D-R-A-F-T Paper

Task

Per the July 1999 Ops Group assignment, develop potential measures to avoid excessive smelt take and ESA-related San Luis storage low-point problems for water year 2000.

Possible scenario

One possible scenario that would accomplish this task would be 4 weeks of export reductions in the post VAMP period of 3,000 - 6,000 cfs. This would be on top of the ramping or whatever operations occur in 2000 following the VAMP period.

Timeline

Actions that only require SWRCB approval may only need about 4-5 weeks of lead time. Others could take months. Funding may be the critical path for many.

Possible Actions

Actions are generally designed to either pre-pump or pre-purchase water prior to the start of the pulse flow for use later in the water year. San Luis Reservoir is expected to fill this year. The State expects to fill its share by January 2000. With this projection, San Luis Reservoir does not appear to be a good location to pre-bank water for any purpose. Castaic does not appear to have available storage either for next year. However, an early fill of San Luis may create available conveyance capacity south of the Delta.

Actions would not impact other water users.

1. Relaxation of EI ratio. Water could be pre-pumped or pre-delivered through an EI ratio relaxation.

2. Use available storage south of the Delta to bank water. San Luis and Castaic do not appear to be available. Groundwater storage such as Semitropic should be pursued. Los Vaqueros may be able to contribute about 5 TAF.

Not on List

3. Pre-approval for an additional 500 cfs at Banks from the COE when Banks is restricted to less than its physical capacity.

4. Joint point of diversion.

5. South of Delta purchases which do not impact other water users.

Not on List

6. Purchase of Merced water following the VAMP period. Salmon impacts may be of concern. This action is probably not hydraulically possible.

7. Recirculation.

8. Repetition of the San Joaquin River flows for 2000. The water could be used to support the exchange contractors, then payback to the Friant Kern users could be delayed until after the low-point in San Luis.

Acting agency with control of storage and conveyance facilities

The DWR, USBR, and/or one of its contractors will have to act as the interim contracting agency for this water for next year.

Better real-time operational response from biological indicators

Option: Using springtime mid-water trawl data, develop a trigger involving take of adults at the pumps in February or March, the heightened likelihood of a springtime juvenile take, and activation of operational changes or south of Delta purchases. Projects could possibly consider adults in the south delta in February as one factor in determining % allocations. However, the overall delivery level does not correlate directly with pumping in May-August. If deliveries were reduced by a relatively small amount (10-20%) this would not necessarily mean projects would pump less in May-August to help with the low-point in San Luis storage. It would probably take a relatively large change in allocation to change the pumping levels in the summer.

Option: Data processing and hatchery management could be used to exploit any overlap of juvenile smelt abundance with the San Joaquin salmon out-migration period. One option is to consider triggers (such as temperature) to forgo the ramp at the end and save the water for Delta smelt.

The Interagency Ecological Program (IEP) is also working to help translate the 20 mm survey data to develop correlations.

Accounting

A simple suggestion would be to apply the "no net loss" principle for WY 2000 but in reverse. This could side-step the baseline and ecosystem entity/agent/governance issues. All of the water pre-pumped/pre-delivered would be ecosystem water but it would held in trust by the CVP or SWP or a contractor. This water would be exchanged for future pumping curtailments on a 1:1 basis for ESA-related actions. The actions would not impact SWP interruptible supplies.

Carryover of assets

Water will probably not be stored in a location that is likely to spill (ie, San Luis Reservoir) for water year 2000. If water is stored in a groundwater basin, some methodology for carryover of water and/or funds into the subsequent water year needs to

be determined. However, the group did not believe that this methodology needed to be in place as a first step.

Financing

The intent is to borrow on work done within the EWA. Funds may vary depending on the intention of the action (i.e., is it related to species protection or supply reliability or both?). Conversely, some actions may depend on funding (e.g., demand shifting or water available through the Kern Water Bank).

Workplan Development

Development of a workplan is critical first element for this task.

Other issues

Could purchases be coordinated with next year's likely b3 purchases such as this year on the Stanislaus? Can we expect the same next year? If so, is it ecosystem water or free for the taking? How do we resolve that issue in advance?