

2022 BPA/GPUD Avian Monitoring Report 06/13 – 06/19/2022

WEEKLY ACTIVITIES & UPCOMING EVENTS

ACTIVITIES	DATE
Survey of Astoria-Megler Bridge	06/15
Survey of site in The Dalles Pool	06/16
Survey of sites in John Day Pool	06/16
UPCOMING EVENTS	
Survey of sites in Potholes Reservoir	06/20-06/26
Survey of sites in McNary Pool below the Snake River confluence	06/20-06/26
Survey of sites in McNary Pool above the Snake River confluence	06/20-06/26

The peak of historic nesting for piscivorous colonial waterbirds in both the Columbia River estuary and Columbia River plateau has since passed. Nesting colonies will continue to be monitored but less frequently to document colony success or failure. As colony monitoring activities are reduced, more effort will be dedicated to analysis of aerial and drone imagery to identify peak colony counts of nesting birds in 2022. PIT tag recovery at bird colonies will likely begin in late July and continue through September.

FIXED-WING AERIAL SURVEY

Columbia River Estuary: Fixed-wing aerial survey was conducted on May 8.

Miller Sands

Aerial imagery of Miller Sands taken on May 8 (first fix-winged flight) has been processed and 943 nesting American white pelicans (preliminary estimate) were counted (*Figure 1*). No other piscivorous waterbirds were observed to be nesting on Miller Sands at the time of that flight. Another count of American white pelicans on Miller Sands will be conducted from our second fixed-wing survey on June 7 in the coming weeks.



Figure 1. Miller Sands American white pelican colony on May 8, 2022. Image only shows a portion of the total colony.

COLONY MONITORING & WATERBIRD SURVEYS

Columbia River Estuary: Site was visited on June 15 (boat and drone survey).

Astoria-Megler Bridge

We conducted our third and final boat survey of the Astoria-Megler Bridge for nesting double-crested cormorants, Brandt’s cormorants, and pelagic cormorants on June 15. For reference, we provide a key to individual bridge sections (*Figure 2*).

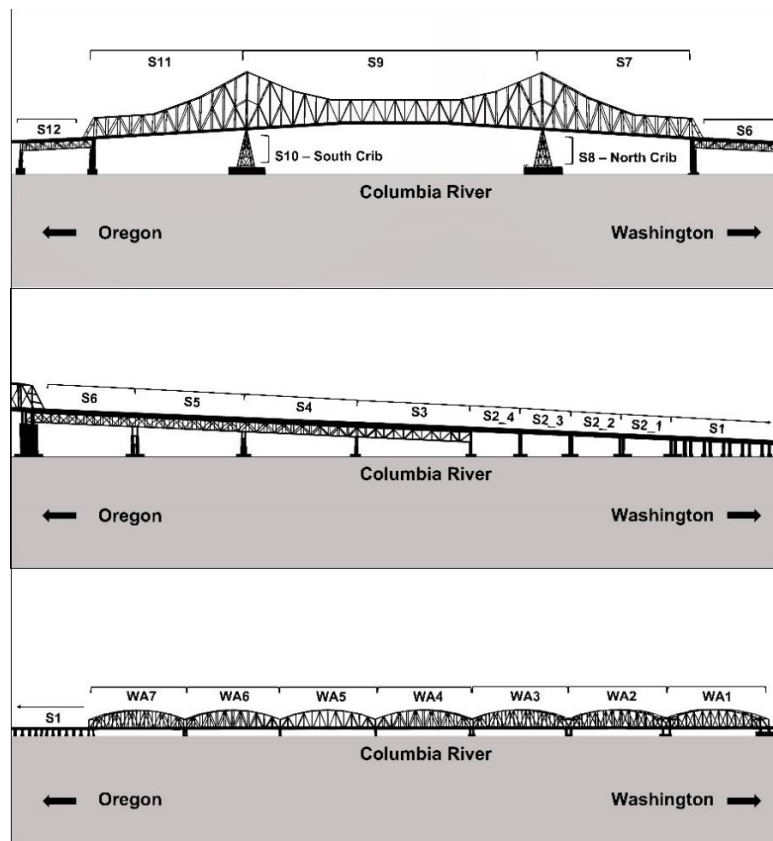


Figure 2. Survey sections of the Astoria-Megler Bridge for cormorant counts.

Complete counts from all three bridge nesting surveys, using boat and aerial counts, are currently being conducted and will be made available at a later date. Double-crested cormorants and Brandt's cormorants were both observed with chicks during our June 15 boat survey (*Figure 3*).



Figure 3. Double-crested cormorants with chicks (left panel) and Brandt's cormorants with chicks (right panel) on the Astoria-Megler Bridge on June 15, 2022.

The Dalles Pool: Site was visited on June 16.

Miller Rocks

~2,000 nesting gulls were observed on five islands in the Miller Rocks complex from a shore-based survey.

John Day Pool: Sites were visited on June 16.

John Day Pool elevations increased in recent days, flooding many of the low-lying islands (Long, Middle, Southern, and Rock islands) where Caspian terns historically nested (*Figure 4*). While not visible from our survey location on shore, Long, Middle, and Southern islands are underwater at pool elevations >264'.

Rock Island

No colonial waterbird activity was observed during a shore-based survey. Most available nesting and loafing habitat was submerged with John Day Pool elevations > 264' (*Figure 4*).

Basketball Island

No colonial waterbird activity was observed during a shore-based survey.

