Ecosystem Restoration Subcommittee Meeting
July 15, 2004
650 Capitol Mall, 5th Floor, Delta Room
Sacrament, CA
Revised and Approved Meeting Summary

Subcommittee members (or their alternates) and agency liaisons present:

Gary Bobker (TBI)
Serge Birk (CVPWA)
Justin Fredrickson (CFBF)
Melisa Helton (USFWS)
Walt Hoye (MWD)
Diana Jacobs (DFG)
Todd Manley (NCWA)
Bernice Sullivan (Friant WUA)

Handouts and Presentations

- Stanislaus–Lower San Joaquin River Water Temperature Modeling and Analysis (presenters Avry Dotan, Donald Smith, Mike Deas, Dave Marston)
- Reinitiation of Consultation: Milestones Assessment and EWA Progress Update (presenter Dan Castleberry)
- Environmental Water Program Update July 15, 2004 (presenter Campbell Ingram)

Meeting convened at 9:15 a.m.

I. Welcome and Introductions (Gary Bobker)

The meeting began with introductions. Gary Bobker noted that attendance was light.

The order of the agenda was changed after approval by those present: topic V, *Temperature Modeling on the Stanislaus River*, was moved to the beginning of the meeting.

V. Temperature Modeling on the Stanislaus River (Informational Item) (Avry Dotan, A.D. Consulting; Donald Smith, RMA; Mike Deas, Watercourse Engineering; Dean Marston, DFG)

AD Consulting is the prime consultant for the Tri-Dam Project. The presenters reported on their experiences with the *Stanislaus-Lower San Joaquin River Water Temperature Modeling & Analysis* project, funded by CALFED. Avry Dotan is Project Manager; Don Smith is the principal modeler; Mike Deas is chair of the Peer Review panel, assembled to evaluate temperature criteria;

Dean Marston is Senior Biologist from the DFG and part of the technical advisory panel for this project. Their presentation is available on the Internet at

http://calwater.ca.gov/BDPAC/Subcommittees/EcosystemSubcommittee2004.shtml

Their discussion followed this agenda: Objective with respect to CALFED and Background; Model Description; Calibration Results; Demonstration of Model Run; Temperature Criteria Peer Review; Operational Studies; Future Work.

Objective and Background

This project is consistent with CALFED's Milestone 84: develop water temperature model for Stanislaus River. The reason for modeling temperature on the Stanislaus River is to study the relationships between river operations, water temperature, and fish mortality in the Stanislaus River, specifically for fall-run Chinook salmon and steelhead rainbow trout.

Salmon populations currently are "boom or bust," which is partly a result of temperature conditions that have changed from pre-dam historical conditions. In fall, elevated temperatures reduce spawning. In spring in times of reduced flow, temperatures can also be too high for successful spawning. The model should be able to determine hydrologic regimes that will lead to the best temperatures for optimal anadromous fish population success. While management is not the current purpose for the modeling tool, ultimately a successful temperature-modeling tool might be used to decide among physical changes or operational changes to foster salmonid success.

The first stage of this project was from 1999–2002, initiated by stakeholders on the upper Stanislaus River. Its purpose was to understand the flow regime, temperatures, and mortality of Chinook salmon and steelhead on the Stanislaus River. It was funded by CALFED, with cost-share partners USBR, USFWS, DFG, OID (Oakdale Irrigation District), SSJID (South San Joaquin Irrigation District), and SEWD (Stockton East Water District). The upper Stanislaus River includes three reservoirs: the 2.4 million acre-foot New Melones Reservoir, the 60,000 acre-foot Tulloch Reservoir, and the several hundred acre-foot) Goodwin Pool. The study area extended from the New Melones Reservoir to the confluence with the San Joaquin River.

The second stage of the project is funded by CALFED for 2003–2006. Its study area was extended to include the lower San Joaquin River from the confluence of the Stanislaus River to Mossdale Bridge. For modeling reasons, the model was also extended upstream on the San Joaquin River to the confluence with the Tuolumne River.

Model Description

This modeling project uses the HEC-5Q model. (The fact that the principal modeler for this project is also the developer of the model optimizes their ability to use it well.) Model calibration was based on three sets of data: seasonal temperature variation (June 1999–December 2003), dry years (1990–1994), and normal and wet years (1996–1999).

