

Ecosystem Restoration Subcommittee Meeting
Thursday, February 19, 2004
650 Capitol Mall, 5th Floor, Bay-Delta Room
Sacramento, CA
Draft Meeting Summary

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

Gary Bobker (TBI)	Diana Jacobs (CDFG)
Serge Birk (CVPWA)	Dave Harlow (USFWS)
Lisa Holm (CCWD)	Steve Evans (FOTR)
Patrick Akers (CDFA)	Mike Aceituno (NOAA Fisheries)
Diane Buzzard (USBR)	Doug Lovell (FFF)
Walt Hoye (MWD)	Lloyd Fryer (KCWA)

Introductions and Subcommittee Status

Gary Bobker called the meeting to order and began with introductions. Walt Hoye (MWD) asked that the January meeting summary be revised to clarify his statement regarding Battle Creek and to include comments by Brent Walthall (KCWA) that had not originally been included in the summary. Staff was directed to revise the summary as requested.

Gary addressed changes in the order of the agenda: the discussions about Butte Creek and Battle Creek would be held before the program status report.

Integration Matrix

Serge Birk (CVPWA) reported that the ad hoc committee had not received any comments about the integration matrix and so suggested extending the deadline. Discussion ensued regarding whether to have an ad hoc meeting before the next subcommittee meeting; Serge suggested that the ad hoc committee could schedule a meeting with Gary and then invite any subcommittee or staff member to participate who wanted to. In addition to working on the matrix, Serge and Gary agreed that the process by which to collaborate and solicit comments from other subcommittees and BDPAC. Serge reiterated his invitation to Implementing Agency and ERP staff to comment and participate in developing the matrix.

Dan Castleberry (ERP) reminded the subcommittee that some staff involvement is appropriate, but that the integration matrix was a subcommittee product. Gary agreed that in allocating staff resources the matrix was not a high priority.

Doug Lovell (FFF) asked what were Gary's major concerns regarding the matrix. Gary replied that he saw the matrix as a good framework to start with but that he thought it needed to address the pros and cons of some issues more fully, such as indicating which were technical issues, analytical issues or policy

issues. Gary thought the current draft provides the rationale of the benefits of the program, which he was not sure was the intent, and that the matrix needs to balance the potential benefits with the potential conflicts. Gary was optimistic that this sort of revision could be done amicably.

There was consensus that Gary and the ad hoc committee would schedule a meeting to work on the matrix revisions; once a meeting is scheduled, a notice to other subcommittee members will be sent out via the reflector inviting them to participate if they would like.

Assessment of Butte Creek Pre-Spawn Mortalities

Diana Jacobs (DFG) opened this discussion by introducing Paul Ward (DFG) who would give the presentation. Diana briefly described that in 2003 there were good numbers of spring-run salmon in Butte Creek, but that there was a high mortality rate that summer before the spawning season. There are a lot of questions about what happened regarding the mortality rate, and the answers provide a complicated story. She suggested that now was a good time to reflect upon what was known in order to plan for this coming season.

Paul began his presentation by giving an overview of the Butte Creek Watershed, referring to a map highlighting the restoration activities on Butte Creek since 1995. Highlights include removal of 5 dams, and construction of 5 fish screens and 11 fish ladders. In reviewing escapement estimates during the CVPIA baseline period, the average was about 350 adults and in some years less than 100 adults; however, using standard snorkel survey methodology that number increased to an average around 7,000 fish since 1995. More recently DFG engaged in a carcass survey, which is more costly and difficult to do, in order to recover tags. The carcass survey results, with an average of about 17,000 fish, calls into question the earlier escapement estimates.

Paul explained that the hydropower facilities on Butte Creek are quite old, built in 1908. There are two diversion points on Butte Creek, and spring-run Chinook can go up to the Quartz Bowl. In explaining the intricacies of the Butte Creek flow regime and spring-run salmon, Paul explained that the cold water from the PG&E reservoirs on the Feather River, when it runs through the Centerville Head Dam provides cooler water to the salmon. Paul noted that prior to 1992 the releases to Butte Creek above the Centerville Powerhouse was only 20 cfs or less, which was significantly lower than the natural flow. A PG&E study recommended increased flows in this reach, and PG&E subsequently doubled the flow to 40 cfs. Natural flows resume below the powerhouse.

