



Aquatic, Water Quality, Geomorphology, & Hydrology Resources Water Balance Model Subcommittee

Technical Working Group Meeting

Date:

Time:

Location:

Directions

Parking:

Discussion Topic:

Agenda

Attendees

Summary

Handouts, Attachments & Presentations

Directions to SMUD's Customer Service Center

SMUD has two four-story buildings located adjacent to Highway 50 on the north side, between 59th Street exit and 65th Street exit. The Customer Service Center (CSC) is the newer building of the two located at 6301 S Street, and houses the Rubicon Room, Forestview 1,2, & 3, Sequoia 1,2,& 3, Timberline 1,2, & 3, and the HRL Conference Room located on the third floor (Northwest wing). The Headquarters building is located at 6201 S Street, directly west of the CSC. It houses the Headquarters' Customer Center (HCC), the Auditorium and several other conference rooms.

The Field Reporting Facility (aka FRF) is located behind the SMUD Headquarters building: go under the Light Rail overpass, then to the left about 150 yards.

Directions:

Heading East: From downtown Sacramento, head east on Highway 50, exit at **59th Street**. This exit will take you up-and-over Highway 50. Go straight at the first intersection, travel about a half mile. On your left (north) is the SMUD Headquarters building, the next building is the Customer Service Center.

Heading West: From Placerville, take Highway 50 to Sacramento and exit at **65th Street**. Go straight about one block after the first intersection. The Customer Service Center is the four-story building on your right (north).

You should be able to find parking spaces for visitors located in the area between the two buildings. There is also parking available in a parking lot on Folsom Blvd. behind the SMUD complex.

If you need assistance to find the Rubicon Room, Timberline 1,2,& 3, Sequoia 1,2,& 3, Forestview 1,2, & 3, and the Hydro Relicensing's Conference Room located on the third floor of the Northwest wing, see the guard at the lobby desk. The Headquarters Customer Center (HCC) room is located in the Headquarters building opposite the board of directors Auditorium in the first floor. Drive Safely.

Note: *Downloadable maps can be found at hydrorelicensing.smud.org/meetings/meet_loc.htm*

SMUD HEADQUARTERS AND CUSTOMER SERVICE CENTER

Relicensing Parking Lot Locations



**Sacramento Municipal Utility District
White Rock Room
6301 S Street
Sacramento, CA 95817**

Water Balance Model Subcommittee
Upper American River Project Relicensing
Monday, December 08, 2003
9:00 pm to 4:00 pm

Agenda

Administration

- Introductions
- Approve/Modify Agenda
- Approve November 10, 2003 Water Balance Model Subcommittee Meeting Summary
- Identify Time Sensitive Items Not on the Agenda

Status Reports

- **Review Action Items from November 10, 2003 Subcommittee Meeting**

Review Additional Information on Model Validation (“Can you live with it” decision)

Review Additional Information on Base Case (“Can you live with it” decision)

Identify Meeting Action Items

Set Meeting Agenda For Next Subcommittee Meeting

UARP Hydro Relicensing**Water Balance Model Subcommittee**

Initials	Name	AffiliationName	Email
<u>BL</u>	Beth Paulson	U.S. Forest Service	bapaulson@fs.fed.us
	Bill Hetland	El Dorado County Water Agency	bhetland@co.el-dorado.ca.us
<u>BM</u>	Bruce McGurk	Pacific Gas & Electric Company	bjmo@pge.com
<u>CM</u>	Cheryl Mulder	U.S. Forest Service	cmulder@fs.fed.us
	Chris Shutes	Citizen	blancapaloma@msn.com
<u>D.S.</u>	Daniel B Steiner		steinerd@ix.netcom.com
	David Hanson	Sacramento Municipal Utility District	dhanson@smud.org
	Jim Eicher	U.S. Bureau of Land Management	jeicher@ca.blm.gov
	Jim Lynch	Devine Tarbell & Associates Incorporated	james.lynch@devinetarbell.com
	Katherine Hill	California Department of Fish & Game	khill@dfg.ca.gov
<u>Mah</u>	Margaret Hannaford	Hydroconsult Engineers, Inc. (SMUD Consultant)	maggyhanna1@aol.com
	Marie Davis	Placer County Water Agency	mledavis@hotmail.com
<u>MJP</u>	Mike Preszler	Mead & Hunt, Incorporated	mike.preszler@meadhunt.com
<u>PTH</u>	Pamela Taheri	SMUD	ptaheri@smud.org
<u>PM</u>	Parvez Mody	Sacramento Municipal Utility District	pmody@smud.org
<u>RD</u>	Robert W. Hughes	California Department of Fish & Game	rwhughes@dfg.ca.gov
	Sharon Stohrer	State Water Resources Control Board	sstohrer@waterrights.swrcb.ca.gov
<u>SL</u>	Stafford Lehr	California Department of Fish and Game	slehr@dfg.ca.gov