The team gathered extensive data of weather conditions and stream and reservoir water temperatures. They collected weather data from five weather monitoring stations that they installed. Weather stations record data on air temperature, solar radiation, relative humidity, and wind speed and direction. They collected water temperature data from two USGS stations: (1) downstream of Goodwin Dam and (2) near the city of Ripon. In addition, the team installed approximately 30 thermographs throughout the system. The data retrieved from these sources are stored and managed in a database developed specifically for this project. DFG also collects temperature profiles at New Melones and Tulloch Reservoirs. The model adjusts for heat exchange for open and sheltered water bodies, and also takes into account riparian shading.

Calibration Results

The model uses boundary conditions consisting of flow and water temperature upstream of New Melones and at the San Joaquin River upstream of the confluence with the Stanislaus River. Then, using the hydrology and weather conditions over the simulation period, the model predicts the temperature response in the reservoirs and along the Stanislaus and lower San Joaquin River with a level of resolution at approximately every 0.5 mile. The presentation showed results of the model's temperature predictions at several test sites over the simulation period, in comparison to the actual temperatures. The match was exceptional, according to statistical analysis.

The presentation shows sample model performance at various sites, including Stanislaus River immediately below Goodwin Dam, Knight's Ferry (about 4 miles downstream), Orange Blossom Bridge (USFWS wildlife objectives are based on data gathered at this site), Oakdale Reach (middle of spawning reach for salmon; also downstream control point for steelhead), Riverbank, a little upstream from the confluence with the San Joaquin River, Vernalis, and Mossdale Bridge.

The temperature data that the model generates can be exported for post-processing. One important use will be to determine the relationship between the temperatures modeled under various conditions and anadromous fish mortality. Temperature criteria for fall-run Chinook and steelhead used by this project for this purpose were developed initially by DFG.

A side discussion arose during this part of the presentation about possible sources of cold water. Rhonda Reed pointed out that the old Melones Dam still

stands behind the New Melones dam structure, limiting water circulation and containing the cold water that accumulates at the bottom of a reservoir. She asked whether the new dam could be modified in some way to make this cold water available for release. Avry responded that the objective of this project is to develop a tool that could eventually be used to decide among possible physical manipulations (such as this access to cold water) or operational manipulations to the flow regime, with respect to water temperatures. When reservoir levels fall to near the level of the old dam, the temperature of the water released by the dam rises. If there were some way to extract the cold water, it would relieve this problem. Serge Birk asked whether there are any constraints to removing cold water, for instance, whether it would be necessary to halt power production in the New Melones Dam in order to remove the cold water. Avry responded that, in the absence of another way to remove water, halting power production would be necessary.

Demonstration of Model Run

The project team has developed a graphic user interface (GUI) to facilitate the management and interpretation of the immense amount of collected data. They demonstrated three features of this GUI: (1) modeling water temperatures in the reservoirs, (2) modeling water temperatures in the reaches, and (3) studying in detail a particular location within a reach.

The modeling demonstration presented in this meeting showed an animation of temperature profiles over time for each of these three features. This animated tool is useful for showing how various flow conditions affect water temperatures. Soon the project will run this analysis on data from 1983–2003.

Modeling Water Temperatures in the Reservoirs

One benefit that this model provides is information on how much the reservoirs are warming under which conditions. This information can enable better management of the temperature regime downstream of the reservoirs.

Modeling Water Temperatures in the Reaches

The presentation demonstrated the temperature profile in the reaches from Goodwin Dam to the confluence, downstream on the San Joaquin River to Mossdale, and the upstream reach of the San Joaquin River that flows into the confluence. The animation showed how the temperature on the Lower San Joaquin River (from the confluence to Mossdale Bridge) is influenced by the flow and temperature contribution from the Stanislaus River and the main stem San Joaquin River. It was evident that during periods in which the majority of the inflow comes from the main stem San Joaquin River, the dominating influence on temperature in the Lower San Joaquin River is the incoming flow from the main stem.

Modeling Water Temperatures in a Particular Location

This demonstration considered water temperatures just upstream of the confluence and just downstream on the San Joaquin after the confluence.

The animated temperature profile showed that in winter, the water temperatures of these two reaches were fairly similar, but as the weather warmed, water temperatures on the Stanislaus stayed relatively cool, while temperatures on the San Joaquin rose sharply. Temperatures of the San Joaquin after the confluence were also high. The flow distribution is responsible for the relatively high temperature of the post-confluence San Joaquin; the relatively greater amount of warm water is not substantially cooled by the small flow from the Stanislaus.

