Sandy River Delta Rare Turtle Surveys & Conservation 2022 Project Completion Summary

In 2022, the Lower Columbia Estuary Partnership (Estuary Partnership) received funding from the Oregon Department of Fish and Wildlife's Oregon Conservation and Recreation Fund (OCRF) for the purpose of conducting surveys of western painted turtles *(Chrysemys picta bellii*) at the Sandy River Delta in Troutdale, Oregon. The western painted turtle is listed as Sensitive-Critical on the Oregon Department of Fish and Wildlife's (ODFW) Sensitive Species List and is found primarily along the Columbia River and mainstem Willamette River in Oregon. The western painted turtle utilizes wetlands, ponds, and sloughs along the Columbia River, including the floodplain habitat of the Sandy River Delta, which is actively being restored after significant habitat degradation alteration in the 20th century (Figure 1). A portion of these restoration efforts involve improving aquatic and terrestrial habitat conditions for western painted turtles.

Project funding was used to conduct native turtle species surveys with diverse volunteers to establish baseline population figures for western painted turtles and western pond turtles in the Sandy River Delta. Emma Scott, a Master of Environmental Management Student at Portland State University conducted surveys between March and September 2022. Scott worked with Wisdom of the Elders, PSU students and community volunteers to complete the work. The results of these surveys will assist in Sandy River Delta management and contribute to Oregon's collective knowledge about rare turtle populations. Scott structured and carried out surveys according to the grantee responsibilities and measurable outcomes as described in this report.

Conduct basking surveys and nesting surveys during the 2022 spring-summer-fall seasons. Measurable outcome: the Grantee will distribute all data collected on turtles to ODFW staff, US Forest Service Staff, the Oregon Native Turtle Working Group, and the Department of State Lands.





During spring 2022 surveys, Scott and PSU volunteers identified a small pond within the Thousand Acres section of the Sandy River Delta (Figure 3). They observed one male western painted turtle basking for multiple days in a row in April and May. Unfortunately, May and June flooding made the main study site inaccessible until July, after which Scott observed no turtles during basking surveys. In October, Scott accessed an area between the Sandy River Delta and Chatham Island (owned by Metro) that was previously inaccessible due to high water (Figure 4). She identified eight basking western painted turtles within the area, though no nests; most likely because high water levels flooded potential nesting sites. Scott will distribute all data collected during this project via email to the Estuary Partnership, ODFW, USDA Forest Service, Oregon Department of State Lands, and Oregon Wildlife Foundation.



Design and place 1 – 2 temporary signs in strategic locations during the survey season informing the 250,000 annual Sandy River Delta visitors about turtle ecology and conservation. Provide photos of erected signage to ODFW.

At the beginning of October, Scott placed two signs at the Sandy River Delta. She placed one near Pond 1 in Thousand Acres, and another at the end of the Old Channel Trail that receives heavy foot traffic (Figures 2 and 3). The signs were designed to inform visitors of the research on western painted turtles happening at the Sandy River Delta and give them an opportunity for involvement by advertising the project's email, sandyriverturtles@gmail.com. Scott distributed signage to project partners, including ODFW.



Distribute turtle cards to local students and community volunteers who will be visiting the Delta

Scott and Estuary Partnership staff distributed informational turtle cards to student volunteers, the public, and volunteers with the Estuary Partnership during native planting and stewardship events. Over 50 volunteers learned about native turtles at the Delta.

Supervise up to 100 students and volunteers who will participate in environmental education and stewardship activities. Measurable outcomes: training 5-10 community volunteers that may include Portland State University students, Wisdom of the Elders work crew members, and community volunteers in survey methodology, turtle ecology and identification. At least five surveyors will receive turtle survey protocol training and will participate in the survey work.

