based on sound science, rather than personal bias, speculation, or conjecture, and to prevent others from suffering the pain that the FWS needlessly inflicted on the Districts.

Section 7 of the Act requires federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that their actions will not jeopardize the continued existence of the species. 16 U.S.C. § 1536(a)(2). The Act instructs that "[i]n fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available." *Id*; see also 50 C.F.R. 402.14(g)(8) ("[i]n formulating its biological opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available").

When the United States Supreme Court considered the Districts' case against FWS, the Court described the purpose of the ESA's science requirement as follows:

> The obvious purpose of the requirement that each agency "use the best scientific and commercial data available" is to ensure that the ESA *not be implemented haphazardly, on the basis of speculation or surmise.* While this no doubt serves to advance the ESA's overall goal of species preservation, we think it readily apparent that another objective (if not indeed the primary one) is to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives.

Bennett v. Spear, 520 U.S. 154, 176, 177 (1997) (emphasis added).

The purpose of the "best available scientific and commercial data" standard can be better accomplished by requiring the data on which the federal agencies base their ESA actions to meet the same standards that expert scientific testimony must meet in order to be admitted in and

relied upon in federal court proceedings. For many years, federal courts debated the standards that should be met before a witness was qualified to testify as an expert on scientific matters. Ultimately, the courts developed rules designed to ensure, among other things, that the expert testimony is based on a reliable scientific foundation. *See Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147-149 (1999); *Daubert v Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993); *Micro Chemical, Inc. v. Lextron, Inc.*, 317 F. 3d 1387, 1391 (Fed. Cir. 2003).

Under *Daubert*, federal courts consider the following issues in determining whether to admit the testimony of a proffered expert witness on a scientific issue:

- Whether a theory or technique can be and has been tested. *Daubert*, 509 U.S. at 593.

- Whether a theory or technique has been subject to peer review and has been published. While this is not dispositive, especially for new theories or those of limited interest, the Court stated that "the scrutiny of the scientific community is a component of 'good science,' in part because it increases the likelihood that substantive flaws in methodology will be detected." *Id.* at 593-594.

- Rate of error and factors affecting or controlling that rate of error. *Id.* at 594.

- Whether the theory or technique has widespread acceptance. *Id.*

In response to *Daubert* and cases applying it, such as *Kumho Tire*, Rule 702 of the Federal Rules of Evidence was amended to specify that (1) the proposed expert testimony must be based upon sufficient facts or data and (2) the product of reliable principles and methods, and (3) the witness must have applied the principles and methods reliably to the facts of the case. *Micro Chemical, Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1391. These rules ensure that any scientific testimony admitted in federal court contains conclusions that are well-grounded in fact and have a basis that is defensible under generally accepted scientific principles.

Many biological opinions issued by FWS or NOAA fisheries do not meet these basic scientific standards. Anyone who has read a biological opinion knows that the authors frequently resort to unproven theories or assumptions to "support" their conclusions. Currently, innumerable biological opinions are tainted by their inappropriate reliance on "personal comments," draft reports, and other untested data or hypotheses.

There is no legitimate basis for allowing junk science to pervade the federal agencies' implementation of the ESA when we would not tolerate this result in our courts. Regulatory actions taken by federal agencies under the ESA should be required to meet the same indicia of scientific reliability that have been determined adequate for our judicial processes. This ensures that the regulatory actions taken by the federal agencies under the ESA have scientific integrity and that the public can have some degree of confidence in the results. This also ensures that, in the event of any Administrative Procedure Act lawsuit challenging an agency's scientific

decision, the federal court's APA deference to the agency's action is properly based on sound science.

IV. Conclusion

The scientific integrity of the ESA would be greatly improved if Congress amended the Act to clarify that the "best scientific and commercial data available" must meet the standards for admissibility of expert testimony in federal court, e.g.:

> The term "best scientific and commercial data available" means that (1) the data is based upon sufficient facts, (2) the data is the product of reliable principles and methods, and (3) Secretary has applied the principles and methods reliably to the facts of the case.

On behalf of Langell Valley Irrigation District and Horsefly Irrigation District, we thank you for the opportunity to submit these comments. Should you have any questions about any of the matters discussed above, please feel free to contact me at (916) 325-4000.

Sincerely,

Jennifer T. Buckman
of BEST BEST & KRIEGER LLP

JTB/CHC