

## Issue Tracking as of January 22, 2012

### Greater Battle Creek Watershed Working Group

The issues, ranked in order of the group's sense of importance in January 2011, that can be addressed and affected by the Greater Battle Creek Watershed Working Group to maximize restoration of all naturally produced anadromous fish and maintain, and restore, as necessary, a healthy watershed and landscape.

Rank	Issue	Updated	Battle Creek Restoration Project	Coleman National Fish Hatchery	General Watershed Issues
1.	Coleman Hatchery Adaptive Management Plan	1/12		X	
2.	Complete the Fisheries Management Plan	1/12	X		
3.	Funding: The cost of implementing the Restoration Program increases as funding issues are being resolved	1/12	X		
4.	Litigation against the Restoration Project may cause further delays and increase costs to construction.	1/10	X		
5.	Watershed monitoring	1/12			X
6.	Coleman hatchery emergency water intake needs a fish screen	1/12		X	
7.	Continue outreach activities to gain stakeholder support and understanding of the Battle Creek Restoration Project	1/12			X
8.1	Restoration Project Biological Opinion (Partially resolved)	1/12	X		
8.2	Hatchery Biological Opinion	1/12		X	
9.	Land and timber management in upper Battle Creek could be contrary to restoration goals	1/12			X
10.	Interactions between hatchery and wild fish	1/12			X
11.	Agreements with landowners	1/12	X		

## Other Non-Prioritized Issues

Issue	Updated	Battle Creek Restoration Project	Coleman National Fish Hatchery	General Watershed Issues
A. Alternative actions in the Restoration Project	1/06			X
B. Inconsistent implementation of agency policy	6/05			X
C. Lassen Lodge hydropower project	1/12			X
D. Degradation of socio-economic conditions	1/12			X
E. Winter-run chinook recovery plan	1/12			X
F. Degradation of natural watershed qualities	1/12			X
G. Shasta Ranch gravel project	1/12			X
H. BLM lands as National Recreational Area	1/12			X
I. Risk of fish extinction	1/12	X		X
J. Winter Chinook Feasibility Study	1/12			X
K. Complete the comprehensive watershed planning process	1/12			X
L. Continuation of hydroelectric project	1/12			X
M. Potential impact to private businesses	1/10	X		
N. Value of hatchery vs. natural/wild fish	1/12			X

## Past Issues That Have Been Resolved

Issue	Resolved	Battle Creek Restoration Project	Coleman National Fish Hatchery	General Watershed Issues
A. Concern over creating a new genetic run as a result of the Restoration Project	6/05	X		
B. Steelhead trout above the barrier weir	6/05		X	
C. Fishing regulations may change as a result of the Restoration Project	6/05	X		
D. Fish stocking policies may change where anadromous fish exist	6/05			X
E. Agency decisions are made without adequate stakeholder input stocking policies may change where anadromous fish exist	opinion			X
F. Insufficient outreach and information sharing with the public	opinion	X		
G. Restoration goals are inadequately defined	1/06	X		

H.	Restoration Project environmental documentation	9/09	X		
I.	Modify the Coleman NFH Barrier Weir	10/08		X	
J.	Screen Orwick Diversion	9/06			X
K.	Restoration Project Biological Opinion	1/12	X		

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**1. The Coleman NFH Adaptive Management Plan has not been completed.**

Kevin Niemela, Scott Hamelberg, and Mary Marshall are the contacts. Status as of January 2012: The solicitation for the Request for Proposal for development of the Coleman National Fish Hatchery Adaptive Management Plan was posted in December 2011 and closed January 2012. The proposal evaluation process is expected in late January or early February 2012. Contract Award is anticipated by end of February 2012.

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<b>History</b>	
January 2011	Agreement was reached on the content of the SOW in November 2010, and Reclamation is moving forward with a request for proposals process to award a contract to develop the CNFH AMP. Contract award is anticipated around July 2011.
July 2011	Contract Award is anticipated by the beginning of September 2011.
Jan 2010	Reclamation received State Funding for CNFH AMP development in July 2008. Since the CNFH AMP will be developed via a contract, a Statement of Work (SOW) was drafted in August 2008. The SOW has gone through a few rounds of review and comment and is close to being finalized. (The Statement of Work is needed for the procurement process to receive proposals and eventually award a contract.)
Nov 2006	Once a funding decision is made on the Restoration Project, we can move forward with this plan.
June 2005	<p>In February, 2004 the California Bay-Delta Authority Science Program held a public meeting to report on the findings of a Science Panel Review of the effects of Coleman National Fish Hatchery (Coleman NFH) on the recovery of anadromous salmonids in the Battle Creek watershed. The Panel concluded that the operation of the Coleman NFH may pose significant risk to the recovery of anadromous salmonids in Battle Creek. A key tenet of the Panel's conclusion is that scientific uncertainties underlie all aspects of Battle Creek fisheries management, including interactions between the Restoration Project and the Coleman NFH. In recognition of these uncertainties, the Panel recommended that adaptive management be used to guide the hatchery decision making process for those operations that may affect the restoration project.</p> <p>In April 2004 the Restoration Project PMT developed a proposal to request CBDA funding for the development (\$240,000) and implementation (\$1,000,000) of an adaptive management plan for the Coleman NFH (Coleman AMP). The Coleman AMP would be closely coordinated with the Restoration Project AMP and would lay out a strategy to monitor, study, and assess hatchery operations that may affect the achievement of goals of the Restoration Project. A funding decision by CDFG is anticipated at the same time as that for the Restoration Project.</p> <p>Residents and landowners in the Battle Creek watershed and members of the GBCWWG support the development and implementation of the Coleman AMP as a means to investigate and address scientific uncertainties surrounding potential impacts of Coleman National Fish Hatchery on restoration of the Battle Creek watershed.</p>

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**2. The Fisheries Management Plan has not been completed.**

Mike Berry is the Contact. Status as of January 2012: Work continues on the development and writing of the FMP for Battle Creek. The FMP team held two meetings to discuss the plan details. The plan will include historical information for each of the 5 salmonid species eventually reintroduced into the new habitat created by the BC Restoration Project. Also included will be population based management goals and objectives for each salmonid species.

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**History**

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January 10, 2006 The fishery management plan (strategy) has been on hold until completion of the winter run Chinook salmon feasibility analysis (see separate issue). The winter run feasibility analysis will be completed in 2006 prior to construction of the Restoration Program in 2007. Once the feasibility analysis has been completed, work will continue on the fish management strategy as a sub-committee of the Battle Creek working group. The Management strategy will be finished prior to the completion of the physical components of the restoration plan for Battle Creek.

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### **3. Funding: The cost of implementing the Restoration Program increases as funding issues are being resolved.**

Mary Marshall is the contact. Status as of January, 2012: Reclamation anticipates approximately \$28 M in State funds from DFG and DWR for Phase 2 by the end of June 2012.

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**History**

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January 2011 In early 2011, Reclamation anticipates receipt of \$28 M in State funds from DFG and DWR for Phase 2.

July 2011 Reclamation anticipates receipt of \$28 M in State funds from DFG and DWR for Phase 2 by the end of 2011.

Sept 2009 In early 2011, Reclamation anticipates receipt of \$28 M in State funds from DFG and DWR for Phase 2.

In July 2008, via funding agreements, Reclamation received \$49.25 M from the following sources to implement Phase 1A of the Restoration Project:

- DFG State (Proposition 50) Funds: \$26.82 M
- California Wildlife Conservation Board Proposition 50 Funds: \$9.98 M
- Caltrans Benicia Bridge Mitigation State Funds: \$ 4.45 M
- Caltrans Richmond San Rafael Bridge Mitigation State Funds: \$1.5 M
- Iron Mountain Mine Mitigation Federal Funds: \$ 6.5 M

In April 2009, Reclamation received \$26 M in Recovery Act Funding to implement Phase 1B of the Restoration Project.

Funding for Phase 2 of the Restoration Project has not been determined.

During Phase 1A, fish passage improvements on the North Fork will be achieved by installing fish screens and ladders at the North Battle Creek Feeder and Eagle Canyon Diversion Dams; installing the Eagle Canyon Canal pipeline, removing the Wildcat Diversion Dam and appurtenant conveyance systems, and modifying the Asbury Dam on Baldwin Creek. During Phase 1B, improvements on the lower South Fork will be achieved by installing a tailrace connector from Inskip Powerhouse to Coleman Canal and a new Inskip Powerhouse bypass (near Coleman Dam). During Phase 2, additional fish passage improvements on the South Fork of Battle Creek will be achieved by removing the Coleman, South, Lower Ripley Creek Feeder, and Soap Creek Feeder Diversion Dams; installing screens and ladders on the Inskip Diversion Dam; installing a tailrace connector from South Powerhouse to Inskip Canal; and decommissioning the South Canal.

March 2008 In addition to three funding transfer agreements between DFG and Reclamation, up to three funding assurance agreements between PG&E and Reclamation will be prepared. All of these agreements are specific to Phase 1A of the Restoration Project. All of these agreements need to be completed before PG&E will submit the FERC License Amendment application for Phase 1A. These agreements are anticipated to be completed in Spring 2008.