Serge asked whether the project considered data prior to construction of the dam. Available data only goes back to 1988, so the model does not consider pre-dam conditions.

Temperature Criteria Peer Review

Temperature criteria for the success of anadromous fish have been determined by DFG, both for optimal success conditions and for critical, or potentially lethal, temperature conditions each month. These criteria are available for Chinook salmon and steelhead trout separately for control points from Knights Ferry to the confluence. The term “temperature violation” was introduced as the condition in which the average daily water temperature in the river exceeds the critical threshold. When this condition is extended for several days, one can compute the cumulative violation in degree-days. For example, if the threshold is exceeded by ten degrees Fahrenheit for 10 days, the cumulative violation is 100 degree-days.

Using a table of the number of accumulative temperature violations (measured in degree Fahrenheit-days) per month, 1982–1999, the project team used the model to manipulate flow conditions to try to improve the number. Manipulating solely for fish success, the project team were able to simulate a lowered accumulative temperature violation based on increased reservoir storage, by releasing less water during wet and normal years to store cold water. Dean pointed out that management decisions in the future would clearly use a cost-benefit analysis to determine the overall benefits of various flow regimes; this modeling effort is focused on determining fish population success.

Avry introduce Mike Deas, Chair of the peer review panel. The panel role is to review the temperature criteria developed by DFG.

Mike reported that the peer review panel determined that a rating of only two values, optimal or critical, is not informative enough for future determinations. They instead propose a continuous ranking system from optimal to lethal. Because current conditions are highly degraded, there is not enough data to

create values for this curve, especially on the “optimal” end. Diana Jacobs noted that this continuous criterion is more biologically sound, and expressed appreciation for the approach. She asked whether this is already being used or whether it is “cutting edge.” Dean replied that it is cutting edge analysis.

Dan Castleberry asked whether running the model is a time-consuming process; in other words, whether data are calculated and determined quickly enough to be useful. Mike responded that the time investment is in setting up the spreadsheet to account for the data correctly. Running the data itself is very fast.

Johnnie Moore asked whether it would be possible to present the output in terms of probability of effects to egg success. Mike responded that, as long as the biological data were available, it would be possible for the model to return probabilistic analyses.

Operational Studies

Avry presented a table with eleven cases that were proposed to be studied with the model in phase one of the project. The cases represented various mechanisms for improving water temperature conditions on the river, including operational changes, physical (structural) changes, or a combination of the two. Stakeholders are currently reevaluating these cases and might eliminate some of them and introduce new ones.

Future Work

In the future, the team will do pre-feasibility study of alternatives. They are considering extending the model upstream to incorporate the San Joaquin and major tributaries, including the Tuolumne and Merced Rivers.

The project team has decided, as a result of interaction with other basins, either to ask for a project amendment or to apply under a new PSP to study basin-wide water temperatures, including the Tuolumne, Merced, possibly Friant, and Stanislaus Rivers.

Conclusion

Avry reported that (1) the project is on time and on task, and (2) it is determining the information it is designed to determine, in accord with CALFED’s milestone 84.

Dean noted that the crucial point in future work is the collaborative working relationship among parties involved in decisions that affect water temperature, agreeing on highly contentious aspects. This project fosters the needed cooperative spirit that will be necessary through the implementation phase.

III. Draft Finance Options Report and Ten-Year Finance Plan Update (Kate Hansel)

Kate Hansel and the finance consulting team attended the June ERP Subcommittee meeting for a substantial presentation on the Draft Finance Options Report and Ten-Year Finance Plan. There has been some confusion about the respective roles of these two documents. The long Draft Finance Options Report treats possible effects of the various programs and example allocations. It makes no recommendations but rather tries to explain to the audience the range of options. The shorter Ten-Year Finance Plan (begun two months ago) is the document that will ultimately guide financial allocations over a 10-year period. It is in the development stage.

The finance team has presented the draft documents to all subcommittees so that everyone can know what is in each finance element. The water users have organized themselves and formed subcommittees to review cost estimates and participate in the development of the 10-year finance plan. The finance team will form a group of environmental stakeholders for the same purpose. This is in addition to outreach and input from BDA, BDPAC, and BDPAC subcommittees. They want balanced input on these documents from all interest groups. The important issues are

- What are the funding targets for the next 10 years?
- What are the available funds?
- What are the unmet needs?
- How should the unmet needs be paid for?