Since 1999 DFG and PG&E have been meeting to address Butte Creek flows and spawning habitat. The US Fish and Wildlife Service (FWS) developed a spawning gravel model that indicates that most of the spawning gravel is found

below the powerhouse; this model can be used to calculate what population level could be supported by habitat above and below the powerhouse.

The ongoing DFG research project implemented in 1995 was expanded during 2003 to assess the causes and magnitude of the pre-spawn mortalities. The high mortalities seen during 2003 were the result of large numbers of fish, high temperatures and outbreaks of two pathogens. The project was divided into five reaches, with each reach subdivided into seven or more subreaches. During the three year period 2001-2003 the reaches above the powerhouse held average of approximately 11,000 fish, 4,500 of which died before spawning, leaving about 6,500 to spawn. The remaining spawning fish over saturated the existing spawning habitat. Below the powerhouse approximately 6800 fish held of which about 500 died prior to spawning. There were approximately 5900 that spawned and which appears to significantly underutilize the spawning area below the powerhouse. Diana asked the question that if spawning number is still higher than the capacity of the habitat, what was the issue. Paul responded that the issue was the superimposition of redds on top of other redds, resulting in eggs being dislodged and lower survival.

The other aspect of the research project was temperature studies. DFG reviewed the site information and records for various sites including Quartz Bowl, Pool 4 and Estates. The data from the temperature studies indicated that lowering the temperature in the reach above the powerhouse by 1.5 to 2 degrees Centigrade might be enough to reduce the pre-spawn mortalities.

A regression model developed by P.G. &E. used to calculate the relationship between temperature and flow indicated that there appears to be a diminishing return to higher flows, i.e., more water does not necessarily significantly lower water temperatures leading to lower mortality rates. There still is a need, Paul stated, to look at how the diversion from the West Branch of the Feather River is operated to bring cooler water into the Butte Creek system. Other factors need to be considered as well, such as the air temperature, spawning capacity, and that the flow had little ability to lower temperature above the powerhouse.

Paul then outlined three future actions for Butte Creek: investigate options to reduce heating in the DeSabra Forebay; develop a better flow-temperature model for the holding/spawning reaches above and below Centerville Powerhouse; and investigate a better predictive model for flow management from the West Branch Feather River that integrates power generation and fishery needs.

Steve Evans (FOR) asked Paul if there was an effort to conduct more temperature studies to test the model's accuracy. He expressed his concern that conclusions made using models only, without real life testing, could lead to assumptions and decisions that do not reflect the real conditions in the stream. Paul said that yes, the model was verified by to "real world" means, and would be further investigated and modified in the future.

Steve asked if DFG is looking to see if barriers may be keeping spawners from moving down stream to areas that provided more spawning capacity. Paul indicated that there were no structural barriers, but rather it appeared to be a density dependency and not related to a genetic predisposition to move up or down stream. Steve followed with a question about the genetic diversity of the fish, and Paul indicated that current studies indicate that Butte Creek spring run Chinook are quite distinct. Paul referred the subcommittee to a recent NOAA fisheries report about this which can be found on their website: Population Structure of Threatened and Endangered Chinook Salmon ESUs in California's Central Valley Basin (http://www.pfeg.noaa.gov/tib/esa/salmonids/trt/cv_trt.html). Tracy McReynolds said that since 1995 the project has tagged more than 500,000 fry spring run salmon, and they have yet to find any fish from outside of the basin among the returning spring run adults. This is quite different than what is seen among the fall run salmon where there are large numbers of fish from other watersheds.

