NOTES | May 17, 2011

Mono Basin Core Working Group Meeting

Prepared by Center for Collaborative Policy

Meeting in Brief

Department of Water & Power' representatives summarized issues and concerns with Synthesis Report recommendations both by facility and by categorizing each recommendation's feasibility. The Core Working Group will attempt to address "feasible" recommendations early on and then continue to work through other more complex issues. The Core Working Group discussed Lee Vining Creek operations and Synthesis Report recommendations. DWP is in the first year of implementing stream ecosystem flows. In June, the Core Working Group will review proposed language regarding Lee Vining operations under special circumstances, such as eliminating ramping requirements during extreme flow events and potential coordination with Southern California Edison and the Forest Service. In October, DWP will present an implementation plan and interim operations plan for a new gate on the Lee Vining conduit. The Core Working Group also established a Monitoring Work Group that will begin discussing the specifics of future monitoring and report back on July 21.

Next Meeting: June 28, 2011, 8:30-2:30, in Mammoth Lakes

Topics: Lee Vining Creek SCE Flows and Operations under Special Circumstances; SCE Rush Creek Operations; Parker & Walker Presentation & Discussion; Refine Charter

Action Items

2011		Action Items
done	Martin	Set modeling meeting date with Mike Deas in Davis, CA for May 24th or 25th
underway	Bartlett	Invite Dan (SCE) and Stream Scientists (by phone) to participate at 6/28 meeting
done, 10/3 at 1:30	Bartlett	Contact SWRCB to schedule possible Oct. 3 briefing
done	Bartlett	Incorporate edits from SWRCB to April 6-7 Meeting Summary and circulate to group
done	Bartlett	Revise May 4 Meeting Summary and circulate to group for final review
done	Drew Bartlett	Discuss with Richard the language regarding Legal Advisers in the Charter
underway	Coufal	Submit 6-month progress report to SWRCB, along with Meeting Summaries: April 6-7, May 4, and May 17 (draft)
done	Bartlett	Circulate revised Charter for attorney review
6/5	Moges	Invite Brian White to attend 6/28 Core Group meeting
6/5	Cutting	Invite Greg Reis to attend 6/28 Core Group meeting
6/15	All	Have legal counsel review Charter and send proposed revisions to Gina
6/20	Martin	Craft language for Special Circumstances for Lee Vining operations
6/21	Schlafmann Golden	Prepare for 6/28 meeting by discussing with SCE flexibility regarding flows in Synthesis Report (Table 4-2, p. 82)
6/28	Golden	SCE presentation: overview of Rush Creek operations, including maps and photos, information on facility's capacity, and potential for flexibility.
6/28	Martin	LADWP presentation: operations at Parker and Walker Creeks

7/13	Moges	LADWP presentation: overview of Rush Creek operations, including safety issues
7/21	Monitoring Work Group	Be prepared to make recommendations and bring discussion items to core group

DWP on Synthesis Report and Overall Operations

LADWP summarized the City of Los Angeles' perspective on Synthesis Report recommendations by facility and by categorizing each recommendation's feasibility. LADWP highlighted issues using Figure 2-1. *Diagram of LADWP's Mono Basin water export facilities and flow release, diversion, and export pathways* (Synthesis Report, p. 14). LADWP articulated the following issues:

- **Lee Vining Creek** – Recommendations are overly restrictive (resulting in less export and increased cost to Los Angeles residents)
- **Parker and Walker Creeks** – Recommendations allow no diversions (resulting in less export and increased cost to Los Angeles residents)
- **5-Siphons Bypass** – Recommendations require upgrades that would result in more dollars per acre-foot to Los Angeles residents. It would also introduce issues of dam safety to Grant Lake
- **Rush Creek release into Return Ditch (MGORD)** – Recommendations to operate at proposed levels would introduce safety concerns
- **Rush Creek below Return Ditch (RCBRD)** - Recommendations are overly restrictive (resulting in less export and increased cost to Los Angeles residents)
- **Grant Lake** – Recommendations are not feasible operationally, due to issues associated with dry years and low storage
- **Rush Creek at Dam site (SCE Regulated Flows)** – Application of non-anthropogenic conditions to represent pre-1941 conditions would result in more dollars per acre-foot cost to Los Angeles residents. Achieving recommendations with SCE's business and federal restrictions would result in additional costs to Los Angeles residents as well
- **DWP Export to Owens Basin (Mono Craters Tunnel)** – Recommendations would result in reduced exports (D-1631) and more dollars per acre-foot to Los Angeles residents
- **Mono Lake** – In terms of both monitoring and limnology, the recommendations would result in increased cost to Los Angeles ratepayers.

