

NOTES | April 6-7, 2011

Mono Basin Core Working Group Meeting

Prepared by Center for Collaborative Policy

Key Outcomes

The purpose of this meeting was to organize a series of facilitated discussions to achieve the goal of developing mutually agreed-upon strategies for operations, maintenance and monitoring of the Los Angeles Department of Water & Power Mono Basin facilities associated with implementing the Mono Basin Synthesis Report and State Water Resources Control Board Decision 1631 and Order 98-05.

The Core Work Group refined a proposed charter for its consensus-seeking activities. The group also organized a modeling work group to focus on tools to address several high priority questions related to Grant Lake storage and lake levels, Mono Lake levels, and Mono Basin exports.

Action Items

Action Items		
4/18/2011	Bartlett	Revise charter and circulate with changes
4/18/2011	Martin and Cutting	Finalize dates for modeling work group and next core work group
4/18/2011	Bartlett	Create scheduling poll to identify future meeting dates
5/1/2011	Vorster	Generate initial task list for Modeling Work Group
5/1/2011	Adams & Coufal	Resolve contract issues so Stream Scientists can participate in meetings related to Synthesis Report
5/1/2011	Vorster & Reis	Send daily data to Mike Deas for modeling
5/4/2011	All	Develop goals & interest statements for early May Core Work Group meeting
Previous Meeting		
Done	Geoff	Brief Mono County Counsel Marshall Rudolph; propose briefing for Supervisors Hansen and Bauer
	Lisa & Dave	Conduct Briefing with Supervisors Hansen and Bauer if recommended by County Counsel
Done	Lisa	Brief Doug Smith, Grant Lake Marina about efforts underway. Invite him to attend and inform him that we will provide periodic updates

Meeting Welcome & Overview

Kathy Mrowka, State Water Resource Control Board (SWRCB), welcomed the group on behalf of the Water Boards. Board Vice-Chair Frances Spivey-Weber hoped to attend the meeting in person to express her support for this process. Ms. Mrowka mentioned that the Water Board has high hopes for this effort, as staff hope the process will provide clarity and closure on issues. She encouraged creative thinking, noting that the way problems have been solved in the past does not have to be the way they are solved in the future.

Ms. Mrowka explained the Board's goal for this process is to have the operating terms and conditions in the final document. She asked that the group work distinguish near-term and long-term actions, as the people at the table today will not likely be the people administering these actions in the future.

Barbara Evoy, Deputy Director of Division of Water Rights, SWRCB, welcomed participants. She mentioned she has recently moved to the Water Rights Division and is pleased to begin tracking the progress of this group. She hopes the process and outcomes of this work group can be used as a model for other areas.

Members of the Mono Basin Group introduced themselves.

Gina Bartlett, Facilitator with the Center for Collaborative Policy, reviewed the agenda and objectives for the day and a half meeting of the full group including:

- Clarifying charter, including scope, decision making process and group rules
- Identifying key issues for future discussions and organize meeting framework
- High level understanding of e-Stream model
- Develop modeling work group charge

Group Charter

Ms. Bartlett explained the purpose of the Charter is to document the operating principles and guidelines for the group. She mentioned most of the content came from the group's charge and from work she has done with other groups. She explained the importance of everyone being comfortable with the Charter, which is why she has dedicated ample time for discussion on the agenda. She reviewed the draft Charter, taking comments section by section, beginning with the "Goal" statement.

Goal

Gene Coufal, LA Department of Water and Power (LADWP), expressed concern that the goal statement, as written, implied that this group is to implement the Synthesis Report as written without making modifications which he and his team feel might be necessary. He expressed concern specifically around stream flows which would change the lake level and export to L.A. Geoff McQuilkin, Mono Lake Committee, commented that the goal would be to implement the Synthesis Report recognizing that it may not all be feasible.

Ms. Mrowka raised the concern of altering the content and intent of the Synthesis Report and suggested that if changes are made they are produced in an amendment report. Marty Adams, LADWP, stated that his goal is to identify the most feasible strategy that can be implemented and memorialize that. Group members pointed out that these more technical debates will be part of the process. The analysis done so far may raise some concern for people, and it is part of the group's task to go back and question assumptions and decide on what is feasible. Ms. Mrowka mentioned that in her opinion the group's task is to determine the feasibility of the measures identified in the Synthesis Report. Mr. Coufal explained his understanding to be that the group needs to go back and look at the recommendations in the Synthesis Report and conduct an analysis based on the group's knowledge of the area and the dependencies.