Determining funding targets and unmet needs will be fairly unproblematic. Determining how to meet unmet needs will be more sensitive. In August, the finance team will work with agencies and stakeholder to develop cost allocation proposals. In addition, the finance team is planning a public workshop (tentatively scheduled for August 30th) to gather public concerns. At the end of August, the team will send recommendations in a draft proposal to BDPAC for the September meeting.

In October the revised Ten-Year Finance Plan will be submitted to the Authority for approval. This will not be a commitment of the funds, but rather an approval of the plan, an agreement that the funding needs have been reasonably identified and cost responsibilities reasonably distributed.

For ERP, $150 million per year is the current target. How much of that amount will come from water users and will a user fee be adopted? What will be the federal/state split of financial responsibility? These questions will be answered as part of the Ten-Year Finance Plan.

Serge mentioned that the user fee had been identified as a possible vehicle to continue funding for the ERP. He asked whether there had been a discussion about whether the programs would be reimbursable. He is particularly interested in the restoration fund. Kate responded that the restoration fund will be funded by user contribution. The planned $15 million yearly should reach restoration targets. A number of CVPIA projects are unable to be met.

Gary reminded the group of last month's discussion about continuing needs, specifically whether directed actions had been included in the assessment of unmet needs for the future. Dan stated that the analysis had been done on previous projects listed in the projects database, which considers contracts. Funds that are directed to agencies are not contracts. Gary stated that he is concerned that past ERP expenditures to EWP may not be assessed as a continuing need.

Serge stated a concern for other items that may have been overlooked, for example, Red Bluff Diversion Dam. Dan noted that this project is in the plan, and that ERP has contributed funding to Red Bluff diversion dams in the past. Todd Manley noted that this project is not stated in Stage 1 explicitly.

Gary noted that in the June meeting, the Subcommittee considered convening a working group to give Subcommittee comments to the finance team. There has been little response since then, so the chair will submit comments directly to Kate.

IV. Reinitiation of Consultation Milestones Assessment Update (Dan Castleberry)

The Thursday previous to this Subcommittee meeting, Dan gave a brief presentation on this reinitiation to the BDPAC. They were intended to receive the whole presentation that will be presented today to the ERP Subcommittee, but did not receive the whole presentation. The presentation, *Reinitiation of Consultation: Milestones Assessment and EWA Progress Update*, is available on the Subcommittee's website. The milestones assessment document is online and open for public input. Its primary concern is commitments to Delta export reliability. The reinitiation process needs to be finished by September 30, 2004.

The presentation began with a brief review of CALFED's Regulatory Compliance for Covered Species, listed in attachments to the ROD. These attachments represent 30-year agreements except for the Conservation Agreement.

Pages 7–10 of the Conservation Agreement, regarding the MSCS, include program-level regulatory commitments for Delta imports: (1) non-reduction in water project exports beyond those required under the regulatory baseline, provided conditions are met; and (2) a requirement of reinitiation to extend commitments beyond September 30, 2004.

Reinitiation will probably lead to supplements to the CALFED Biological Opinions (BO), which will guide the future extension of the Conservation Agreement. The Milestones Assessment will also inform the ERP's efforts to develop future proposal solicitations.

The assessment considers whether ERP is on track to achieve the milestones by the end of Stage 1. The summary considers only progress toward achieving milestones during the first four years of Stage 1 and the efficacy of EWA (Environmental Water Account). No new actions are proposed. The Subcommittee members were encouraged to view the assessment, available at

http://www.delta.dfg.ca.gov/envcomp/milestones.asp

The Assessment is about 200 pages, plus attachments. A brief and very readable summary introduces this lengthy document, making it easy for the reader to manage the reading.

All federal CALFED agencies are co-leads. The Resources Agency also is identified in the draft letter for reinitiation of consultation from the Bureau of Reclamation as representing DFG, Water Resources, Reclamation Board, and CBDA.

When the reinitiation letter is signed and passed on to regulatory agencies, the 30-day review period will begin.

The focus on review comments is additional information about progress toward milestones. There may be activity that addresses the milestones that the authors missed, and they hope to receive information about these possible projects during the review period.

Findings of the Assessment:

- EWA is effective in reducing effects of water export on Delta fish while protecting State and Federal projects from supply impacts.
- About 70% of milestones are on schedule.
- 20% of milestones need additional evaluation (mostly water quality because of its complexity).
- Progress is sufficient to renew program-level regulatory commitments.

