

**MEMORANDUM FOR THE RECORD – 20 LGS 06 Direct Load Mortality****SUBJECT: Direct Loading Flume Mortalities**Background

On May 17, Little Goose Juvenile Fish Facility staff found 80 juvenile salmon and steelhead mortalities in the raceway loading flume (Table 1). This particular portion of the flume only contains water while emptying raceways into a transport vessel. The plate preventing fish from swimming up the raceway loading flume while conducting direct loading operation was not properly installed after barge loading on May 16 (Picture 1).

Table 1: Total mortalities by species related to the May 17 event.

Species & Origin	Number	PIT Tag
Clipped Yearling Chinook	25	
Unclipped Yearling Chinook	3	
Clipped Subyearling Chinook	1	
Unclipped Subyearling Chinook	9	
Clipped Steelhead	16	3DD.0077D7D525
Unclipped Steelhead	8	
Clipped Sockeye	10	3DD.003D3931BE
Clipped Coho	3	
Unclipped Coho	5	
Total	80	

- A. Species – Chinook salmon *Oncorhynchus tshawytscha*, Steelhead *O. mykiss*, Sockeye salmon *O. nerka* and Coho salmon *O. kisutch*.
- B. Origin – Hatchery and Wild
- C. Length – N/A
- D. Marks and tags – All fish were examined for PIT tags. Of the 80 fish, 2 were marked with PIT tags (Table 1).
- E. Marks and Injuries found on carcasses – N/A
- F. Cause and Time of Death – Improper installation of flume plate on May 16.
- G. Future and Preventative Measures – Project staff are drafting an SOP for proper installation of the flume plate and all staff will be retrained on flume operation.

Picture 1: Direct load flume plate properly installed.



Sincerely,  
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