

2022 BPA/GPUD Avian Monitoring Report 05/02 – 05/08/2022

WEEKLY ACTIVITIES & UPCOMING EVENTS

ACTIVITIES	DATE
Survey of sites in The Dalles Pool	05/02
Survey of sites in McNary Pool above the Snake River confluence	05/02-03
Survey of sites in Potholes Reservoir	05/03
Survey of site in McNary Pool below the Snake River confluence	05/04
Survey of sites in McNary NWR off the Columbia River	05/05
Aerial survey of sites in Columbia River Estuary	05/08
UPCOMING EVENTS	
Survey of site in The Dalles Pool	05/09-05/15
Survey of Astoria-Megler Bridge	05/09-05/15
Aerial survey of sites in Columbia River plateau	05/09-05/15

COLONY MONITORING & WATERBIRD SURVEYS

The Dalles Pool: Sites were visited on May 2.

Island 20

~ 2,310 nesting gulls were observed at the four islands in the Miller Rocks complex (upstream, middle, downstream, and southern). Colony counts of gulls have doubled over the past week since the first gull eggs were confirmed on April 25. Phase I of Yakama Nation's non-lethal hazing has concluded this year. Next steps for Phase II work are currently being evaluated for implementation in 2023 with an update from Yakama Nation expected later this year.

McNary Pool above the Snake River Confluence: Sites were visited on May 2 (Island 20) and May 3 (Hanford Reach).

Island 20

3 double-crested cormorants and 1 attended nest were observed.

~5,340 nesting gulls were observed on the island. The colony was split into two distinct breeding areas on the south-central end of the island (~3,600 gulls) and the north-central end of the island (~1,740 gulls). Other breeding behaviors (e.g., copulation) were observed, and it is expected that gull attendance will continue to increase in the coming weeks. We estimate that approximately 90% of the colony was visible from our vantage.

Hanford Reach - Island A

~60 double-crested cormorants, and 15 attended nests were observed.

Hanford Reach - Island B

3 Caspian terns and 8 gulls were observed loafing.

Hanford Reach - Unnamed Island (downstream of Island B)

48 loafing Caspian terns were observed. Several terns were observed scraping and engaging in other breeding behaviors (e.g. copulation). We resighted 7 Caspian terns that were originally banded at sites in Potholes Reservoir: 1) 1 was banded as a chick in 2001 at Solstice Island; 2) 1 was banded as a chick in 2007 at Goose Island; 3) 2 were banded as chicks in 2009 at Goose Island; 4) 2 were banded as adults in 2011 at Goose Island; and 5) 1 was banded as a chick in 2011 at Goose Island (see *Figure 1*).



Figure 1. Banded Caspian terns on an unnamed island in Hanford Reach on May 3, 2022.

9 loafing gulls were observed.

Hanford Reach - Locke Island Complex

No piscivorous waterbirds were observed.

Potholes Reservoir: Sites were visited on May 3.

Goose Island

Caspian terns were counted in 11 different locations on Goose Island and its surrounding islets (see *Table 1*). 4 Caspian terns were observed loafing along East Rocks (see *Figure 2*), and 2 were seen observed loafing on the rocks at South Spit.

A drone survey was also conducted. While imagery is still being processed, preliminary analysis

did not confirm Caspian terns nesting on the historic colony area.

*Table 1. Caspian tern counts by location at Goose Island from 4/12 – 5/03.
[NA: Not Available]*

Caspian terns				
LOCATION	04/12	04/18	04/27 ²	5/03
Northwest Main	0	0	0	0
Northeast Main	0	0	0	0
Southeast Main	0	0	0	0
South Spit	0	0	0	2
South Beach	0	0	0	0
Colony Area ¹	NA	NA	NA	NA
Southwest Main	0	0	0	0
West Main	0	0	0	0
North Beach	0	0	0	0
East Rocks	0	0	0	4
Northeast Rocks	0	0	0	0
Northwest Rocks	0	0	0	0
Total	0	0	0	6

¹ Complete obstruction from boat vantage.

² Nesting dissuasion activities occurred during counts.



Figure 2. Loafing Caspian terns at East Rocks on Goose Island on May 3, 2022.

Northern Potholes Reservoir

No Caspian terns, double-crested cormorants, or American white pelicans were observed. Reservoir levels are high, flooding many of the low-lying islands in North Potholes.

12 loafing gulls were observed.

McNary Pool below the Snake River Confluence: Sites were visited on May 4.

Foundation Island

~400 double-crested cormorants and ~140 nests were observed.

2 bald eagles were observed in the trees just north of the cormorant nesting site. No eagle nesting or disturbances were observed.

