63

SYRWCD #8

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SERVING CLIENTS SINCE 1957

1126-02 November 11, 1998 Reply to: San Rafael

Mr. Craig Fusaro
California Trout
435 El Sueno Road
Santa Barbara, California 93110

Re: Releases for Downstream Uses in Santa Ynez River

Dear Craig:

Thank you for providing a copy of the Santa Barbara News-Press "Perspective" editorial by you entitled "Some questions and answers about steelhead trout." The meeting with you on October 8, 1998 to discuss the elements of the strategy described in your article was very helpful. At that meeting, we discussed the hydrologic conditions and the environmental resources in the Santa Ynez River basin. I also indicated that Mr. John Markon had asked me to provide you written comments based on our experience with releases to recharge the ground-water basins in Santa Ynez and Lompoc areas. Those comments are summarized below.

We agree that releases of water from Cachuma Reservoir for downstream users can also help fish habitat in the Santa Ynez River. The editorial article refers to a tripod strategy (resting on three points) that you have been proposing since 1993. The second point rests on the assumption that modifying the timing and the rate of water right releases to 25-35 cubic feet per second (cfs) over the period from May through October would achieve the dual goals of providing the needed ground-water recharge and flows for fish habitat in the Santa Ynez River. A daily release of 25-35 cfs from May through October would result in a release of about 9,100-12,800 acre-feet of water from Cachuma Reservoir.

A similar proposal for revised downstream water right releases amounting to about 9,800 acre-feet per year was put forward by you earlier in the TAC (Santa Ynez River Technical Advisory Committee) process and it was submitted in a letter by Mr. John Bullock (January 22, 1996) to the Santa Ynez River Water Conservation District. In a letter dated February 16, 1996 we discussed the problems associated with the proposal in connection with meeting the needs of ground-water recharge in the above Narrows area and the Lompoc Plain. In your editorial article of August 16, 1998, the same proposal is repeated and it is stated as follows:

Received 11/16/98

Revise the timing of groundwater recharge deliveries mandated under water rights Order 89-18, and augment this with water gained from "surcharging" Bradbury Dam in spill years, and with "minimum pool" water currently committed for fishery studies (2,000 acre-feet, or AF). Instead of putting the water downriver in one or two big slugs, meter the water out on a daily basis at about 23-35 cubic feet per second (CFS) such that the river flows more of the summer for oversummering habitat to rear young fish spawned in Hilton Creek and other such tributaries below the dam. Sufficient water is available, with the surcharge, to do this from about May to October. This augmentation of flow will actually improve conditions for farmers' wells and urban water, by improving both quality and quantity.

Although the comments provided in the letter of February 16, 1996, apply to the above second point in your proposal, we would like to emphasize the following comments:

1. A daily release of 25-35 cfs for the period from May through October requires a supply of about 9,100-12,800 acre-feet from the Cachuma Reservoir. The downstream account water in combination with the Fish Reserve Account of 2,000 acre-feet will not have enough water in storage to produce releases of 9,100-12,800 acre-feet in most years.

   For example, there was no water available for the Lompoc Plain in 1989 and 1990 and the releases for the area above Lompoc Narrows were about 5,200 and 4,800 acre-feet, respectively. An additional release of 2,000 acre-feet (Fish Reserve Account) would not have reached to the Lompoc Plain in 1989 and 1990. In this year, the downstream account for the above Narrows area had zero credit as of August 1, 1998.

2. If the annual Fish Reserve Account of 2,000 acre-feet is used for releases during the period from May through October, that means additional releases would have to be made to maintain the river habitat, specifically in dry years, during the period from November through April. The editorial article does not address the additional releases for maintenance of fish habitat during the period November through April.

3. Releases of 9,100-12,800 acre-feet at the rate of 25-35 cfs in dry years may not reach to the Lompoc Narrows or at best may provide a limited amount of recharge to the Lompoc Plain. This would result in exhausting Above Narrows Account with no carry-over water to next year for drought protection for the benefit of water users downstream of Bradbury Dam. In order to deliver an adequate amount of recharge water to the Lompoc Plain efficiently, the releases have to be made at significantly higher rates than 25-35 cfs.

4. It is noted in the editorial article that water right releases can be augmented with the water gained from "surcharging" Bradbury Dam in spill years. However, a good portion of the "surcharge" water is used to extend the spill period. Generally, in spill years the Santa Ynez River flows to the ocean. Therefore, most of those "surcharge" releases will commingle with the downstream tributary contributions and will flow to the ocean.

5. As you know, in above average years, water right releases are not made to recharge the ground-water basin. Natural flow from tributaries and spill from Cachuma Reservoir will provide a significant amount of recharge to the ground-water basins. Releases of downstream account water will not provide an effective recharge and will flow to the ocean in those years. Furthermore, releases of downstream account water would deplete the downstream carryover water stored in Cachuma Reservoir for drought protection.

6. Based on our analysis of the Santa Ynez River hydrology, it will take more than 9,100-12,800 acre-feet of releases annually to keep the Santa Ynez River wet year around between Bradbury Dam and "V" Street in Lompoc. On average, it would take about 19,800 acre-feet of releases per year to maintain a wet river with a flow of two cfs at "V" Street. That would reduce the safe yield of the Cachuma Project from about 25,000 acre-feet to 4,000 acre-feet per year. This would represent a reduction of about 80 percent in the yield of Cachuma Project.

7. Water right releases are not accomplished by sending "the water downriver in one or two big slugs." For the purpose of replenishing the groundwater basin in Lompoc, initially water is released at a relatively high rate. Once the flow is established to the Lompoc Narrows, the rate is reduced to steady levels to maximize the recharge in the Lompoc basin. The continuous releases from Cachuma Reservoir could extend from July through October. The releases are gradually ramped down toward the end of the release period in accordance with the recommendation of the SYRTAC Biological Subcommittee.

We recognize that a coordinated operation of water right releases with the Fish Reserve Account can help the fishery resources in the Santa Ynez River downstream of Bradbury Dam. An adaptive management in conjunction with natural flow regimes should provide better results than a fixed release approach. We would like to continue our discussion on the basin hydrology and explore the potential of a coordinated operation.

Sincerely,

Ali Shahroody

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Enclosures

cc: SYRWCD Board Members
Bruce Wales
Ernest Conant, Esq.
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Gary Keefe
Jean Baldridge
Steve Mack
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