LADWP acknowledged that some of the proposed flows would be very difficult to achieve and reiterated that reduced export, increased costs to ratepayers, and safety will remain priority concerns. Solutions are complicated by the fact that the Synthesis Report is asking LADWP to change hydrographs affected by SCE operations in the watershed. LADWP does not want to risk noncompliance with the SWRCB, as occurred under the previous order due to operational difficulties at Lee Vining Creek. While the Synthesis Report corrected these challenges to minimize future noncompliance at Lee Vining Creek, its

recommendations transferred the same operational challenges to Rush Creek, increasing the likelihood for noncompliance there.

One significant issue that the Modeling Work Group will consider is modeling stream flows and the implications on lake levels and potential export. Different analyses have occurred. The Stream Scientists in the Synthesis Report projected that stream ecosystem flows (SEFs) would still allow export consistent with State Board orders. MLC's analysis also suggests that water export would occur. However, DWP's analysis using eStream projects lower exports than DWP has anticipated under State Board orders. One explanation could be differing models and assumptions (comparing "apples to oranges"). Agreeing to one common model and set of runs is the central task of the Modeling Work Group. In interpreting the Board Order, MLC links flows and the Mono Lake level. MLC is working to optimize stream flow for restoration. MLC agrees with the Synthesis Report prescriptions in regards to stream flow amounts but does not feel restricted to the Report's implementation recommendations.

LADWP has made a commitment to stream restoration in the Mono Basin and is interested in exploring alternative ways to achieve the proposed goals. To this end, LADWP staff (with modeling consultant Mike Deas) is conducting additional modeling scenarios. LADWP stated its interest in presenting the group with flexible alternatives (i.e. minor flow modifications) that consider the system as a whole and meet ecological restoration as well as water export goals. The group expressed openness to considering alternate ways to implement the flow recommendations. The input of the Stream Scientists (not in attendance) regarding Mike Deas' modeling will be critical to the group reaching consensus on modeling. The Calendar Update has details on upcoming modeling meetings.

Mono Basin Feasibility Report Summary

In acknowledgment of the limitations of addressing issues in isolation (i.e. operations in one particular creek rather than all related Mono Basin operations), LADWP presented a summary table of the City of Los Angeles' response to the Synthesis Report recommendations (See *Mono Basin Feasibility Report Summary)*. The table categorizes each recommendation by topic, lists the Feasibility Report section number for each, and summarizes LADWP's response. The table is color-coded as follows, with the number of recommendations in each category bracketed.

- Green – Feasible [6]
- Light Orange – Partially feasible [2]; Not presently feasible [4]; Not fully feasible presently [1]
- Yellow – Feasible with modification [13]
- Dark Orange – Not reasonable [3]
- Red – Needs further analysis [1]; Not feasible [5]; Disagree [1]; Needs to be addressed [1]

The group agreed that the chart was a useful way to help focus on the priority items. MLC had crafted a similar table, noting that there were very few (8) items coded in red. LADWP is working on the first of these, structural modification and associated cost for Grant. The alternate modeling scenarios conducted by Mike Deas for LADWP are expected to be ready soon; the group requested that LADWP keep the group informed of developments in Deas' analysis. Complications have arisen due to the interrelatedness of the system and to the fact that some of the Synthesis Report recommendations (in particular, those

related to Walker and Parker Creeks) require LADWP to cede some of its water rights, which would result in a violation of the City Charter. LADWP clarified that its water rights are specific to each creek. The group agreed to explore alternate scenarios for solutions that would achieve the desired outcome in a practical manner for all. The group also recognized that there may be differences in management options in the pre- and post-transition periods.

