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BEFORE THE CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of the State Water Resources Control Board Hearing to Determine whether to Adopt a Draft Cease & Desist Order against California American Water Regarding its Diversion of Water from the Carmel River in Monterey County under Order WR 95-10

BRIEF OF SIERRA CLUB

I. STATEMENT OF FACTS

A. Failure of Remediation of Effects of Diversions on Steelhead Under WRO 95-10, 2002-02 and the Conservation Agreement

In 2001 Cal-Am and NMFS signed a "Conservation Agreement" in which Cal-Am agreed to modify its pumping operations to pump from the most downstream wells to maintain continuous surface stream flow in the Carmel River as far downstream as possible in the low flow season. Cal-Am could not comply with the provisions of the Conservation Agreement that required it to increase well capacity in the lower aquifer, since studies showed that any new well in the lower Carmel Valley would require surface water treatment and construction of a treatment plant. Ambrosius testimony, PT 38.

According to NMFS Fisheries Biologist Joyce Ambrosius, Cal-Am's diversions continue to

cause mortality and substantial habitat loss, which causes a taking of SCCC (South Central California Coast) steelhead in violation of the Endangered Species Act, Section 9, 16 USC §1538 (a).

In WRO 2002-02 the Board ordered Cal-Am to take additional steps to move its diversions downstream during low flow periods (when stream flow in the Carmel River at the Don Juan Bridge, CRM 10.8) gage is less than 20 cfs for five consecutive days. However, WRO 2002-02 allowed Cal-Am to continue to divert 7900 afa unlawfully.

Thus Cal-Am not only continues its unlawful diversions at the same amount as in 1996 (after complying with the 20% reduction ordered under WRO 95-10) but pumps water from the Carmel River alluvium that dries up significant portions of the River and aversely affects SCCC steelhead. Despite Order 2002-02 and the Conservation Agreement, Cal-Am's deflection of pumping to the most downstream pumps has not significantly abated the problem, and injury to the SCCC steelhead continues.

B. Current Effects of Cal-Am Diversions and Remediation by Way of Diversion Reductions Proposed in the CDO

Cal-Am's diversions continue to decrease the amount of juvenile rearing habitat that is available in the lower river. The de-watering necessitates fish rescue operations that involve steelhead mortality. The fish that are not rescued die in the remnant pools as the river dries up. There is a reduction of food sources available to the steelhead as the river dries up, causing stress, related disease, and increased mortality. Substantial numbers of juveniles are crowded together in increasingly limited habitat. II Transcript, p.25. (NMFS Fisheries Biologist Ambrosius) There is also an increase in predation on the weakened fish, caused in part by an increases in competition for food in the remnant areas that stay wetted. (Id, p.44)

Cal-Am's diversions have caused a die-off in riparian vegetation in five miles of the lower

river. This die-off causes bank erosion, which increase sedimentation into the River, and adversely affects critical habitat of the steelhead. (Id, p.45). Downstream riparian portions of the River are affected below RM5 (Id. pp 840-841) (Hampson testimony), and remediation through irrigation is not feasible.

Cal-Am's pumping of the Carmel River alluvium causes the River to dry up and cease flowing. This causes a reduction in habitat needed by the steelhead to survive. It decreases the food production in that area. (Id., p.65). (Ambrosius). Cal-Am's pumping also adversely affects lagoon habitat used by the steelhead as rearing habitat for the juveniles and for smelt production. (Id. p. 81) See also Dr. John Williams testimony at 13, et seq. [1]

If the reductions in diversions recommended by NMFS were implemented, it would cause improvement in steelhead habitat, according to NMFS fisheries biologist Ambrosius:

> "There would be portions of the river that would remain wetted year round, and the portions that do dry up would not dry up quite as soon as they do now, and that would allow the habitat to remain and the fish able to remain in the system longer." (II Id. at 86).

Dr. Williams identified (in the longer term) diversions and dams, (especially Los Padres Dam), as mainly responsible for the dramatic declines in steelhead population. "Diversions reduced dry season flow and habitat downstream from the San Clemente Dam, and Los Padres Dam blocked access to upstream habitat….[An] obvious factor in the decline of Carmel River steelhead is dewatering of the river by Cal-Am's diversions." (Williams Phase II testimony, p. 9). Regarding steelhead, Dr. Williams quotes a MPWMD report:

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[1] According to PT40, the 2007 Federal Recovery Outline for the Distinct Population Segment of South-Central Coast Steelhead:

> "…[W]ater diversions and dams have reduced the frequency, duration, timing, and magnitude of river and stream flows, which affect migratory behavior, and have altered the breaching patterns at the mouths of coastal estuaries, which affects steelhead rearing and migratory opportunities. Altered flow regimes have also created conditions which promote the spread of non-native invasive species, including amphibians, fishes, and plants. (Recovery Outline at 20).