BC Bill Center

**Sacramento Municipal Utility District (SMUD)
Upper American River Project (UARP) Hydro Relicensing Project**

**Water Balance Model Subcommittee Meeting Summary
December 08, 2003
9:00AM – 1:00PM**

The Water Balance Model Subcommittee (WBMS) met on December 08, 2003, at SMUD's Customer Service Center, White Rock Room. A notice of and agenda for the meeting was distributed to all interested parties on November 12, 2003. Meeting participants included:

- Bill Center – *Camp Lotus*
- Scott Flake – *SMUD (Introduction only)*
- Margaret Hannaford – *Hydro Consultants*
- Bob Hughes – *CDFG*
- Stafford Lehr - *CDFG*
- Bruce McGurk – *PG&E*
- Parvez Mody – *SMUD*
- Cheryl Mulder – *USFS*
- Beth Paulson - *USFS*
- Mike Preszler – *Mead & Hunt*
- Dan Steiner - *Consultant*
- Pam Taheri – *SMUD*

SUMMARY

- The subcommittee reviewed the outstanding action items
- The subcommittee reviewed comments on the UARP Water Balance Model validation and Base Case outputs (without Chili Bar or Iowa Hill in the model)
- The next subcommittee meeting is scheduled for January 5 from 9 a.m. to 4 p.m.

ADMINISTRATION

November 10, 2003 Meeting Summary – The Subcommittee reviewed the November 10, 2003, meeting summary but no action was taken. Robert Hughes requested some time to review the meeting notes. The subcommittee will approve the summary at the next meeting.

Action Item 1: The subcommittee to approve November meeting summary.

STATUS OF ACTION ITEMS

The Subcommittee Reviewed The Status Of Outstanding Action Items – Based on the November 10 subcommittee meeting summary, the subcommittee had identified twelve outstanding action items. The subcommittee reviewed the status of each and concluded that the following outstanding items had been completed:

- Parvez Mody to reissue the October 8 meeting summary with the revisions Robert Hughes requested. Completed and sent out the WBMS November 12, 2003.
- Dave Hanson to call John Gangemi. Jim Lynch left a voicemail with John on November 11. Jim and Parvez emailed John on how to download and submit Water Balance Model Run Request Form

- Bill Hetland to report on JBIT's discussions regarding whether consumptive withdrawals should be included in the model used in the UARP Relicensing. Mike Prezler on behalf of Bill Hetland reported that no agreement had had been reached.
- Licensee to provide the validation information for Calendar Years 1994 through 2000 to the subcommittee members. A document with a CD containing requested data was sent out to the committee members on November 26, 2003
- SMUD offered to repeat presentation of "*Project Overview and Base Case Description*" to interested parties. No one from the subcommittee requested a presentation.
- Licensee to provide an expanded written description of the Base Case assumptions to the subcommittee members. A description of the Base Case and a CD containing output was sent out to the committee members on November 26, 2003

The following action items remain outstanding:

2. SMUD to add Chili Bar and Iowa Hill to the CHEOPS model. No date assigned, but Pam Taheri said that SMUD was working diligently on incorporating these facilities/features into the model.
3. Margaret Hannaford to calculate total unimpaired flows at all nodes in the List of Nodes. The subcommittee agreed that the information would be incorporated into the Hydrology Report, which includes the Hydrology CD, and provided to the subcommittee by mid-December.