As many of the items in section Feasibility Report 4.10 relate to monitoring, the group agreed to form a Monitoring Work Group to review each item.

Monitoring Work Group Established

The Monitoring Work Group will include Dave (LADWP), Lisa (MLC), Mark (Cal Trout) and Steve (DFG). The group will conduct preparatory work to highlight areas of needed discussion by the group. As appropriate, the Work Group will present proposals for the group's consideration. The group will present first outcomes at the July 13-14th meeting.

Lee Vining Creek

Facility Overview

LADWP Engineer Charlotte Rodrigues presented LADWP's Lee Vining Creek facility. She showed the group how to access Los Angeles Aqueduct real-time data and current flows (updated every 3 hours) on the LADWP website (www.ladwp.com ›Supply & Reliability ›Los Angeles Aqueduct ›Los Angeles Aqueduct Condition Reports). The Los Angeles Aqueduct Northern District Daily Report provides a daily snapshot of the Los Angeles Aqueduct System, including flows in cubic feet per second (cfs) and reservoir elevations. The margin of error for these reports is +/-2cfs although that may change with higher flows.

In 2004, LADWP had to rebuild the Lee Vining Creek facility for sediment to pass. This involved building a new Langemann overflow gate and shifting from a system of flow control (designed for irrigation and to maintain downstream flow into the conduit as well as maintain the lake) to level control (to ensure the pond level to maintain steady flow to the conduit and a variable flow down the creek). Under the new system, an operator checks the flow once daily and adjusts the gate manually to ensure steady flow into the conduit. LADWP reprograms the system every six months to account for differences in seasonal flow and is currently in a trial period running April 1 - October 1. LADWP acknowledged that while the system appears to be functioning well (tracking flow within a range of 1-2cfs) the true test will be how it performs in periods of high flow.

The Langemann gate operates within its range and self-adjusts in low-flow situations to maintain the pond level. LADWP and SCE coordinate informally to maintain the pond level, and LADWP has an emergency response system in place in the event that flow drops suddenly. LADWP has had to rely on this emergency response system once.

LADWP sets the pond level daily at 9 a.m. when the water is highest. The setting is based on variable factors (i.e. temperature predictions), including the flow above the intake which sets the conduit diversion. LADWP estimates that the average range has tended to be 5-10 cfs in the morning, which may

fluctuate throughout the day. Ramping rates and fluctuating stream flows make it a challenge to maintain the pool level.

While the current system is adequate for the short-term, LADWP acknowledged that under optimal circumstances an operator would check the flow numerous times throughout the day (rather than just once) to respond to diurnal and seasonal changes and mimic natural flows by maintaining the pond level and keeping the conduit flow steady. One potential long-term solution would involve automating the conduit gate (currently manual and labor-intensive to adjust), which would allow LADWP to input minor flow adjustments (up to 30 cfs) from the Bishop office and also set weekly (rather than seasonal) flow rates. Automating the system would also make high flow situations less of a challenge.

In summary, potential improvements to the Lee Vining Creek facility include replacing the old gate into the conduit, repairing some of the aging concrete structures, and making the stop-log system adjustable to maintain the pond level. An alternative would be to replace the stop-log system with another Langemann flow control gate in the conduit to maintain the pond level at the start.

LADWP noted that the Synthesis Report recommendations did not consider diurnal and seasonal fluctuations. Original recommendations were for the gate to adjust in 1 cfs increments, which Core Working Group members recognized as not feasible, given the high amount of labor required to achieve this. The Stream Scientists in the final Synthesis Report agreed to this change; in addition, the Core Working Group concurred that 5 cfs increments is reasonable.

Lee Vining Creek Recommendations & Special Circumstances

Implementation Plan: LADWP stated that the Synthesis Report recommendations for Lee Vining Creek were feasible and that it would develop an implementation plan and interim plan for a new gate into the conduit and operational changes. LADWP will present this plan to the group at the October 3-4 meeting.