> About 1.5 miles of habitat between Boronda Road and Robles del Rio and up to nine miles of habitat below the Narrows may dry up, depending on the magnitude of streamflow releases at San Clemente Dam, seasonal air temperatures and water demand. Beginning as early as April or May of each dry season, the District rescues juvenile steelhead from the habitat in these reaches. (Id. at 9, lines 11-22). (Williams)

Dr. Williams further testified that there is empirical evidence that moderate reductions in summer flow reduce the growth rate of juvenile steelhead, and decreases their prospects for survival. Williams Testimony at 10. See summary of current studies. Id. at lines 8-28, and 11, lines 1-2. Dr. Williams also testified that loss of surface and subsurface flow to the lagoon is another important factor in the decline of Carmel River steelhead. Testimony at 13-18.

Dr. Williams and counsel for Cal-Am engaged in the following colloquy:

> Mr. Rubin: Do you have a sense on average how many feet of Carmel River will remain wetted if the SWRCB adopts your proposed remedy?
>
> Dr. Williams: It's a more complicated issue that that, but if you're talking about the part of the River that stays wet all year, my guess would be a mile or more [beyond]. The other side of the issue is flows to the lagoon would continue longer in the spring and commence earlier in the fall, so it's not simply an effect on that one part of the river. (Phase II Transcript, p. 708).

MPWMD fisheries biologist Kevin Urquhart's calculations of the amount of habitat gained under various hydrological scenarios and under varying percentage reductions in diversions lack foundation, since Mr. Urquhart has no qualifications as an hydrologist, and such calculations are clearly properly performed only by a qualified hydrologist. In a colloquy with Cal-Am's attorney, Mr. Urquhart characterized his calculations as "bare bones, arithmetic ways of estimating." II Transcript at 785. When asked by counsel whether his calculations would withstand peer review, Mr. Urquhart replied: "…people would say that more rigorous methodologies would be more appropriate, and they would ask for those to be done." Id. Another colloquy ensued:

> Mr. Rubin: So in order to give an exact number [as to benefit to abundance of steelhead attributable to phased reductions of diversions], you would need a model?
>
> Mr. Urquhart: As a fisheries biologist who is , you know, on the entry level

familiar with geomorphology and those issues, I would assume that I would have to rely on an engineering geologist or a registered hydrologist to produce a model that could move accurately predict how far down the reductions would create permanent habitat than were roughly predicted by my crude analysis.

Mr. Rubin: And your testimony today is not based upon any such modeling?

Mr. Urquhart. No." (II Transcript p. 785) [2]

In cross-examination by Dr. John Williams, Mr. Urquhart admitted he had no formal training in hydrology or the interaction between streams and aquifers (II Transcript 861). Dr. Williams then asked Mr. Urquhart about the recession curves he had used to plot the numbers of days that the river would continue to flow past a certain point under varying diversion reduction scenarios:

Dr. Williams: So then, if I understand your testimony you were saying that if the diversions were decreased by 10.9 cfs per day in a year like 2007, the result would be you would have only 16 more days with non-zero flow at near Carmel Gage?

Mr. Urquhart: Yes.

Dr. Williams: In fact, you said – you so stated in your testimony. If there were less pumping from the Carmel River underflow, do you believe that would affect the shape of the recession curve [MPWMD KU 10A]?

Mr. Urquhart: Yes

Dr. Williams: Do you think it would be steeper or less steep?

Mr. Urquhart: My best professional judgment, it would be less steep and extend longer.

Dr. Williams: So in fact if there's a repeat of 2007 with a reduction of 10.95 cfs per day pumping, you would have more than 16 days with non-zero flow?