- November 2007 Three different funding transfer agreements may be completed by late fall of 2007. There are three agreements because the Ecosystem Restoration Program (ERP) funds that the California Bay Delta Authority (CBDA) transferred to the California Department of Fish and Game (CDFG), combined with CDFG's existing ERP funds wasn't as high as CDFG previously thought so CDFG found mitigation money in California Department of Transportation (Caltrans) and money in the State of California Wildlife Conservation Board (WCB) to make up for the difference. CDFG and the Bureau of Reclamation (USBR) are working with the WCB and Caltrans to transfer these funds through two additional and separate agreements (from than the CDFG agreement). These agreements need to be in place before Pacific Gas and Electric Company (PG&E) will submit their license amendment application to the Federal Energy Regulatory Commission (FERC) and USBR can proceed with the construction contract procurement processes. There is also \$6.5 million being provided by the Iron Mountain Mine Trustee Council; these federal funds can be transferred easily to Reclamation.
- May 2007 Agreements to transfer funds are being finalized.
- March 2006 In September, 2005 a Final Cost Estimate Summary was relayed to the CBDA, which indicates a need for an additional \$73.5 million for the Restoration Project. In October 2005, CBDA voted to transfer their remaining ERP State Prop. 50 Funds (\$45 million) to CDFG, and CBDA also recommended that CDFG fund the Battle Creek Salmon & Steelhead Restoration Project 'conditioned upon the completion of the environmental documents for the project, acquisition of necessary easements and compliance with all other legal requirements'. Additional information is available at: [http://www.delta.dfg.ca.gov/erp/signature\\_battle\\_creek\\_dareview.asp](http://www.delta.dfg.ca.gov/erp/signature_battle_creek_dareview.asp)
- January 2006 On August 3, 2005 the CBDA made a final recommendation to approve funding with conditions for up to 64 million dollars. The Selection Panel received three letters from the general public during the 30-day public comment period of the Panel's initial recommendation. All three letters were from landowners in the Battle Creek Watershed. The ERP Selection Panel believes the issues raised in the comment letters are more appropriately addressed in the project's joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and/or by the project lead agencies, including the CDFG. The State Water Board is the CEQA lead, and the USBR is the NEPA lead. These public comment letters are available for viewing at the following link: [http://www.delta.dfg.ca.gov/erp/signature\\_battle\\_creek\\_dareview.asp](http://www.delta.dfg.ca.gov/erp/signature_battle_creek_dareview.asp)
- The Selection Panel also received a letter from USBR, CDFG, US Fish and Wildlife Service, and NOAA Fisheries responding to our initial recommendations. The Panel appreciates this response to the initial recommendation and the agencies' affirmation of a commitment to the project's timely implementation and long-term management. The ERP Selection Panel would like to reiterate three aspects of our Initial Recommendation.
- First, we recommend that both the CBDA Ecosystem Restoration Program staff and Science Program staff assist with independent technical review of future project management documents, including the Battle Creek fish management strategy.
- Second, we urge the agencies to develop life-cycle models for winter-run and spring-run Chinook salmon and steelhead before the construction phase of the project is completed. The Joint Battle Creek Review Panel (JBCRP) stated in its technical review that these models could be used "to demonstrate the degree of success of the Project" and "to explain what happened to the channels, habitats, thermal environments, and fish populations in Battle Creek." These models should include a level of specificity that allows them to inform adaptive management of the target species on Battle Creek, as recognized in the agencies letter by their commitment to modify and expand developing models for use in Battle Creek. We agree with the JBCRP that the models would provide a critical framework for understanding the observed responses in Battle Creek and therefore would be more useful if developed before construction is completed.
- Third, the Selection Panel believes that public workshops and meetings that bring together the State and Federal agencies, PG&E, the scientific community, and local stakeholders are

necessary to ensure the success of restoration efforts. These public forums will also ensure that regular reports and information collected during project implementation are widely disseminated and that there is accountability by the agencies with a role during and after implementation of the Restoration Project. The project agencies should work with the CBDA ERP staff to schedule these forums at key times during project implementation.

June 2005 A letter of support for the request for additional funds was sent from the GBCWWG to California Bay-Delta Authority Director Patrick Wright. Carissa Dunn was responsible for completing this letter.

There is a 30 day review period once a decision is made by the selection committee (June 20th). This group may be able to comment during this 30 day review either as individual entities or as the GBCWWG. Website:

[http://www.delta.dfg.ca.gov/erp/signature\\_battle\\_creek\\_dareview.asp](http://www.delta.dfg.ca.gov/erp/signature_battle_creek_dareview.asp)

May 2005 During the annual meeting of the Battle Creek Watershed Conservancy on May 23<sup>rd</sup>, there were 51 people in attendance, 31 people voted (including proxies), all in favor of supporting the Battle Creek Salmon and Steelhead Restoration Project.

March 2005 See Battle Creek Restoration Project March 2005 final revised Ecosystem Restoration Program PSP forms to provide documentation for cost increases.

[http://www.delta.dfg.ca.gov/erp/signature\\_battle\\_creek\\_dareview.asp](http://www.delta.dfg.ca.gov/erp/signature_battle_creek_dareview.asp)

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#### 4. **Litigation against the Restoration Project may cause further delays and increase costs to construction.**

Mike Berry is the contact. Status as of January 2010: The Sacramento Superior Court found that the Battle Creek Environmental Impact Statement/Environmental Impact Report was legally sufficient and the use of Proposition 50 funds for the project was lawful. Therefore, the project will continue to proceed.

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##### **History**

January 2008 Background: Project opponents have threatened litigation against the Restoration Project at various times during planning and development phases. Some of the threats were more viable than others.

The July 2005 Restoration Project EIS/EIR was prepared jointly by the State Water Resources Control Board (State Water Board) and the USDO, Bureau of Reclamation (Reclamation). On September 19, 2006 the State Water Board certified the adequacy of the EIS/EIR. Subsequently on October 18, 2006, Case No. 06-CS01520 was filed in Sacramento County Superior Court. Under this case, Outfitters Properties, LLC, Rocky Springs Ranch, LLC v. State Water Resources Control Board of the State of California, the petitioners are purportedly challenging the certification of the EIS/EIR for the Restoration Project.

On March 14, 2007, the California Department of Fish and Game (DFG) filed CEQA Findings and a Notice of Determination in regard to a Funding Decision on the Restoration Project. Subsequently, on April 12, 2007, Case No. 07-CS00462 was filed in Sacramento County Superior Court. Under this case, Outfitters Properties, LLC, Rocky Springs Ranch, LLC v. State Water Resources Control Board of the State of California, the petitioners are purportedly challenging the certification of the EIS/EIR, certain funding decisions and/or conditions, and compliance with CEQA (in various aspects) for the Restoration Project. The respondents to this case are the State Water Board and its Executive Officer, and the California Department of Fish and Game (DFG), and its Director.

The litigation process associated with addressing these lawsuit filings could cause considerable delays and substantial cost increases to the Restoration Project.

Solutions: The litigation process is proceeding. This is likely outside the ability of the GBCWWG (watershed group) to resolve. Landowners have identified several actions which might reduce the potential for litigation on their part. These actions are not acceptable to Federal and State agencies due to incompatibility with the project purpose, increased

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environmental impacts, additional cost and significant project delays which would result by implementing landowner alternatives. The GBCWWG should continue their outreach program outlining the benefits from this project to the community. Many local businesses are already benefiting from the increased trout population as a result of higher interim flows in Battle Creek. These benefits will be jeopardized by lengthy litigation.

## 5. Long term watershed condition monitoring is not occurring.

Mike Ward and Melanie McFarland are the contacts.

Status as of January 17, 2012 for the Lassen National Forest (Melanie McFarland is the contact): **In-channel and/or water quality effectiveness monitoring, Lassen National Forest (LNF)**; effectiveness of management strategies on National Forest System (NFS) lands (LNF) in Battle Creek are evaluated primarily using pre and post project effectiveness monitoring. Data collected from streams reaches are selected to evaluate conditions before and after project implementation.

A few examples of effectiveness monitoring, and results, are:

- In 2007, in-stream monitoring results of projects implemented in two tributaries (Summit and S.F. Bailey) to Battle Creek were conducted and reported in the following document:  
[http://www.fs.fed.us/r5/hfqlg/monitoring/resource\\_reports/hydrology\\_and\\_fisheries/stream\\_condition\\_02.01.2008.pdf](http://www.fs.fed.us/r5/hfqlg/monitoring/resource_reports/hydrology_and_fisheries/stream_condition_02.01.2008.pdf).
- Since 2007, Summit Creek has been included in a long-term monitoring effort utilizing the Region 5 Stream Condition Inventory Protocol to assess the effects of land management activities (vegetation management/watershed improvements). Results of this monitoring are included in the following document:  
[http://www.fs.fed.us/r5/hfqlg/monitoring/resource\\_reports/hydrology\\_and\\_fisheries/Stream%20Condition%202010.pdf](http://www.fs.fed.us/r5/hfqlg/monitoring/resource_reports/hydrology_and_fisheries/Stream%20Condition%202010.pdf)
- From 2003-present, the LNF has collaborated with Dr. Kenneth Tate (UC Davis) in monitoring key stream attributes to evaluate the effects of conifer removal on water resources. One (of four) project sites is located in the Battle Creek watershed in the S.F. Bailey Creek (Brokeoff Meadows). Data collection included streamflow, stream canopy cover and solar radiation, stream water temperature, stream water quality, and stream macroinvertebrate composition. Both pre and post treatment stream data has been collected. Preliminary results are summarized here:  
[http://www.plantsciences.ucdavis.edu/plantsciences\\_faculty/tate/main/aspen\\_stands.htm](http://www.plantsciences.ucdavis.edu/plantsciences_faculty/tate/main/aspen_stands.htm)  
and, complete project treatment descriptions, methods, and results from 2003 through 2008 can be found in the current project report here:  
[http://www.plantsciences.ucdavis.edu/plantsciences\\_faculty/tate/publication%20list%20and%20files/tate%20aspen%20progress%20report%202003%20to%202008.pdf](http://www.plantsciences.ucdavis.edu/plantsciences_faculty/tate/publication%20list%20and%20files/tate%20aspen%20progress%20report%202003%20to%202008.pdf).  
UCD is currently completing data analysis for the entire 2003-2010 study period and the final report is expected to be completed during the first or second quarter of CY2012.

Additional information on existing conditions (as of 2001) is also available in a report titled: "[Aquatic Condition Report for the Upper Battle Creek Watershed](#)". In this report, the results of stream inventory data collected was analyzed for major tributaries on LNF lands.

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Updated Status as of September 26, 2011 (by Steve Tussing): The Battle Creek Watershed Conservancy (BCWC) received a grant from SWRCB in 2005 to develop a long term watershed condition monitoring plan and to implement limited watershed monitoring. With the assistance of a technical advisory committee comprised of Greater Battle Creek Watershed Working Group members, the BCWC completed in 2008 the Battle Creek Stream Condition Monitoring Plan (SCMP) and Data Analysis Report for 2006 stream monitoring efforts.

<http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf>

<http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoring2006.pdf>

Since 2007 the BCWC has submitted numerous proposals to secure grant funds for implementing the SCMP which to date remains unfunded. A proposal to implement the SCMP was submitted to the DWR PSP in March 2007, and was declined. In March 2010, an inquiry was made with AFRP about funding potential (Tricia Parker) and AFRP was not a good funding fit as funds were being cut back in 2010. A pre-proposal was submitted to CalFed in June 2010 for Directed Action funding consideration. At CalFed's request a full proposal was submitted to the CalFed ERP PSP 2010/2011 in March of 2011, which was declined.