Fall Fish Monitoring: The monitoring plan will have to factor in fall fish monitoring as a result of proposed flow changes. LADWP suggested the possibility of adjusting proposed flow rates due to new information from a study on icing conditions. The Synthesis Report recommends winter flows of 16 cfs in dry and normal years and 18-20 cfs in other year types to avoid winter icing although the preferred flow for winter fish holding habitat is 12 cfs. The instream flow study (August 09) indicated the maximum requirement at 12 cfs for winter fish holding habitat. Data from winter icing studies indicate that due to warmer temperatures, LADWP could reduce flows to 16 cfs from Oct 1 -Dec 15 and 12 cfs from Dec 16-March 31 similar to the instream flow study. However, monitoring would be essential. LADWP would be able to gain this water. LADWP prefers to reduce flows during winter months as long as fish holding and spawning are protected.

Extreme Flow Events: While flows of 250 cfs or greater are infrequent in Lee Vining Creek, extreme events (such as the 700+ cfs flow in 1997) pose a threat to public health and safety, riparian habitat, and infrastructure. The group recognized the challenge of preparing for extreme events and identified ways for the Lee Vining Creek facility to increase its preparedness beyond existing SWRCB protocol and contingency plans. In the search for flexible and practical solutions, the group distinguished between emergency operations and winter peak flows in the bypass period:

Emergencies: The group agreed that LADWP should be released from ramping requirements in the case of an emergency. SCE's license has a similar clause, which allows SCE to reduce flows to 10 cfs without a ramp in such cases. USFS and SCE work collaboratively to identify opportunities to improve timing of release or augment peak flow; this type of arrangement could augment Grant Lake Reservoir and address concerns about timing. LADWP noted that it would be useful to have a pre-approval exemption from ramping rates and obligations.

Winter Peaks: The group noted that the tables in the Synthesis Report do not address the possibility of winter peak flows (250-500 cfs) during the bypass period or provide specific operational recommendations for such periods. The group agreed that ramping is not important during the winter peak flows and that the only ramping consideration in such events is the timing of when the conduit comes back on. The group agreed to release LADWP from ramping requirements during such events to allow peak flows to pass through.

The group also noted that while the Synthesis Report recommends that flows be kept low during the bypass period, it does not address the impacts (e.g. to fisheries, LADWP staff time) of directing water to one creek over another when Grant Lake is full. The group will continue to consider system linkages in managing operations in the creeks and recognizes that it will not always be possible to keep flows low in all streams. One suggestion was to operate within a range (of cfs) instead of a minimum.

SCE & USFS Coordination

The group addressed Synthesis Report recommendations for SCE releases to meet peak flows in Lee Vining Creek (Table 4-2, p. 82). Given the flexibility of the FERC license, USFS and SCE may be able to shift the timing and volume of releases to make water available under different scenarios. The USFS has minimum flows established with SCE and could negotiate higher rates as long as they remain within the capacity of the operation; the agreed-upon range is based on the effects to upstream impacts rather than on the FERC license. The USFS and SCE will meet to discuss operational flexibility and safety considerations prior to the June 28 meeting.

Next Steps

- LADWP will develop an implementation plan and interim plan for a new gate and operational changes at the Lee Vining Creek facility. The target due date is October 3, 2011.
- LADWP will present draft language addressing the Special Circumstances at the June 28 meeting.
- Group members should send Gina Bartlett and Dave Martin any additional input regarding Special Circumstances.
- USFS and SCE will meet to discuss shifting timing and volume of releases to Lee Vining.

Charter Refinement

(Version 3: 5/13/2011)

The Center has incorporated all approved revisions to the Group Charter (Versions 1 through 3) into the document; those changes will no longer appear in underline format. Changes not yet approved will

remain in underline format. After discussing California Trout's suggested modifications, the group agreed that Gina and Mark would follow up before the next session. The group did agree to the following:

- Change terminology under Goal from 'singular document' to 'Final Agreement' (p. 1)
- Change terminology under Core Working Group from 'Membership' to 'Organizational Members and Primary Representatives' (p. 1)
- Add language under Scientific Advisors (p. 2) to convey that a party may invite scientists or other technical advisers to participate in Core Group or other meetings to advise individual parties on issues.
- Modify the third bullet on p. 5 (under Process Agreements) to address staffing changes and preliminary agreements separately. The group also agreed to substitute the term 'building block' for 'basis' and to change 'in consultation with the mediator' to 'including the mediator'.