AGENCIES' MODEL

Agencies Reported Status Of Agencies' Water Balance Model – Bob Hughes reported that the agencies were working on the model. The agencies will present an overview of HEC-ResSim model at the January 5 subcommittee meeting. A letter on behalf of agencies, requesting data for the model will be sent to SMUD.

Action Item 4: Agencies to present an overview of HEC-ResSim model at January 5, subcommittee meeting

BASE CASE ASSUMPTIONS AND MODEL VALIDATION RESULTS

At the November subcommittee meeting, Pam Taheri, Margaret Hannaford, and Dan Steiner made a presentation to the subcommittee on the CHEOPS model and its validation, and a limited version of the "Base Case", existing facilities without Chili Bar. After viewing the presentation, the subcommittee requested some additional information. The requested information regarding base case and model validation runs was forwarded to the subcommittee members for their review.

Review of Base Case and Validation Runs – Dan Steiner pointed out that the purpose of the validation runs is to check that the water mass balance is correct and the relationships used to represent the Licensee's generation facilities in the model provide representative system results.

Robert Hughes and Cheryl passed out their comments regarding the Base Case and Validation Runs sent out to the subcommittee on CDs. Mike Prezler pointed out some inconsistency in the Base Case output. During review of validation runs, the agencies requested SMUD to provide new Bathymetry data, which is being used in the CHEOPS model.

Action Item 5: Licensee to review the comments provided by CDF&G and USFS. Licensee to develop additional validation analysis for a single year using historical daily data.

Action Item 6: Licensee to provide the new Bathymetry data to the subcommittee by end of December 2003

Bill Center Requested White Rock Powerhouse Generation - Bill Center said that he would find it useful to review the hourly White Rock powerhouse generation from 1995 through 2000. Bill further suggested that it would be in SMUD's interest to provide information regarding the how SMUD coordinates daily release schedules from White Rock powerhouse, with PG&E. Pam and Bill agreed to discuss the request outside the meeting.

Action Item 7: Pam Taheri to arrange a meeting with Bill Center and SMUD's operation staff.

EID's Atkins Powerhouse Daily Flows - Margaret Hannaford pointed out the conceptual Base Case approved by the Plenary Group had the South Fork American River and EID's Atkins Powerhouse daily flows assuming operation under the new EID license, but information was not available for calendar years 1996 through 2000. Mike Prezler on behalf of Bill Hetland said that the EID does not have that data. Dan Steiner suggested three alternatives to the subcommittee: a) To extend the EID's hydrology data and run it through the OASIS model, b) Run CHEOPS from 1975 through 1995 instead of the approved study period ending in 2000; or c) Massage the available historic data to extrapolate it to 2000. The subcommittee suggested that Mike develop a cost estimate of extending the EID powerhouse flows by running the OASIS model.

Action Item 8: Mike Prezler to develop rough estimate of cost of developing daily flow data through EID's Atkins powerhouse assuming operation under new EID license, for calendar years 1996 through 2000 and forward it to the subcommittee by end of December 2003.

Mike Prezler Requested A Reply Whether The Licensee Would Make EDCWA's Requested Model Runs Using The Current Base Case – Mike Prezler noted that EDCWA had submitted two additional model run requests to SMUD but did not receive any reply whether the runs would be made. Pam Taheri pointed out that reply would depend upon meeting between Jim Shetler and Bill Hetland.

Action Item 9: SMUD to provide reply to EDCWA.

NEXT MEETING

Next Water Balance Model Subcommittee Meeting Is Scheduled For January 5 – The next Water Balance Subcommittee meeting is scheduled for Monday, January 5, at SMUD from 9:00 a.m. to 4:00 p.m. As agreed to by the Subcommittee, agenda items will include:

- Review/Approve Agenda
- Identify "Hot" Items
- Approve November 10, 2003 and December 8, 2003 Subcommittee Meeting Summaries

- Review Status of Outstanding Action Items
- Review Agencies' HEC ResSim Model
- Identify Meeting Action Items
- Set Agenda for Next Subcommittee Meeting