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STATE WATER RESCUESES
CONTROL FORM
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LIVER WATER RIGHTS

December 14, 2015

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

Re: Response to November 19, 2015 letter from Planning and Conservation League and Sierra Club – Ventana Chapter

Dear Ms. Evoy:

I am herein responding to a letter sent to you on November 30, 2015 by Jonas Minton on behalf of the Planning and Conservation League ("PCL"), and Rita Dalessio and Larry Silver on behalf of the Sierra Club – Ventana Chapter ("SCVC"), in regard to the November 20, 2015 joint *Application for Order Modifying WRO 2009-0060 (Cease and Desist Order)* ("Application"). The PCL/SCVC letter suggests that California American Water's (Cal-Am) Effective Diversion Limit (EDL) from the Carmel River should be further reduced from that requested in the Application. However, as a basis for their suggestion, the parties selectively and inappropriately quote portions of previous testimony provided to the SWRCB during hearings on the 2009 Cease and Desist Order (CDO) by Kevan Urquhart, Monterey Peninsula Water Management District (MPWMD) Senior Fisheries Biologist, and Joyce Ambrosius, National Marine Fisheries Service. That testimony and the related data provided to you by PCL/SCVC are out of the context in which it was originally provided, and cannot be used as presented to characterize or support conclusions relating to current steelhead fishery and hydrologic conditions in the Carmel River and its alluvial aquifer.

We find that the PCL/SCVC letter contains the following shortcomings and errors:

- Flaws in assumptions regarding diversion numbers;
- Limitations to the use of Urquhart and Ambrose testimony;
- Failure to consider other activities and commitments which mitigate or ameliorate steelhead fishery impacts at the EDL proposed in the Application.

These shortcomings and errors are addressed below.

Most important is to consider that the EDL proposed in the Application is significantly below the limits imposed by the CDO. Further, since Order 95-10 the Monterey Peninsula has reduced its demand for water almost 6,000 acre-feet per year or 38% and should be recognized for its response to the Order despite its difficulties in bringing a new water supply project to the finish line.

Flaws in assumptions regarding historical diversion numbers

a) PCL/SCVC have ignored outages. The diversion limit of 7,659 AFA proposed by PCL/SCVC and which is based on the three most recent years of production from the Carmel River does not account for two years of production from the Seaside Basin that exceeded annual authorized

production from the Basin due to emergency Carmel River well failures, in order to meet health and safety demands on the Monterey Peninsula. This over-production from the Seaside Basin should not be assumed within a new baseline of diversions from the Carmel River for future years, as it would ignore the Seaside Groundwater Basin management efforts developed to avoid undesirable groundwater effects pursuant to the Seaside Basin adjudication (Cal-Am v. City of Seaside, et al. (Case No. 66343). Cal-Am cannot continue to rely on the Seaside Basin to offset Carmel River alluvial aquifer production in the future, particularly since Seaside Basin production is subject to triennial ramp downs in production through 2021.

- b) PCL/SCVC have ignored discretionary actions related to drought. During the four years of drought, Cal-Am has been asked by MPWMD, NMFS, and California Fish and Wildlife (CDFW) to use all practicable efforts to reduce pumping from the Carmel River in order to increase flows for the benefit of fish and habitat. Those efforts have contributed to a higher level of production in the Seaside basin, which for the reasons stated above is unsustainable. That production must return to the Carmel River until a new supply is completed.
- c) PCL/SCVC have underestimated the Peninsula's drought response efforts. MPWMD and Cal-Am have spent over \$3 million during the drought on conservation activities, including two public outreach campaigns heightening public awareness. In addition there has been local response to the Statewide call for conservation. These efforts and expenditures have resulted in decreased consumption, some of which will be permanent. However, one cannot predict that such reductions in demand are entirely permanent. Data shows that there is typically a rebound in demand following a drought. This is often attributable to increased irrigation and relaxing of behaviors without constant messaging. PCL/SCVC should not assert that data based on three years of drought messaging represents a permanent reduction in consumption, despite MPWMD's and Cal-Am's best efforts to keep it there.

The average annual production from the Carmel River for water years 2010 through 2013 was approximately 8,500 AFA, which is more representative of what the community requires, and represents a period for which there was some aquifer storage and recovery, the steeply tiered rate structure, and some drought response.