Mr. Urquhart: It's possible, yes. (II Transcript 864-865) (emphasis added)

Dr. Williams demonstrated that not only was Fisheries Biologist Kevin Urquhart not qualified to make the calculations concerning the effects of different diversion scenarios on river coverage

[2] in Technical Memorandum 2003-02 (MPWMD Exhibit TC-7) prepared by MPWMD witness Thomas Christensen, it is stated that: "The …(District) uses the Carmel Valley Simulation Model (CVSIM) to simulate the occurrence, distribution, and movement of surface and groundwater resources within the District. Specifically CVSIM simulates the response of the surface and groundwater resources in the Monterey Peninsula Water Resources System (MPWRS) to varying physical, structural and management conditions." (Tech Memo 2003-02, p.1)

Fisheries Biologist Kevin Urquhart did not employ CVSIM in attempting to calculate river habitat changes under varying flow and hydrologic scenarios at fixed points along the River below San Clemente Dam.

(past a predetermined point), but the calculations he made likely significantly underestimated the habitat gains for steelhead juveniles attributable to diversion reductions mandated by the CDO, under the varying scenarios that Mr. Urquhart purported to describe quantitatively. In any event, not being based on a model, the calculations failed to meet the standards generally used by MPWMD for making such calculations.

Dr. Williams further elicited from Kevin Urquhart an admission that he had not taken into account in his prediction of habitat benefits to steelhead attributable to a reduction of diversions, the fact that Cal-Am's pumping had the effect of drawing down the water table in the aquifer, so that the aquifer needs to be recharged before the River can flow into the Lagoon. II Transcript, 866-867. Additional days of flow attributable to reduced pumping would recharge the aquifer and cause improved surface flow conditions in the River, enabling earlier flows into the Lagoon that would improve habitat conditions there. Id.

In his testimony Kevin Urquhart recommends selecting a minimum annual steelhead population number as a trigger to institute the first two levels of cutbacks in the following water year. He states:

> For example, if the adult steelhead count at San Clemente Dam declined below 300-400 fish for one year, it could be the trigger to implement the first 1693 acre feet curtailment of diversion…(Phase II testimony at 5).

This recommendation contradicts Urquhart's conclusions in his testimony that any initial year cuts in Cal-Am's diversions will provide at best only marginal benefits in productivity of steelhead, since he believes that "an area must remain wetted year-round to successfully serve as spawning and rearing habitat. Rewetting areas for a few more weeks or months, that otherwise are still going to go dry every year, does not naturally produce on its own any more net fish for the population that currently occur." (Urquhart testimony at 5-6).

Urquhart does admit, however, elsewhere in his testimony that there are benefits to the

steelhead resulting from phased reductions of diversions:

> "[Rewetting areas for a few more weeks] will to some degree delay the de-watering of certain redds, letting a few more fry emerge out of the gravel for the District to rescue and rear…It is likely to slightly reduce the depleting of the groundwater table such that flows may return faster to that area next winter, possibly allowing the lagoon to open a little earlier and enhance the start do for the adult run in the next year. Large enough summer and fall reductions in diversions might improve dry season underflow to the lagoon, such that it may improve water quality. (Phase II Urquhart testimony, 6)

Later in his testimony, Urquhart also admits:

> [A]n "extension of days that any flow regime is extended at the USGS near Carmel Gage illustrates how long we might be able to delay the initiation of fish rescues …Delaying fish rescues allows more time for juvenile steelhead to emerge from their redds (nests), and might increase the number of fish available to rescue. Also, the longer rescues are delayed, the larger fish are allowed to grow in their natural environment, and larger fish survive the rescue process better, as well as survive and resist disease outbreaks better while being reared….Delaying the date of de-watering at the …Highway 1 Gage represents an extension of the amount of time a continuous fresh-water flow connection could be maintained in the lagoon, and also where significant under-flow to the lagoon can also be assumed to be occurring. The longer this date is extended, the longer good water quality in the lagoon is likely to be maintained each year (Urquhart testimony at 7-8).

(See Appendix A discussing the relation between pumping and subsurface flow on the Carmel River.)

II. Status of Listing Actions, Critical Habitat Designation in the Carmel River, and Protective Regulations

NMFS designated the South-Central California Coast (SCCC) steelhead Distinct Population Segment (DPS) as a federally listed threatened species on August 18,1997, and it reasserted that listing on January 5, 2006 (71 Fed. Reg. [FR] 834). NMFS designated the entire Carmel River as SCCC steelhead critical habitat on September 2, 2005 (70 FR 52488).

