

# Interagency Development Team

## Meeting Summary

December 4, 1997

### Size of the Isolated Facility in Alternative 3

- Need to look at tradeoffs between QWEST and Rio Vista Flows.
- The operational range appears broad enough to test alternatives.
- The Ag/Urban group is finding out that Bromide concentrations is a real driver for sizing the I.F.
- Model runs show that it is not practical to set a standard at Rio Vista that eliminates flow reversal at Hood at all times.
- Two concerns of flow reversal at the screens at Hood: 1) Recycling the fish that go through the bypass ( Outfall of bypass system is 5,000 ft downstream, may eliminate problem), 2) During reversals, a longer time of exposure for the fish in front of the screens.
- Since there are low head pumps behind the fish screens, could curtail pumping during flow reversals. Could make the diversion larger to make up the water lost.
- For the same flow in the Sacramento River at Hood, there will be less reversal at screens with the cross-channel open than with it closed.
- The difference in water quality improvement in the south Delta, with south Delta pumping at 500 cfs and 1,000 cfs is small.
- How often would the full capacity of a 15,000 cfs I.F. be utilized? With and without a large south of Delta storage?
- What would be the advantage of increasing the storage greater than 3 MAF in the Sacramento Valley? Would it help meet the Rio Vista flows? Need to look at the linkage between north of Delta storage, size of I.F., Rio Vista Flows and water supply to determine answer.
- 8,000 cfs may be the minimum size of an I.F. that gives the full benefit of seismic protection to water supply.
- 10,000 cfs may be the upper limit of the increased incremental physical benefits.
- In-Delta Ag would strongly oppose 10,000 cfs I.F., may oppose any I.F.
- Not much lose of supply with an I.F. from 5,000 cfs 10,000 cfs. However, would have increased water quality, fisheries, and flexibility benefits. Need to consider flexibility verses assurances.
- Need to determine if we are going to serve in-Delta water users before we can really size I.F.
- Depending on the institutional arrangements, a larger I.F. will allow more transfers.
- Need to know range of non-structural solutions for supply, before we can size I.F.
- May need to dedicate some portion of the I.F., for transfers.
- **IDT decided to set the size of the I.F. for alternative 3 at 10,000 cfs  $\pm$  2,000 cfs.**

## **Distinguishing Characteristics**

### **Water Quality**

- Need to define the 0 and 5 reference points. Is it better to best or the ability to meet standards.
- Need to consider that many of the standards are being met. May show a distorted view to show better to best. Instead, may want to show how the quality meet or exceeds the standards.
- Having a general DC for in-Delta water quality may not be representative enough. May have to divide Delta in regions.
- If we account for how well that we meet water quality standards, we should show less of a variance of DC's between alternatives 1,2, & 3.
- Need to write assumptions on seasonal and regional changes of water quality.
- Need to check water quality in new runs which includes storage.

### **Diversion Effects on Fisheries**

- The biggest change in DC's occurs when you get about 80% of the diversion out of the Sacramento River.
- How does alternative 3 rank high in circulation and rank low in water quality?
- Does water temperature increase in alternative 3 and does it effect salmon on San Joaquin River.
- How was the fish barrier at Old River modeled? What months is it closed in each alternative?
- For circulation, a 0 score is the existing conditions and a 5 score indicates a positive flow through Delta, higher Delta outflow, and elimination of Ag diversions in the Delta.

### **Water Supply Opportunities**

- A score of 0 applies to the least amount of additional water supplied by an alternative. While a score of 5 applies to the most additional water supplied.
- Should use total supply as base. i.e. maybe the DC's are all 3 or better.
- All DC's show should be consistently calibrated before we go public.

### **Water Transfer Opportunities**

- The major driver was the free capacity of the I.F.
- If there is a lot of north of Delta storage it would tend to keep I.F. full; therefore, less opportunity for transfers.
- If there is a lot of south of Delta storage, there would be more opportunities to move water north to south.
- With both north and south storage may still have a little less opportunity.
- May have long term contracts for transfers that are only implemented in dry years.

### **Costs**

- We only show capital costs. We should show all social costs (treatment, users supply other than CALFED, etc). Should also include O & M costs.

### **Operational Flexibility**

Flexibility is in relation to the infrastructure in the alternative.

**Risk to Export Water Supplies**

- South of Delta storage can cover most of seismic risk.
- Does this DC also include flooding? If it does, need to factor in setback levees included in the common programs.

**General**

- There is more flexibility for changing the operation standards with an I.F., thus more supply.
- Not sure that operation standard changes can produce 200 TAF/yr  $\pm$ . Where storage can make 500-700 TAF/yr.
- In our operational criteria range, we didn't cover full range of X2 sensitivity. i.e. X1-X3.
- Haven't fully defined the south Delta intake size. 7,000  $\pm$  2,000 cfs ??
- Mark will provide numbers to help IDT size south Delta intake at next meeting.
- Each IDT member will provide at least five reasons for selecting each alternative and five reasons for rejecting each alternative at next meeting. i.e. the selling points and the negative points.