Diana asked Dan to discuss how CVPIA (Central Valley Project Improvement Act) projects were addressed. Dan replied that they looked at ERP and Category A projects, such as projects implemented through the CVPIA Anadromous Fish restoration and Anadromous Fish Screen programs.

Several committee members asked whether Dan could provide a printed copy on the same day. Printed copies were not available, but the document could be obtained online or on CD-ROM.

There was some discussion whether there were any OCAP (Operations Criteria and Plan) discussions. Dan responded that the assessment looked at prior actions, and not proposed changes to OCAP. Gary noted that this is not directly related to future performance of the EWA. Serge noted that EWA is referenced in OCAP documents.

Serge asked whether the ERPSB (Ecosystem Restoration Program Science Board) would be involved in reviewing the *Milestones Assessment and EWA Progress Update* document. Dan responded that they will not be asked for supplemental information, but that ERP is coordinating with them to decide what the SB's contribution should be. Gary noted that the SB will not meet before the end date for the document review period. He suggested that their primary contribution might be to provide guidance in suggesting how to extend the assessment—for instance, (1) Is it possible to measure the progress that has been made? (2) Are there particular actions that should be taken in the future? The ERPSB could provide look-forward insight as opposed to look-back.

Gary asked on what basis the assessment was made, and according to which measurements, that EWA is effective in reducing the effects of water exports on fish. Diana responded that, among other procedures already reported in previous yearly reviews, they study whether take at the pumps has been reduced. This document uses the same measures as previous documents and provides incremental information in the form of an update.

Gary, speaking on behalf of TBI and other environmental groups, noted that before re-acceptance of the Conservation Agreement, the difference between the ROD requirements, the conservation agreement baseline assumption about implementation of CVPIA Section 3406 (b)(2), and the actual outcome needs to be reviewed carefully.

VI. Coordination of CVPIA and ERP Actions (Informational ItemS) (no discussion leader)

The ERP Subcommittee and the CVP Restoration Roundtable could have closer coordination. Rebecca Sheehan requested at the June 2004 ERP Subcommittee meeting that this topic be discussed at this meeting.

Tim Ramirez said that he no longer receives notices about upcoming Restoration Roundtable meetings. Serge said that he would make sure that he receives notices in the future. Tim said that his concern is greater than not receiving notices. The Ecosystem Restoration Subcommittee and the CVP Restoration Fund Roundtable do a lot of similar work but on parallel tracks rather than in close coordination.

Gary reminded the group of some history: the one attempt in the past to merge the two groups into one was not successful, because the CVPIA did not feel that there was not enough time in the joint meetings to address their concerns adequately. But he noted that although this one attempt was not successful, that does not address the larger question of whether and how the two groups could coordinate. Gary suggested that the Subcommittee could re-invite the Roundtable to join them, and discuss CVPIA every other meeting.

Serge noted that the current Roundtable meetings are open to all stakeholders and usually take place about two or three times a year, as appropriate. The CVP has mandates unrelated to CALFED mandates, although some actions are also linked to CALFED. The Roundtable is successful in injecting critical thinking into the budget process, and in encouraging more efficient use of funds. The Restoration Roundtable provides an informal environment for managers of the CVP to discuss annual work plans. Both the Bureau and USFWS take advantage of this opportunity, and are comfortable with this *ad hoc* approach.

Gary said that ERP should have a better avenue to learn what the CVPIA is doing. He suggested a quarterly joint meeting to discuss their overlapping actions and mandates. Pat Showalter, a new member of the Restoration Roundtable, said that the Roundtable would profit from ERP representation at Roundtable meetings. The meetings convene only a few times a year and are very well planned. Serge noted that ERP has indeed attended in the past and representatives have given presentations. Todd asked how many CVPIA representatives were present at the ERP Subcommittee meeting. Four people responded: Serge, Bernice Sullivan, Walt Hoye, Todd.

Gary concluded that some issues about coordination will not be solved by CALFED representatives attending CVPIA Restoration Roundtable meetings. He would like to see more involvement between CVPIA and CALFED managers to discuss integration and coordination.

Serge noted that the next CVPIA Restoration Roundtable meeting will be in Sacramento in September. The group discussed the possibilities for coordinating meetings but reached no definitive resolution.

VII. Ecosystem Restoration Program Status

a. Deputy Director's report (Dan Castleberry)

At the most recent BDPAC meeting, Dan presented

- Update on the Milestones Assessment and EWA Update process.
- Review of Battle Creek, with the expectation that ERP will provide a similar update at an upcoming Authority meeting, and an April decision by the Authority whether to approve.

