Diversion Effects on Fisheries Technical Team
August 27, 1998, 1:00 p.m. to 5:00 p.m.

Meeting Minutes

Present:

Michael Thabault	Paul Fujitani	Sanjaya Seneviratu
Gary Stern	Pete Rhoads	Dick Daniel
Karl Halupka	Elise Holland	Dave Fullerton
Dale Sweetnam	Joe Miyamoto	Kate Hansel
Curtis Creel	Gary Bardini	Pete Chadwick
Mike Ford	Sarah Cotter	Dave Briggs
George Barnes	Paul Marshall	BJ Miller
Tara Smith	Mark Cowin	Sheila Greene
Ron Ott	Mark Holderman	

Committee Reports

Salmon Team

Sheila Greene provided an update on the activities of the Salmon Team. Each of the team's current tasks are still in progress, including

- Development of Stage 1 actions for Salmon
- Incorporation of analysis into DEFT recovery matrix

Discussion:

The Salmon Team is having difficulty linking the upstream actions to a benefit rank, so an uncertainty score will be also included with each rank.

Future Action:

A list of Stage 1 actions and an assessment of DEFT proposed actions is due Friday, September 4th.

Smelt Team

Mike Thabault led discussion on the Smelt Team activities. The professional opinion of the team is Delta Smelt cannot achieve recovery with the Through-Delta alternative, without drastic changes to the system. The Smelt Team needs additional information to make further progress. The team cannot evaluate DEFT actions without analyzing incremental differences between the original matrix in DEFT report and the new matrix.

Need to know how much environmental water is available and where is it located. Have general agreement on team of Habitat paper with all actions being in Stage 1.

Suggestions for modified operations were as follows

- 1962 LOD for X2 is a necessary requirement (with DEFT 6 or 7, may be good enough for Stage 1.
- Export as little as possible from North Delta and Sacramento River, in exchange for additional exports from San Joaquin River (except during pulse flows). Can't recover smelt unless we restore San Joaquin stocks for central and south Delta.

Discussion:

During discussion on the proposed fish structures, a suggestion was made to move the 5,000 – 7,000 cfs screened diversion from Clifton Court Forebay to Old Italian Slough, to reduce pre-screen mortality(i.e. No pumping in CCF). Gates in CCF would stay open to make Delta habitat. Furthermore, it should not be assumed that barriers are in place because there are non-structural methods that can be used to achieve the same results as the barriers.

Harvest Management Team

Joe Miyamoto provided an update on the current progress and activities of the Harvest Management Team. A summary of the current harvest regulations has been completed which will be provided at their next meeting on September 4th. The team has had difficulty compiling harvest rate data for each fish species; however, some data has been gathered on Battle Creek. This topic will also be addressed at the September 4th meeting.

An evaluation of projected levels of recovery for each species is currently in progress. The Harvest Team is having difficulty determining how much each action would contribute to recovery of a species. A table outlining the harvest management actions and each recovery goal was provided to the DEFT Team with a request to provide comments and suggestions on each of the topics.

Discussion:

It may not be possible to evaluate the increment of benefit that harvest management will contribute to overall species benefits.

The recovery goals for Striped Bass were not included in the Species Recovery table, but should be added.

CALFED Strategic Plan Group has been evaluating many of the same issues as the Harvest Team. Ron Ott will provide information on their goals and current activities.

Future Action:

The Harvest Management Team will meet on September 4th, and the proposed agenda is as follows:

- Central Valley Chinook Harvest Rate
- BDOC White Paper
- Summary of existing regulations
- Life cycle models
- New regulations over the next seven years
- Assessment of regulatory actions on species recovery and sustainable fisheries

DEFT-NONAME Coordination Team (DNCT)

The first DNCT meeting was held August 24th. The charge of this team is to further develop the reoperation concept proposed to the DEFT team last week by Dave Fullerton. Ron Ott provided a summary of the meeting. Some of the issues discussed during the meeting included:

- Areas of potential flexibility in the current system of operations.
- "Environmental Water "
  - Provided in the form of a block of storage or a specified flow rate?
  - How would it be modeled?
  - Who would make operation decisions?
  - Where would it be stored?
  - What would be the are the boundaries on man environmental block of water
- Mix of Measures (Fixed criteria and Environmental crediting)
  - Some E/I ratios could be flexed throughout the year
  - What criteria should be used to set the baseline for operations?
- Peter Louie from the Metropolitan Water District gave an update on his work with "take" reductions at Skinner Fish Facility. There is a fishery/operations subgroup assigned to determine if this idea should be pursued future.

