MEETING HIGHLIGHTS
CALFED DRINKING WATER QUALITY OPERATIONS WORKGROUP

September 1, 1999
3:00 p.m. to 5:00 p.m.
Resources Building, Room 1147-C1

Attendance

Paul Sandhu, DWR
Sanjaya Seneviratne, DWR
Jay Lund, UCD
Dave Briggs, CCWD (via conference call)
Chuching Wang, MWDSC (via conference call)
Grace Chan, MWDSC (via conference call)
Brian Campbel, EBMUD (via conference call)
Terry Erlewine, SWC
Bill Smith, SWRI (via conference call)
Susan Paulson, Flow Science (via conference call)
Paul Hutton, CALFED
Judy Heath, CALFED

Delta Modeling Status

Susan Paulson reported that FDM simulations are complete for the base studies (DWRSIM Studies 809 and 822). FDM study results will be posted on Chuching's FTP site. These studies track total dissolved solids. Susan agreed to conduct fingerprinting runs also, thereby allowing for evaluation of any conservative constituent. Susan agreed to consult with Sanjaya Seneviratne to verify that the San Joaquin River boundary is being treated consistent with other CALFED studies.

North of Delta Storage (2 MAF) Operating Rules

Bill Smith reported that he has developed a spreadsheet analysis tool to evaluate North of Delta storage operating rules. The spreadsheet computes salinity at six Delta locations using a forward G-model; the spreadsheet also calculates X2. The spreadsheet generates "before" and "after" graphs. Bill tested the spreadsheet with a dummy release pattern and will post it on Chuching's FTP site. Chuching, Dave Briggs, and Paul Hutton will meet tomorrow to discuss formulation of a North of Delta reservoir release trigger.

South of Delta Storage (1 MAF) Operating Rules

Bill Smith, Chuching, Dave Briggs, and Paul Hutton will meet on September 7 to discuss formulation of a South of Delta reservoir fill trigger.

Worgroup Studies

The workgroup agreed to maintain the same list of studies identified in our August 17 meeting:

1. Preferred Alternative without Hood Diversion, Criterion B (Study 809)
2. Preferred Alternative with 4,000 cfs Hood Diversion, Criterion B (Study 822)
3. Study 809 + 2 MAF Sacramento Valley surface storage
4. Study 822 + 2 MAF Sacramento Valley surface storage
5. Study 809 + 1 MAF Off-aqueduct surface storage
6. Study 822 + 1 MAF Off-aqueduct surface storage

Possible side studies identified by the workgroup could involve organic carbon triggers, flexing the E/I ratio constraint, and changing the baseline assumptions.

Related Studies

Jay Lund developed the following list of operational (non-structural) options that may be available to improve drinking water quality:

Re-operation of existing upstream storage
Re-operation of existing storage & pumping south of the Delta
Within-Delta facility operations
    cross-Delta canal
    barriers & gates
    within-Delta island pumping
Modifications in Delta environmental requirements (e.g., varying E/I ratios as a function of water quality or fish populations)
Land use management within the Delta (to reduce or dynamically vary organic loads)
Reductions in delivery yields to improve water quality
Water transfers or exchanges from higher-quality agricultural supplies
    NBA-Lake Berryessa exchanges
    Friant-Tulare-MWD exchanges
    New Don Pedro-San Joaquin River exchanges
    other transfers or exchanges
"Product pipeline" operation of the California Aqueduct and other south of Delta storage & conveyance (e.g., run the California Aqueduct in plug flow pulses of different water qualities for different purposes; this would probably also entail segregating reservoirs by water quality). I understand the petroleum industry uses this type of operations to transport different types of petroleum products using a single pipeline.
Combinations of these options.

Combinations of these options with new facilities
New Facilities
Uptream storage
In-Delta and/or South of Delta storage
Conveyance facilities
Within Delta flow barriers and gates (e.g., isolating SJ flows, tidal barriers, etc.)
Drinking water treatment

The workgroup agreed that, although we will be unable to quantitatively address all of these options in the Integrated Storage Investigation, we should research what efforts (if any) have addressed these options. Paul Hutton agreed to investigate and document as part of the ISI comprehensive analysis.

Next Meeting

As discussed above, small group meetings were scheduled for September 2 to discuss North of Delta storage and for September 7 to discuss South of Delta storage. A full workgroup meeting will be scheduled for the week of September 13. Judy Heath agreed to schedule Steve Ritchie to give a presentation on the CALFED Drinking Water Council. Mark Cowin has tentatively agreed to give a presentation on the ISI at this meeting.