- PSP. BDPAC suggested that the Monitoring PSP is ready to be brought to the Authority (but there was no quorum in attendance).

He will bring these three topics to the August meeting of the Authority. He will also bring up two additional funding recommendations remaining from the 2003 PSP: (1) a pilot monitoring, stakeholder involvement, and risk communications in mercury, and (2) *Arundo* eradication, stage 2. These two proposed projects can be reviewed online at

http://calwater.ca.gov/Programs/EcosystemRestoration/Ecosystem2002DirectedAction.shtml

b. Battle Creek reviews update (Dan Castleberry)

In June, at the request of agencies and the Battle Creek Foundation, CBDA hosted a workshop on steelhead, with the expectation that the panel would produce a report in about 30 days. That report will be available on the CBDA website later this summer.

Serge asked Dan to report on the supplemental EIS. Dan reported that it is scheduled to be available in September. Serge noted that the reason for needing a supplemental report was that, after review of public comments, the Bureau determined that the restoration project as proposed would result in significant impacts: adverse effects on water quality in the watershed and in the Bay-Delta system, and threats to the Mount Lassen trout farm. Further, mitigation costs were likely to be $5.5 million. The supplemental EIS was expected to be available in administrative draft form the week of the current ERP Subcommittee meeting. The public draft will be available in September. Serge noted that if the proposed alternative is chosen, mitigation will be necessary. If the 8-dam alternative were chosen, mitigation would not be necessary. He asked how that would impact FERC (Federal Energy Regulatory Commission) licensing. Dan responded that in February, PG&E will submit a request for the FERC permit.

c. EWP update (Campbell Ingram)

Campbell Ingram reported on the status of the EWP in the five priority watersheds: (1) Clear Creek, (2) Mill Creek, (3) Deer Creek, (4) Butte Creek, and (5) Tuolumne River. His presentation is available on the Internet at

http://calwater.ca.gov/BDPAC/Subcommittees/EcosystemSubcommittee2004.shtml

Clear Creek (active)

The Clear Creek Conceptual Proposal is currently under review by members of the ERP Science Board; the review schedule is in the presentation available at

the address above. It is intended to provide a check on the intermediate high flow concept and supporting science (hypotheses and monitoring).

Walt Hoye noted that the effort on the Tuolumne River is to increase riparian vegetation, whereas here the effort is to remove riparian vegetation. Campbell responded that in Clear Creek, the vegetation armors the channel and restricts meander. Dan noted that riparian vegetation plays the same role in both streams, but they are starting out at different points.

Campbell said that EWP has a "wish list" of external science reviewers, many with experience in adaptive management at the project, landscape, and program levels. Wim Kimmerer and Bob Twiss of the ERPSB recommended these scientists for the review panel.

Mill Creek (not active)

The EWP is currently taking no action. They have not been welcomed into the watershed, and EWP does not want to intervene in areas where they are not welcome. Without an invitation to work with the people in Mill Creek watershed, trying to insert themselves would be detrimental. Walt asked what activities are in progress. Campbell responded that he has worked with Burt Bundy to explain the resources and funding available to the watershed through the EWP.

Serge said he was unaware that the conservancy that Burt represents has the authority to lease the water or acquire water rights. Campbell stated that EWP had recently been approached by another individual on the stream that expressed an interest in selling water to the program. Diana noted that she has spoken with Burt about the conservancy's reluctance to work with EWP and that for unknown reasons they prefer to remain independent of EWP. She noted that further discussions might be useful.

Serge noted that the reason the program is moving in the right direction is that it is doing two important things: (1) figuring out where the water is, and (2) addressing correct biological needs. The discussion should focus on biological needs rather than on water purchase. Gary suggested that Serge have some exploratory conversations with stakeholders. Campbell said that someone other than himself would be a more effective liaison right now. Diana noted that in previous conversations with Burt, he had acknowledged that EWP could improve the science component of their project. She said that she would speak with Burt.

Gary noted that EWP sets some money aside for water acquisitions based on ecosystem criteria, not just success of individual species. EWP does not have much money; he asked whether it would make sense to augment the EWP budget so that they could also buy water for WAP. Diana said that the issue would require further discussion. Todd expressed concern about asking people

to become involved for fear that they might be evaluated as “users” and thus taxed.