Serge Birk (CVPWA) cited recent studies which indicate that additional flow can benefit fish by limiting the time a pathogen remains on the gill. Serge wondered if in the case of Butte Creek there were any value to investigating the benefit of additional flow to reduce pathogen density rather than only reducing water temperature. Paul said he agreed with the conclusion of the studies Serge cited; he continued that the flip side of that conclusion, however, was that reduced flow below the powerhouse and the increase in water temperature may move the fish into the areas of concern (i.e., other spawning areas). What is needed is a better sense of how flow affects temperature and fish movement.

Doug asked if there were any Environmental Water Program (EWP) objectives regarding Butte Creek. Paul said that EWP is working on some of the same issues, but not necessarily in terms of EWP acquisition of flow, but more in terms of structural impediments such as reducing heating in the DeSabra Forebay.

Gary observed that if the fish spawning/mortality is flow related, then some targeted experiments could be conducted. Diana Jacobs (DFG) said that gravel is a limiting factor too, and that the question is over the long run, what is sustainable—how does it work in nature? Paul responded that the spawning populations seen over the last several years were probably within or exceeding the carrying capacity of the stream. Gary concurred that this success was the good news of Butte Creek.

Mike Aceituno (NOAA) asked Paul if anyone has evaluated the habitat and passages above Centerville Dam. Paul said there are two reports evaluating habitat and passage above the dam. These reports indicate that there is habitat to support about 2,000 fish, and that there are 10 natural barriers—about the size of Quartz Bowl—that limit access to those habitats. The question is if the benefit outweighs the cost of modifying and maintaining the access to these remote

sites? Mike said he had not seen a feasibility study about this, and Paul said that with the relicensing, he believed that there would be a reinvestigation of this issue. Serge voiced his concern that DFG may regret in 10 or 15 years not conducting a feasibility report now.

Steve pointed out that the spring-run was not the only anadromous species in Butte Creek and he suggested that the issues relating to steelhead also be looked at. Gary concurred, saying that he hoped to see further, expanded efforts in Butte Creek, but that as a program all habitat values need to be addressed.

Battle Creek Update

Mary Marshall (USBR) provided a brief update in two areas regarding Battle Creek. First she addressed work being done about the biological benefit analysis that was a request from the last subcommittee meeting and second she addressed the current project schedule.

At the request of the subcommittee, the Battle Creek working group is looking at the biological benefit of Alternative B, removal of eight dams. Teams are developing the information to address this, and California Hydropower Reform Coalition (CHRC) has offered technical assistance with the analysis. Some members of the CALFED technical review team will also look at the biological benefits analysis.

A public workshop is scheduled for March 15 to discuss the outcome of the working group's analysis. Time and place still need to be determined, but it likely will be held in the evening and probably in Red bluff. Public notices will be sent out as soon as a meeting room is obtained. Mary anticipates reporting the results of both the biological benefits analysis and the public workshop to the subcommittee at its March 25 meeting.

Mary next highlighted some key items on the schedule for the Battle Creek project. Key items included the ERP Technical Review Panel's final response to comments about its report which is anticipated on February 25; the Project Management Team public meeting on February 24; the completed revised draft Adaptive Management Plan (AMP) due March 9-10, and a completed Action Specific Implementation Plan (ASIP) due March 26. In April, the final technical panel response, final revised AMP and final cost request will be completed. In August the schedule calls for Bay-Delta Authority review, biological opinions, CEQA findings and NEPA Record of Decision, and NCCCP completed. Mary also stated that secure funding is necessary for letting out bids and licensing.

Dan asked Rebecca Fris (ERP) to talk about the review process, which she did briefly. Rebecca said that the dates had slipped a bit for the technical panel review, but that the selection panel is set to meet in May. After the selection

panel makes its initial recommendation, there is a 30-day public comment period. In June there will be a general presentation before the BDA, and after the selection panel incorporates the public comments, a mid-July final recommendation will be developed. The final recommendation will be presented to the BDA at its August meeting. Doug asked Rebecca what exactly does the selection panel select; Rebecca responded that the selection panel makes recommendations regarding whether a project ought to be fully funded, partially funded or not funded at all.

