Cachuma Project Water Rights Hearing

November 2003

Rebuttal Testimony

Presenter: Ali Shahroody Stetson Engineers Inc.

Cachuma Member Units Exh No.265/Slide-1



Downstream Water Rights Releases

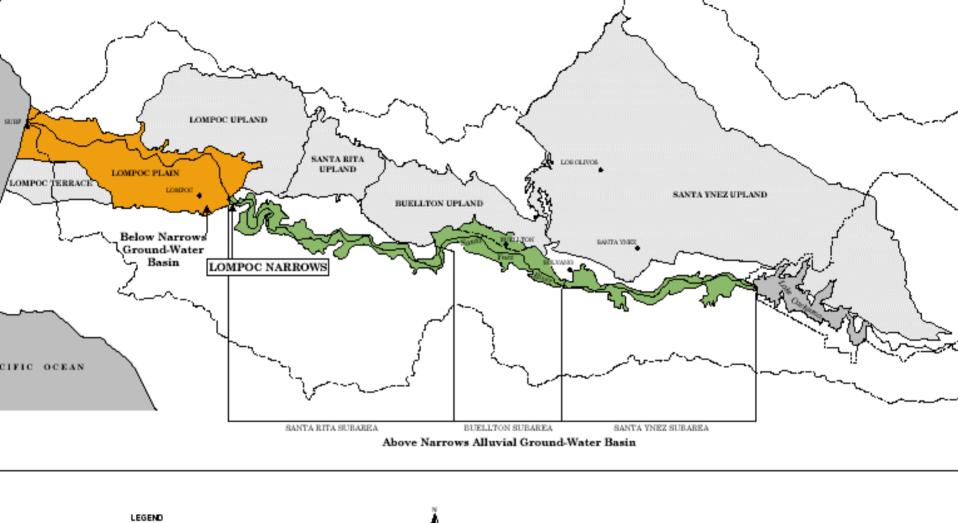
It is stated in CalTrout's written testimony:

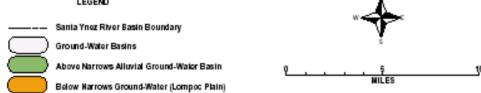
- WR 89-18 releases should occur over a more continuous nature
- Dry river conditions are necessary to trigger water rights releases which is not beneficial for fish
- WR89-18 releases should be used in tandem with other releases

Overview of Water Rights Releases

- Objective: Percolate the quantity of water which would have occurred from unregulated flow, so that operations of Cachuma Project shall not reduce natural recharge of groundwater from the Santa Ynez River.
- Downstream releases usually made when the released water can be fully percolated through Santa Ynez River bed to achieve recharge of water associated with impairment of percolation caused by the Cachuma Project. That means the river bed in targeted area is dry.
- Point of delivery (measurement) for Above Narrows Account is at Bradbury Dam
- Point of delivery (measurement) for Below Narrows Account is the USGS gage at the Lompoc Narrows







MAJOR GROUND-WATER UNITS OF THE SANTA YNEZ RIVER BASIN





Continuous Releases

- If we made releases at, say, 30 cfs continuously for the above and below Narrows areas:
 - ANA would be depleted
 - BNA delivery to Lompoc would be limited
- Example:
 - Water rights releases of July 19-October 31, 1996



Water Rights Releases from Bradbury Dam July 19 – October 31, 1996 (94 days)*

Total Release from		Flow at Narrows		Above Narrows Percolation	
Bradbury Dam		(Below Narrows Account)		(Above Narrows Account)	
Total	Average	Total	Average	Total	Average
Volume	Release	Volume	Release	Volume	Release
af	cfs	af	cfs	af	cfs
10,778	55	3,459	20	7,319	35

*Rampdown period excluded

Cachuma Member Units Exh No.265/Slide-6



Continuous Releases

- In delivering water for recharge in the Lompoc Plain, any percolation occurring in the above Narrows area debited from Above Narrows Account
 - ANA would be depleted
 - Above Narrows area would have no water left during drought periods
 - Not enough ANA water to deliver BNA water, resulting in stranding the BNA's water in Cachuma Reservoir
 - Resulting in impairment of downstream water rights and deterioration of water quality in Lompoc Plain
 - Results in premature depletion of water rights without providing drought protection for downstream water users and deprives Lompoc Plain from needed recharge water



Coordinated Release

- Water Rights Releases are made in tandem with other releases for fish
- Conjunctive Use Program recognized in Biological Opinion and Settlement Agreement
- About 31% of the long-term releases for fishery purposes required by the BO come from water rights releases
- Settlement Agreement assures coordination of scheduling for tandem releases with fish water and requires water rights releases for a specified period of time