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**History**

June 2005	The BCWC recently received a grant from SWRCB to develop a long term watershed condition monitoring plan. Further information will be forthcoming. The development process will start in summer 2005; invitations for participation will include members of the Working Group.
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**6. Coleman National Fish Hatchery emergency intake needs a fish screen.**

Scott Hamelberg is the contact. Status of January, 2012: Phase I: Construction to screen intake #3, expand intake #1 and install new pipeline between intake #1 and #3 is completed. Phase II, the screening/modification of the emergency intake, intake #2, is not funded at this time. Use of Intake #2 only required when primary intakes (Intake #1 or #3) not available. Expansion of Intake #1 and increased reliability of water through the PG&E system (Intake #1 water source) should result in limited need to operate Intake #2.

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**History**

Fall 2010	Expanded Intake #1 Completed
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September 2009	Construction to screen Intake #3 completed
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November 2007	Overall Project: The plan is to begin vegetation clearing no later than early January 2008 and be completed by February 1, close of the neotropical bird window. Actual construction expected to begin in May with screening intake #3, expanding intake #1, and installing the new pipeline between intake #1 and #3. This is still a tentative schedule as many things still need to fall into place. Project Design: Still taking comments and hope to have specs completed and ready for bid in next 1-2 months. Received detailed comments from the NMFS a day or so ago regarding proposed Intake #3 screen designs.
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Vegetation Removal: Still hoping permits will be obtained and EA/IS signed in time to begin clearing in late December/early January and completed by February 1 deadline.

Environmental Compliance/permitting:

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	<ul style="list-style-type: none"> <li>• EA/IS: Received only a few comments on draft FONSI and Mitigated Negative Declaration and both have been finalized. The EA/IS is very close to being finalized with responses to comments done. (For copies, contact Jim DeStaso at <a href="mailto:jdestaso@mp.usbr.gov">jdestaso@mp.usbr.gov</a>.)</li> <li>• Section 404: Letter of Permission application submitted about October 24.</li> <li>• Section 401: Submitted about October 23.</li> <li>• Section 402 (for vegetation clearing only): Submitted about October 23.</li> <li>• FWS Consultation: Completed about October 18.</li> <li>• NMFS Consultation: Ongoing, mildly hopeful BO will be completed in December.</li> <li>• State Historic Preservation Office Consultation: Initiated about November 5.</li> </ul>
July 2007	On March 20, 2007 A public meeting on the CNFH Intake Improvement project was held in conjunction with the release of the Draft EA/IS for the NEPA/CEQA process. The comment period on the draft document closed on April 13, 2007. Reclamation and FWS are working with the contractor, Tetra Tech, Inc., to respond to comments and identify a preferred alternative. Due to cost/funding issues, options are being examined for a "phased" project.
September 2006	Reclamation is moving forward with the project to provide fish screens for the Coleman National Fish Hatchery water intakes. Reclamation has secured funds for design and 50% of the cost of construction. A contract with Tetra Tech, Inc. has been secured to prepare the required environmental documentation and Reclamation engineers are providing technical support to this process. A multi-agency/stakeholder meeting for this project was held on Sept 7, 2006.
May 2006	Funding is being sought. The need to screen the intakes is supported by the four agencies (DFG, USBR, USFWS & NOAA). In July 2005, Reclamation and USFWS reinitiated an effort to assess previously identified intake screening alternatives. Four alternatives are being examined for further study. The USBR Technical Service Center (TSC) is in the process of preparing an Intake Alternatives Analysis including the re-estimation of construction and operating costs at current price levels, and the re-evaluation of the alternatives against specific selection criteria. In early 2006, Reclamation's Northern California Area Office intends to contract for environmental compliance service to prepare appropriate NEPA and CEQA documents.
June 2005	Currently have verbal agreement from USBR to split cost of the screening of the Coleman NFH intakes. USBR to provide funds under the RAXS program. Need to secure that other half of funding from CBDA. \$200,000 coming in 2006 from CVPIA for intake #1. Considering using these funds for environmental documentation. Ideally construction to begin in 2007 and continue through 2009. Intake #1 needs rehabilitation. Intakes #2&#3 need screens. Total project cost is estimated at \$10 million.

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**7. Continue outreach activities to gain stakeholder support and understanding of the Battle Creek Restoration Project.**

Tricia Parker Hamelberg is the contact. Status as of January, 2012: The bimonthly meetings of the Greater Battle Creek Watershed Working Group are open to the public and provide a venue for information sharing. Status updates are given on most of the activities underway (e.g. the USFWS distributes written updates on all their Battle Creek activities, USBR gives an update on their activities and local stakeholders give updates).

**8.1. Complete the Restoration Project Biological Opinions.**

- ii. PG&E License Amendment Biological Opinion:** Liv Imset and Naseem Alston are the contacts. Status as of January 2012: There are no requests pending for an additional Biological Opinion. Phase 2 of the Restoration Project will require a Biological Opinion to be issued.

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**History**

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January, 2011 NMFS issued a Biological Opinion for Phase 1A of the Restoration Project on July 21, 2009. It was incorporated into the license by FERC Order Amending License issued August 25, 2009.

NMFS issued a Biological Opinion for Phase 1B on April 27, 2010; it was incorporated into the license by FERC Order Amending License issued May 21, 2010.

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NOTE: Issues 8.1 **i.** and 8.1 **iii.** were moved to Past Issues That Have Been Resolved, Issue K (per Tricia Parker Hamelberg).

## 8.2 Coleman NFH Biological Opinion has not been completed.

Naseem Alston and Jim Smith are the contacts. Status as of January, 2012: FWS completed the updated 2011 Coleman National Fish Hatchery Complex Biological Assessment (BA) and submitted to the NMFS on July 27, 2011. The 2011 BA and the 2001 BA are posted at [http://www.fws.gov/redbluff/he\\_reports.aspx](http://www.fws.gov/redbluff/he_reports.aspx)

The FWS also provided a draft Biological Opinion to NMFS. NMFS is currently reviewing both documents.

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**History**

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Jan 2011 In early 2009, after a continuing lack of available NMFS staffing prevented the finalization of the Biological Opinion (BO) for the Coleman NFH, the FWS Regional Director and NMFS Southwest Regional Administrator agreed that the FWS would assist in the development of a hatchery BO. The FWS is conducting staff work to generate a draft BO for NMFS review and consideration. Because almost nine years had elapsed since the completion of the June 2001 BA, the FWS is also updating the BA to include new information and analyses in order to complete a draft BO. The updated BA and a draft BO are expected to be submitted to NMFS in the spring of 2011.

Jan 2006 The Coleman NFH BO is in final Sacramento Section 7 coordinator review (step (2) shown below).

June 2005 The BA was submitted June 2001 to NOAA Fisheries. Shirley has been reviewing this document. There is no estimated date of when this will be completed. There is a legal requirement that the BO be issued in 135 days. The existing BO is ongoing until a new BO is issued. There is no real issue with the ongoing BO other than from an agency perspective of take. From the GBCWWG perspective it is important to know how the opinion of NOAA Fisheries. Scott – this is an important issue because FWS made a BA and a lot of people were waiting for an opinion from NOAA fisheries on what impact operation of Coleman NFH has. Has some impact on credibility of the Government with the stakeholders.

The latest draft of the Coleman NFH Biological Opinion has been submitted for initial editorial/technical review. Remaining steps include: (1) completion of editorial/technical review and inclusion of edits; (2) completion of final Sacramento section 7 coordinator review and inclusion of edits; (3) completion of final Long Beach section 7 coordinator review and inclusion of edits; (4) and final approval and signing of biological opinion.

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## 9. Land and timber management activities in upper Battle Creek could be contrary to restoration goals.

- i. **Public lands:** Melanie McFarland is the contact. Status as of November, 2010: On lands administered by the Lassen National Forest (LNF) in upper Battle Creek, management activities follow direction contained in the LNF Land and Resources

Management Plan (as amended). Management direction includes the “Long-Term Strategy for Anadromous Fish-Producing Watersheds in the Lassen National Forest”. The long-term strategy was developed in collaboration with NMFS and designed specifically for the protection and restoration of important anadromous fish-producing watersheds of the Lassen NF, including Battle Creek.

In addition to current direction and regulations, specific actions that complement the restoration project include efforts established under partnership between the Battle Creek Watershed Conservancy (BCWC) and the LNF. One component of a CALFED grant awarded to the BCWC was aimed at improving upper watershed conditions to benefit downstream listed anadromous fish and their habitat. Actions have been implemented on National Forest Service lands to reduce or eliminate chronic sources of sediment (primarily associated with roads) in headwater tributaries of Battle Creek.

Over the years, LNF personnel have made three presentations to the GBCWWG and hosted two field trips (2006 and 2009) for the GBCWWG. The purposes of these efforts were to share information on proposed federal activities designed to meet forest resource management goals and objectives and, to inform interested parties of the opportunity to provide input and feedback during the NEPA process. Primary activities shared have focused on maintaining and/or improving watershed health through the treatment of roads (sediment reduction) and vegetation/fuels management.

- ii. **Private lands:** Angela Wilson and Guy Chételat are the contacts. Status as of January, 2012 provided by Guy Chételat : Concern has been raised regarding potential for sediment discharges from clear cutting (AKA even age cutting) on private lands in Battle Creek watershed. During the period 1998 through 2011 approximately 23,655 acres were clear cut over a total of 145,073 acres (approximately 16%) of mixed ownership timber managed lands (CAL FIRE data). In response to public concern, a multiagency task force comprised of agencies that oversee the timber harvest plan approval process was formed to assess the potential for impacts to water quality from established clearcuts in the watershed. The complete task force report can be found at the CAL FIRE internet site address below. The executive summary is provided below.  
[http://www.bof.fire.ca.gov/board\\_business/other\\_board\\_actions](http://www.bof.fire.ca.gov/board_business/other_board_actions)

#### EXECUTIVE SUMMARY

A Rapid Assessment of Sediment Delivery from Clearcut Timber Harvest Activities in the Battle Creek Watershed – Interagency Battle Creek Task Force  
2011

The Battle Creek Salmon and Steelhead Restoration Project is a cornerstone for the recovery of listed salmonid species in the Sacramento Valley, northern California. The spring-dominated, relatively cold waters of Battle Creek provide important potential refugia for salmon and steelhead in the event of rising global temperature. As restoration activities focus on the removal of downstream barriers for salmonid migration, much of the headwaters of Battle Creek are being managed for high-yield timber production by the largest private landowner in the watershed – Sierra Pacific Industries (SPI). SPI’s use of clearcutting, coupled with the rate of harvest in the upper watershed, has alerted local environmental stakeholders to the potential for water quality impacts from these harvest practices. These concerns have garnered

State-wide attention with the recent publishing of several stories in the Sacramento Bee detailing the potential for clearcut related impacts to the success of the restoration in Battle Creek. In response to public concern, staff from the Timber Harvesting Plan (THP) Review Team agencies formed the interagency Battle Creek Task Force (Task Force). The Task Force performed a rapid assessment to determine if timber operations associated with SPI clearcut harvesting in Battle Creek had resulted in observable erosion and subsequent delivery of sediment which has resulted in violation of state law or observable negative impact to fisheries.