Badger Island

~240 Caspian terns were observed on the shoreline on the northeastern side of the island, the same location as the 2021 shoreline-nesting Caspian tern colony. While one tern was observed flying to the island's interior, a drone survey was conducted over Badger Island and preliminary analysis of imagery did not confirm an interior Caspian tern nesting colony. Woody debris was placed on the 2021 interior Caspian tern nesting site prior to the breeding season this year. More complete counts will be conducted once drone imagery is processed.

No double-crested cormorants were observed.

~280 American white pelicans were observed nesting and loafing along the northeastern shoreline. Most interior nesting areas for pelicans were obstructed from our view from the boat, although more complete counts will be conducted once drone imagery is processed.

~1,030 gulls were observed. Most gulls were visible on the nesting colony on the western shoreline (~760 gulls). ~270 gulls were observed loafing on the eastern shoreline. More complete counts, including the interior nesting colonies, will be conducted once drone imagery is processed.

Crescent Island

A drone survey was conducted, and preliminary analysis confirmed a Caspian tern nesting colony at the historic colony site. A preliminary count of 178 Caspian terns were counted from drone imagery. While imagery is still being processed, the raw image is provided below (see *Figure 3*).



Figure 3. Preliminary imagery of the Caspian tern colony on Crescent Island on May 4, 2022.

~60 double-crested cormorants were observed in the trees on Crescent Island and ~20 were attending nests.

~470 LAXX were observed. More complete counts will be conducted once drone imagery is processed.

McNary NWR off the Columbia River: Site was visited on May 5.

Burbank Slough

No piscivorous waterbirds were observed.

FIXED-WING AERIAL SURVEY

Columbia River Estuary to Troutdale Towers: Sites were surveyed on May 8.

Most aerial images are still being processed from our fixed-wing survey of the Columbia River estuary from East Sand Island to the transmission towers in Troutdale, OR. An initial analysis confirmed a Caspian tern colony on Rice Island where a preliminary count of ~270 individuals were observed (see *Figure 4*).



Figure 4. Caspian terns nesting on the interior of Rice Island, as seen from an aerial survey on May 8, 2022.

PIT TAGGING OF STEELHEAD AT ROCK ISLAND DAM

Steelhead smolt tagging commenced at Rock Island Dam on April 8th. As of May 8th, a total of 1,757 steelhead smolts (1,432 hatchery and 325 wild) have been captured, PIT-tagged, and released (See *Figure 5*). Steelhead are selected for tagging at random, regardless of their size, condition, or rear-type (hatchery, wild) and are tagged in proportion to and in-concert with the run at-large (tagged and untagged) passing Rock Island Dam. 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.

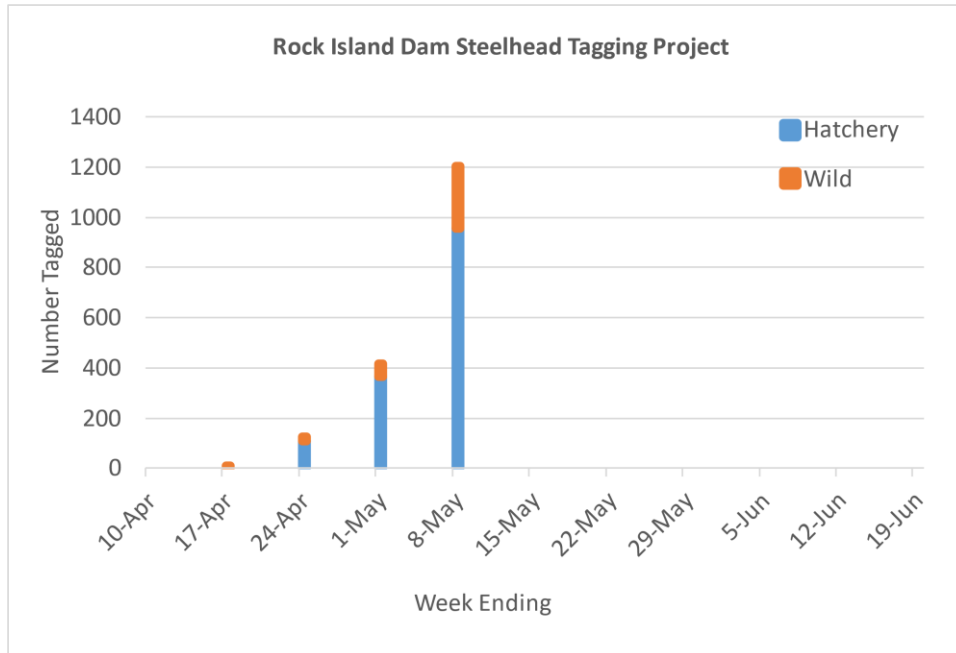


Figure 5. Steelhead smolt tagging at Rock Island Dam in 2022.