Discussion:

Mike Thabault brought up the point that it is inefficient to manage fisheries at the pumps. Once they have arrived at the pumps, they are already in danger. Fish at the pumps is only one biological indicator and should not be the only trigger for operational flexibility.

Future Action:

The next DNCT meeting will be held on Friday, September 4th.

CALFED Operations Modeling

Gary Bardini provided a summary of the recent support activities of the Operations Modeling Team. The Modeling Team performed additional analysis of the current DEFT and NoName Studies.

Base Study 3 was compared to DEFT Study 5 and No Name Study 9. Results were provided in the following graphic representations:

- Comparison of Total Delta Exports (Monthly Average)
- Effects of SWP and CVP on Delta Outflow
- Surplus Delta Flows (Monthly Average)
- Flow at Qwest (Monthly Average)
- SWP Deliveries and Unmet Demand
- CVP Deliveries and Unmet Demand
- Comparison of Computed Export Ratios (By Month)

A summary table of estimated water supply benefits and impacts for various DEFT and No Name studies was also provided. The table included operational assumptions and modifications and the net impact of long term and critical period deliveries (as compared to corresponding base studies) under each scenario.

Discussion:

Some of the assumptions included in each operation study were clarified. The NoName Studies include all (b)(2) actions; however, they are combined together in the model. The CALFED Studies include only limited (b)(2) actions. The Operations Team is in the process of updating the CALFED model to reflect all (b)(2) actions and other current criteria.

The Species Teams cannot base their analysis on water cost information provided in the model studies. How can water supply information be linked to species considerations?

Can Peter Louie's historic salvage data be modeled as an indicator action?

The Delta SOS model may be a more effective tool to analyze some reoperation scenarios.

Future Action:

Future actions of the Operations Modeling Team include:

- Update the CALFED Model to reflect all (b)(2) actions and other current criteria.
- Conduct a DSM run to reflect the following criteria (Study 6 + GW Storage):
  - Full DEFT Actions
  - Full NoName Actions (including Madera Ranch Groundwater Storage
- Conduct sensitivity analysis on current DEFT Studies

The new DSM run will model all the fishery structures except the Delta Habitat actions and the Test Diversion of 1,500 to 2,000 cfs at Hood. The other structures will be modeled,

including the Ag Barriers, to ensure the new run includes the same assumptions as the Alternative 1, 2, and 3 baselines to which it will be compared.

Direction
There is general concern that the set of proposed DEFT actions are not adequate to achieve full recovery. The recommendation of the DEFT Team to Policy Group will have to be characterized as positive measures that provide increased protections to work *towards* recovery. Adaptive management will have to play a large role as DEFT moves forward in this iterative process.

Process
- Gary Bardini will provide synoptic information on model runs to species teams ASAP, so the teams can started on their analysis.
- DSM model run will be made on current DEFT scenario, with a comparison to Alternatives 1,2, and 3 to assist the species team in evaluation of differences. (2 weeks)
- Species teams will evaluate the DEFT scenario ability to move towards recovery. Evaluation will include habitat actions recommended by DEFT. (Draft report by Oct 1 and presentation to policy September 14th-15th)
- Gary Bardini will provide a sensitivity analysis of effects individual protection parameters on water supply.(2 weeks)
- Deft will recommend benefits of DEFT measures and potential areas of flexibility, that could benefit from flexible rules and possibly an environmental water account.

Model Run
DEFT Alternative analysis assume the existing Delta geometry with the following changes:

1. Permanent flow control structures are installed in Old River, Middle River and Grant Line Canal.

2. Permanent fish control structure in installed at the head of Old River.

3. Tracy Pumping is ***NOT*** connected to Clifton Court Forebay through an intertie.

4. A new forebay intake structure with a 10,300 cfs capacity (full Banks capacity) installed in the Northeast section.

5. Delta-cross channel closed in November through June in all water year types.