After some discussion on how to craft language for the Charter the group decided on the following:

“THE GOAL OF THE EFFORT IS TO DEVELOP MUTUALLY AGREED UPON STRATEGIES ...TO IMPLEMENT FEASIBLE MEASURES OF THE SYNTHESIS REPORT AND THE SWRCB DECISION (DI631) AND ORDERS (9805)”

The second paragraph described the desired outcome, including a document outlining the agreements reached.

The group asked how much detail the order can contain. If the group decides that a great amount of detail is necessary, how will that be documented? The group wondered if a separate document would be necessary. Ms. Mrowka pointed out that the licenses are out of date and need to be updated regardless. She explained the outcome will be an Amended License, which will contain the ongoing conditions from the Orders and the Decision. Rather than worrying about the level of detail allowed in the document now, she proposed consulting with SWRCB staff on the desired content. Staff will then help the group decide on the appropriate documentation. She gave an example that the SWRCB has issued amended permits for the Department of Water Resources that include prior Board orders.

The group discussed the idea of a “kitchen sink” including agreements and outcomes of the group’s work that may or may not be part of the Order. This would be a singular document that outlines the operations, maintenance, and monitoring of LADWP facilities in the Mono Basin.

Roles & Responsibilities

Core Group

While meetings will not be advertised, meetings will be open to the public if someone is really interested in hearing the discussion. Excluding people from attending could make the process controversial. The group decided to change the name of the “Core Group” to the “Core Working Group.”

- Add Stream Scientists to the list of parties to consult with.
- Add that there was a legal decision identifying these Core Working Group members.
- The group discussed the role of Southern California Edison in the Core Working Group. Dan Golden, Southern California Edison, has been notified of the Core Working Group dates. Mr. Golden was comfortable with the group moving forward without his input, but expressed a willingness to become involved and to attend meetings when topics are related to SCE.

Relevant Parties

California State Parks and the State Lands Commission were relevant parties to Orders 9805 and 9807. While the group did not feel it was necessary to have them attend each meeting, they did feel they should be notified and involved with the progress reports. Modifications:

- Change the title to “Other Relevant Parties.”

SWRCB

- Add that that SWRCB will provide feedback in a timely manner as to not hold up the process.

Science Advisors

- The group questioned whether or not disagreements should be sent to the SWRCB. Members expressed concern that the group would be looking to the Board as a referee.
 - Ms. Bartlett explained the example provided would not be an ideal situation; it would be one in which the group has worked very hard for agreement with the scientist advisors. She explained that most likely this documentation will be part of the end product provided to the SWRCB; however, there may be a circumstance where the group will need a decision to be made on a disagreement in order to move forward.
- Ms. Mrowka mentioned that the group should not assume this consultation has to occur in a formal Board hearing. She encouraged the group to think “outside of the box” to reach agreements.
- Bill Trush, Water Board Stream Scientist, expressed concern about the role of the Stream Scientists outlined in the Charter. He explained his concern is he anticipates the SWRCB will side with the Core Work Group in the case of disagreements with the Stream Scientists.
 - Ross Taylor, Water Boards Stream Scientist, suggested that the Core Work Group add Stream Scientists to the list of parties they will consult with.
 - Ms. Mrowka added that this was why she would prefer the group to create amendments or documented alternatives to the Synthesis Report rather than directly editing it, this will clarify differences for the Board.
 - Mr. Trush added that the Stream Scientists can explain the implications of changes the group may make to the Synthesis Report recommendations. He expressed the need to involve the Stream Scientists early when a work group is formed.
 - Jim Canaday, State Board retiree, reminded everyone that the State appointed the Stream Scientists, and they carry weight due to this appointment.
- After discussion on the role of the Stream Scientists, the group decided that language in the Charter be added to distinguish the roles between science advisors and the “State Appointed Stream Scientists.” Ms. Mrowka suggested rather than offering one document and noting where there are disagreements that the group provide two options for the SWRCB to consider.
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Work Groups

- The Core Work Group can establish working groups as needed.
- Group members asked if the Charter is a public document. The group agreed that yes everything will be publicly available once finalized.

Process Agreements

- Mr. McQuilkin suggested and everyone agreed to an additional process agreement. Add that statements and comments made and recorded during brainstorming or exploratory discussion should not be used as evidence later in the process.
 - Ms. Bartlett restated the proposed process agreement that tentative information should be treated as such and not used as evidence in legal proceedings.
 - Mark Drew, California Trout, asked how the group would hold members to this agreement.
 - Lisa Cutting, Mono Lake Committee, agreed that it will be hard to enforce this but it should be in the Charter and documented.