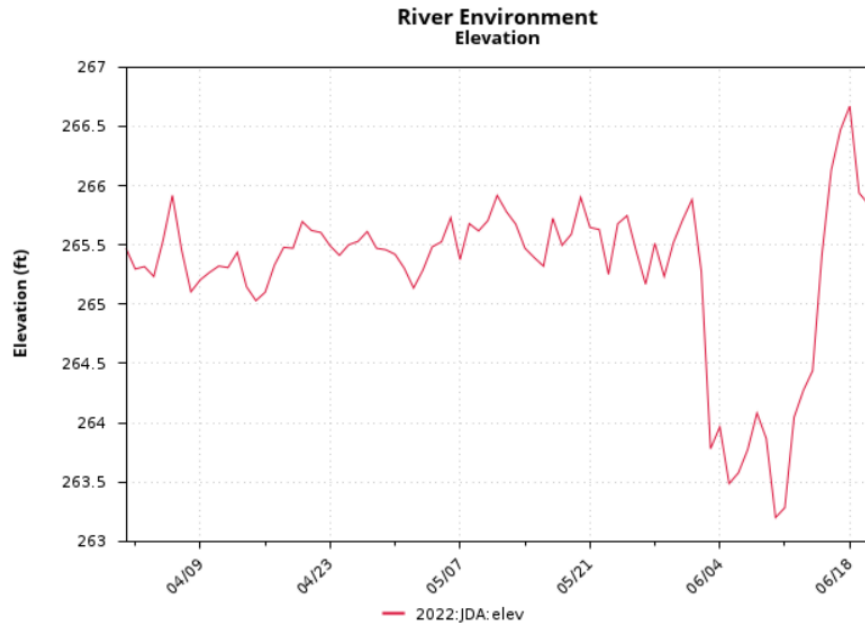


Figure 4. John Day Pool elevations from April 1 to June 21, 2022.

Anvil Island

Nesting gulls were observed during a shore-based survey, although counts were not conducted due to vegetation obstructions of the interior nesting colony.

Straight Six Island

Gull activity was observed during shore-based survey, although nesting has not been confirmed. This historic nesting site for gulls was previously vacant for most of the breeding season.

PIT TAGGING OF STEELHEAD AT ROCK ISLAND DAM

Steelhead smolt tagging commenced at Rock Island Dam on April 8 and ended on June 17. A total of 5,543 steelhead smolts (3,995 hatchery, 1,548 wild) were captured, PIT-tagged, and released (Figure 5). An additional 540 previously PIT-tagged steelhead smolts (484 hatchery, 56 wild) were also sampled, resulting in total of 6,083 PIT-tagged steelhead available for analysis. Steelhead were selected for tagging at random, regardless of their size, condition, or rear-type (hatchery, wild) and were tagged in proportion to and in-concert with the run at-large passing Rock Island Dam (tagged and untagged). Following the 2022 breeding season (August-September), we will scan bird colonies for smolt PIT tags to estimate predation rates on steelhead and on other groups of tagged fish.

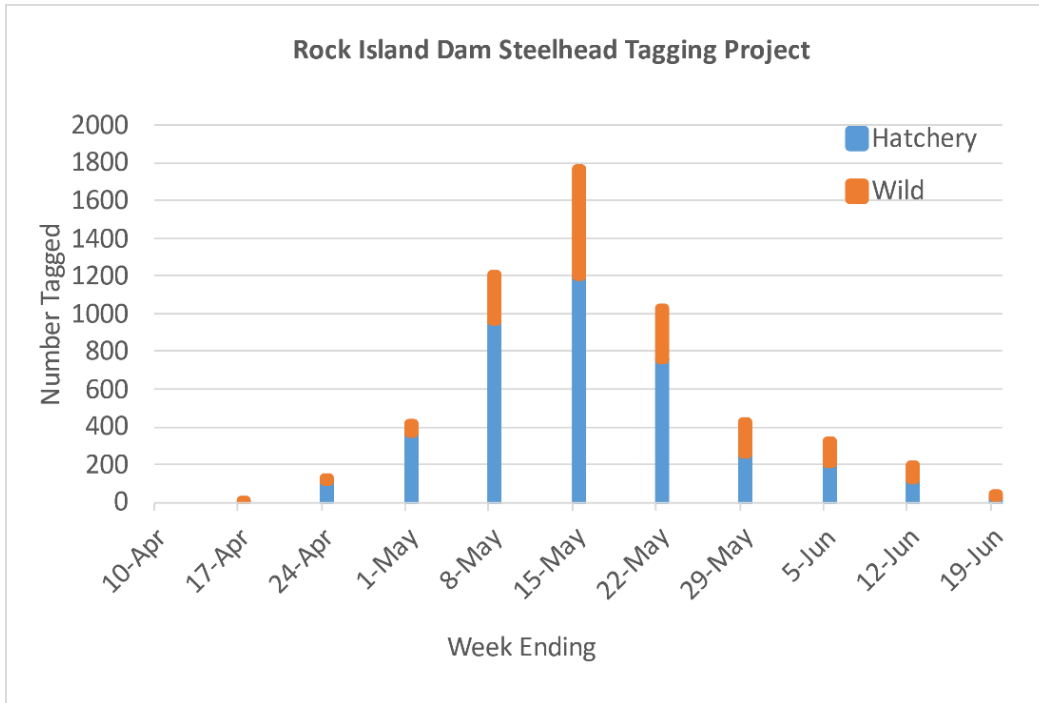


Figure 5. Steelhead smolt tagging at Rock Island Dam in 2022.