In designating critical habitat, NMFS considers the following requirements of the species: 1) space for individual and population growth, and for normal behavior, 2) food, water, air, light, minerals, or other nutritional or physiological requirements, 3) cover or shelter, 4) sites for breeding,

reproduction, or rearing offspring, and, generally, 5) habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of this species (50 CFR §424.12(b)). In addition to these factors, NMFS also focuses on known physical and biological features (primary constituent elements) within the designated area that are essential to the conservation of the species and that may require special management considerations or protection. These essential features may include, but are not limited to, spawning sites, food resources, water quality and quantity, and riparian vegetation.

Protective regulations prohibiting a take of SCCC steelhead by all persons, including Federal agencies and private entities, were published on July 10, 2000 (65 FR 42422). These regulations, which went into effect on September 8, 2000, extend the legal prohibitions of section 9 of the ESA to SCCC steelhead, making their take unlawful. A "take" as defined in the ESA, includes, in part, to kill, injure, harm, or harass the species. The protective regulations describe certain activities that are very likely to injure or kill salmonids, or that may injure or kill salmonids, resulting in a violation of the ESA (64 FR 73479). These activities include, in part:

> *... Physical disturbance or blockage of the streambed where spawners or redds are present concurrent with the disturbance, ... Blockingfish passage through fills, dams, or impassable culverts, ... Water withdrawals that impact spawning or rearing habitat ...*

The Carmel River population of SCCC steelhead is one of the core populations identified by NMFS' Technical Recovery Team (TRT) as important for recovery of the SCCC steelhead DPS. It is the only watershed which has been singled out and placed in its own biogeographic region because of a unique set of physical and biological characteristics (PT - 40). The recovery of the SCCC steelhead population in the Carmel River is essential to the recovery of the SCCC steelhead DPS, because it is historically one of the largest and, therefore, potentially more viable, steelhead populations within the SCCC steelhead DPS. (PT 38, Ambrosius testimony).

III. Status of South Central Coast Steelhead DPS and its Critical Habitat in the Carmel River

NMFS' most recent review of the status of west coast salmon and steelhead (71 FR 834) found the SCCC steelhead DPS is "likely to become endangered within the foreseeable future." Blocked access to historic spawning and rearing areas upstream of dams, and extensive water diversions have contributed to the decline in this population (PT - 40). Though the steelhead population showed signs of recovery from the effects of the 1987-1991 drought with the 1997 and 1998 totals being the highest counts at SCD since 1975 (775 and 856, respectively), the population has been decreasing since a high of 804 adults were counted in 2001. In 2004,2005, and 2006, the adult steelhead returns to the dam totaled only in the mid-300's (388, 328, 368 fish, respectively) (PT - 43). In 2007, the total count at the dam was only 222 adults, while this year's (2008) total is 412 adults (PT - 44). The steelhead population in the Carmel River has seen a 49% to 72% decline in numbers from 2001 to 2008.[3]

California American Water (CAW) is responsible for approximately 85% of the total water diversions from the Carmel River system and its associated subterranean flow (PT - 45). As a result of direct diversions of water by CAW and others, the Carmel River goes dry downstream from the Narrows (River Mile 9.5) usually by July of each year. From July until the winter rains begin, the only water remaining in the lower river is in isolated pools that gradually dry up as the groundwater table declines in response to pumping. Surface flow into the Carmel River Lagoon normally recedes after the rainy season in late spring, and ceases in summer as rates of water extraction from the river and alluvial aquifer exceed the flow in the river. (PT 38, Ambrosius testimony).

[3] CAW-40 shows the adult steelhead at San Clemente Dam from 1995 to 2002. The chart does not show data beyond 2002. When the years 2004-2008 are taken into account, it is apparent that the steelhead population is diminishing. (In 2004, 388 fish; in 2005, 328; in 2006, 368; in 2007, 222; and in 2008, 412). (II Transcript 210). Figure I (testimony of John Williams, p.8) shows that since 2002 there has been a downward trend in adult steelhead in the Carmel River. In 1998 there were approximately 850 adults at the San Clemente ladder: this declined to between 350-400 during 2004-

Adult steelhead migrate into the Carmel River to spawn in the winter months and then either die or return to the ocean, whereas juvenile steelhead are present and rear in the river year-round. The decrease in flows has a significant adverse effect on SCCC steelhead and critical habitat in the Carmel River by 1) decreasing the amount of habitat available for juvenile rearing, resulting in overcrowding in the areas where streamflow is still present, increased competition for food, and a decrease in food production; 2) stranding and killing steelhead as the stream channel dries back; and 3) increasing predation (birds, raccoons) due to fish being trapped in isolated pools. (Id.)

