

MEMORANDUM FOR THE RECORD – 19 LMN 11 Temporary Primary Bypass due to Shad

SUBJECT: Large numbers of American shad entering the system during the early morning hours on 26 September inundated the B-side (larger fish) sample holding tanks and mortalities began to collect on the tail screen. B-side Holding tank began to overflow and at the discretion of the Biologist in charge via phone contact, the system was switched to Primary Bypass at 0500 hours. Several shad mortalities occurred in the transport flume downstream of the separator while the holding tank clog was being removed. Among the shad mortalities, one unclipped juvenile Chinook salmon mortality was discovered. The clog and overflowed tank did not affect sample numbers from 24-25 September or sample numbers 25-26 September from 0700 until 0500. Two hours of sample collection (0500-0700) for 25-26 September were missed due to the facility running in Primary Bypass. Two hours at the start of the 26-27 September sample collection were also missed and the facility was switched back in to collection at 0900 hours on 26 September. Overall, sample fish were not collected for four hours between 0500 and 0900 on 26 September.

- A. Species – 1 juvenile Chinook salmon *Oncorhynchus tshawytscha*,
- B. Origin – Wild
- C. Length – 150 mm
- D. Marks and tags –N/A
- E. Marks and Injuries found on carcasses –N/A
- F. Cause and Time of Death – Inundated with shad in flume 26 September at 0500 hours
- G. Future and Preventative Measures – Facility was operating at 100 percent sample rate at the time of the incident which is normal practice when juvenile Chinook numbers are very low late in the season. The influx of American shad in the system overwhelmed the sample holding tanks so the sample rate was set at 10 percent when collection began on 26 September at 0900. This will limit the amount of shad able to enter the holding tanks and should alleviate the issue. The tank will be monitored closely and if there are still too many shad coming in at 10 percent, the sample rate will be further decreased.

Sincerely,
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