

BRC

STATE WATER RIGHTS  
CONTROL BOARD

2015 DEC -2 PM 4:16

DIVISION OF WATER RIGHTS  
SACRAMENTO



SIERRA  
CLUB  
FOUNDED 1892

Barbara Evoy, Deputy Director  
Division of Water Rights  
SWRCB  
PO Box 1000  
Sacramento, California 95812

In our joint letter of support submitted in connection with the Cal-Am Application for an extension of the Cease and Desist Order Sierra Club and the Planning and Conservation League urged that the Cal-Am maximum effective diversion limit be established at the 7,659 afy level (the three year average of Cal Am's 2013-2015 levels). Sierra Club And PCL are concerned that the higher effective diversion levels sought in the proposed Application, will cause a deterioration in the condition of the fishery and jeopardize any habitat gains for the fishery that have resulted from reduction of the diversions from the River from 10,978 afy in 2009 when the CDO was issued, to an average of 7,659 over the last three years.

With respect to possible beneficial effects on the fishery of the reduced Cal-Am diversions over the last few years, the Kevan Urquhart Declaration submitted in evidence at the 2009 CDO hearings by MPWMD is pertinent. See Exhibit MPWMD-KU1. See also Declaration of Joyce Ambrosius, NMFS fisheries biologist. PT Exhibit 39.

The Urquhart 2009 Declaration predicted that substantial curtailments of Cal-Am's diversions over time could have beneficial fishery impacts, and as well, collateral benefits that can be important to the steelhead fishery. These collateral impact resulting from substantial reductions in Cal-Am diversions include replenishing the Carmel River groundwater in the River alluvium, with the result that flows may return faster to downstream areas in the River the next winter, "possibly allowing the Lagoon to open a little earlier and enhance the start date for the adult run in the next year". (Declaration at 6.) The Urquhart Declaration predicts other beneficial impacts may occur: "Large enough summer and fall reductions in diversions might improve dry season underflow to the lagoon, such that it may improve water quality, but not the quantity of dry season rearing habitat in the Lagoon." Id. Although Urquhart states that these inferred secondary benefits cannot be predicted "to any degree of certainty or magnitude," Urquhart submitted supporting Exhibits MPWMD KU7A through KU7C and KU8A-KU8C, and explained that in these exhibits, "I depict the benefits the draft CDO's planned reductions in CAW diversions may have in delaying the dewatering of the Carmel River at the USGS Near Carmel Gage at RM3.24 and at the MPWMD Highway 1

Gage at RM 1.0.” Declaration at 7-8. (The planned reductions Urquhart referred to come from the SWRCB’s Notice of Intent to issue a CDO (2008), which shows reductions to the level of 7,335 afy four years after issuance of a CDO). Urquhart explains the benefits further:

“The number 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, as once the river begins to dry at that location, the continuous dry back process has inexorably begun for that water year, and fish rescues are required from thereon. 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 the fish are allowed to grow in their natural environment, and larger fish survive the process better, as well as survive and resist disease outbreaks better while being reared by the District...Delaying the date of dewatering at the Highway 1 Gage represents an extension of the amount of time a continuous freshwater inflow connection could be maintained to the lagoon, and also where significant underflow can 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.....” ( Declaration at 7-8.)

In his declaration, Urquhart characterizes Exhibit KU7A as demonstrating that in a Critically Dry Water Year, flows may be sustained to the Lagoon for a month to a month and a half longer by the “four levels of diversion cutbacks proposed in the draft CDO.” [The fourth level of cutbacks under the proposed CDO would have been 7,335 afy]. “Rescues may also have been delayed from about one to three and one half weeks later into the year.” (Declaration at 9.) The Declaration continues to describe sustained flows and other benefits to the fishery for Normal Year Types (KU7B) and Extremely Wet Years (KU7C), although the fishery benefits are somewhat less than those associated with Critically Dry Year Flows, as the Normal Year Types and Extremely Wet Year charts demonstrate. (Declaration at Paragraph 17.)

Paragraph 18 ext describes the benefits the CDO’s planned reductions in Cal-Am diversions “may have in extending the wetted front of the Carmel River downstream year-round in three recent years.” The Declaration continues: “If these sections of the river were actually to have remained wet year round, they may have been able to produce approximately an additional 50 juvenile steelhead and eventually one returning adult steelhead for every 110 fee of stream that gets permanently rewetted year round. This is equivalent to approximately 2414 juvenile steelhead per mile, which might eventually produce 48 returning adults per mile two or more years later. To illustrate the relative magnitude of the probable benefits of the CDO, I estimated the additional number of miles that flow might have been extended downstream in three different water year types since 1994, based on whether the probable flow increases equal to the diversion reductions might have been sufficient to overcome the cumulative influence of the maximum pumping capacity of the nearest CAW diversion wells...” (Declaration at 9.)

KU Exhibit 8A states that in the Critically Dry Year 2007, continuous river

flows could have been extended from "as little as .18 miles to as much as 2.72 miles further downstream by the levels of diversion cutbacks [7,335afy] proposed in the draft CDO. Using the calculations set forth in the previous paragraph, Urquhart would conclude that under the 2.72 mile "further downstream" Critically Dry Year scenario there could be 6618 juveniles and 130 adult returnees two or more years later. The Urquhart Declaration, p. 10, sets forth the lesser downstream gains projected to result from Normal Water Years and Extremely Wet years (KU 8B, 8C) as well. The Declaration concludes:

".....Slight benefits may occur under the first two stages of diversion curtailment.....but significant benefits are not likely to accrue until the last two levels of restrictions proposed in the draft CDO [7,335, 5,642 afy]. (Declaration at 10.)