While large numbers of steelhead spawn below the SCD, the actual survival of juveniles is low because survival depends upon streamflow remaining in the river throughout the entire summer, fall, and following winter. MPWMD and Carmel River Steelhead Association annually rescue steelhead that are stranded due to dewatering between the Narrows and the Lagoon. From 1995 through 2005, a total of 208,015 juvenile steelhead were rescued. The number of juvenile steelhead rescued per year ranged from a low of 3,198 fish in 1998 to a high of 39,748 fish in 2003 (PT - 43). Rescued steelhead are either released to permanently flowing upstream reaches of stream, the Lagoon, or reared at the Sleepy Hollow Steelhead Rearing Facility. The rescue activities likely save some steelhead that would otherwise die from stranding; however, the rescue effort only accounts for a portion of the steelhead potentially lost in the lower river. A percentage of those fish that are subject to rescue, (ranging from 1-5%) are killed during capture. Those that are rescued may experience adverse conditions from competition and overcrowding in upper river segments or in the facility; and many that are not captured are left to die in the drying pools. Fish mortality rates have been high (over 50%) at the facility for a variety of reasons, ranging from high water temperatures and disease to predation, Those fish that survive through the summer and fall are released back into the river

2008. Mean production from 1964-1975 was 3, 177 fish. Maximum 3602. This is considered only 25% of historic levels (PT 41,Reconnaisance of the Steelhead Resource of the Carmel River Drainage W Snider).

once winter flows have connected the lower river to the Lagoon. Rescuing juvenile steelhead and rearing them over the summer period allows some fish to survive from the dewatering of the river; however this is not an acceptable long term solution, and has not increased the number of adults returning to spawn. PT 38. (Ambrosius testimony).

IV. This Board Has Plenary Authority to Curtail Cal-Am's Unlawful Diversions Through A CDO

Thus even if Cal-Am demonstrates that it has made good faith efforts to obtain water from other sources, and has complied with the conditions of order 95-10, the Board has plenary authority to mitigate and reduce continuing adverse impacts on the threatened steelhead (SCCC DPS) arising from Cal-Am's unpermitted diversions. In fact, it has a duty to do so, or otherwise find itself implicated in a "taking" of steelhead and its habitat under Section 9 of the ESA, 16 USC §1538. Nothing in Order 95-10 confers "immunity" on Cal-Am from Board Cease and Desist Orders reducing its unlawful diversions in the event of continuing (even augmented) damage to the federally listed threatened steelhead.

The Board recites it has enforcement authority under Water Code §1831 to issue a CDO in response to a violation of "the prohibition set forth in section 1052 against the unauthorized diversion or use of water subject to Division 2…of the Water Code." This authority is broad, plenary, and distinguishable from its authority to regulate permitted uses of water. In Order 95-10, the Board has already determined that Cal-Am has no permit to divert 10,730 acre-feet of water, and is in violation of section 1052.

The diversion of water without first obtaining a permit from the Board constitutes a trespass within the meaning of Water Code §1052. People v. Shirokow, 26 Cal.3d 301 (1980). The State is authorized to seek injunctions against such trespasses. Id. At 304. After reciting that since 1923 the

statutory procedure became the exclusive means of acquiring appropriative rights, the Court declared:

> "These declarations of policy, together with the comprehensive regulatory scheme set forth in section 1200 et seq. demonstrate a legislative intent to vest in the Board expansive powers to safeguard the scarce water resources of the state." 26 Cal.3d 309.

The Court also restated the long-standing rule that property held by the state in trust for the people cannot be lost through adverse possession, citing Hoadley v. San Francisco (1875), 50 Cal.265, 274-276. 26 Cal.3d at 311. See also Santa Clarita Water Co. v. Lyons (1984), 161 Cal.App.3d 450 (where a water company never applied for a permit or license from the Board to take water from the subject property, it is "not an appropriator…[but] merely a negligent trespasser" in violation of Water Code §1052).

