

Imnaha River Spring/Summer Chinook Salmon Hatchery

Imnaha Supplementation

III. KEY FINDINGS

ISRP comment page 53: “A final conclusion on the effect of the program on natural adult abundance and productivity is not provided.”

Response: The supplementation program and the RM&E are ongoing. Adaptive management actions are proposed to improve the effectiveness of the program, thus final conclusions regarding program success would be premature. However, we believe the conclusions we provided do reflect final conclusions regarding the program performance to date. Relevant to this ISRP comment are the following conclusions from the report:

“The Imnaha hatchery program has demonstrated a significant full life cycle survival advantage over naturally spawning fish with a R/S advantage of over 10:1. We have not observed an increasing trend in natural-origin abundance since we started the hatchery program. R/S for mixed hatchery and natural-origin fish spawning naturally has averaged less than 1.0 and has only exceeded 1.0 in 5 of the last 20 complete brood years. We have significantly increased the total number of spawners, but it does not appear that we have increased the number of natural-origin recruits. The natural productivity of mixed hatchery and natural-origin spawners in the Imnaha River population has decreased significantly since supplementation was initiated.”

In addition to the above conclusions, we provided extensive conclusions related to life history and spawning characteristic comparisons (see page 26 in the report).

ISRP comment page 53: “A section summarizing HSRG and USFWS hatchery review findings and how they are reflected in project management would improve the presentation.”

Response: We did include such a summary in the presentation but did not include it in the report. Following is the summary we provided in the presentation.

Imnaha River HSRG and HRT Recommendations

- **Program Goals: HSRG – Maintain current interim 360,000 smolt goal, divide program into integrated conservation and stepping stone harvest and improve PNI**
HRT – Maintain current 350,000 smolt goal, modify sliding scale so that pHOS does not exceed pNOB to improve PNI and establish natural origin escapement goal where pHOS is 0

Response: Maintain current 360,000 smolt goal and improve PNI, however construction and operation of new weir is essential to achieve these recommendations.

- **Facility Rearing Capacities: HSRG – Improve the weir so it can trap across the run**

HRT – Expand early rearing and smolt rearing capacities by modification of Lookingglass or construction of Lostine NEOH facility, install new more efficient weir

Response: New weir currently planned for implementation when funds secured other new facilities planned by co-managers.

- **Rearing-Release Strategies: HSRG – Increase smolt size at release**

Response : Not considered beneficial for survival or age-at-return.

- **Define More Specific Goals for Big Sheep Creek: HRT - Co-managers establish quantifiable and measurable goals for outplanting hatchery-origin Chinook adults into Big Sheep Creek**

Response: Co-managers currently considering this recommendation, with expansion of monitoring under NEOH additional assessment of outplanting effectiveness will be possible.