In light of the Urquhart Declaration, and the CDO testimony of Joyce Ambrosius (PT 39), Sierra Club and PCL urge that the markedly lower Cal-Am diversion levels of the last several years be retained through averaging, for the following reasons:

1. Since the current Cal- Am diversion levels are at about the level of the third stage proposed CDO levels used in the Declaration (7,335 afy), it is possible that the benefits to fisheries predicted by Urquhart have occurred, have helped to prevent even further significant declines to the steelhead population resultant from recent critically dry years, and could help enhance the prospects for recovery of the fishery from the critical low spawning returning adults of the last two years. The Urquhart declaration supports a conclusion that the significantly reduced Cal-Am production at the level of the average of the last three years may have already produced significant fishery benefits that must be preserved and not dissipated by allowing Cal-Am to divert Carmel River water substantially in excess of the average diversion levels of the last three years, given the present perilously low number of adult steelhead returns during the past three years.

There is sufficient evidence that it would be detrimental to the fishery to allow the Cal -Am effective diversion limit to reach 8,600 this water year, or 8,300 afy, as the application proposes for future water years. Cal-Am reports that dewatering San Clemente Reservoir took place between April and June, 2015. The FEIR for the San Clemente Dam Project states that draining of the dam, causing release of sediments, could significantly adversely affect steelhead. At this juncture, these impacts are unknown, but additional release of sediments in a drought year could have significant population impacts on survival of juvenile fish (which can live in the River for several years before migrating downstream). Other factors need to be taken into account before staff recommends to the Board a schedule of maximum effective diversions substantially in excess of the actual diversion levels of the last several years that could likely harm steelhead surviving in the River.

2. In Order 95-10 and in the 2009 CDO, the SWRCB found a hydrological one to one connection between flows in the river and underground flows. Maximizing ground water replenishment in the alluvium has ultimate fishery

benefits. There seems to be a serious lack of information or studies concerning the effects of various diversion levels on underground flows. In any event, given the present (inadequate) state of knowledge, the beneficial effects of ground water replenishment in the River alluvium should be taken into consideration in establishing an effective diversion limit for Cal- Am. The 2014 MPWMD Mitigation Program Report notes "dramatic storage declines that were observed during the prolonged 1987-1991 drought period.....The relatively stable storage in the Carmel Valley alluvial aquifer in recent years is attributable to a combination of a period of more favorable hydrological conditions and the adoption of improved water management practices that have tended to preserve higher storage conditions in the aquifer." The current condition of the aquifer after several successive drought years ought to be assessed and taken into account before there is any determination concerning an effective diversion limit for the next five years that exceeds the reduced diversion levels achieved during the last three years. (It should be noted in this regard that the District has not posted on its web site a 2015 Mitigation Program Report, and so there is no reported information on the state of the River alluvium, after sequential years of serious drought.)

3. In her testimony at the 2009 hearing, NMFS fisheries biologist, Joyce Ambrosius stressed the adverse effects that the fish rescue program has on steelhead. NMFS stated that fish rescues result in mortality and significant stress to fish. "Those that are rescued may experience adverse conditions from competition and overcrowding in upper river segments or in the [MPWMD fish rescue] facility, and many that are not captured are left to die in the drying pools." "Rescuing juvenile steelhead and rearing them over the summer period allows some fish to survive from the dewatering of the River; it is not an acceptable long term solution nor will it provide for recovery of the SCCC steelhead DPS." (Declaration of Joyce Ambrosius, PT 39 , at 5.) The letter to you from NMFS, dated September 14, 2015 states as well:

a. "Any additional increase in flow in the summer flow season will also improve the survival of SCCC steelhead in the Carmel River.

b. Any additional water left in the River during dry periods allows for a longer period of wetted river (increased rearing capacity, increased food production, more favorable water temperatures).

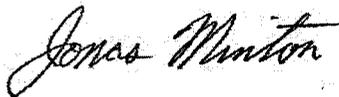
c. A longer period of connectivity between the river and lagoon, allowing more steelhead access to/from the lagoon for rearing,

d. Improved habitat/water quality within the lagoon for a longer period." (NMFS 2015 Letter at 6).

Sierra Club and PCL believe that in light of the above observations by NMFS, it is probable that allowing (for the five year period that the CDO would be extended), Cal-Am diversions substantially to increase over the average of the last three year diversion levels, will result in a likelihood of stress to fish due to rescues, increased mortality, a decrease in food production, higher river temperatures, shorter periods of connectivity with the Lagoon, deterioration of water quality in the Lagoon, than currently exists at baseline conditions. Over the five year CDO extension period the condition of the fishery could significantly deteriorate in the event of Cal- Am diversions over the

average of the last three years. Allowing diversions in the amount of 8,600 afy, or 8,300 afy, when in recent years Cal-Am diversions have been substantially lower, could harm the threatened SCCC steelhead, or cause their present condition and habitat to worsen. And considering the low or possibly non-existing adult steelhead returns for 2014-2015, it is imperative that, in light of the precautionary principle embodied in the public trust doctrine, the Board not authorize, given the present severely diminished population of returning adults, an effective diversion limit for five years of 8,600 afy, or 8,300 afy.

Sincerely,



Jonas Minton,  
Senior Water Policy Advisor, Planning and Conservation League



Rita Dalessio on behalf of the Ventana Chapter, Sierra Club



Larry Silver, Esq.  
Counsel to Ventana Chapter, Sierra Club

cc. David Laredo, Dave Stoldt, Andrew Homer, Russ Mcglothlin, Jason Burnett, Eric Sabolsice,