August 16, 2006

Mr. John Hitron
Carson National Fish Hatchery
14041 Wind River Highway
Carson, WA  98610

Dear John:

The Fish Passage Center has been marking fish from the Carson Hatchery facility over the last several years as part of the Smolt Monitoring Program (SMP). For purposes of these studies data are collected on either juvenile life stage, or both the juvenile and adult life stages. The SMP provides information for in-season management of the hydrosystem and post-season analyses to the federal, state, and tribal fishery agencies. We would like to share with you some of the information we developed under this study for the fish used from the Carson Hatchery facility.

Under the Smolt Monitoring Program, information is collected on the timing and migration speed from the hatchery to Bonneville Dam.

### Carson Hatchery Spring Chinook Travel Times

<table>
<thead>
<tr>
<th>Release Date</th>
<th>Migration Year</th>
<th>Min</th>
<th>Med</th>
<th>Max</th>
<th>Lower</th>
<th>Upper</th>
<th>Bonneville Flow (kcf/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-Apr</td>
<td>1999</td>
<td>0.8</td>
<td>8.7</td>
<td>94.3</td>
<td>7.8</td>
<td>9.5</td>
<td>198.5</td>
</tr>
<tr>
<td>20-Apr</td>
<td>2000</td>
<td>0.9</td>
<td>11.6</td>
<td>41.2</td>
<td>10.7</td>
<td>12.6</td>
<td>192.5</td>
</tr>
<tr>
<td>19-Apr</td>
<td>2001</td>
<td>1.6</td>
<td>18.5</td>
<td>130.3</td>
<td>18.3</td>
<td>18.7</td>
<td>127.8</td>
</tr>
<tr>
<td>17-Apr</td>
<td>2002</td>
<td>0.7</td>
<td>15.6</td>
<td>76.7</td>
<td>15.5</td>
<td>15.7</td>
<td>132.1</td>
</tr>
<tr>
<td>16-Apr</td>
<td>2003</td>
<td>1.2</td>
<td>12.5</td>
<td>42.5</td>
<td>11.6</td>
<td>13.0</td>
<td>111.8</td>
</tr>
<tr>
<td>15-Apr</td>
<td>2004</td>
<td>0.9</td>
<td>10.4</td>
<td>65.9</td>
<td>9.6</td>
<td>10.6</td>
<td>143.8</td>
</tr>
<tr>
<td>15-Apr</td>
<td>2005</td>
<td>1.5</td>
<td>11.5</td>
<td>29.3</td>
<td>10.7</td>
<td>11.6</td>
<td>146.7</td>
</tr>
<tr>
<td>10-Apr</td>
<td>2006</td>
<td>0.7</td>
<td>7.4</td>
<td>44.3</td>
<td>6.7</td>
<td>8.4</td>
<td>226.2</td>
</tr>
</tbody>
</table>

The above table describes the median travel times from each release site to Bonneville Dam along with the minimum and maximum travel time. It also provides the 95% confidence limits around the estimated median travel time.
Also, we are providing the following graphs which show passage timing of the hatchery releases to Bonneville Dam for the past nine years. To better facilitate comparison, we have broken the years into two separate graphs. Please note the different scales on the x-axis.

**Carson Hatchery – Spring Chinook (1997-2001)**

*Passage Timing to Bonneville Dam*

![Graph 1](G:\STAFF\DOCUMENT\2006 Documents\Hatchery Reports\124-06.doc)

**Carson Hatchery – Spring Chinook (2002-2006)**

*Passage Timing to Bonneville Dam*

![Graph 2](G:\STAFF\DOCUMENT\2006 Documents\Hatchery Reports\124-06.doc)
We hope that the information we have provided regarding the use and application of information from the groups that have been marked at the hatchery over the last several years is of some use to you. If you would like any additional information regarding these releases please feel free to contact us.

Sincerely,

Michele DeHart
Fish Passage Center Manager

Cc: Charlie Petrosky, IDF&G
    Doug DeHart, USFWS
    FPAC