# Battle Creek Watershed: March '06 Update
# U.S. Fish & Wildlife Service Activities

## Coleman National Fish Hatchery Complex (includes Livingston Stone NFH*)

**Scott Hamelberg Project Leader, 365-8622**

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| Spawning:<br>Winter-run<br>Fall<br>Late fall-run<br>Steelhead | ➢ 107 adults were used in the propagation program (LSNFH*)<br>➢ **Spawning ended in late November 2005.**<br>➢ **Spawning ended in late February 2006.**<br>➢ **Spawning ended in late February 2006.** | |
| Production:<br>Winter-run **(LSNFH*)**<br><br>Fall<br>Late-fall<br>Steelhead | ➢ **Brood year 2005: fish released Feb 2 (160,272 fish at 60 fish per pound, 13,071 fish at 94 fish per pound).**<br>➢ **Broodyear 2006: Broodstock collection initiated in February. To date 18 adults have been retained**<br>➢ **Broodyear 2005: Approximately 13.4 million fry on station.**<br>➢ **Broodyear 2006: Approx 2.4 million eggs collected.**<br>➢ **Broodyear 2006: Approx 1.3 million eggs on station.** | |
| Screens for Water Intakes | Funding is being sought. The need to screen the intakes is supported by the four agencies (DFG, USBR, USFWS & NOAA).<br>➢ 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.<br>➢ In early 2006, Reclamation's Northern California Area Office intends to contract for Environmental Compliance service to prepare appropriate NEPA and CEQA documents. | Co-lead:<br>Eric Simmen USBR, Shasta Dam |
| Barrier Weir & Upstream Ladder Improvements<br><br>(CBDA proposal #99-B08) | In Dec '04, the USFWS, with assistance from Reclamation, submitted a $6.5 million proposal to CBDA for supplemental funding to cover an increase in construction costs. In Jan '05, CBDA completed a Technical Review of the proposed project. Preliminary final construction plans and specifications were distributed for technical review in Aug '05. In Sept '05, $6.5 million of Federal funding was obligated for the project. Also in Sept, a review meeting was conducted to receive comments on the preliminary final plans and specs. In Nov '05, final specs were submitted for construction procurement. The Service and Reclamation, as co-lead Federal agencies under NEPA, have prepared the Final Environmental Assessment (EA) for the proposed project. The Final EA/FONSI is expected to be available to the public by early Jan '06. The construction contract is scheduled to be awarded in Spring 2006. | Co-lead:<br>Sandy Osborn, USBR |

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| **CA/NV Fish Health Center** | **Scott Foott, Ph.D. Project Leader 365-4271** |
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| Disease Studies | Recent research on Battle Creek shows an extremely low risk of IHNV mortality in Spring-run and steelhead alevins as a result of infected Late-fall adult Chinook shedding the virus. (presentation given by Scott Foott at the AFS Fish Health Section meeting in Boise). |

| **Red Bluff Fish & Wildlife Office** | **Jim Smith, Project Leader, 527-3043** | |
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| **Battle Creek Monitoring** | ➢ **The CNFH barrier weir upstream fish ladder was opened on March 1, 2006. We are currently monitoring fish passage through the ladder using a fish trap. Natural origin salmonids (unclipped) are passed upstream. Hatchery origin salmonids (clipped) are not passed upstream. As of March 11, natural origin fish passing upstream totaled 3 Chinook and 46 steelhead/trout. Total hatchery origin fish were 109 Chinook and 9 steelhead. Rotary screw traps continue to monitor the abundance of juvenile salmonids.**<br>➢ **Due to the Coleman Powerhouse outage, the hatchery must take water from Intake #2, an unscreened diversion, instead of Intake #1. We successfully operated a fyke net trap for about 8 weeks in the CNFH canal to estimate entrainment of juvenile fish and adjust production estimates from rotary screw traps. Capture efficiencies were high and mortality was low. Trap operation stopped March 3rd due to lack of funding. A total of 38 juvenile Chinook were captured. One steelhead/rainbow trout was captured but trap operation occurred prior to their emigration period.**<br>➢ **Kayak steelhead redd surveys have not been feasible this winter due to frequent high flow events.** | Jess Newton<br>Matt Brown |
| **Acoustic tagging of post-spawn hatchery steelhead** | **Forty-five post-spawn and "reconditioned" hatchery steelhead have been surgically implanted with acoustic tags to monitor migration patterns after their release in early-April. Movements of tagged steelhead will be monitored for >1.5 years using a series of hydrophones located in the Sacramento River, Delta, and Bay. This study will provide information on dispersal and upstream migration patterns for adult, post-spawn hatchery steelhead released from the Coleman NFH.** | Kevin Niemela |
| **Bio-sampling, tagging & tag recovery** | **Late-fall Chinook entering the Coleman NFH December through February were surveyed for adipose fin clips and the head has been collected from all salmon with a missing adipose fin. Approximately 4,450 heads were collected. Tag recovery and tag reading are underway, and anticipated to be completed during April, 2006.** | Kevin Niemela |



Revised updates (**shown in bold**) are distributed at each regular Battle Creek Work Group meeting.
Please refer to the complete reports prior to using this preliminary information in literature citations.