Over a five-day field period in September 2011, the Task Force assessed the potential for water-quality impacts at 135 sites they determined to have a high risk for sediment delivery to waters of the state. Of these sites, 55 were clearcut harvest units, 39 were road crossings of watercourses, 24 were watercourse-adjacent road segments, 6 were watercourse-adjacent landings, 5 were tractor crossings of watercourses, and 3 were associated with other sources of erosion. Despite assessing approximately 16 miles of riparian buffers directly adjacent to clearcut harvest units (i.e., 47 percent of the total buffer-zone length adjacent to harvested clearcuts), the Task Force only found one instance of low-magnitude sediment delivery (less than 1 cubic yard) directly associated with a clearcut. However, sediment delivery associated with this site resulted from a Forest Practice Rules (FPRs) violation (encroachment of a tractor into an equipment limitation zone adjacent to a watercourse), rather than from erosion generated within the adjacent clearcut unit.

The Task Force field study found the likelihood of sediment delivery in the assessment area to be highest for tractor crossings, road crossings, watercourse-adjacent road segments, and watercourse-adjacent landings, respectively. All 5 tractor crossings delivered sediment, but were generally delivering only a low-magnitude of sediment to waters of the state. Road crossings and watercourse-adjacent road segments delivered sediment 69 percent and 67 percent of the time, respectively. The magnitude of sediment delivery from road crossings and watercourse-adjacent road segments with implemented Best Management Practices (BMPs) was generally low or unobservable. The highest magnitudes of sediment delivery from roads were associated with poor BMP implementation (e.g., poor road drainage) and/or poor location (e.g., road segments Battle Creek Assessment Report November 2011 within 30-50 feet of a watercourse). Poor BMP implementation was commonly associated with county-managed roads or SPI-managed roads with public access. Watercourse-adjacent landings associated with recent Timber Harvesting Plans (THPs) delivered no sediment, and the lack of delivery was attributed to the protective ground cover provided by application of a wood-chip mulch. Overall, the Task Force saw no significant direct water quality impact related to clearcut harvesting in the assessment area. Most observed timber-harvest-related water-quality impacts were found to be associated with publicly and privately managed roads. These roads are used for all types of timber harvesting in the watershed, whether clearcutting, selection, or some intermediate silvicultural method. Due to the limited time period of the assessment, the Task Force was unable to evaluate the potential for indirect water quality impacts that may result from clearcut harvesting (such as possible increases in suspended sediment and turbidity associated with logging-induced increases in peak flows).

Recommendations developed by the Task force are provided herein to improve the water-quality-related performance of forest roads and to further evaluate the potential for logging-induced water quality impacts in the Battle Creek watershed.

<b>History</b>	
January, 2011	There have been 16 Timber Harvest Plans filed for the Battle Creek watershed area between Manton and Lassen National Forest since 1998. These contiguous plans cover 19,586 acres. Thirteen of these plans, 14,803 acres, have been filed since 2002. Eleven of these plans have been completed, three have been approved and are in litigation and three are not-yet-approved. There is extensive road building included in 3 of the uncompleted plans, all of which are connected to the drainages of South Fork of Battle Creek.
Mar 2006	<p>On lands administered by the Lassen National Forest (LNF), activities follow direction contained in the “Long-Term Strategy for Anadromous Fish-producing Watersheds in the Lassen National Forest” (Sierra Nevada Forest Plan Amendment 2004 ROD). The long-term strategy (LTS) was developed specifically to address the protection and restoration of anadromous fish-producing watersheds (including upper Battle Creek) within the LNF boundary.</p> <p>In addition to current direction and regulations, specific actions that complement the restoration project include efforts established under partnership between the Battle Creek Watershed Conservancy (BCWC) and the LNF. One component of a recent CALFED grant awarded to the BCWC, is aimed at improving upper watershed conditions, for the benefit of the downstream anadromous fishery. Specifically, actions will be implemented to reduce or eliminate sources of sediment (primarily associated with roads) on LNF lands in upper Battle Creek tributaries.</p>
June 2005	<ul style="list-style-type: none"> <li>• Land and timber management activities on private lands throughout Battle Creek are conducted under existing rules and regulations.</li> <li>• The BCWC Assessment of the Battle Creek Watershed (2001-2002) did not find strong evidence that land use is significantly affecting sediment delivery to the South Fork at the watershed scale.</li> <li>• BCWC will soon be developing a monitoring plan that will augment the Watershed Assessment and will be designed to further investigate the issue of upper watershed land management.</li> </ul>

**10. There are unknown implications from the interaction of natural- and hatchery-origin fish.**

Jim Smith is the contact. Status as of January, 2012: This issue is linked to issue #14 and somewhat to issue #8.

<b>History</b>	
June 2005	The primary role of the GBCWWG on these issues should be to monitor and support new and ongoing research, share new information as it becomes available, and understand how it may or may not relate to Coleman NFH and Battle Creek restoration. In recent years, a great deal of research has been conducted coast-wide into investigating the interactions between natural and hatchery-origin salmon and steelhead. This research is usually looking at questions related to effects that are either ecological or genetic. Examples of ecological effects include predation, competition/displacement and disease transfer. Genetic effects would include hybridization and loss of diversity between populations, loss or gain of within population diversity, and overall fitness difference between hatchery and wild fish. Although much research has been completed and has been used to modify hatchery practices, uncertainty still remains and research continues. This issue is broader than the scope of the GBCWWG but is still a concern as it relates to the operations at Coleman NFH and Battle Creek restoration. As new research is completed, the results of those findings should be considered as they related to Coleman NFH.

**11. The Restoration Project requires the development of agreements with the landowners for temporary and permanent construction easements. (Agreements are completed and signed once the Record of Decision is issued.)**

Liv Imset is the contact. Status as of January, 2012: There are no new land owner agreements being negotiated for the purposes of the Restoration Project. Site specific land owner agreements for Phase 1A and Phase 1B have been coordinated with the affected landowners as needed to address Restoration Project construction related issues.

<b>History</b>	
February, 2011	Site specific land owner agreements for Phase 1A and Phase 1B have been coordinated with the affected landowners as needed to address Restoration Project construction related issues.
Sept 2009	PG&E is coordinating the landowner agreements for Phase 1A of the Restoration Project.
November 2007	Landowner coordination is ongoing. In 2007, several meetings occurred between the agencies, PG&E and the landowners associated with Phase 1 of the Restoration Project - Bruce McCampbell, Shirley Davis (and Kelly Ferris), Ron Reid, Horace & Peggy Crawford and Sue & Ed Shaw.
September 2006	USBR, DFG, USFWS and PG&E met with Battle Creek Watershed Conservancy Board Members and landowners, Leland & Shirley Davis, Bruce McCampbell and Erich Vaden, Kerry Burke, & Lannie Johnson (representing Val Vaden) on June 15, 2006 to discuss landowner agreements associated with temporary and permanent construction easements, and other issues. Per the 1999 Memorandum of Understanding, PG&E will coordinate with the landowners to develop these agreements.
March 2006	USBR, USFWS, DFG and NOAA Fisheries developed and sent a letter to landowner Val Vaden (dated March 9, 2006) which requests his feedback on construction items and refinements to proposed mitigation and avoidance measures to address noise, aesthetic or recreational impacts near the Inskip Diversion Dam/South Powerhouse Site. PG&E plans to set up meetings with the landowners in regard to agreements for temporary and permanent construction easement on their properties.
January 2006	USBR and project partners have been meeting with property owners to try to resolve outstanding issues. Meetings have occurred in Mid-June 2005 as well as subsequent meetings in August 2005 and December 2005.
June 2005	There has been two previous Project Managers that have made numerous contacts with the private landowners. USBR is working with PG&E to clearly define the property ownership and easements in the project area. After the ownership determination with PG&E, USBR will be moving forward with discussions with Landowners affected by the Restoration Project. GBCWWG members should communicate any landowner issues that they become aware of to Mary Marshall. The plan is to meet initially with the landowners in Mid June. Final negotiations will occur after signing of the ROD.

## Other Non-Prioritized Issues

- A. There are misconceptions of the differences between the alternate actions in the Restoration Program EIR/EIS. (e.g. better understanding of the ramifications from the 8-dam alternative)**

Mary Marshall is the contact. Status as of January 10, 2006: The Restoration Project Draft July 2003 EIS/EIR (in Chapter 3) provides a complete description of the project alternatives. The Restoration Project February 2005 Draft Supplemental EIS/Revised EIR and the July 2005 Final EIS/EIR (in Chapter 3) provides information on the 8 dam removal alternative and describes why it was eliminated from further consideration as a project alternative.

- B. There is inconsistent implementation of agency policy.**

~~Update with new language so that the title isn't so generally stated. Update with new language because the supplementation issue is resolved. Provide a link to a letter by (Who FWS?) on the supplementation.~~

~~The contact person for this issue is unclear. Status as of June 10, 2005: This issue has been raised during previous Battle Creek Working Group meetings by Serge Birk regarding discussions concerning passage of steelhead above the Coleman Fish Hatchery barrier weir. Serge was not present during the issue identification meetings. The GBCWWG needs to spend additional time better identifying this issue.~~

- C. The Lassen Lodge Hydro project plan could conflict with restoration of the watershed.**

Mike Berry is the contact. Status as of January 17, 2012: In early December 2011, Department of Fish and Game's (DFG) Region 1 FERC Coordinator was contacted by the new owner of the Lassen Lodge Project (Applicant). DFG Staff, the Applicant and their Consultant conducted a site visit on December 7, 2011 on the proposed Project, associated facilities, and Panther Grade. DFG was given a preliminary proposal consisting of: 1) A grouted rock and boulder diversion structure; 2) a proposed 36 inch diameter steel penstock; 3) a proposed powerhouse with one generating unit having a total installed capacity of 5 megawatts; 4) a proposed 60 kilovolt transmission line that would cross the creek and tie into an existing powerline at the top of the canyon (distance not included); 5) a fish ladder with baffling; and 6) a trash rack, fishscreen, and fish return raceway.

