CENWW-OD-WM Date: 5 December 2014

MEMORANDUM FOR THE RECORD

SUBJECT: 14 MCN 29 MFR Fish Salvage Unit 11

Narrative: On June 28, 2013, McNary Main Unit #11 was forced to shut down due to a bearing problem. By the time we determined the full extent of the problem, some time had already passed, and we determined that we could not spin the unit to drive the fish out and place tail logs, as we would normally do. Since several days had already gone by, allowing the draft tube to fill with fish, there was no point in conducting a fish rescue in 2013.

This week we needed to finish the repairs to the bearing in the area below the tailrace water line, so we needed to place tail logs, drain the scroll case and draft tube, and conduct a fish rescue. The scroll case rescue was conducted on December 3, but there were no fish there, because they closed the wicket gates and did not reopen them when the unit was originally shut down in 2013.

The draft tube, as expected, was full of fish, and we were well-prepared, with good equipment and a large crew, to remove them on December 4. The salvage report is attached.

- **A. Species:** White sturgeon and channel catfish. No salmonids.
- **B.** Origin: Presumably wild.
- C. Length: Sturgeon: 12" to about 60". Catfish: 10" to about 24".
- D. Marks and Tags: None observed.
- **E.** Marks and Injuries Found on the Carcasses: The surviving fish appeared to be in pretty good shape, with only minor scrape marks on a few of them. Many of the dead fish had been dead for some time, as their eyes were gone. Some of them had marks that were presumably from the gratings over the drain openings.
- **F.** Future and Preventative Measures: Nothing that we could have done differently. When you lose a bearing on a main unit, you don't have a lot of options.
- **G. Photos Taken:** Some crew members took photos of the larger sturgeon. We will send when they become available.

Carl R. Dugger Supervisory Fisheries Biologist McNary Juvenile Fish Facility

RECORD OF FISH RECOVERY OPERATIONS – McNary Dam

Biologist in charge: Carl Dugger/ Bobby Johnson

Dates: 12/3/2014 and 12/4/2014.

No fish in scroll case on Dec. 3. Time of rescue on Dec. 4: start 1230 hours; end 1530 hours.

Other personnel involved in activity: Fish staff, general maintenance, resources and mechanics.

Location: Unit 11 scroll case and draft tube

Narrative: The scroll case unwatering took place over the course of 15 minutes was on December 3. No fish were found. The draft tube was unwatered on December 4th. All fish reported below were recovered from the draft tube on December 4th.

Purpose of dewatering/activity: Maintenance, inspection and repair of unit bearings.

Species and Counts of Fish Recovered (estimate only if necessary)

Adult Salmonids Recovered None		
Chinook Unclipped	Live	Mortality
Chinook Clipped	Live	Mortality
Coho	Live	Mortality
Sockeye	Live	Mortality
Steelhead Unclipped	Live	Mortality
Steelhead Clipped	Live	Mortality
Juvenile Salmonids R	ecovered None	
Chinook Unclipped	Live	Mortality
Chinook Clipped	Live	Mortality
Coho	Live	Mortality
Sockeye	Live	Mortality
Steelhead Unclipped	Live	Mortality
Steelhead Clipped	Live	Mortality
Non Salmonids:		

Scroll case none.

Draft tube: About 55 channel catfish (about 10 dead) of various sizes.

About 85 white sturgeon with about 10 to 15 lost. (15 were 3.5 to 5ft [two of these were lost])

Problems and Comments: Unit was forced to shut down on June 28, 2013. Unable to spin turbine unit to flush the fish out due to the failed bearing.