Doug asked if it was accurate to say that the decision was coming down to a choice between the MOU and Alternative B. Mary said she could not answer that until after the March 15 public meeting; Diana said that was only one decision, another decision was regarding the funding. Doug asked if the subcommittee intended to make a recommendation regarding Battle Creek; Gary replied that it was not within the subcommittee's charter to make a final recommendation on a particular project, but to highlight the policy issues.

Doug expressed concern that there be maximum stakeholder involvement in the decision making process and that the process be as transparent as possible; he expressed concern that the decision makers hear all of the input regarding Alternative B. He asked if Alternative B was in the NEPA/CEQA document. Mary replied that elements of Alternative B are in the document, but that the alternative as such is not. After the March workshop, she will have a more clear understanding of what needs to be revised in the document. Doug stated that the recreational fishing community wants to make sure the decision makers know their concerns and comments.

Serge asked which proposal the selection panel will review, because it is likely that selection of the eight dam removal would require amending the MOU. He said that serious decisions needed to be made, and he asked what was the role of BDPAC? From the stakeholders' point of view, Serge said, the project appears to have benefits, but there has been concern by ERP Science Board and other independent reviewers that objectives for the project are not clear. Two questions include (1) what information will be included in the EIS/EIR and (2) what information will be included in the selection panel and the technical review team review? The stakeholders talked about the plumbing around Coleman National Fish Hatchery, the genetic drift, etc. and Serge feels that the scope of the project has been changed with the introduction of steelhead above the hatchery. He stated that this policy appears inconsistent with ERP restoration priorities and CVPIA AFRP goals to double natural fish. Serge said that it is important to know how the AMP was crafted and how the role for the stakeholders is defined, specifically, how do the stakeholders work with PG&E. This role and process needs to be explicit in the NEPA process.

Serge commented that the Battle Creek Working Group has proven to be an ineffective and inappropriate forum in which to deal with adaptive management

issues and that at interagency meetings stakeholders are reduced to reacting to their discussions and status reports but are not invited to participate. He observed that the cost increases for Battle Creek are not due to the delays in the project, but because it was underestimated what was needed to be done.

Steve observed that the schedule as Mary relayed it seemed to be based on the assumption that the MOU project would be moving forward because there was no time given for any renegotiation. Mary said that any revisions to the schedule would be developed after the March 15 meeting.

Tim Rameriz (BDA) suggested that the subcommittee not think of the August BDA meeting as finishing the Battle Creek project, but rather to think of it one part of the overall project. The Battle Creek project would be the largest, single investment made by CALFED and everyone needs to be involved and needs to participate all along the way. He also suggested that since things change over time, the subcommittee ought to focus on the Adaptive Management Plan.

Steve Wald (CHRC) reiterated his statement that the process so far has been very transparent and expressed his appreciation of the commitment to the collaborative process he has heard at the meeting. He said that CHRC has hired people to review the information and they have had one formal meeting and a process meeting. Some progress has been made regarding foregone power. Steve asked if the technical panel biologists are also committed to review the biological assessment analysis.

A representative from DFG said that a lot of work needs to take place between February 19 and March 15, and he asked the subcommittee to come to a consensus regarding the alternatives at their next meeting. Dave Harlow (FWS) said that the implementing agencies need to tell the subcommittee if they want to proceed with the current NEPA document or go with a new alternative. Doug expressed his feeling that if there is not a rigorous analysis of the alternatives—including Alternative B—then the draft EIS/EIR will not pass the “stupid” test and will fail. Other discussion included the idea that the possible impacts to Coleman National Fish Hatchery needs to be addressed in the documentation and that there needs to be an adaptive management plan for the fish hatchery (Serge). Gary agreed that there needs to be a better articulated strategy between hatchery operations and restoration efforts.

Mary Scoonover (Resources Law Group) reminded the subcommittee of her comments from the last meeting: that delays could negate existing funds or that there is a likelihood that once the need for more funds is identified, the funds will not be available. She supported the review panel and workshop process, and encouraged the subcommittee members to reexamine their underlying assumptions regarding the project. She said that there has been a significant slip in the schedule, and that the current schedule is no more realistic than previous timelines; if the schedule continues to slip, the concerns will not go away. She

suggested the Battle Creek proponents look at incremental implementation so the BDA can make a final decision about the project. Mary encouraged everyone not to allow the process to overtake what needs to be done. Gary joined Mary in encouraging people in thinking about incremental implementation.