The group discussed the possibility of allowing legal advisers to attend Core Working Group meetings in an observer and advisory capacity (similar to the role agreed upon for Scientific Advisers). One option would be to allow attorneys to attend with advance notice recognizing that the presence of attorneys could limit some members' participation. As this would prevent full participation of all members in the dialogue, the group agreed to leave this section of the Charter unchanged. The group retains the option to revise the Charter if the issue resurfaces.

Next Steps

- The approved changes will appear underlined in the next version of the Charter, which Gina will circulate for attorney review on June 1. Legal counsel for each group will be responsible for reviewing the Charter to ensure that its organization can comply (i.e. live) with the language and Agreements therein; any proposed revisions are due to Gina by June 15. The Stream Scientists have additional input to the Charter, which they will share with the group via Gina.

Document Review

May 4th Meeting Summary

The group reviewed the May 4th meeting summary. Suggested revisions include:

- Add language regarding DFG's interest in defining parameters for operations at Grant Lake to ensure that operations balance the lake's health with other needs including Rush Creek flows (p. 4). LADWP would like the group to consider Grant Lake in terms of water export as well as balancing Grant Lake health in recognition of LADWP's mission statement.
- Edit under the Defining Feasibility section (p. 5): removal of the last sentence in the first paragraph; and removal of the word 'economic' from the 2nd sentence in the 2nd paragraph.

Next Steps

- **May 4 Meeting Summary:** Gina will revise and circulate to the group for final review.

- **April 6-7 Meeting Summary:** The State Water Resources Control Board (SWRCB) has some clarifying edits that Gina will incorporate and circulate to the group for approval prior to sending to Greg Brown to post on the SWRCB website.

Calendar Update and Future Meeting Preparation

Upcoming Work Group Meetings

	Date & Time	Location
Modeling	May 24, 1-4:30, & May 25, 8-12:00	Davis
Monitoring	May 26 at 10	Mammoth Lakes
Modeling	June 7, 1-4:30, & June 8, 8-12:00	Sacramento @ CCP
Monitoring	**To be rescheduled** from June 7	

June 28 Core Working Group

1) LADWP will present an overview of its operations at **Parker and Walker Creeks**, addressing the current management scenario and related issues.

   Priority Review: Synthesis Report and LADWP Feasibility Report

2) As a follow-up to the May 17th discussion, LADWP will also present draft language that addresses **Special Circumstances related to Lee Vining Creek** operations.

3) **SCE** will provide a presentation on its **Rush Creek operations**, addressing the facility's capacity and potential for flexibility regarding flows and including relevant maps and photos.

4) With input from USFS, SCE, and the Stream Scientists, the group will discuss **SCE flows and releases to Lee Vining Creek.**

5) Revised Charter.

Additional invitees/participants: Greg Reis (MLC), Brian White (LADWP Water Quality Group and SWRCB-appointed scientist)

July 13-14 Core Working Group

1) **LADWP** will present an overview of **Rush Creek operations**, addressing the current management scenario, safety considerations, and related issues

   Priority Review: Synthesis Report and LADWP Feasibility Report
   Other Background Materials: Appendices to the Synthesis Report and GLOMP/Rush Creek (optional)

2) **Modeling Work Group** will inform the group of its progress to date

3) Hydrographs in general, including those that the Stream Scientists used to arrive at recommendations

Attendance

IN PERSON

Gene Coufal, Los Angeles Department of Water and Power (LADWP)
Lisa Cutting, Mono Lake Committee (MLC)
Mark Drew, California Trout
Ali Karimi, LADWP
Dave Martin, LADWP
Geoff McQuilkin, MLC
Bruk Moges, LADWP
Steve Parmenter, Dept. of Fish and Game
Paul Pau, LADWP
Mike Schlafmann, Inyo National Forest

BY PHONE

Greg Reis, MLC

Facilitator Gina Bartlett, Center for Collaborative Policy (CCP)
Note-taker Hannah Murray (CCP)