### Idaho Department of Fish and Game
#### McCall Summer Chinook Hatchery
#### January 2009 Monthly Narrative

Steve Kammeyer

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**Number**

**Total Mortality**

<table>
<thead>
<tr>
<th>Month</th>
<th>To Date</th>
</tr>
</thead>
</table>

**Feed Conversion**

| Density Index |
| Flow Index |

**Total Length**

<table>
<thead>
<tr>
<th>Fish/ Pound</th>
</tr>
</thead>
</table>

**30-d Length**

| (inch) |

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<table>
<thead>
<tr>
<th>Number</th>
<th>Total Length (inch)</th>
<th>Fish/ Pound</th>
<th>Total Mortality</th>
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<th>Density Index</th>
<th>Flow Index</th>
<th>30-d Length (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BY07 SFSR SU Pre-smolt</td>
<td>1,108,382</td>
<td>5.14</td>
<td>21.93</td>
<td>126</td>
<td>1.79%</td>
<td>0.73</td>
<td>0.81</td>
</tr>
<tr>
<td>BY08 SFSR SU Fry/ Alevin</td>
<td>Vats 660,264 Incub 551,333 1,211,597</td>
<td>1.43</td>
<td>1,219</td>
<td>2,138</td>
<td>0.32%</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td>BY07 Johnson Cr SU Pre-smolt</td>
<td>91,252</td>
<td>4.67</td>
<td>30.01</td>
<td>22</td>
<td>3.63%</td>
<td>n/a</td>
<td>1.07</td>
</tr>
<tr>
<td>BY08 Johnson Cr SU Fry/ Alevin</td>
<td>Vats 64,437 Incub 37,815 102,252</td>
<td>1.45</td>
<td>1,177</td>
<td>449</td>
<td>0.70%</td>
<td>1.24</td>
<td>1.24</td>
</tr>
</tbody>
</table>

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**South Fork Salmon River SU Production**

**Brood Year 2007**

There are 1,108,382 SFSR SU pre-smolts being reared in the 2-outdoor rearing ponds (266,554 AD/CWT, 51,674 AD/ PIT and 790,154 AD clip only). Currently these fish average 21.9 fpp (5.14 inch TL) in size. Individual lengths and weight measurements were collected, 100 per pond, to assess condition this month. Data indicated: Pond 1 average size was 5.21 inch TL at 21.11 fpp producing a condition factor of 3,357 (-7); Pond 2 average size was 5.07 inch TL at 22.74 fpp producing a condition factor of 3,384 (-7).

During January these fish were fed 1,374 pounds of feed resulting in an average conversion of 0.73 for the month (0.81 to date). Ending average density and flow indices were 0.21 and 1.74, respectively. Incoming water temperatures averaged 38.0 degrees Fahrenheit during January, with no appreciable variation.

Ducks landing on the ponds, primarily pond 1, has had a significant negative impact on fish growth and feeding response during the month. Due to this activity Pond 1 was only fed roughly 1/3 of what was fed to Pond 2.

Fish marking personnel were on station February 2 – 4 to insert PIT tags into a portion of the BY07 SFSR SU that are being reared in Pond 1 (AD Clip only sub-population). A total of 51,674 summer chinook received functional PIT tags during this period. Operations proceeded very smoothly with all of the fish marked in two days (new record) and a half of day was used to disinfect equipment prior to departure.

**Brood Year 2008**

There are 1,211,597 fry/ alevin from this brood year on station. Fry from the first 4 spawning Lots were setout during January and currently number 660,264. Alevin from the last 3 spawning Lots will be setout in February and number 551,333. During January 15.6 pounds of starter feed was fed out resulting in a conversion of 1.33. To improve initial feeding response fry are being fed a 50:50 mixture of BioVita #0 and a reformulated version of BioDiet #1. Qualitatively, this combination seems to have improved (lessened) the time it takes for the fry to go onto feed following setout. Ending density and flow indices averaged 0.40 and 0.61, respectively. Ultimately 12 of the indoor early rearing vats will be used for SFSR SU fry and will be loaded at approximately 101,000 each.
**Johnson Creek SU Production**

**Brood Year 2007**

Johnson Creek origin summer chinook pre-smolts currently number 91,252 and average 30.01 fpp (4.67 inch TL) in size. During January, 132 pounds of feed was fed to these fish resulting in no apparent growth for the month and a conversion to date of 1.07.

Fishery personnel from the Nez Perce conducted PIT operations for BY07 Johnson Creek pre-smolts at MCFH on January 27th. Operations proceeded smoothly with 2,095 functional PIT tags being inserted into fish. To facilitate tagging, a randomly selected group of Johnson Creek summer chinook were transported from the collection basin and placed into a partitioned indoor rearing vat on January 22nd. As fish were PIT tagged, they were moved into the upper unoccupied section of this vat. Following tagging these fish will remain indoors for 2-weeks to allow for healing of the PIT injection site and ease the collection of potentially shed tags before being returned to the outdoor collection basin.

During tagging, NPT fishery personnel completed a mark quality/retention check for CWT and Elastomer tags. The following retention rates were reported: 98.28% VIE (2,120/2,157), 98.28% CWT (2,120/2,157). Coverage for at least one of these marks was found to be 100% (2,157/2,157) and coverage for both marks was determined to be 96.57% (2,083/2,157). Average fish size was also calculated from the 2,157 fish sample and determined to be 30.01 fpp (4.67 inch TL) with a condition factor of 3,272 (-7). Hatchery growth information was adjusted to correspond to this value.

**Brood Year 2008**

There are 102,252 Johnson Creek origin fry/alevin on inventory. Fry from the first four spawning Lots were setout in January and number 64,437. Alevin from 2 additional spawning Lots will be setout in early February and number 37,815. During January 3.5 pounds of starter feed (also 50:50 mixture) was fed out resulting in a conversion of 1.24. Ending density and flow indices averaged 0.18 and 0.24, respectively. Two indoor rearing vats will be used for initial rearing of the Johnson Creek SU fry and will be initially loaded at approximately 51,350 each.

**Miscellaneous**

PIT Tagging BY07 SFSR SU (Feb 26-27, 2009).  Improvised Containment for Fish to be PIT Tagged.
Two of the 20 resident deer frequenting the Hatchery.

It is Early for Robins, but a few have already arrived.