Limitations to the use of Urquhart and Ambrose testimony

d) Statements referenced from Kevan Urquhart's 2009 testimony were based on a different and larger range of flow reductions than are currently being proposed by the Parties and PCL/SCVC. For example, Kevan Urquhart's 2009 testimony projected possible effects and benefits of reducing total direct annual diversions from the Carmel River alluvial aquifer from 11,285 AF at the time to specific levels as presented in the original Draft CDO: 9,592 AF, 9,028 AF, 7,335 AF, 5,642 AF or 3,376 AF. That is, the order of magnitude being examined by Urquhart was in the thousands of acre-feet, not the hundreds being discussed by PCL/SCVC. Proper use of Urquhart's 2009 testimony requires reapplication of the same methods used in his prior testimony against the levels of production that actually occurred in recent years.

The PCL/SCVC cite testimony that estimated how environmental conditions might vary between annual diversion levels of 11,285 AF down to 7,335 AF. This estimate is not particularly relevant to current assessments as to whether a new annual diversion cap of 7,659 AF proposed by PCL/SCVC should apply instead of 8,310 as proposed in the Application. Comparing effects of a 3,950 AF reduction analyzed in Urquhart's 2009 testimony to a proposed difference of 651 AF does not fully or accurately present that original testimony.



- e) The referenced 2009 testimony estimated potential benefits based on an assumed 1:1 relationship of forgone diversion to surface flow, which is a relation that was always acknowledged to not be entirely accurate. While the actual ratio continues to be unknown, and still must be assumed to a certain extent, Mr. Urquhart's predictions from the testimony should be verified and refined with actual data gathered over the seven succeeding Water Years (2009-2015). Mr. Urquhart can provide updated analysis at the State Water Board's request.
- f) Since Ms. Ambrosius submitted her testimony, the MPWMD fish rescue program, at NOAAs' request, has developed quantitative annual analyses of rescue efficiency. These analyses show that annual rescue efficiency exceeds 82% and averages 88% (range 82 99%). Recent available literature produced by NMFS, CDFW and UC Santa Cruz (Satterthwaite et. al. 2009) indicate rearing survival at the facility most likely exceeds estimated survival in the wild. These authors estimated wild steelhead survival over seasonal periods equivalent to when fish are reared at the Sleepy Hollow Steelhead Rearing Facility (SHSRF) of 39% for June October, to as little as 21% for May December, versus the documented 16-year average survival rate at the SHSRF of 43%.
- g) More recently survival at SHSRF has exceeded 69% in all but one year since 2009. Fish released from the SHSRF are also slightly larger their wild counterparts, and thus will survive to return as adults at a greater rate. Given high rescue efficiency, greater than wild survival rates, and better growth at the SHSRF, it can reasonably be concluded that the rescue and rearing program is most likely fully mitigating for all loss of steelhead due to Cal-Am's diversions in the lower 9 miles of the main-stem Carmel River. Consequently, any decline in Carmel River steelhead populations is most likely due to factors outside the influence of Cal-Am's diversions, and curtailment of those diversions by 651 afa is unlikely to produce any benefit to the steelhead population.

Failure to consider other activities which mitigate steelhead fishery impacts

- h) It is also important to consider the many recent steelhead habitat improvements, predominantly funded by local ratepayers, which will benefit and improve Carmel River fishery conditions and habitat, and improve steelhead populations. These improvements have been made since the 2009 testimony cited by PCL/SCVC and are relevant to meaningful assessment of the effects of Cal-Am's water diversions on the Carmel River steelhead population. Such activities were not considered or mentioned in the PCL/SCVC letter, yet will have a profound impact on the conclusions reached, thus undermining the veracity of the PCL/SCVC letter. These improvements include:
 - i. 2015 Carmel River Dam Removal and Reroute (CRDRR) project's channel restoration and removal of San Clemente Dam to create unimpaired fish passages, and restore natural spawning gravel transport.
 - ii. 2015 Los Padres Dam (LPD) Smolt Passage Improvement Project to expand the feasible emigration season for smolts and ensure their safe passage.
 - iii. 2014 Spawning Gravel Replenishment Project below LPD.
 - iv. 2016 Old Carmel River Dam Removal and Sleepy Hollow Ford Replacement.
 - v. Proposed 2016+ Spawning Gravel Replenishment Project below CRDRR Project site



using natural gravel excavated from the dam removal and reroute site.

vi. The Application also includes an annual review of the status of the Carmel River steelhead fishery at the proposed EDL of 8,310 AF. Such annual review was supported by PCL/SCVC.

For the foregoing reasons, references made in the November 30, 2015 letter from PCL and SCVC should be rejected as lacking applicability or relevance to properly characterize or support conclusions relating to current conditions in the Carmel River and its alluvial aquifer. The quotations made therein are both selective and dated, and cannot be relied upon as accurate for the purposes presented.

Yours sincerely,

Kevan Urquhart

Senior Fisheries Biologist

MPWMD

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