

MEMORANDUM FOR THE RECORD 16 MCN 06 – Fish Loss in VBS Mesh**SUBJECT:**

On May 5, during routine VBS inspections, maintenance staff pulled VBSs in slots 5A, 9A and 10B due to high differentials, a sign of debris impingement preventing flows from passing through the screens. Unit 10 was taken out of service at 1429 hours, followed by unit 9 at 1526 hours then unit 5 at 1554 hours. During the course of cleaning operations, maintenance staff noted smolts trapped behind the VBS mesh. All three units remained out of service for fish salvage operations and screen repair. Unit 5 currently remains out of service for repairs to the VBS in slot 5A. Unit 9 was returned to service on May 6 at 0959 hours after the VBS mesh in slot 9A was repaired. Unit 10 returned to service on May 6 at 1657 hours after the VBS mesh in slot 10B was repaired. Fish apparently passed through very small seam breaks in each of these VBSs, resulting in their entrapment behind the mesh. The numbers and types of fish recovered are summarized below by gateway slot.

5A: 5 live clipped Chinook yearlings.
18 live clipped steelhead.
12 clipped steelhead mortalities.
2 non-clipped steelhead mortalities.

9A: 14 live clipped steelhead.
35 clipped steelhead mortalities.
2 non-clipped steelhead mortalities.
65 clipped Chinook yearling mortalities.
2 non-clipped Chinook yearling mortalities.

10B: 1 live clipped steelhead.
154 clipped steelhead mortalities.
25 non-clipped steelhead mortalities.
206 clipped Chinook yearling mortalities.
23 non-clipped Chinook yearling mortalities.
4 Chinook fry mortalities.
3 non-clipped sockeye mortalities.
2 non-clipped coho mortalities.

A. Species –see above.

B. Origin –fish assumed hatchery or wild by presence or absence of adipose fin clip.

- C. Length – size as expected for each species.
- D. Marks and tags – not recorded.
- E. Marks and Injuries found on carcass – scrapes, descaling and injuries from rubbing or passing through broken mesh seam and/or contact with perforated steel plates behind the mesh.
- F. Cause and Time of Death – Exact time of death unknown. Fish loss resulted from injury and stress from being trapped between the caught between damaged mesh and the perforated plates behind the mesh.
- G. Future and Preventative Measures –
 1. Examine all VBSs that have not undergone “in season” inspections yet this year as soon as possible, starting with the oldest screens.
 2. Accelerate the VBS rehabilitation program

Sincerely,
Bobby Johnson
McNary Project Fisheries