

**MEMORANDUM FOR THE RECORD – 20 MCN 04****SUBJECT: Pelicans entering the Oregon ladder exit.**

**Narrative:** During approximately the last five years, pelicans have entered the Oregon ladder exit to feed on shad. However, these occurrences were only documented a couple of times a year. Originally, there were rumors of more birds being in the ladder but these sightings could not be verified. Starting June 12, 2020, pelicans were again observed in the Oregon exit. That day, the assistant biologist recorded, "I didn't get a photo of the one "in" the ladder, only a long distant shot to where he flew out and landed. The other two birds were feeding at the floating trash rack. I caught photos of them as they flew off." There is no record for June 13. The next day, June 14, the project biologist found a pelican in the Oregon ladder exit. After 3 or 4 hours, the pelican had left without assistance. This exit has a floating trash rack outside the ladder and a standard bar trash rack that slides into the exit opening. The sliding trash rack does not go all the way to the ladder bottom. We suspect birds enter the fishway exit through the sliding trash rack by swimming up to the floating rack, hop up onto it and then dive between the trash rack bars. The pelicans have been observed exiting by this route and by flying out the exit, as described below.

The general maintenance staff reported two pelicans in the exit on June 15 at 0700 hours. One bird flew out by flying west. The descending ladder allows the birds to get altitude. This flight path was observed two years ago. The project biologists observed the second bird at about 1030 hours. The bird moved back and forth between exit and the upstream picketed leads. Later, in the day, from about 1200 to 1330 hours, three fisheries staff members moved the bird until one employee was able to net the pelican out of the ladder and return it to the river. The bird swam away, which would indicate it was full of shad. In fact, the bird was caught just as it was dipping its head to catch a shad dinner. Later, that evening, the assistant biologist reported seeing more pelicans inside the exit. Fortunately, these birds fled. Another pelican was observed and later left on its own in the morning of June 16. While evaluating how to exclude pelicans from the ladder exit, two more birds were observed that left by themselves. During the day, there were repeated reports of pelicans being observed inside the Oregon ladder exit. The swing shift technician was asked to monitor the exit. One pelican approached the exit but the great blue heron sitting on the floating trash rack discouraged the pelican. No further birds were observed and by 1200 hours on June 17, the Oregon ladder exit pelican exclusion bars had been installed. We do not think the pelicans can fly into the exit. Though they are every graceful, this would be a tight landing.

**Location:** Oregon ladder exit upstream of count station.

**Method:** Pelicans entering ladder needed to be excluded from the ladder. An exclusion was installed.

**Time Line - Duration:** From June 12 at about noon to June 17 at noon.

**A. Species:** It is likely the pelicans were consuming adult shad. We have observed them in other locations eat small adult sockeye and steelhead. We suspect they would also consume jack salmon. Any small adult salmonids near the surface, which we do see in the ladders, would be at risk.

**B. Origin:** Unknown.

**C. Length:** Unknown.

**D. Marks and Tags:** Unknown.

**E. Marks and Injuries Found on the Carcasses:** Unknown.

**F. Future and Preventative Measures:** If pelicans cannot fly into the ladder exit and if the exclusion at the trash racks works, we should not see any more pelicans inside the Oregon ladder exit. However, the project personnel have wanted to install a new slide in trash rack with smaller bar gaps, which would also cure the problem. The process has begun to purchase the material so a new trash rack can be built. The exclusion installed on June 17 will cover the exit until the new trash rack is installed. There is no issue at the Washington ladder exit as the bar gap on that trash rack is much smaller than the Oregon exit trash rack.

**G. Photos Taken:** Yes!



Pelicans outside ladder near floating trash rack.



Pelican feeding near exit.



Pelican we netted out of ladder.



Floating and slide in trash racks before exclusion installed.



View of exclusion from outside.



View of exclusion from inside the ladder.



After exclusion was installed. Got to find a new place to feed.

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