The Sierra Club urges the Board as well to consider the public trust with respect to the fishery resources of the River in connection with remediation for the unlawful diversions and the reduction of unlawful takings of steelhead. The public trust is to be construed liberally for the benefit of all people of the State. See California Trout, Inc. v. State Water Resources Control Bd. (1989), 207 Cal.App.3d 585 ("Cal-Trout I"); National Audubon Society v. Superior Court (1983), 33 Cal.3d 419, 437, cert. denied, 464 U.S. 977. These decisions and others have found that the State owns the fish and wildlife and waters of California in trust for the people, and either it, or the people, can assert that public trust as necessary to protect these resources and their public uses.

The wild fish and game of this State belong to the people in their collective, sovereign capacity. See Fish and Game Code § 711.7, sub div. (a) ("[I]he fish and wildlife resources are held in trust for the people of the State"); Fish & Game Code § 1600 (fish and wildlife are "the property of the people"). The State can protect and preserve wild fish wherever they are found:

> The fish within our waters constitute the most important constituent of that species of property commonly designated as wild game, the general right and

> ownership of which is in the people of the state…and the right and power to protect and preserve such property for the common benefit is one of the recognized prerogatives of the sovereign, coming to us from the common law.

People v. Stafford Packing Co. (1924) 193 Cal. 719, 727 (citations and emphasis omitted).

Cal-Am's Opposition Brief, filed before the hearing began, claims that "the State Water Board authorized CAW to continue diversions up to 14, 106 acre feet of water in exchange for CAW's performance of mitigation measures…" (emphasis added). Cal-Am Opposition Brief at p. 5. Cal-Am's characterization of Board Order 95-10 as an "authorization" to continue its unlawful diversions implicates the Board in unlawful takings of SCCC steelhead in violation of the ESA, since these diversions have caused takings of steelhead in violation of Section 9 of the ESA. 16 USC §1538.[4]

Cal-Am's argument renders superfluous the carefully crafted measures relating to obtaining permits for the diversion of waters of the State. Virtually every other water purveyor in the State of California has a permit to appropriate water (or a riparian or a pre-1914 appropriative right). It has had every opportunity to legalize its appropriations, as Condition 2 of Order 95-10, invited it to do. Instead it has chosen, at its risk, not to go the route of legalizing its water diversions.

Water Code §1225 provides:

> "No right to appropriate or use water subject to appropriation shall be initiated or acquired except upon compliance with the provisions of this division."

[4] In its Request for Clarification, filed with the Board May 21, Cal-Am reiterates its contention that this Board has authorized its diversions conditional on its compliance with Order 95-10:

> "Under [Water Code] Section 1052, a diversion or use of water is a trespass if it is not "authorized."…Authorization can come from any action undertaken pursuant to Division 2 of the Water Code (Section 1000, et seq.). Id. It should be beyond reasonable debate that, through Order 95-10, and not through the issuance of a permit, the State Water Board authorized diversions as an interim physical solution. In that Order, the State Water Board authorized CAW to divert no more than 14,106 acre-feet per year, subject to CAW satisfying the conditions established therein." Request for Clarification, p.2 (emphasis added).

Section §1225 provides an exclusive mechanism for obtaining a right to use water from stream waters. Crane v. Stevinson, 5 Cal., 2d 387, 398 (1936). The words "other than as authorized" in Water Code §1052 reference Water Code §1225 as the exclusive modality for obtaining a water right. In Meridian v. San Francisco, 13 Cal., 2nd 424, 450 (1939), the Supreme Court cited Water Code §1052 as ensuring there would be no apprehension that rights could otherwise become vested, by prescription or otherwise, "in an excessive use of water or in a use for an unauthorized purpose." See Hutchins, The California Law of Water Rights, 98 (1956).

V. If the Board Has Authorized the Cal-Am Diversions It Is in Violation of the ESA And Has a Duty to Curtail Diversions

In Straham v. Coxe, 127 F3d 155 (1st Cir. 1997), the Court of Appeal held that the Secretary of the Massachusetts Department of Executive Office of Environmental Affairs, the Commissioner of the Massachusetts Division of Marine Fisheries, and the Commissioner of the Massachusetts Department of Fisheries, Wildlife, and Environmental Law Enforcement violated Section 9 of the Endangered Species Act, 16 USC §1531 et seq. and had facilitated a "taking' of the Northern Right Whale, an endangered species listed under the Act, insofar as they had issued licenses and permits authorizing gillnet and lobster pot fishing that caused "takings" of the Northern Right Whale.