The original powerhouse was to be located just upstream of Panther Grade at river mile 18.85. The Applicant's new proposal is to move the powerhouse 1.5 mile upstream of Panther Grade to river mile 20.75. Angel Falls (a known barrier to anadromous fish) is 1.9 miles upstream of the powerhouse in the bypass reach. The diversion structure proposed to be located at river mile 22.9.

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### **History**

November 27, 2007	This project is currently proceeding under the Traditional Licensing Process (FERC Project No. P-12496). Interested parties may sign up for the FERC e-Subscription service if they
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**D. There is a potential for a degradation of the socio-economic condition of watershed.**

Sharon Paquin-Gilmore is the contact for this issue. Status as of January, 2012: This issue will never be fully resolved; the GBCWWG may be asked to consider specific items under this issue periodically as they arise in the future. Socio-economic conditions in Battle Creek Watershed are largely outside of this group's control; however, conditions can be influenced by the GBCWWG within certain forums including: implementation of the Restoration Project; management of public lands; and other agency actions.

**E. The Winter-run Chinook Recovery Plan has not been completed.**

**a. Winter-run Chinook Recovery Plan.**

Naseem Alston is the contact. Status as of January, 2012: The draft Central Valley Recovery Plan for winter-run Chinook salmon, spring-run Chinook salmon, and CV steelhead is available to the public at:

<http://swr.nmfs.noaa.gov/recovery/centralvalleyplan.htm>

Final plan was not completed by the end of 2011.

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**History**

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June 2005 NMFS' CENTRAL VALLEY RECOVERY PLANNING PROCESS

Brief Overview of Process and History of CV TRT

The Southwest Region (SWR) of NOAA's National Marine Fisheries Service (NMFS) has engaged in the recovery planning process for all salmonid ESUs in California. Modeled after the recovery planning framework developed by the Northwest Region (NWR) of NMFS, recovery planning areas (referred to as domains) are defined by ESU boundaries. For the Central Valley (CV), the boundaries of the winter-run and spring-run Chinook salmon and CV steelhead ESUs define the CV recovery planning domain. The foundation of this framework is based in the NOAA Technical Memorandum "Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units", June 2000. This technical report supports the concept of four criteria or parameters (known as VSP criteria) to meet when attempting to recover listed salmonid populations: abundance, productivity, diversity, and spatial structure. This report can be accessed at [http://santacruz.nmfs.noaa.gov/ESA/salmonids/esa\\_docs/index.php](http://santacruz.nmfs.noaa.gov/ESA/salmonids/esa_docs/index.php).

The planning process is devised in two phases – technical (phase 1) and planning/implementation (phase 2); there is often overlap between the two phases, thus phase 2 does not have to wait for completion of phase 1 to initiate some of the early planning activities. Phase 1 is initiated through the appointment of a technical recovery team (TRT). Each TRT has been selected through a nomination and independent peer review process that seeks individuals with strong scientific backgrounds in salmonid biology, along with specialized experience related to the respective geographic domain. Phase 2 is viewed as largely a policy/management exercise that calls upon the expertise of the TRT and is managed and directed by individual recovery coordinators in each domain. Diane Windham is NMFS' recovery coordinator for the CV recovery domain. More

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information about the NWR's recovery planning framework can be found on their website at <http://www.nwfsc.noaa.gov/trt/overview.htm>. Additional information regarding recovery planning in California, including domain-specific products produced and status review information can be found at <http://santacruz.nmfs.noaa.gov/ESA/salmonids/trt/index.php>.

With respect to winter-run Chinook salmon, which was federally listed in 1990 and reclassified as endangered in January 1994, the initial recovery planning process was initiated by NMFS prior to the development of the recovery planning framework described above and prior to the federal listings of spring-run Chinook salmon and CV steelhead. A recovery team was selected, who produced a draft recovery plan in August 1997. CV steelhead was federally listed in March 1998, and spring-run Chinook salmon in September 1999, both as threatened. During this time period, the phased recovery planning approach was drafted by the NWR in 1999, and updated in 2000. As recovery plans were needed for all three Central Valley salmonid species, it was decided to include and update the draft winter-run recovery plan into one larger phased planning effort for all three listed species.

The CV TRT was appointed (after nominees' applications were peer reviewed by an independent panel from the American Fisheries Society) in late 2002, and convened its first meeting in March 2003. The CV TRT is chaired by Steve Lindley from NMFS' Southwest Fisheries Science Center in Santa Cruz, CA. The TRT typically meets monthly or bimonthly, depending on workload and availability (most members serve voluntarily or represent State or Federal agencies, so TRT responsibilities are in addition to their existing work demands). The CV TRT is responsible for identification of independent populations of the listed CV salmonids, as well as development of population viability analyses, ESU viability analyses, identification of monitoring and research needs, and to provide guidance and review for phase 2 activities. The TRT was first tasked with familiarizing themselves with the status of the three listed CV salmonids and their respective habitat and habitat requirements. This has been challenging in a fairly data poor environment, especially with respect to CV steelhead.

The CV TRT chair tasked the TRT with identification of independent populations of spring-run Chinook salmon. This resulted in a report titled "Population structure of threatened and endangered Chinook salmon ESUs in California's Central Valley basin", April 2004, available as a Technical Memorandum that can be found at <http://santacruz.nmfs.noaa.gov/ESA/salmonids/trt/cv.php>.

#### Current/Future Recovery Planning Activities

The TRT has drafted, is revising, and will soon produce a final report on identification of independent populations of CV steelhead. Again, this has been a challenging effort due to the data poor environment regarding steelhead in California.

The approaches to assess population viability and ESU viability are being drafted by the TRT chair and will be provided to the TRT for their review and comment in June and September 2005, respectively. The documents will describe the population viability and ESU viability approaches that the TRT have determined are most appropriate for Central Valley salmonids. Once revised and endorsed by the TRT, the documents will be published as NOAA technical reports.

In addition, the TRT is currently drafting initial guidance for monitoring and research activities needed in the CV, including those proposed by the California Department of Fish and Game, CALFED, and others. This guidance should be available by winter 2005.

All reports, technical memoranda, and other guidance documents are or will be available on the webpage cited above.

It is important to note that most members of the TRT have had little time to actually draft the documents being produced. Instead, the TRT chair has produced most of the written materials and analyses after significant discussion and consideration of the data with the TRT. The TRT chair then provides these drafts to the TRT for their review, comment, and revision. This has influenced the pace of the technical phase to a large degree, but if able to maintain the schedule described above, all TRT phase 1 products should be completed by winter 2005.

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The TRT will not be making specific recommendations; rather, they will refer to the existing population structures and identify areas or watersheds where recovery actions would contribute to meeting the VSP criteria. For example, while the TRT has not specifically identified the Battle Creek restoration project, they concur with the objective of establishing at least an additional population of winter-run in order to meet VSP criteria. This objective is also consistent with the draft winter-run Chinook salmon recovery plan which will be incorporated into the larger multi-species planning effort.

Identification of specific actions or even specific geographic areas of opportunity for recovery actions will be a function of phase 2 of the recovery planning process, which is also underway at this time. An initial step in starting this phase has been through our recent contributions to two reports to Congress; the Pacific Coast Salmon Recovery Fund Report to Congress, and the NMFS' Biennial Recovery Report to Congress, both of which track status and progress of NMFS' recovery planning efforts. These reports include overviews of the status of and threats to the three listed CV salmonid ESUs, identification of limiting factors, an assessment of conservation actions or measures that are in place or funded, and remaining priority actions that would contribute to and achieve recovery. While the CV domain is included in the reporting for the Pacific Coast Salmon Recovery Fund Report, it is not eligible to access these funds due to another CV funding source/planning and restoration effort (CALFED). In both of these reporting efforts, NMFS has specifically identified the Battle Creek Restoration Project as a high priority action that would contribute to not only recovery of the three listed salmonid species, but would also help meet VSP criteria. These reports, when finalized, can be accessed at <http://nwr.noaa.gov>.

The CV narratives for the Reports to Congress establish a structure or outline upon which to build a recovery plan. While expanding on this information, the CV recovery coordinator will also initiate an extensive and updated threats assessment for the three listed species. These efforts are anticipated to get underway in summer 2005, which fits logically with activities of the TRT. Phase 2, as it moves forward from the plan outline and threats assessment, will involve developing strategies and actions to ultimately meet VSP parameters, following the guidance provided in TRT written products, as well as consideration of ongoing conservation efforts throughout the CV that contribute to recovery, such as CALFED, AFRP, and CVPIA. Stakeholder participation is a very important component for phase 2, and will go hand-in-hand with an extensive outreach effort. Numerous workshops will be held to facilitate stakeholder involvement for the threats assessment and for developing recovery strategies, actions, and an implementation plan, as well as review of any phase 2 products. Members of the TRT are anticipated to continue involvement by advising on phase 2 efforts. To continue progress and maintain consistency between domains, the recovery coordinators meet frequently to discuss and identify various approaches and strategies for phase 2 that best meet the needs of the respective domains. We expect considerable progress to be made for both phase 1 and 2 over the next one to two years.

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**F. The natural and scenic qualities of the watershed could be degraded due to Restoration Program construction.**

Sharon Paquin-Gilmore is the contact. Status as of January, 2012: BCWC recognizes that some natural qualities will be improved through watershed restoration; for example, the existence of a thriving salmon population and related improvements to the ecosystem. On the other hand, the Conservancy also recognizes that scenic qualities could be degraded due to construction, such as the effects of construction on Oasis Springs resort and Rocky Springs Ranch.

BCWC understands that this issue is addressed in the EIS/EIR and will be addressed further once permits are obtained. The Conservancy also understands that this is not an issue to be resolved but more of an area of concern to be aware of before, during and after construction.

**G. The Proposed Shasta Ranch Gravel Project has the potential to impact salmonids within the Greater Battle Creek Watershed.**

Tricia Parker is the contact. Status as of January, 2012: The proposed gravel operation (2007) is now operational as "Shasta Ranch Aggregates" with Tullis, Inc.

[http://www.tullisinc.com/Shasta\\_Ranch\\_Aggregates.html](http://www.tullisinc.com/Shasta_Ranch_Aggregates.html)

**PROJECT CHARACTERISTICS – (excerpt from Shasta Ranch draft EIR executive summary- July 2006)**

The project applicant, Tullis Inc., proposes to establish a gravel operation that includes the excavation and processing of aggregate material on 268 acres of which is comprised of three parcels totaling 947 acres in size. The purpose of the project is to serve as existing and future market demand for sand and gravel aggregate materials.