In May, Scott trained two Portland State University (PSU) students on proper basking survey protocol and identification. Both students then joined Scott in the field on four basking surveys. During a Lower Columbia Estuary Partnership native planting event, Scott trained 10+ community volunteers in turtle ecology and identification. In the fall, Scott trained three community volunteers and two more Portland State University students on proper basking survey protocol and identification. These volunteers joined Scott for two basking surveys. In December, Scott trained Wisdom of the Elders work crew members in turtle ecology and identification during a Himalayan blackberry removal event (Figure 2).

Recognize the Oregon Conservation & Recreation Fund and the Department of Fish and Wildlife in communication materials associated with the project

Scott recognized and included The Oregon Conservation & Recreation Fund and the Department of Fish and Wildlife through turtle card distribution, creation of an Estuary Partnership website page about native turtle research at the Delta, and final reports, including this document and the final Sandy River Delta Turtle Management Plan, which will be distributed in 2023.

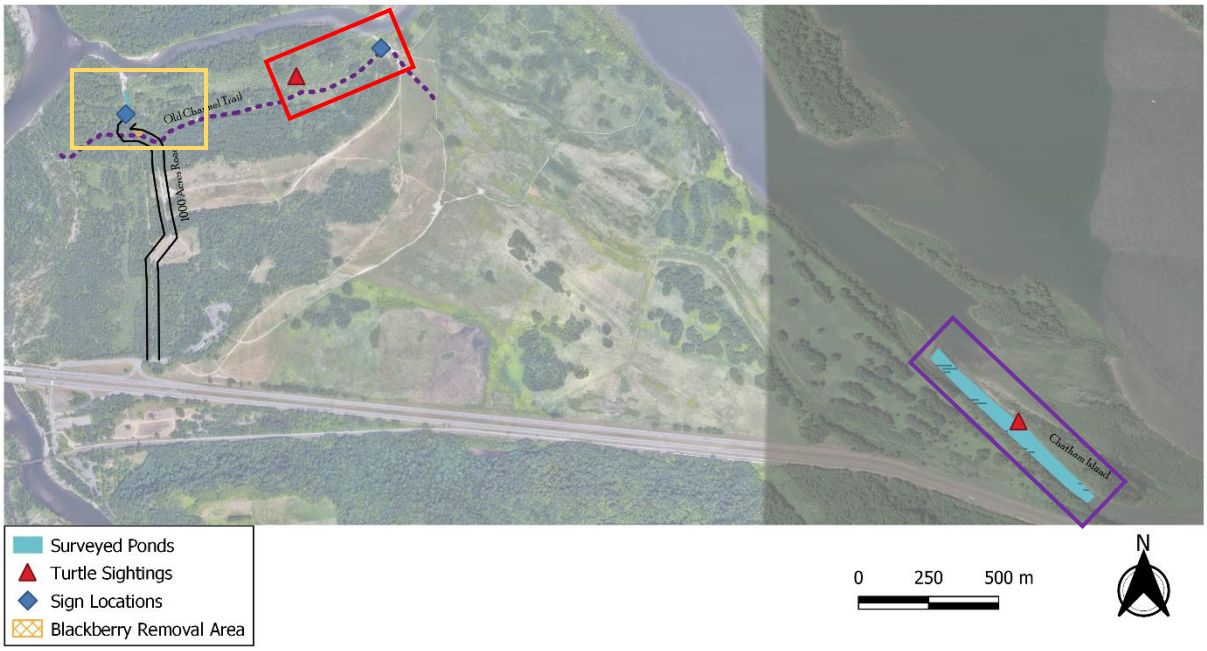

Figure 1. Areas surveyed in 2022 at the Sandy River Delta

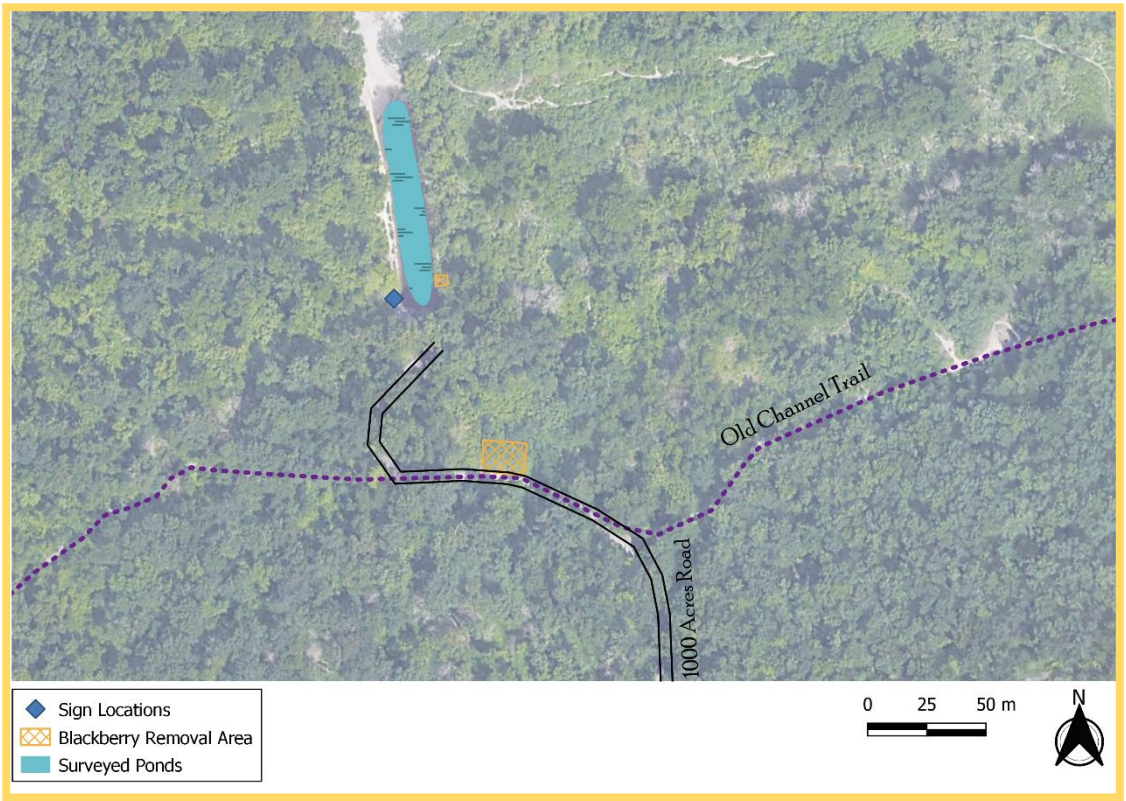

Figure 2. Pond 1, blackberry removal areas, and sign location

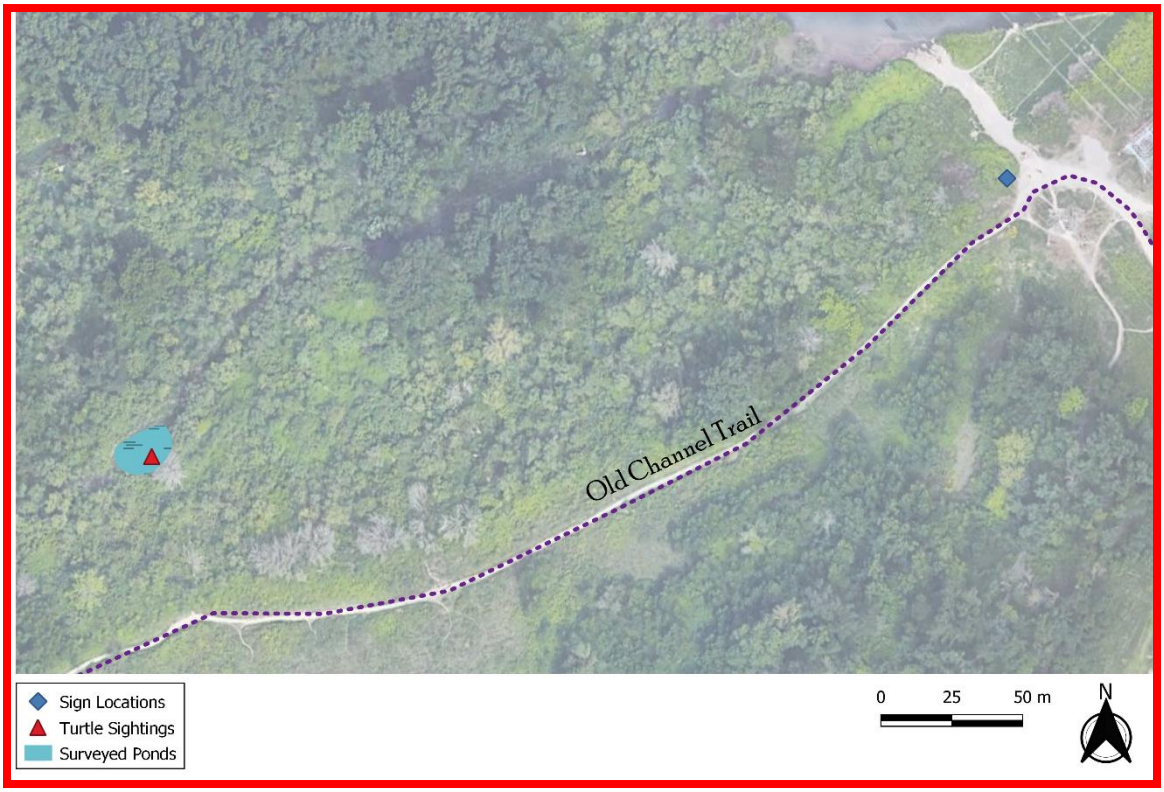

Figure 3. Pond 2, turtle sighting location, and sign location

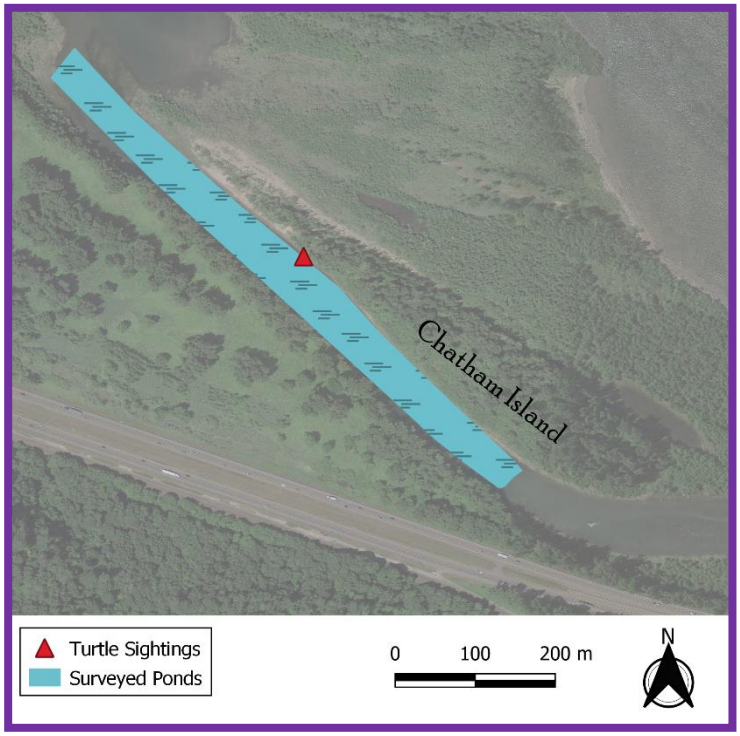

Figure 4. Chatham Island and turtle sighting location