Ecosystem Restoration Program Status Report

Deputy Director's Report

Dan provided an update to the subcommittee regarding two administrative issues for the ERP. The first had to do with the contract freeze, which has been lifted on some of the ERP funds. This means that some contract amendments and approved contracts can be written. The ERP can use almost all of the remaining Proposition 204 funds, about \$50 million, and about \$10 million of the \$60 million of the Proposition 50 funds. This means that everything that is in process can move forward as the ERP awaits the May budget revise.

The second item had to do with the BDA finance plan. The BDA finance plan efforts are proceeding, but are not yet public; those plans will be public at some point, however.

Environmental Water Program (EWP)

Campbell Ingram (FWS) sent in a written update of the EWP that was distributed to the subcommittee. Dan explained that the program is moving ahead and that Campbell is working on community outreach, which is critical to the success of the program. Gary said that EWP is an important priority that has not received in the past the attention it deserved, and expressed his appreciation that the EWP was progressing.

The question came up as to how satisfactorily has the agency team been working. Dan explained that the core team of agency members and consultants were doing programmatic work, but that there was a low level frustration that there was not as much participation by the agencies as had been hoped. Both Diane and Mike expressed surprise because they have the understanding that both DFG and NOAA Fisheries are participating in EWP, and if there are problems, then Campbell ought to let them know. Gary asked Dan to invite Campbell to the March 25 meeting to clarify this.

The next question asked what the budget for EWP implementation was. Dan said that EWP still has \$6 to \$7 million from the Bay-Delta Enhancement Act (federal money) as well as a commitment to use Proposition 50 funds once projects are selected.

Diana asked Gary to clarify what his priority is regarding the EWP. She explained that while the ROD commitments were to acquire 100,000 acre-feet by the end of Stage 1, and combined with the ERP flow targets, all of the EWP effort so far has

been focused on creating a pilot project on small streams. She asked Gary if he was concerned that EWP was working on small streams, because she does not think that EWP cannot meet all the needs at once. Gary said that he thought the flow targets as they relate to the larger Delta outflow ought to be clarified and that meeting the flow targets will not be met in the short-term. He stated that from the Bay Institute perspective, EWP is part of the incremental progress in meeting the overall targets.

Discussion turned to the specific creeks about which EWP is holding core team meetings. Serge asked how EWP efforts fit in with the ERP regional strategy, and he suggested that the opportunities identified thus far by EWP appear to have minimal benefits and tend to target spring-run Chinook. Diana reminded the subcommittee that everyone agreed to embark on the EWP pilot project; she said that the pilot project is taking a lot of work and that it was not getting as far or as fast as was originally anticipated, but that it is based on the biological benefits articulated and anticipated by the core team. She asked what other alternatives were available. Serge said there was a project proffered on Mill Creek that had quantifiable objectives, an adaptive management plan, and the water rights were identified; he suggested that it would be beneficial to convene a core team of biologists to find out what EWP water acquisitions could be used for. Gary said that the Fish and Wildlife Service did a biological assessment and a consultant completed a flow report about Mill Creek; Dan explained that those reports were already in the "tool kit".

Gary asked that the discussion about the EWP and whether to invite science advisors into the process be added to the March subcommittee agenda.

Proposal Solicitation Process (PSP)

Dan Ray (ERP) explained that it has been almost two and one-half years since the last PSP and that ERP has been working on projects and directed actions selected under the last PSP and are nearing the end of that process. Dan referred the subcommittee to copies of the letter from the ERP Science Board and Dan Castleberry's response, which outlined the three parts to the current PSP: (1) a focused solicitation for monitoring and evaluating of previously-funded projects; (2) a broad solicitation for everything else; and (3) coordination with the Anadromous Fish Screen Program (AFSP) to focus on fish screen projects.