The Coast ruled that the defendants had violated Section 9 of the ESA, 16 USC §1538(g):

> "…[The ESA prohibits any person from "tak[ing] any [endangered] species within the United States or the territorial sea of the United States." § 1538(a)(1)(B). In addition, the ESA makes it unlawful for any person "to attempt to commit, solicit another to commit, or cause to be committed, any offense defined" in the ESA. See § 1538(g). The term " 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." § 1532(19). " 'Take' is defined ... in the broadest possible manner to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife." S.Rep. No. 93-307, at 7 (1973); The Secretary of the Interior has defined "harm" as "an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or

> sheltering." See 50 C.F.R. § 17.3 (1994); Sweet Home, at 695-701, 115 S.Ct. at 2412-14 … The term "person" includes "any officer, employee, agent, department, or instrumentality ... of any State, municipality, or political subdivision of a State ... [or] any State, municipality, or political subdivision of a State.... 16 U.S.C. § 1532(13)". 127 F3d at 162.

The Court held that §1538 (a)(i)(b) (prohibiting "take") and §1538 (g) (prohibiting solicitation or causation by a third party of a taking) applied to acts by third parties that allow or authorize acts that exact a taking and that, but for the permitting process, could not take place. 127 F3d at 163. The Court cited, with approval, cases from other circuits, that had found a Section 9 taking, on the part of federal and state governmental officials, in similar circumstances:

> See, e.g., Sierra Club v. Yeutter, 926 F.2d 429, 438-39 (5th Cir.1991) (finding Forest Service's management of timber stands was a taking of the red-cockaded woodpecker in violation of the ESA); Defenders of Wildlife v. EPA, 882 F.2d 1294, 1301 (8th Cir.1989) (holding that the EPA's registration of pesticides containing strychnine violated the ESA, both because endangered species had died from ingesting strychnine bait and because that strychnine could only be distributed pursuant to the EPA's registration scheme); …Loggerhead Turtle v. County Council of Volusia County, 896 F.Supp. 1170, 1180-81 (M.D.Fla.1995) (holding that county's authorization of vehicular beach access during turtle mating season exacted a taking of the turtles in violation of the ESA). The statute not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking. We believe that, contrary to the defendants' argument on appeal, the district court properly found that a governmental third party pursuant to whose authority an actor directly exacts a taking of an endangered species may be deemed to have violated the provisions of the ESA. 127 F3d at 163. (emphasis added)

The Court noted that "it was not possible for a licensed commercial fishing operative to use its gill-nets or lobster pots in the manner permitted by the Commonwealth without risk of violating the ESA by exacting a taking." 127 F3d at 164. The Court of Appeal upheld the District Court's finding that entanglement with fishing gear in Massachusetts waters caused injury (harm) or death to Northern Right Whales. Id. As in Strahan, in this case the Board, through Orders 95-10, and 2002-02, has authorized Cal-Am to divert water from the Carmel River without a lawful permit, which directly gives rise to takings of the SCCC steelhead and its critical habitat despite attempts at remediation. Id. The Court rejected the Commonwealth's argument that the District Court should have taken into account the "significant efforts made by the Commonwealth to "minimize Northern Right Whale entanglements in fishing gear," 127 F3d at 165. The Court held that to the extent 'any entanglement with fishing gear injures a Northern Right Whale and given that a single injury to one whale is a taking under the ESA, efforts to minimize such entanglements are irrelevant." Id.

The First Circuit affirmed the order of the District Court requiring the defendants to "develop and prepare a proposal to restrict, modify or eliminate the use of fixed fishing gear in coastal waters of Massachusetts listed as critical habitat for Northern right whales in order to minimize the likelihood additional whales will actually be harmed by such gear." 127 F3d at 158.

In Palila v. Hawaii Dept. of Land and Natural Resources, 639 F2d 495 (1981), the Ninth Circuit expressly noted that "the only facts material to this case are those relating to the questions whether …the defendants' actions amounted to a taking... Any dispute or uncertainty as to the current population trends of the Palila is immaterial." 639 F2d at 497. In Palila the Ninth Circuit held that the actions of the Hawaii Department of Natural Resources in maintaining feral sheep and goats in the critical habitat violated Section 9 of the ESA, since it was shown that the Palila was "harmed" through the state's activities. See 16 USC. §1532(14) (defining "taking" as including to "harass, harm, pursue, hunt or wound…or attempt to engage in any such conduct.")[5]

VI. Conclusion

Sierra Club believes, on the basis of the above, that the proposed CDO, as modified consistent with the recommendation of the Sierra Club Phase II testimony of John Williams or NMFS (Testimony of Joyce Ambrosius) is not only clearly authorized under applicable law, but that it is legally required to avert possible Board complicity in a violation of Section 9.[6]

Counsel for Sierra Club

[5] In Palila v. Hawaii Dept. of Natural Resources 852 F2d 1106 (9th Cir. 1988) the Court expressly approved the Secretary's regulatory definition of "harm" as including injury caused by impairment of essential behavior patterns via habitat modification that can have significant and permanent effects on species." 852 F2d at 1108. See 50 CFR §17.3.