- Ms. Bartlett mentioned that she will provide the Charter to any new members or observer for reference.
- Additionally, the group discussed issuing a joint press release if someone does misconstrue something said during the process, especially to the media.
- The meeting notes, which will be approved by the group before being posted, are a tool to provide context and clarify comments made.

Participation Agreements

- Mr. Drew asked if members of the Core Work Group can send alternates if they cannot attend meetings.
 - Ms. Bartlett responded that it should be fine as long as alternates are brought up to speed beforehand.

Decision Making

Ms. Bartlett reviewed the proposed process for when the group cannot come to an agreement. She explained this is a process she has outlined for other groups; however, this group is welcome to modify. She explained that when the group cannot come to agreement they can form a Resolution Committee to work through the details and come back to the Core Work Group with a resolution. If the committee cannot come to a resolution the disagreement will be documented. Mr. Drew suggested and others agreed that the facilitator be part of the Resolution Committee. Mr. Coufal expressed concern with taking disagreements directly to the SWRCB in the middle of the process. He recommended, and others agreed, that disagreements and the proposed options would be documented as part of the final product.

Documentation

Ms. Bartlett explained that CCP will capture notes and action items. She will use the meeting notes to summarize agreements of the group in a singular agreements document that she will update throughout the process.

Communication

LADWP discussed the desire for the group to assist them in creating the six-month progress reports to the SWRCB.

Charter Next Steps

Ms. Bartlett explained that she will update the Charter based on the group's discussion and will redistribute before the next meeting.

Scope of Effort: Identify Issues for Future Discussion

Ms. Bartlett explained that next the group will work to identify issues for future discussion. Each member listed priority issues and concerns for discussion. Ms. Bartlett grouped and charted comments on a large wall poster.

Mono Basin Issues & Concerns

Mono Lake

- 2014 SWRCB decision on how to achieve lake level. The group may want to revisit this timeframe.

Monitoring

- Establish long term monitoring plan
- How will long term monitoring results be used?
- How does it affect stream flows?
- Long term lake and stream support flows

Definitions

- Baseline
- Feasibility
- Adaptive management

Tools and Science

- Understanding scientific drivers
- Lake level tool for 2014
- Consensus tools
- Modeling

Operations and Infrastructure Updates

Rush Creek

- Geomorphic and riparian implications
- Flows
- Fisheries
- Infrastructure changes
- Temperature
- Floodplain “sponge bob”
- Downcuts in bottom land
- Side channel openings

Grant Lake

- Assumptions around the temperature and new information to use
- Grant Lake health
- Infrastructure changes
- Capacity
- Dam

Lee Vining Creek

- Downcutting
- Infrastructure upgrades to meet flows
- Keep A4 entrance open
- Minimize Southern California Edison flows

Parker and Walker Diversions

- Temperature – provide cold water
- Need to be used for Rush Creek flows

Peak Flows

- Identify options to hit flows
- Infrastructure changes
- Timing and the magnitude
- How to deliver flows (now, in 2 years, in 5 years), possibly a need for an interim plan
- FERC relicensing

Global Warming /Climate Change

- Existing recommendations based on snow pack and conditions

Grazing

Termination Criteria and Guidelines

Operational Flexibility and Responsiveness

- Not adaptive management
- Year type and natural fluctuations

Clarify Long Term Stakeholder Roles

- Stream Scientist
- California Department of Fish & Game
- Cal Trout
- LADWP
- Mono Lake Committee
- SWRCB

