

**MEMORANDUM FOR THE RECORD - 19MCN06****SUBJECT: Partially Missed Index Sample.**

On May 4, at 2245 hours, the B side sample gate failed with the gate in the closed position. The cylinder shaft and connector had disconnected from the bearing on the gate. The technician turned the gate off at 2300 hours. Sample collection on the A side continued with the system switched to primary bypass at 0700 hours as scheduled. Eight hours of sampling were missed on the B side at 1 percent. The next working day, May 6, the mechanic repaired the B side sample gate system thinking the issue was the shaft in the cylinder. Sample collection had begun at 0700 hours with a 1 percent sample rate. The B side gate was activated at 0744, resulting in only two samples being missed. Later that day, the technician on duty informed the biologist that the B side sample gate had failed again. This time, the gate was open and fish were being collected. Again, the cylinder shaft and connector had disconnected from the bearing on the gate. The gate was manually closed and turned off at 1345 hours. By examining the count record, it was determined the gate had been open from 1325 to 1345 hours, 20 minutes. The B side count went from 38 to 291, an increase of 253 fish in 20 minutes. There were 36 fish counts on the A side. At this time of year, PSMFC generally sets the sample rate to collect 300 fish. Adding both A and B counts together, there was an estimated 327 fish in the sample tanks. After consulting PSMFC, the biologist determined it would be best switch the system to primary bypass and collect no more fish for sampling. The system was switched to primary bypass at 1500 hours. The A side collected fish for one more hour. After this time, for the data day, 16 hours of sampling were missed. By 1700 hours, the bearing on the B side sample gate where the cylinder shaft attaches was replaced. Testing the gate occurred briefly and it appeared some adjustment was required. These adjustments and a complete inspection of the B sample gate system occurred the early the next day, April 7. The system appears ready to collect fish for sampling on schedule on April 8, starting at 0700 hours. The sample was also examined on April 7. The combined number of smolts sampled was 372. With a general increase in smolt numbers, the sample rate has been reduced to 0.5 percent.

Species – no fish mortality or passage delays occurred. The only issue was missing sample collection as described above.

- A. Origin – NA
- B. Length – NA
- C. Marks and tags – NA
- D. Marks and Injuries found on carcass – NA
- E. Cause and Time of Death – NA

F. Future and Preventative Measures – Improve maintenance and system inspections by staff. Insure replacement parts are in stock.

No photos available.

Sincerely,

Bobby Johnson  
Project Fisheries Biologist  
McNary Lock and Dam