[6] Dr. Williams presents the Sierra Club position with respect to modifications of the proposed CDO at pages 27-31 of his testimony. The Sierra Club position proposes that the reductions in diversions occur in periods when flow in the River is low, and incremental increases in flow will provide greater benefit to steelhead and other public trust resources. The Sierra Club also requests that as long as Cal-Am continues to divert water unlawfully, Cal-Am shall be required to pump water from the San Carlos Well or other lower Carmel Valley well to the lagoon, as necessary to provide a minimum surface inflow of .5 cfs.

APPENDIX A

In a joint brief filed October 6, 2008 MPWMD and the Watermaster argued that the prosecution team failed to show any statistical or factual correlation between CAW groundwater pumping and Carmel River surface flow. This contention ignores the determination made in Order 95-10, section 3.2 based on the District's expert hydrologist Thomas Stetson. At pp. 11-12, Order 95-10 determines:

> On behalf of the District, Thomas M. Stetson reviewed District Exhibit 108 and SWRCB Exhibits 19, 24, 27, and 29, in connection with his evaluation of the physical aspects of the subsurface water in Carmel Valley. Mr. Stetson also reviewed hydrographs of Carmel Valley aquifer water levels obtained at numerous wells. (MPWMD:107). In addition, he reviewed Carmel River streamflow hydrographs for the USGS Robles Del Rio and Carmel gaging stations By superimposing surface and subsurface water level hydrographs, Mr. Stetson established that there is a direct relationship between recovery of seasonally-lowered subsurface water levels at wells and recurrent river flow increases during ensuing wet periods. On this basis, Mr. Stetson concluded that surface flow recharges river underflow and, consequently, causes a rise in Carmel Valley aquifer water levels. (MPWMD, 107)
>
> Mr. Stetson provided written testimony that such underflow is only through this younger alluvium within a known and definite channel along the entire length of Carmel Valley. … Mr. Stetson concludes that the hydraulic conductivity difference is substantial and renders the aquifer a "pipeline" for subsurface flow.

In the following colloquy in Phase II, Dr. John Williams, an expert hydrologist, testified on cross-examination:

> Mr. Rubin: Dr. Williams do you know how much water will remain in the Carmel River if the SWRCB adopts your proposed remedy?
>
> Dr. Williams: Well, there is in environmental physics what's called the principle of continuity, so there will be a basic one-to-one relationship between reductions and diversions and increase in the feet of the surface or subsurface of the River.
>
> Mr. Rubin: And is there a statistical relationship between reductions in extractions of subsurface water by California-American Water and the quantity of surface water in the Carmel River?
>
> Dr. Williams: That would essentially be one to one.
>
> Mr. Rubin: What do you base that on?
>
> Dr. Williams: That's based on the fact that the subsurface flow will not vary very much, and so when you reduce the diversions … all the avoided diversion is going to go to surface flow.
>
> (Phase II Transcript at 704-705)

PROOF OF SERVICE

I declare as follows:

I am over 18 years of age and not a party to the within action; my business address is P.O. Box 667, Mill Valley, CA, I am employed in Marin County, California.

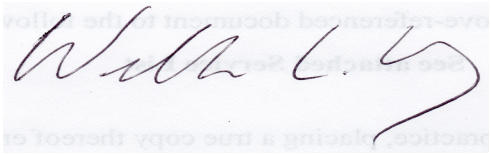
On October 9, 2008, I served a copy of the foregoing following document entitled **BRIEF OF SIERRA CLUB**

Following interested parties in the above-referenced document to the following:

See attached Service List

[X] BY ELECTRONIC MAIL
I caused a true and correct scanned image (PDF file) copy to be transmitted via the electronic mail transfer system to the email address(es) indicated in the attached Service List of Participants.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was executed on October 9, 2008, at Penn Valley, California.



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