The project would include stockpiles, staging areas, and retention basins. The Reclamation Plan is available for public review at the Shasta County Department of Resource Management Planning Division, 1855 Placer Street, Suite 103 in Redding, and on the internet at:

<http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/Shasta%20Ranch/Shasta%20RanchTOC.htm>.

All current information can be accessed on the internet at:

<http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/Shasta%20Ranch.htm>

The mined aggregate (sand and gravel) would be crushed, screened, washed, stockpiled and loaded at the processing area for off-site transport. The annual excavation of material would be approximately 266,667 cubic yards. Approximately 3.43 million cubic yards of overburden and 6.06 million cubic yards of aggregate would be excavated from the project site. The overburden and topsoil will be stockpiled and stored for future reclamation activities including backfill of Phase 1, bank stabilization, revegetation, levee construction, and the creation of two ponds.

*In the summary of impacts and mitigation measures (Table 2.0-1), the following potentially significant impacts appear to be of most interest to the GBCWWG:*

**IMPACTS:**

Impact 4.5.6: Implementation of the Shasta Ranch Mining and Reclamation Plan will result in the direct loss of, indirect impacts, to federal and state-listed endangered Sacramento River winter-run ESU Chinook salmon and threatened Central Valley spring-run ESU Chinook salmon; federal-listed threatened Central Valley ESU steelhead and/or their designated critical habitat; and federal-listed as threatened green sturgeon. Potentially significant.

Impact 4.5.7: Implementation of the Shasta Ranch Mining and Reclamation Plan could result in direct and indirect impacts to the California Species of Special Concern: Central Valley fall/late-fall run ESU Chinook salmon, Sacramento splittail, and river lamprey. Potentially significant.

**THREE MITIGATION MEASURES (MM) that would address both of these impacts:**

MM 4.5.6(a): In the event that flood events exceed the 25-year (Phase 1) and 50-year (Phases 2 and 3) design flood capacities of the proposed quarry levees, a qualified fishery biologist shall be retained to conduct site surveys to quantify the extent of anadromous fish stranding that may occur. Fish shall be salvaged and returned to the Sacramento River to the extent practicable using fish collection and handling protocols approved by the California Department of Fish and Game and National Marine Fisheries Service.

Timing/Implementation: During project operation and in perpetuity.

Enforcement/Monitoring: California Department of Fish and Game and National Marine Fisheries Service.

MM 4.5.6(b): The design of the Phase 2 and Phase 3 quarry ponds shall include a controllable drainage system that allows any juvenile salmonids that may enter the ponds during floods exceeding the 50-year recurrence level to be passively returned to the Sacramento River.

Timing/Implementation: To be implemented during project operation and maintained in good operation for perpetuity.

Enforcement/Monitoring: California Department of Fish and Game and National Marine Fisheries Service.

MM 4.5.6(c): Grading of the restored Phase 1 quarry shall avoid creating pits or swales and insure that slopes and contours drain to the Sacramento River in order to prevent stranding of fish species during high flow events.

Timing/Implementation: During reclamation activities.

Enforcement/Monitoring: California Department of Fish and Game and National Marine Fisheries Service.

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#### History

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January 2007	The Shasta County Department of Resource Management reports that the consultant, PMC, is currently incorporating public comments that were received on the draft EIS. A thirty-day legal notice will be posted in the Record Searchlight and on Shasta County's website before the project goes to the Planning Commission for approval.
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#### **H. The new designation of BLM property as National Recreational Area on their lands in Battle Creek.**

Sharon Paquin-Gilmore is the contact. Status as of January 2012: Waiting for an update from Kelly Williams, BLM. The (proposed) Sacramento River Bend National Recreation Area has already been designated as an Outstanding Natural Area/Area of Critical Environmental Concern (ONA/ACEC) in 1993. It encompasses 26 miles of the Sacramento River from Balls Ferry Bridge to the section line south of Seven Mile Creek. Within the 26 mile river corridor, BLM manages approximately 15 miles of river frontage and an additional 2 miles of conservation easement along the river. Battle Creek traverses 4 miles of BLM managed lands. The issue of concern regarding this proposal is that with the designation of this area as a National Recreation Area, there will be the

possibility of more use of the river, creeks and lands within this critical area, which could have an adverse effect on the Restoration Project. BCWC would like assurance that BLM will have the staff to manage this sensitive area consistently and effectively.

On March 20, 2007, Kelly Williams, BLM, led Greater Battle Creek Working Group members on a tour of the Battle Creek area of the proposed Recreation Area. The concern regarding management was raised, and Williams responded that BLM hopes that with the official designation of National Recreation Area, BLM will have more leverage in requesting additional staff to manage it. He also suggested that constituents of the area could request more staff support by writing to Congressional representatives.

This is an issue that will need to be tracked if the proposed Recreation Area is approved, especially after the Restoration Project begins.

**I. The risk of fish extinction increases with the passage of time.**

Mike Ward is the contact. Status as of January, 2012: Ongoing issue. If the Restoration Project is implemented in a timely fashion, concerns will be moderated. Further delays in the Project will increase risk. The GBCWWG letter to CBDA urged a timely decision to award additional funding to the Project. The initial recommendation was made on June 20, 2005, but a final decision still need to be made. Link: [http://www.delta.dfg.ca.gov/erp/signature\\_battle\\_creek\\_dareview.asp](http://www.delta.dfg.ca.gov/erp/signature_battle_creek_dareview.asp)

**J. The Winter Run Chinook Salmon feasibility study in Battle Creek has not been completed.**

Mike Berry is the contact. Status as of January, 2012: The BCFMP team recommended that the winter-run reintroduction plan (WRRP) be a separate document from the Fish Management plan due to the level of detail that will be necessary to include in the WRRP. At the last meeting of the BCFMP team, a matrix of winter-run restoration methodologies was developed that will help decide the best plan for reintroducing winter run to the new habitat in Battle Creek. Due to the complex nature of reintroducing a listed endangered species into a new habitat the team decided that the plan details should include: permitting, broodstock collection methods, agency roles, funding sources, and designs and costs for equipment and possible facilities for reintroductions. Progress on the plan was slowed this fall due to staffing shortages and prior commitments by various team members (hatchery review, fall run estimations). Currently the plan development is ongoing and team members will be meeting to further development of this plan.

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**History**

January, 2010	No further action is anticipated until restoration is closer to completion. Mike Berry sent out an administrative draft of the Winter Run Chinook Salmon feasibility study in late December 2005. The administrative draft incorporated comments received from the May 16, 2005 initial draft.
June 2005	The initial draft has been completed by CDFG staff and is currently being reviewed internally. A draft was released through email to the working group on the May 16, 2005. Comments to this initial draft need to be sent to Mike Berry.

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## K. Complete the comprehensive watershed planning process.

Sharon Paquin-Gilmore and Mike Ward are the contacts. Status as of January 17<sup>th</sup>, 2012: The Battle Creek Watershed Assessment was completed in August 2004 by Terraqua Inc. for the Battle Creek Watershed Conservancy (BCWC). This document can be found at: [http://www.battle-creek.net/docs/BCWA\\_Report\\_Final1.pdf](http://www.battle-creek.net/docs/BCWA_Report_Final1.pdf) . This project characterized stream conditions and investigated sediment source factors within the watershed. The Battle Creek Stream Condition Monitoring Plan was completed in September, 2008. This plan can be found at: <http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf> . A stream condition monitoring report was also completed in September, 2008 that compared watershed conditions in 2001-2002 to those in 2006 and provided some corrections to the 2004 Watershed Assessment. This plan can be found at: <http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoring2006.pdf> .

In December, 2007 the Battle Creek Watershed Conservancy Community Strategy was updated. This strategy is available on the BCWC website at <http://www.battle-creek.net/CommunityStrategy.htm> .

In recent years the BCWC and Tehama County Resource Conservation District (RCD) have collaborated to submit several proposals for further watershed assessment and planning activities to support restoration in Battle Creek, though they have not yet been funded:

- Battle Creek Watershed Assessment and Management Plan: This project would incorporate the assessment of upland watershed conditions (wildfire, wildlife, vegetation etc.) into existing assessment activities to date that have largely focused on the stream network and sediment sources. Proposal submitted to the Sierra Nevada Conservancy, March 2008.
- Battle Creek Watershed Weed Management Plan: Development of an integrated long term weed management plan for the Battle Creek Watershed, preparation of a formal planning document and execution of an initial eradication project. Pre-proposal submitted to National Fish and Wildlife Foundation Pulling Together: Managing Invasives, 2009.
- Battle Creek Watershed Stewardship; Phase IV: This project would identify high priority restoration projects to address current and emerging threats of wildfire and climate change to the Battle Creek riparian zones and stream networks. Proposal submitted to the Sierra Nevada Conservancy, Sept. 2010.
- Anticipating climate related changes in stream flow and temperature to identify watershed restoration projects that can mitigate future impacts to anadromous salmonid habitat restoration investments in Battle Creek, CA: Pre-proposal submitted to The California Landscape Conservation Cooperative, Feb. 2011.

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### History

January, 2010	The Battle Creek Watershed Assessment was completed in August 2004 by Terraqua Inc. for the Battle Creek Watershed Conservancy (BCWC). This document can be found at: <a href="http://www.battle-creek.net/docs/BCWA_Report_Final1.pdf">http://www.battle-creek.net/docs/BCWA_Report_Final1.pdf</a> . This project characterized stream conditions and investigated sediment source factors within the watershed. The Battle Creek Stream Condition Monitoring Plan was completed in September 2008. This plan can be found at: <a href="http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf">http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf</a> .
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**History**

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[creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf](http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoringPlan.pdf) .

A stream condition monitoring report was also completed in September, 2008 that compared watershed conditions in 2001-2002 to those in 2006 and provided some corrections to the 2004 Watershed Assessment. This plan can be found at:

<http://www.battle-creek.net/docs/monitoring/StreamConditionMonitoring2006.pdf> .

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December, 2007 In December, 2007 the Battle Creek Watershed Conservancy Community Strategy was updated. This strategy will soon be available on the BCWC website at <http://www.battle-creek.net/CommunityStrategy.htm>.

Ongoing watershed assessment and planning activities include the proposed Battle Creek Watershed Assessment and Management Plan which will incorporate the assessment of upland watershed conditions (wildfire, wildlife, vegetation etc.) into existing assessment activities to date that have largely focused on the stream network and sediment sources. This assessment and planning project has yet to be funded.

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**L. Continuation of the Battle Creek Hydroelectric project license amendment (FERC# 1121) process is important.**

Liv Imset is the contact. Status as of January, 2012: A license amendment application has not been submitted for Phase 2 of the Restoration Project. FERC will have to approve the license amendment before implementation of Phase 2 of the Restoration Project.