Dan explained that the monitoring and evaluation PSP will look at how the adaptive management plans are being carried out and at looking at how entire ecosystems are responding to the specific projects. The PSP committee hoped to open the PSP during summer 2004.

The broader PSP solicitation would be for all ERP goals other than fish screens. This PSP will emphasize high priorities outlined in the draft Stage 1 Implementation Plan; the soonest this PSP will be out is late 2004 or early 2005.

There are about 12 high priority fish screen projects identified in the draft Stage 1 Implementation plan, and those that are ready for next phase funding will be the focus of the AFSP. These projects will go through a selection panel review similar to what other PSPs receive.

Among the uncertainties in planning for the PSP is the budget situation, the results and implications from the milestones assessment, and the effect of contracts not currently in place. Next steps for the PSP include coordinating with the AFSP, drafting the monitoring and evaluation PSP, and presenting the PSP to the subcommittee, the Agency Coordination Team, and the BDA for approval.

Diana stated that the BDA has heard information about the monitoring issues and about level performance indicators; she encouraged Dan and the PSP committee to use the same language in those presentations in the PSP. Gary also encouraged them to look for monitoring criteria that could be consistent across projects and to be as specific as possible. Dan Castleberry indicated that there clearly was more work to do before the PSP was completed, and Rhonda Reed (ERP) said that one of the goals was to determine the programmatic indicators. Dan Ray asked Diana to clarify what level of evaluation she was seeking, and she gave the example that salmonids are integrating species across projects and programs. Gary stated that gaps in knowledge needs to be in the discussion, and asked if developing the monitoring and evaluation criteria ought to be developed by the Science Program.

Serge asked if the fish screens PSP would go beyond the list of those in the draft Stage 1 Implementation plan; Dan Castleberry said no, the list was the list and that the ERP would work for better coordination of ERP funds with the AFSP. Serge asked if there was still a role for a selection panel. Dan said yes, and explained that the expectation was that the fish screens were going to be built, and that a selection panel could assist in assessing the plans and quality of the fish screens.

Diana asked if the draft Stage 1 Implementation Plan was going to be redrafted; the answer was no, not at this time.

Multi-Year Program Plan

Nancy Ullrey (ERP) presented for the first time a copy of the Year 5-8 ERP Multi-Year Program Plan to the subcommittee. She explained that the plan differed somewhat in structure and content from the previous version and she highlighted those sections that had changed. Some information, she said, was carried over from the previous year's program plan. Nancy requested that subcommittee comments about the program plan be submitted to her by March 3. The schedule for the program plan was for a draft to be presented at the March BDPAC meeting and a revised final draft would go to the BDA in May for approval at its June 2004 meeting.

Independent Science Board (ISB)

Patrick Akers (CDFA), representing the Working Landscapes Subcommittee (WLS), asked the subcommittee to consider the WLS memo asking the BDA to consider appointing someone with socio-economic expertise to the Independent Science Board. Patrick said that the WLS will likely go ahead with the request to the BDA, but wants to work with other subcommittees who are interested in the idea. He said that the WLS looks to have joint meetings with other subcommittees if necessary. Gary said he was not opposed to the idea, but wanted to see the language redrafted to tie in more with the ISB's purpose of ensuring analytical and methodological integrity; he also would like to see language that reflected a more inclusive range of socio-economic activities, not just agricultural related activities. The subcommittee indicated that it was interested in working with WLS on this issue, and Gary suggested that it could likely be completed by a conference call.

Tim suggested that it might be more appropriate for BDPAC to ask the BDA to consider this, rather than the WLS. Patrick said he would take both suggestions back to the WLS for their consideration.

Public Comments

There were no public comments.

Next Meetings

The next meeting for the Ecosystem Restoration Subcommittee is 9 a.m. to 1 p.m. on Thursday, March 25, 2004, from 9 a.m. to 1 p.m. Agenda items include updates on the Integration Matrix, Battle Creek, and the Environmental Water Program. The subcommittee also scheduled a meeting for Thursday, April 15 from 9 am. to 1 p .m.