Diversion Effects on Fisheries Technical Team
August 20, 1998, 1:00 p.m. to 5:00 p.m.

Meeting Minutes

Present:

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

Committee Reports

Salmon Team

Pete Chadwick provided an update on the activities of the Salmon Team. The majority of their efforts have been dedicated to determining the benefits of CALFED upstream actions on various salmon runs throughout Northern California. Individuals on the Salmon Team were assigned the task of determining a method to measure benefits in specific regions so a ranking system can be used for comparison.

Discussion:

The original DEFT analysis indicated that reduction of flow below Hood would be detrimental to salmon. There is technical debate over the validity of this hypothesis. Some studies show there is no conclusive evidence that relates flow below Hood to salmon survival in the Sacramento River. Several DEFT members advised that if there is not technical consensus on a particular issue, all alternative hypotheses or an approach to resolving the discrepancies should also be presented.

Future Action:

Individual reports on the analysis of net benefits due to CALFED upstream action are due on Monday, August 24, for peer review and discussion. The next Salmon Team meeting will be held on Tuesday, August 25.

Harvest Management Team

Joe Miyamoto updated DEFT on the activities of the Harvest Management Team. Several difficulties relating to harvest management have been identified including:

- Central Valley Index does not necessarily represent the True Harvest Rate
- Difficult to detect small changes in harvest
- Constraining factors
  - Klamath River Stocks
  - Winter Run Chinook Salmon
  - Coho Salmon
- Need for better Data Management
- Mills and Fisher Data
- Kohl Harvest Paper
- What are the impacts of harvest with data above ?
- Can we refer from harvest stock, data effects of natural stocks
- Actions: lip dating
- BDOC white paper (need to get members copy)
- Life cycle models

There is a need for additional data so the Harvest Management Team can begin quantitative analysis of harvest impacts. Insufficient data on hatchery practices, hatchery returns in the Central Valley, escapement rates and timing is delaying progress, so the following methods have been proposed as a means to gather additional data:

- Constant fractional marking
- Allowing hatchery returns into the hatchery
- Carcass surveys in spawning grounds

Additional actions that are being considered in the Harvest Management program include:

- Selective fisheries
- In-season adjustments
- Gear selection (barbless hooks, etc.)

Discussion:

A description of current fishing regulations should be provided to establish a baseline. There is also a need for a better description of the harvest index and how it differs from the harvest rate.

Habitat Committee

Pete Rhoades provided an update on the activities of the Habitat Committee. No additions or changes have been made to the current draft report, and final comments are due to Pete by Wednesday, August 26.

Dave Fullerton's Proposal

Dave Fullerton presented a new concept that would restructure the operational rules and institutions of the California water system based on the following fundamental goals:

- Intrinsically protective (seasonality)
- Reliable levels of exports (remove the biology out of reliability)
- Real-time operation
- A system that easily adjusts and incorporates new facilities
- Incorporate a set of export rules to promote transfers and market rules

A trade system would be developed between environmental water users and the water projects. The State Water Board would develop an agreement that would predefine trading rules and operational standards. Each group would then be responsible for negotiating mutually beneficial water trades throughout the year. A volume of water would be allocated to environmental use that could be released throughout the year at critical biological periods or could be traded to the projects for water credits to be used at a later time. This balance of power between the two groups would promote reliability for exporters by placing environmental risks on the real-time discretion of the environmental trustee.

The new framework differs from its predecessors on two critical points:

1. Rights of each group are predefined as a baseline for operations
2. There is an absolute commitment to payback of water credits

Discussion:

Restructuring the current system of operations has many uncertainties and serious discussion is needed to further develop the details of the new framework.

Future Action:

The following individuals were assigned to a subcommittee to explore this concept:

Dave Fullerton	Curtis Creel	Jim Buell
Mike Frisk	Jim Snow	Gary Bardini
BJ Miller	Jim White	Peter Lui
Elise Holland	Mike Thabault	Paul Fugitani

No Name Group

Dave Briggs updated DEFT on the No Name Group activities. The No Name Group released a report during last Friday's meeting that provided a summary of preliminary results from several new studies. The group has had difficulty reprogramming their operations model to include new groundwater storage at Madera Ranch; however efforts to

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incorporate this feature continue. The group is now waiting for further direction in their analysis.

Discussion:

Coordination between the DEFT and No Name Groups is a continued concern. The conclusions of each group will have no intersecting solution unless original and creative thought is introduced to the process.

Impact analysis should be completed before recommendations can be made to Policy Group in September.

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 Studies with corrections made to the August and September relaxation, which was not reflected in last week's analysis. The suggested DEFT actions were also evaluated with full CALFED storage and at a higher level of demand.

Comparisons between existing conditions and various DEFT studies 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 preliminary analysis of DEFT suggested actions with full CALFED storage and 2020 level of demand was also provided, including the following graphical comparisons:

- Net Annual Water Supply (Long Term and Critical Period)
- South of Delta SWP and CVP Water Supply Average Annual Deliveries (Long Term and Critical Period)

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

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Discussion:

It is not clear why the graph for CVP Deliveries and Unmet Demand suggests variability in CVP demand. This point should be clarified.

Study DEFT9 (full DEFT actions plus full CALFED storage) indicated a small net benefit in long term and critical period supply benefits. Construction of 4.75 MAF of storage is an expensive action and the associated biological benefit must be evaluated.

Future Action:

Elise Holland requested new studies be conducted under the following criteria:
- Full DEFT actions + Full No Name Tools + Full CALFED Storage
- Full DEFT actions + CALFED Groundwater Storage only

BJ Miller requested that an analysis be provided to show the difference between target deliveries and the quantity of water that is actually delivered under the various DEFT operational criteria for the long term and during critical period.

Species Team Evaluations

The Species Teams must begin an impact analysis on some of the proposed actions and tools that have been developed by DEFT and No Name Group. Furthermore, any reoperation actions recommended by the Species Teams must come forth immediately if they are to be included in the modeling analysis.

Final Report

The Policy Group is expecting a single comprehensive report that provides the conclusions of both the No Name and DEFT groups.

Discussion:

The operational modifications that will ensure recovery must be determined to provide a "bookend" for DEFT recommendations. The No Name Group will provide the other "bookend". A full range of alternatives will also be included in the comprehensive report to Policy Group. A suggestion for the DEFT bookend would include the following criteria:
- Structures Actions for Fisheries
    - Demo Screen at Tracy (2,500 cfs)
    - 5,000 – 7,000 cfs screen at Head of CCF
    - Old River Barrier
    - Ag Barriers (not for fish)
    - Habitat (Delta)
    - Demo (1,500 – 2,000 cfs at Hood)
    - Model Assumptions (ex: DCC operations)

- Species Teams Recommendations
- DEFT6 (Full DEFT actions, 1195 level of development, WQCP and upstream AFRP, and Delta (b)(2) actions)

An impact analysis must be included in the final report to Policy Group. The Species Teams must determine biological benefit of each of the recommendations and actions brought forth by DEFT.

Future Action:

Mike, Pete, Gary, and Terry were assigned the task of writing a 2-page description of the DEFT recovery goal and a definition of "recovery". The description will be emailed to all DEFT members by Monday, August 24 for review.

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