

CENWW-ODL

07/10/2017

MEMORANDUM FOR RECORD: 17 LWG 15 Adult Trap Shad Issue:

Lower Granite Adult Trap Overflow – 10 July 2017

Description of the problem: Current adult trap operation includes changing to non-sample mode from Friday afternoon through Sunday morning with the turnpool diversion gate remaining in the trapping position. At about 0500 hours July 10 Corps personnel noticed water overflowing from the adult trap recovery pool into the parking lot below. NOAA personnel were notified immediately and arrived at about 0510 hours. The problem was identified as adult shad mortalities accumulating on the recovery pool screen located below the fish sample basket (see photo). Shad were flushed from the screen without impacting adults in the trap sampling system to regain control of water flow. After sample fish were worked up the trap was completely flushed (see photos). No salmonid mortalities occurred. Shad counted over Lower Granite have increased (see graph) resulting in blockage of adult trap drain screens over the last couple seasons. Modifications in adult trap operation including daily trap flushing and changing the turnpool gate position to remove shad has been used to mitigate this problem. The adult trap will be flushed daily after working the morning sample until observed shad mortalities decline or other actions are warranted. Corps night shift biological techs will monitor the adult trap every 1.5-3 hours (depending on personnel availability) and notify the Corps and NOAA fisheries biologist of any issues until Lower Granite shad passage declines.

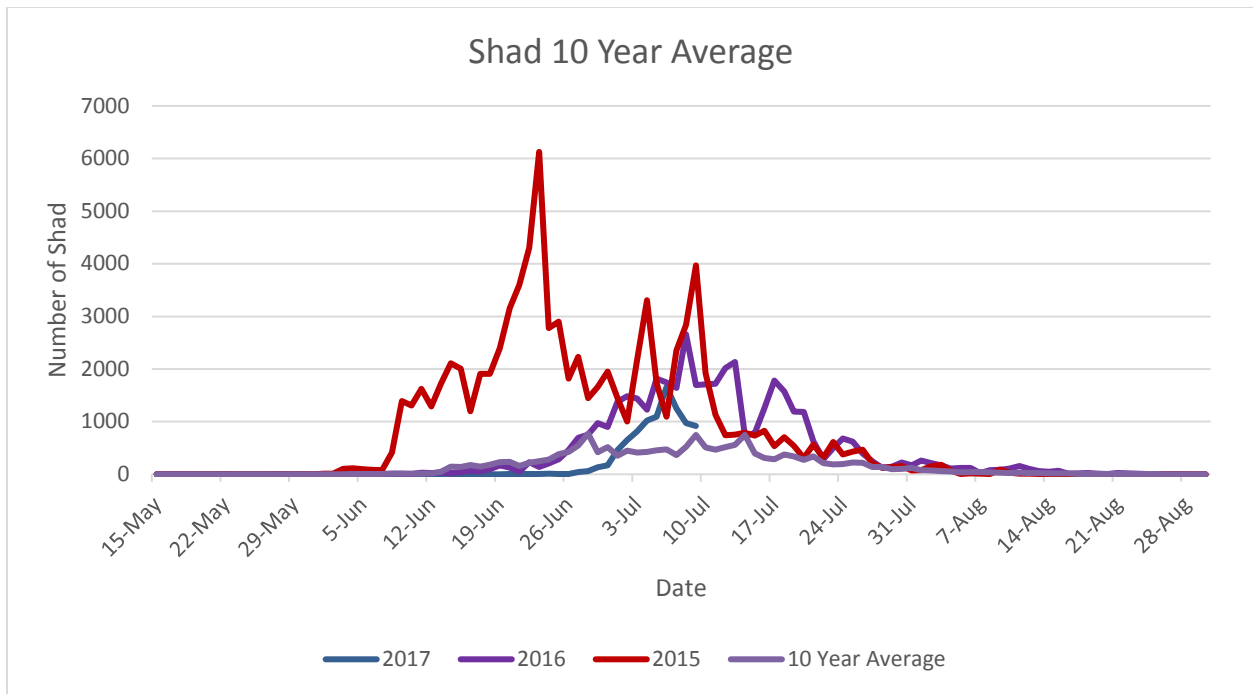
- A. Species – NA
- B. Origin – NA
- C. Length – NA
- D. Marks and tags – NA
- E. Marks and Injuries found on carcass – NA
- F. Cause and Time of Death – NA
- G. Future and Preventative Measures – Lower Granite Corps and NOAA biologist agreed the preferred method is to continue to operate as described above until shad mortalities are reduced. An additional method of operation if flow cannot be managed considered by Lower Granite Corps and NOAA biologists considered would be to change to daily waterup and dewatering of the trap.
- H. Photos – See below.



Photo 1. Adult trap recovery pool looking towards the sample basket and screen that plugged with shad mortalities during dewatering for shad July 10, 2017.



Photo 2. Adult trap recovery pool looking towards attraction pool during dewatering for flushing shad mortalities July 10, 2017.



Graph 1. Lower Granite ten year average shad passage with 2015, 2016, and 2017 shown separate.

Elizabeth Holdren

Supervisory Fisheries Biologist
Lower Granite Lock and Dam
Ph. (509) 843-2263
Cell. (509) 592-6109
Elizabeth.a.holdren@usace.army.mil

Or

Darren Ogden

NOAA Fisheries Biologist
Operation of Lower Granite Adult Trap
Darren.ogden@noaa.gov