

# Battle Creek Watershed: U.S. Fish & Wildlife Service Activities March 2004

<b>CA/NV Fish Health Center</b> <b>(530) 365-4271</b>		<b>Scott Foott, Ph.D.</b> <b>Project Leader</b>
Disease Studies	<b>Preliminary data indicates that Chinook sac-fry are markedly less sensitive to Infectious Hematopoetic Necrosis Virus (IHNV) infection, than 50 mm fingerlings. This is true for both standard bath and flow through IHNV challenges.</b>	
<b>Red Bluff Fish &amp; Wildlife Office</b> <b>(530) 527-3043</b>		<b>Jim Smith</b> <b>Project Leader</b>
Battle Creek Monitoring	<b>&gt;&gt; Adult salmonid trapping at the barrier weir began March 2. New operating times and hours of operation have been implemented to further reduce potential passage delay to salmonids. As of March 12, 34 steelhead have been passed above the weir. A short term experimental 24 hr trapping operation in April is planned to increase our knowledge of passage timing.</b> <b>&gt;&gt; Steelhead redd monitoring began on 11/24. Three complete surveys of each reach have been performed with a total of 26 redds observed. High flows may have made redds undetectable. High flows and elevated turbidity have caused many surveys to be canceled. Snorkel surveys will begin in mid-April.</b> <b>&gt;&gt; The upper Battle Creek screw trap captured its first juvenile steelhead of the year on March 1, indicating onset of emergence. Sampling with rotary screw traps at the upper and lower sites continues for juvenile salmonids seven days a week.</b>	
Monitoring the abundance of fall Chinook in lower B.C.	<b>&gt;The USFWS and CDFG cooperated on a new strategy to estimate escapement of fall Chinook salmon in lower Battle Creek using video-monitoring. Video tapes were reviewed, quality control analysis is underway, and a 2003 passage estimate is due soon.</b>	
Bio-sampling, Coded-wire tagging, and Tag recovery	<b>&gt;Marking and tagging of approx. 200,000 fall Chinook fry occurred during February-March, 2004. These fish were released at Red Bluff and Clarksburg to assess survival through the Sacramento River.</b> <b>&gt;In an experiment on mass marking methods, approximately 140,000 fall Chinook salmon were marked with a fluorescent chemical that binds to calcified structures, such as otoliths, fin rays, and operculum. These fish were also marked with a fin clip and coded-wire tag so that they can be identified on return to the hatchery or the Sacramento Basin. Over the next four years, adult fall Chinook salmon will be examined to determine the efficacy of this technique. Release is due in April.</b>	
Battle Creek Watershed Conservancy Federal Grant	<b>The watershed assessment will be ready for review by BCWC &amp; BCWG in Fall 2003; it was provided to the CALFED Battle Creek science review team for their use.</b>	

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<b>Coleman National Fish Hatchery Complex Anderson, CA (530) 365-8622</b>		<b>Scott Hamelberg Project Leader</b>
Chinook Spawning: Winter-run	<p>&gt;Broodyear 2004 broodstock collection began 0n Jan 7<sup>th</sup> and nine adults are on station at Livingston Stone NFH. Spawning begins in late-April.</p> <p>&gt;Spawning began December 30th, 2003. Forty-five late-fall Chinook from the Keswick trap have been incorporated into the broodstock. Eight natural origin late fall were passed into upper Battle Creek during the hatchery late-fall propagation season. Spawning has finished for the season.</p> <p>&gt;Spawning began December 15th, 2003. Thirty-eight natural origin steelhead have been infused into the broodstock. One hundred eighty-two natural origin steelhead have been passed upstream into upper Battle Creek. Spawning has finished for the season.</p>	
Late fall-run		
Steelhead Trout		
Production: Winter Chinook	<p>Broodyear 2003: An estimated 152,000 natural-origin smolts and 67,000 "captive broodstock"-origin smolts were released on Feb 5.</p> <p><b>Broodyear 2003: 12,600,000 fingerlings are in ponds.</b></p> <p><b>Broodyear 2004: 1.1 million eggs on station</b></p> <p><b>Broodyear 2004: 700,000 eggs on station.</b></p>	
Fall Chinook Late-fall Chinook Steelhead		
Screens for Hatchery Water Intakes	Funding is being sought to bring CNFH screens into compliance with state and federal standards	<b>Sandy Osborn</b>
Barrier Weir & Upstream Ladder Improvements	<p><b>In their January 24, 2004 report, the CALFED Science Panel Report provided a recommendation which states "We support the USFWS proposal to improve the effectiveness of the barrier dam and the facilities for passing fish upstream." (Recommendation #3 Page 53). Based on this recommendation, the final design schedule and process was discussed at a brief technical team meeting on February 26, 2004. The next technical team meeting may be scheduled in late April to review Final Designs by Reclamation's Technical Service Center. These designs are estimated to be "25%-complete".</b></p>	

Please refer to the complete reports prior to using this preliminary information in literature citations. A revised version of the status of these activities is distributed at each Battle Creek Work Group meeting. Updates are shown in bold.  
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