Serge wanted to clarify his point of view. He believes that it is appropriate to identify biological needs. On the other hand, he also feels that a better dialogue is needed. He has worked with this project for six years but despite this involvement, is not sure what the impediment for collaboration with EWP might be. He hopes for a breakthrough.

Deer Creek (active)

EWP is developing an MOU for inclusion in a WUE proposal. They are also developing a grant agreement with SVRIC for legal assistance. The next meeting will be in October.

Butte Creek (not active)

Efforts to develop justifiable biological objectives have not been successful. In the upper watershed, temperature relationships need to be better understood before experimenting with flow alterations because routing water through the original channel may do more harm than good. Temperature modeling is needed and will be conducted through the FERC/PG&E re-licensing process.

In the lower watershed, passage is the limiting factor. With the M&T Ranch base flow agreement to provide 40 cfs and recent expenditures to improve passage throughout the lower river, it is difficult to justify buying more water. As a result, EWP anticipates that the next meeting may be the last one they attend for now. If so, they will prepare an exit document that (1) illustrates the data reviewed and (2) documents discussions with stakeholders that have lead to the determination that the program will not acquire water on the stream at this time. The document will also (3) note those factors that could result in the program becoming re-engaged in the watershed.

Tuolumne River (not active)

EWP has changed course with respect to this watershed. Previously they intended to develop a concept paper that would describe a cross-CBDA program toolbag to address flow on the Tuolumne. Currently they intend to work more directly with Wilton Fryer of TID to discuss compare objectives and try to plot a course of action. Jeff McLain at NOAA has initiated contact with TID (Tuolumne Irrigation District), which has shown little interest in collaborating with EWP.

Discussion

Serge asked what the ERP Subcommittee could do to help EWP develop projects within the targeted watersheds. Campbell responded that the EWP has committed to working with stakeholders to develop locally supported objectives and proposals for funding. He expects to continue to apply gentle pressure on

the inactive watersheds. The program has actively been working in three of the five priority watersheds. He proposed that the group may want to consider having EWP begin to work on Tier 2 priority streams.

Serge asked how much flexibility EWP has. He noted the ROD commitment to purchase 100,000 acre-feet per year.

Gary noted that of these five creeks, two are active, and two have stakeholder sensitivities. The Tuolumne River, however, is not an example of stakeholder sensitivity. There have been a number of acquisitions on the Tuolumne because of interest in higher levels of management. He suggest that EWP bring together these higher managers with Allen Short; perhaps their interest has not filtered up to him. Serge agreed.

Gary suggested that EWP evaluate how long it will be before they can make progress with the three inactive watersheds, and move on to lower priorities if progress with the higher priorities will be slow.

Todd noted that EWP is a very good program, and that Campbell has done a good job involving all interested parties. Gary noted that EWP has accelerated under Campbell. He also agreed with Serge's earlier comment that getting water into streams is the highest priority.

VIII. Next Steps (Gary Bobker)

a. Upcoming Agenda Items

Agenda items at the next ERP Subcommittee meeting may include

1. A presentation on the effect of invasive species on the food chain (requested by Pat Showalter).

2. EWA update. In the June meeting, there was a request for a comparison of the fish protection measures implemented before the EWA was created and those taken using EWA since the 2000 ROD. An update on the direction of the EWA after 8500 and OCAP would be useful.

3. Input received on Milestones Assessment, through the end of Stage 1, from the public and from the Authority.

4. Overlap between CVP and ERP; possible coordination between CVP IA Restoration Roundtable and ERP Subcommittee.

5. Update on Milestones and finance.

6. Progress on the general PSP.

b. Future Meeting Dates

There will be no ERP Subcommittee meeting in August.

The next meeting for the Ecosystem Restoration Subcommittee is 9 a.m. to 1 p.m. on Thursday, September 16. The ERPSB meeting is scheduled for Thursday and Friday of that week. Rhonda asked whether the ERP Subcommittee has topics that it would particularly like the ERPSB to address at that time. She would need to know them within two weeks, when the agenda for the September ERPSB meeting will be decided. Gary suggested that the ERPSB and the ERP Subcommittee could have a joint public session in the afternoon from 1:00–3:00. Rhonda stated that this might be agreeable to ERPSB members. Gary and Rhonda will investigate this possibility and coordinate with each other.

IX. Public Comments

There were no public comments.

Meeting adjourned at 12:30 p.m.