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**History**

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January 2011 A license amendment application for Phase 1A of the Restoration Project was submitted on July 21, 2008; FERC issued its Order Amending License on August 25, 2009 allowing implementation of Phase 1A to occur. A license amendment application for Phase 1B was submitted on January 26, 2010; FERC issued its Order Amending License on May 21, 2010.

Mar 2008 Submittal of the final license amendment application for Phase 1 of the Restoration Project is contingent on the completion of the funding transfer agreements (see Issue #1.2).

June 2005 PG&E prepared a draft license amendment in June 2003 for public comments. Exhibit E of the license amendment is the Battle Creek Salmon and Steelhead Restoration Project EIR/EIS. PG&E has begun preparation of the final license amendment.

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**M. There are potential impacts to private businesses in the Battle Creek Watershed (e.g. Mt. Lassen Trout Farm, Rocky Springs Ranch, and Oasis Springs Lodge) as a result of the Restoration Project.**

Mary Marshall and Kerry Burke are the contacts. Status as of January 10, 2006: The Restoration Project July 2003 Draft EIS/EIR, February 2005 Draft Supplemental EIS/Revised EIR, and July 2005 Final EIS/EIR discusses the impacts to the private businesses. Public comments regarding this matter have been incorporated into the Final EIS/EIR. Under CEQA, CDFG is coordinating with Phil Mackey regarding the mitigation associated with the Mount Lassen Trout Farms Willow Springs. In September 2005, CDFG relayed a letter to Val Vaden (owner of Rocky Springs Ranch and Oasis Springs Lodge), which identifies the process associated with compensation for business losses.

**N. There is not a common understanding of the relative value/importance of hatchery versus natural/wild fish.**

Jim Smith and Scott Ferris are the contacts. Current as of January, 2012: This is a difficult problem because there two schools of thought in the scientific community and among some of our stakeholders on this issue. On one side there are those who apparently prefer to have completely wild salmon/steelhead populations that would sustain themselves solely by natural reproductions. This would be accomplished by curtailing or eliminating hatchery production, restoring rivers to pre-1900 conditions by breaching dams, limiting water diversions and greatly reducing agricultural and forestry impacts on our western anadromous streams.

Others in the scientific community contend that society has shown no indication that it is willing to make the societal economic sacrifices that would be necessary to make the foregoing scenario a reality. They believe that if we are to deal with the ever increasing urban and agricultural demands for more water and an exploding west coast human population, we need a scientifically and biologically sound blend of both wild and hatchery fish based on best known technology.

Hatcheries in the Pacific Northwest have been operating for more than 50 years and have generally been very successful in producing quality salmon and steelhead for sport and commercial harvest as well as helping compensate for steadily declining wild fish populations. This group of fishery scientists is of the opinion that state of the art fish hatcheries are critical to maintaining future recreational, commercial and Treaty harvest obligations. Like it or not, 60 to 80 percent of the salmon and steelhead that have been harvested in recent years in California, Oregon, and Washington originated in State, Federal and Tribal hatcheries.

Coleman NFH together with three other Sacramento River tributary hatcheries have in recent years, produced more than 60 percent of all commercial and sport caught salmon and steelhead in California. The trickle down economic value of these fish arguably can range from 70 to more than 100 million dollars a year. Based on projected human population growth and estimates during the next 25 years, it does not appear that wild/natural spawning fish will, now, or in the foreseeable future be able to support current harvest levels, let alone increased levels that are likely to occur with increased numbers of people.

To create a better common understanding of this issue the Resource Agencies and the scientific community must be up front with the general public regarding the realities of restoring wild/natural fish to a point where they could sustain current harvest rates with our strong hatchery support. Remaining populations of wild/natural fish are important and should be protected and enhanced whenever possible.... However, hatchery fish are important also. If we are to have salmon and steelhead for the public to catch now and in the future, we must have a delicate balance between hatchery operations and the wild/natural stocks. All the while keeping in mind that many of the so called natural spawning stocks are probably of Coleman parentage. In the case of Coleman NFH and the Battle Creek Restoration Project, the Resources Agencies should make clear to all parties that Coleman NFH has a congressional mandate to produce fish as mitigation for lost habitat, that it can and will meet its mitigation responsibilities to the best of its abilities without jeopardizing the success of the project. A good adaptive management plan will be helpful in making sure all parties are working cooperatively together without the tail wagging the dog.

If in the work groups future deliberations we can all make greater efforts to work together and focus more of our attention on providing our wild/natural Battle Creek stock with the access and water quality they need, and less on Coleman's operational production efforts, the completion of this project will become a reality.

## **Past Issues That Have Been Resolved**

- A. There is concern that, in the event a new genetic run (e.g. ESU-WR) of salmonids is created as a result of the Restoration Program, new regulations would be enacted by regulatory agencies.**

Naseem Alston is the contact.

**Status as of June 10, 2005 – RESOLVED.** With regards to the classification and treatment of restored populations of listed salmonids in Battle Creek, the concern has been voiced by various stakeholders that such a restored population (in particular, a winter-run Chinook salmon population) would somehow be classified as a separate species or ecologically significant unit (ESU) from the ESU that has already been designated in the Sacramento River. This is not the case. A restored population of winter-run Chinook salmon in Battle Creek would be classified as a sub-population of the Sacramento River winter-run Chinook salmon ESU just as the various sub-populations of spring-run Chinook salmon (Deer Creek, Mill Creek, etc.) are considered parts of the whole Central Valley spring-run Chinook salmon ESU. Establishment of a new sub-population of winter-run Chinook salmon in Battle Creek could only improve the recovery prospects for the entire Sacramento River ESU. ***Provide a Link to NOAA Fisheries letter***

DFG sent a letter to the Battle Creek Watershed Conservancy ***on (FILL IN THE DATE)*** concerning their view of this issue.

- B. Passage strategies of steelhead trout above the Coleman Barrier Dam could negatively impact other salmonid species.**

Scott Hamelberg is the contact.

**Status as of June 10, 2005 - RESOLVED.**

In 2004, in response to the recommendations of a CBDA Science Panel, the Resource Agencies issued a decision to discontinue releases of hatchery-origin steelhead above the Coleman NFH barrier weir. USFWS will continue to collect information on this issue through Coleman NFH adaptive management, CBDA science panel recommendation, and the 2001 biological opinion.

- C. Fishing regulations may negatively impact the take of salmonids in the Battle Creek Watershed once an anadromous fishery is restored under the restoration program.**

Mike Berry is the contact.

**As of June 10, 2005 – RESOLVED.**

The fishing regulations in Battle Creek throughout the project reach are the same as all other anadromous waters in Shasta and Tehama counties. They currently read: Open-Last Saturday in April through November 15 Only artificial lures with barbless hooks may be used. Bag Limit - 0. These regulations will not change as a result of the restoration project.

**D. The fish stocking permit policies will change for certain areas in the Battle Creek Watershed where anadromous fish could be present.**

Mike Berry is the contact. As of June 10, 2005 – RESOLVED.

Currently DFG policy prohibits stocking fish in anadromous waters of the state. The exception to this policy in Battle Creek is the operations at Oasis Springs Lodge. They currently have a stocking permit that expires in 2006, but could be extended depending on the progress of the restoration project. Once a project alternative is chosen (even if it is no project), fish passage on Battle creek will be provided and fish planting will cease. The number of native sport fish should increase substantially under any alternative that provides augmented flow and improved fish passage.

**E. Agency decisions are made without adequate stakeholder input.**

This is an opinion. The objectives of the GBCWWG MOU address this issue.

**F. There is insufficient outreach and information sharing to the public.**

This is an opinion. The objectives of the GBCWWG MOU address this issue.

**G. Restoration goals and the measurement of success are not adequately defined.**

Harry Rectenwald was the contact for this issue.

**Status as of January 10, 2006 - RESOLVED**

Status as of June 10, 2005 – The restoration goals and measure of success for the Restoration Project (Project), as defined as the 42 miles of anadromous habitat upstream of Coleman Powerhouse, is included in two documents part of the Supplemental Draft Environmental Impact Statement/Revised Environmental Impact Report (review period ended April 29). The goal and success benchmarks for the Project are contained in the Adaptive Management Plan (Plan) at the finest level of detail available in the documentation package; and in the Action Specific Implementation Plan at a broader level of detail relating to goals for the Sacramento River system as a whole. The Plan underwent substantial review during the CalFed proposal process producing substantial revisions from the previous version circulated with the Draft EIS/R.

The Action Specific Implementation Plan is focused on how the Project relates to the CalFed Program's blue print that establishes goals and measures of success for the multiple species and ecological communities in the Sacramento River Valley. One suggested way forward on this issue is to provide an overview of these revised documents focused on goals and measurement of success.

**H. Restoration Project environmental documentation has not been completed.**

December 2008: State Water Board filed Final CEQA Findings and issued Notice of Determination on the EIR, and issued the Clean Water Act Section 401 Water Quality Certifications for the project.

January 2009: Bureau of Reclamation Signed Record of Decision on the EIS

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**History**

November 2007 In March 2007, CDFG issued the CEQA Findings and Notice of Determination in regard to a Funding Decision on the Restoration Project.

December 2006 The environmental documents completed to-date for the Restoration Project follow. These documents are located on: <http://www.usbr.gov/mp/battlecreek/documents.html>

**NEPA/CEQA:**

Draft Supplemental EIS/Revised EIR- February 2005

Draft EIS/EIR - July 2003

Final EIS/EIR - July 2005

**ESA:**

Draft Action Specific Implementation Plan - April 2004

NOAA Fisheries BO and FWS BO - June 2005

**Adaptive Management:**

Draft Adaptive Management Plan - September 2001

Revised Draft Adaptive Management Plan - April 2004

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**I. Modification of the Coleman NFH Barrier Weir.**

Scott Hamelberg is the contact.

February 2009: Construction completed.

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**History**

October 2008 Returning fall Chinook salmon utilized the new ladder into Coleman NFH. A number of modifications remain to be completed on the project. Reclamation's Willows Construction Office is in the process of initiating the transfer of the new facilities to the USFWS Coleman Fish Hatchery.