Post Transition Issues

- Mono Lake Levels
- LADWP operations

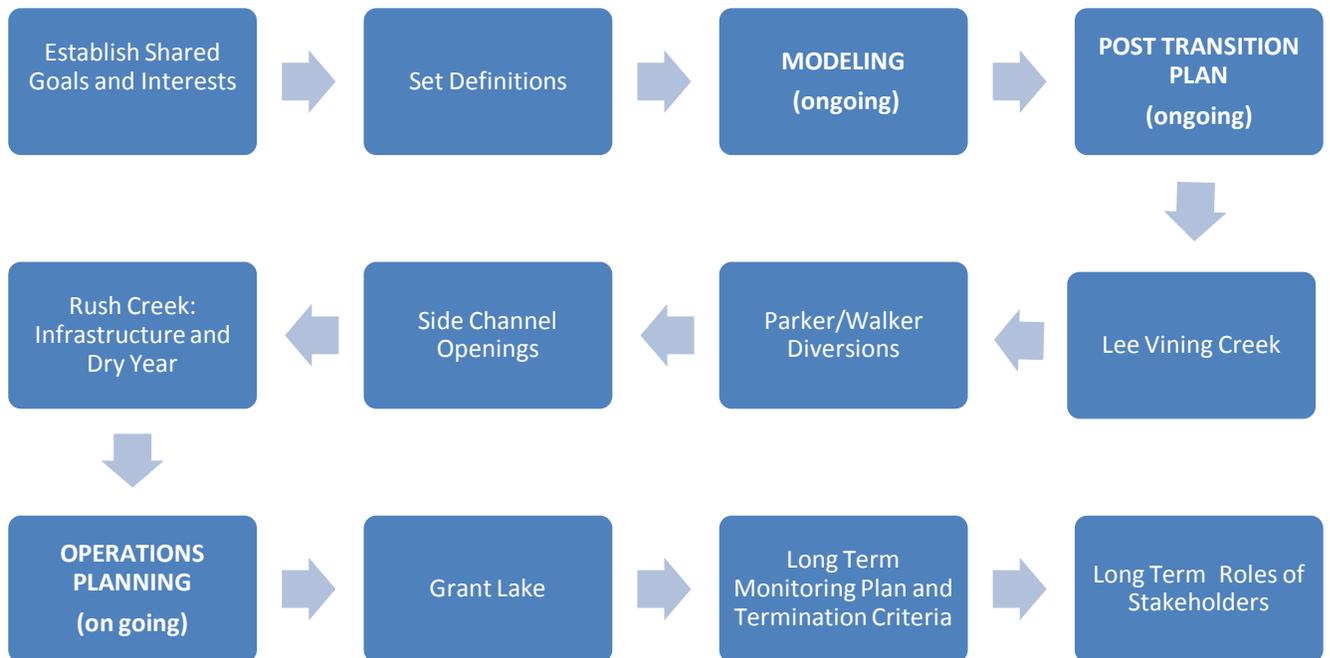
Fundamental Issues

- Need to honor group's various constituents
- Goals to have water supply reliable for LA and for stream flows

- Measurable delivery
- Restore conditions that supported the fisheries (prior to '41)
- Ecosystem and riparian restoration

Sequencing Issues: Develop Work Plan and Meeting Framework

Once the group identified the spectrum of issues they would like to discuss during the process, Ms. Bartlett helped the group organize the issues into a timeline for discussion. She encouraged the group to tackle easier or less controversial issues first. The following were the topical areas in their proposed order for discussion.



Outcomes will include:

- Agreement Document (CCP will prepare)
- Terms for the Amended License (measurable and enforceable)
- “Kitchen Sink” Document (if necessary)

Day 2: Modeling Work Group

Group members introduced themselves. Two new participants joined the group for Day 2: Modeling Work Group meeting including Rich Satkowski, SWRCB and Mike Deas, Modeling Consultant to LADWP.

Modeling Work Group Concept

The group reviewed the draft Modeling Work Group Concept (Date April 5th, 2011).

- Mr. McQuilkin pointed out that the timeframe should be defined. The priority questions outlined relate to post transition, where the timeframe is not defined. It could be 7 or 70 years.
- Mr. Taylor mentioned the importance of understanding how different modelers have come to their conclusions since there are discrepancies. If the same inputs were not used, it is logical that the outcomes would be different as well.
- Rectifying differences should be a desired outcome of the Modeling Work Group.
- Another member mentioned the need to have an agreed upon modeling tool.

Modeling – eStream Overview

Mr. Deas presented the eStream Model. Mr. Deas reviewed the LADWP modeling history including over 25 years of modeling work conducted. He explained that at first modeling was done on an annual regression equation with regards to flows and releases, these models evolved as time went on.

The evolution included:

- LAASM - monthly planning model which allows for specifying the ramifications for different operations.
- GRANT LAKE OPERATIONS MODEL - daily model for Lee Vining and Grant Lake based on single year data with no forecasting involved. This model was used well into the 2000's.
- STREAM – created in 2006, this model could incorporate stream release schedules and year types.
- eSTREAM – created in 2010 allows for more multiple year inputs based on runoff years.