January 2008 Upstream Fish Ladder. In August, the primary and auxiliary upstream river ladder floors (slabs) and walls were placed. In September, the Coleman National Fish Hatchery (NFH) Project Leader expressed concern about the difference in elevation between the slab (invert) of the upstream ends of the primary and auxiliary river ladders and the existing stream bed. The stream bed is higher and may allow rocks, silt, and/or debris to enter the ladder. Also, the future bar rack on the upstream end of the existing fish ladder may catch debris that may be difficult to remove by hand. These concerns were relayed to Reclamation's Technical Service Center (TSC) design team for investigation. On December 10, 2007, Reclamation's Technical Service Center (TSC) provided a proposed remedy using a combination of grading of the stream bed and stop logs in the river ladder to minimize the conditions for bed load to enter the ladder. These remedies are within the existing project design and specification.

Construction Information Line. Also in October, the toll-free construction information line was updated to provide general info about construction activities and help address construction-related questions about the subject project. The phone number for construction info is: 800-742-9474 (press 2 for info on various programs, then press 1 for Fish Barrier Weir). To help ensure that our agencies "speak with one voice," please refer interested parties to this number.

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## History

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- November 2007 Temporary Diversion Channel. In August, the construction contractor completed ahead of schedule a major portion of the work on the south side of Battle Creek that was originally scheduled for 2008. The temporary diversion channel was partially excavated and the riprap weirs and rock berms were constructed within the diversion channel.
- Cofferdam. On September 18, the cofferdam subcontractor completed removal of the portable cofferdam that allowed dewatering for construction of the primary and auxiliary river ladder. There were no visible signs of turbidity in Battle Creek during the cofferdam removal. Based on water quality monitoring by Reclamation and the contractor, there have been no violations of turbidity limits to date.
- 2007 Salmon Festival. On October 20, 2007, Reclamation participated in the Salmon Festival at Coleman National Fish Hatchery, which drew an estimated 15,000 visitors. Reclamation answered visitors' questions about and exhibited recent photographs of the ongoing construction (see attachments). Reclamation believes that the public responded positively to the project display and in-progress construction visible to the public.
- Section 7, Endangered Species Act Compliance. The construction contractor has scheduled some in-stream activities in May 2008, outside of the in-stream work period (June 1 through September 30). The action agency, Coleman NFH (USFWS), requested re-initiation of section 7 formal consultation with the goal of receiving an amended biological opinion from the National Marine Fisheries Service (NMFS) to allow in-stream activity in May 2008, ahead of the June to September work period. The contractor proposes to cross equipment through the stream on 1 day in May in preparation for starting work on the south side of the creek on June 1.
- July 2007 The Service and Reclamation anticipate that major construction activities will begin by mid-May 2007. In-stream construction is confined to June 1 through September 30.
- Bald Eagle. On April 4, Reclamation's avian biologist consultant completed the 14-day pre-construction raptor monitoring required for Endangered Species Act compliance for the Federally-listed as a threatened bald eagle. The monitoring results indicate that the bald eagle nest in the project vicinity is progressing normally.
- Info Line. Reclamation's toll-free construction info line is: 800-742-9474. Info will be updated as construction progresses.
- Budget. In March and April 2007, Reclamation briefed the Service on the project's cost growth and advised the Service to secure an additional \$1.95 million. The cost growth is primarily due to a 1-year schedule delay and increases in cost of: construction; construction materials; design and post-award construction support; and conservation measures to protect the bald eagles.
- Biological Opinion. On March 26, National Marine Fisheries Service issued their amended biological opinion (BO). As addressed in the amended BO, the construction contractor plans to use 3 portable, free-standing cofferdam systems (instead of spawning gravel) to divert
- Battle Creek flows away from the construction of the ladders and upstream and downstream of the temporary diversion channel.
- Schedule. Construction contract award: February 1, 2007; Mobilize on-site: April 25, 2007; Major construction activities begin: May 14, 2007; Work in water window: June 1 through September 30 of any year ; Construction completion: February 2009.
- May 2007 On February 1, 2007, Reclamation's Mid Pacific Region awarded the contract for the construction of the Service's Fish Barrier Weir & Ladder Modification at Coleman National Fish Hatchery (NFH) to Gracon Corporation.
- Sept 2006 In June 2006, the Service and Reclamation, as co-lead Federal agencies under NEPA, signed a FONSI based on the Environmental Assessment (EA) for the Fish Barrier Weir and Ladder Modification at Coleman NFH. On September 12, Reclamation issued a solicitation for proposals from interested contractors for construction of the subject project. It is anticipated that major construction activities would begin in the spring of 2007. In-stream construction is confined to June 1 through September 30 of any year.

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**History**

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- May 2006 The Service and Reclamation, as co-lead Federal agencies under NEPA, have released a Draft Environmental Assessment (EA)/Draft FONSI for the Fish Barrier Weir and Ladder Modification at Coleman NFH. On April 6, 2006, the Draft EA/Draft FONSI was made available to the public for a 30-day public comment period. These documents are available online at [http://www.usbr.gov/mp/nepa/nepa\\_projdetails.cfm?Project\\_ID=2148](http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=2148).
- The first Draft EA and Draft FONSI for this proposed action were made available for public review and comment in June 2004. The March 2006 Draft EA provides updated information since the issuance of the first Draft EA. The construction contract is scheduled to be awarded in Summer 2006.
- July 2005 USFWS anticipates that \$6.5 million will be obligated for the project by Sept 2005.
- June 2005 Current project requires \$6.55 million amendment on top of \$1.6 million that was secured in 2000 for a total of \$8.1 million. A NEPA document (draft EA) was completed and put out for review in 2004. A CEQA document (IS/ER) is currently available for public comment on the CALFED website (GBCWWG can comment on this doc--comment period closes June 3, 2005). A BA was being prepared to submit to NOAA Fisheries--now it has been decided that an ASIP is required. Timeline for ASIP completion is under development. Design team is meeting regularly a project design is at 50%. Schedule - Construction contracts need to be awarded in early '06 for construction to begin in Jun 06. Need midyear 2005 funding decision by CBDA to keep on schedule for construction. Project completion date = early 2008.
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**J. Substantial losses of juvenile salmonids occur as a result of the lack of proper screening of Orwick Diversion.**

Naseem Alston and Tricia Parker are the contacts. Status as of January, 2011: Until recently, the screen on the Orwick diversion did not meet many of the NMFS screening criteria. It was often overtopped by high flows and screen panels were often removed completely allowing entrainment of juvenile salmonids. The bypass system on the Orwick screen also was inadequate; instead of returning screened fish back to the main channel of Battle Creek, it emptied into a side channel that was dry throughout much of the year. These impacts have caused increased stress and mortality of listed salmonids that were entrained into the diversion.

The fish screening facilities on the Orwick diversion have recently been retrofitted to meet the NMFS fish screening criteria. Two separate actions occurred to improve the effectiveness of the screen and improve survival of juvenile salmonids that enter the Orwick diversion. In 2006, a 600 foot bypass pipe was installed to return fish back to the main channel of Battle Creek, and in 2007 a headgate water control structure was installed. The headgate's intention is to prevent the screen from being overtopped by high flows. The new bypass pipe replaces an inadequate pipe so that at all times during the year, juvenile salmon and steelhead should be maintained in a wetted environment from the time that they are diverted from the mainstem Battle Creek until the time that they are returned to Battle Creek via the bypass pipe.

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**History**

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- September 2006 Northstate Resources has been hired to complete the environmental permitting. Iron Mountain General Engineering has been hired to construct the bypass pipe. Construction was completed during the fall of 2006.
- March 2006 Multiple partners are working together (Mr. Orwick, DFG, BLM, NMFS, USFWS) to improve fish passage and survival at the Orwick diversion. Funds to remedy two of the issues with the current fish screen (no bypass and no control over diversion flows) have been attained

from the Anadromous Fish Restoration Program (AFRP). \$180,000 of fiscal year 2006 AFRP funds have been designated to construct a properly functioning bypass pipe on the fish screen and an automatic headgate structure to control inflow at the mouth of the canal. This project is Action Four in the AFRP plan (USFWS 2001).

During the summer and fall of 2005, a significant effort was made by the above listed partners to re-engineer the rock weir that was built across Battle Creek at the Orwick diversion. Several alterations were made to the weir in the fall of 2005, with the intent of improving fish passage past the weir and minimizing the geo-fluvial impacts of the weir on the Battle Creek channel. The true test of the new design will be how it stands up to high winter and spring flows. A re-evaluation of the structure will be conducted following the spring runoff.

June 2005 This has been a long standing issue and this diversion has been on the NMFS law enforcement "top 10 list" of potential take violators at unscreened or poorly screened diversions for some time. There is also the more recent issue of the construction of a large rock weir that was built in Battle Creek to facilitate diversion of water into the Orwick ditch. This structure was constructed without ESA compliance and with no incidental take authorization.

In conjunction with these issues there have been periodic efforts to acquire the water rights to this diversion for environmental purposes and shut the diversion down all together. Efforts towards this goal have been made by BLM and DFG, and most recently by the Environmental Water Program under CALFED.

NMFS law enforcement has recently initiated an ESA investigation. Our special agents and engineers have been out at the site several times collecting evidence such as flow measurements and photographs of threatened steelhead entrained in the diversion.

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## **K. Complete the Restoration Project Biological Opinions. (Formerly part of Issue 8.1)**

- i. Restoration Project Implementation:** Naseem Alston is the contact. The Biological Opinion for 'Restoration Project Implementation' was completed, and NOAA Fisheries transmitted the Biological Opinion to USBR on June 22, 2005. The BO can be downloaded from: [http://swr.nmfs.noaa.gov/sac/myweb8/webpages/biol\\_opinions.htm](http://swr.nmfs.noaa.gov/sac/myweb8/webpages/biol_opinions.htm)

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### **History**

June 2005 This BO has been through editorial/technical review and Sacramento section 7 coordinator review. It is currently being revised in accordance with these reviewer's edits and comments. It has been suggested (and seems likely) that the Long Beach section 7 coordinator will wave review of this BO and that it will go directly to the NMFS Regional Director for final approval. Once this BO has final approval from Long Beach and is ready for signature, it will be provided to Reclamation as a draft for review by Reclamation and whomever they wish to provide it to (the workgroup?). Final revisions will then be made to the BO and it will be signed and issued to Reclamation.  
On June 2, 2005 a draft of the USFWS Biological Opinion was sent out for review to the GBCWWG by Mary Marshall. On June 3, 2005 a draft of the incidental take portion of the NOAA Fisheries Biological Opinion was sent out for review to the GBCWWG by Mike Tucker.

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- iii. Monitoring Plan Biological Opinion:** Naseem Alston is the contact. Status as of January 10, 2006: A Biological Opinion is not necessary for the Battle Creek Restoration Program monitoring plan. NOAA Fisheries will handle the monitoring plan under section 10 or section 4D.