Mr. Deas reviewed the eSTREAM daily model Features:

- Lee Vining intake diversions and creek flows
- Walker and Parker divisions and flows
- Lee Vining Conduit operations
- Grant Lake inflows, outflows, and storage
- Rush Creek flows
- Mono Basin tunnel exports
- Conveyance capacities
- Grant Lake capacity and operations restrictions (minimum pool)
- Pre and post transition export rules based on mono lake elevations

Mr. Deas explained he has run 1981-2009 hydrology of various year types and that is aligned with the Synthesis Report recommended flows.

Mr. Taylor asked how flow losses and evaporation are handled by the model. Mr. Deas responded there is a miscellaneous loss and gains bucket. The model also includes runoff, releases, and adjusted surface area of Mono Lake.

Mr. Deas went on to review the Input Data, followed by the modeling Process outlined below:

- Load upstream creek flows (hydrology)
- Specify downstream flow requirements
- Specify target diversions and exports
- Specify simulation parameters
- Start simulation
- Post process results

Next he reviewed the Outputs including:

- Daily flows
- Annual summaries

Capabilities:

- Year type dependent operations
- Multiyear simulations
- Stream Flows based on the Synthesis Report concepts
- Annual export targets as a function of Mono Lake elevations or a user specified volume/rate
- Grant Lake representations: operating rules, miscellaneous gains/losses, evaporation, capacity limits on facilities
- Export shortage banking

Limitations:

- No stream flow peak spill requirements from grant lake
- Downstream LA Aqueduct operations are considered/included
- 29 year data set (certain years are monthly averages)

Full Group Discussion

Mr. Vorster and Mr. Reis explained that the Mono Lake Committee has some daily data for the summer and possibly winter that they will provide with Mr. Deas (ACTION ITEM). Mr. Deas mentioned that he did not randomly select data years because it takes 7 – 50 years to fill Mono Lake. One strength of eSTREAM is that it does a better job than other models on the actual system constraints. Mr. Deas mentioned that the system was designed for a certain purpose, a purpose which is being modified which is now inconsistent with the design. Mr. Taylor pointed out that the model used for the Synthesis Report did account for evaporation estimates and other losses. Mr. Trush mentioned he looked forward to discussing the estimates used in the eSTREAM model which in his opinion is a better model than that used for the Synthesis Report. Mr. Taylor asked if Mr. Deas had run the eSTREAM model with any changes to the Synthesis Report such as Grant Lake level to ease the restrictions. Mr. Deas explained he had done only limited variations such as the diversion table for Lee Vining Creek.

In response to a question about correlation coefficients of the eStream model regression equations, Deas said that some equations were strong, and some were not (i.e. $R^2=4$). In the future, the Core Working Group would like to examine the equations more closely.

Next Steps for Modeling Work Group

- Go more in-depth on the eSTREAM model
- Explain differences between LADWP and Synthesis Report analyses
- Make recommendations on best tools and approaches to use them to answer high priority questions (and test ideas and assumptions)
- Review Mono Lake equations (as part of the analysis to get to the priority questions)
- Explore correlation coefficients for eStream regression equations.

Scheduling Upcoming Meeting Date

The group discussed upcoming meeting dates. Mr. Deas offered to host the next Modeling Work Group meeting at his office in Davis. The group discussed many options for Core Working Group meetings as well as Restoration Meetings. As many members of the group did not have access to their calendars, Ms. Bartlett offered to send out a scheduler to the group (ACTION ITEM).

Attendance

IN PERSON

Marty Adams, Los Angeles Department of Water and Power (LADWP)
Greg Brown, State Water Resource Control Board (SWRCB), (Day 1)
Gene Coufal, LADWP
Lisa Cutting, Mono Lake Committee (MLC)
Mike Deas, Modeling Consultant, (Day 2)
Mark Drew, California Trout
Barbara Evoy, SWRCB, (Day 1)
Morgan Lindsay, MLC
Dave Martin, LADWP
Geoff McQuilkin, MLC

Kathy Mrowka, SWRCB, (Day 1)
Rich Satkowski, SWRCB, (Day 2)
Greg Reis, MLC
Ross Taylor, SWRCB Stream Scientist
Bill Trush, SWRCB Stream Scientist
Peter Vorster, MLC
Jim Canaday, Retired, SWRCB, (Day 1)
Facilitator Gina Bartlett, Center for Collaborative Policy (CCP)
Note-taker Charlotte Chorneau, CCP

ON THE PHONE

Brad Henderson, Department of Fish and Game
Ali Karimi, LADWP
Bruc Moges, LADWP
Paul Pau, LADWP

