Improvement of Painted Turtle Nesting Habitat

Final Monitoring Report

For

Oregon Department of Environmental Quality

Oregon Department of Fish and Wildlife

U.S. Fish and Wildlife Service

Prepared by

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Introduction

Metro received $45,740 on behalf of the U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife and Oregon Department of Environmental Quality as part of the settlement agreement for the T6 diesel spill that occurred in May 2003 in the lower Columbia Slough. The funds were provided by Port of Portland and Marine Terminals Corporation.

This project's goal is to improve nesting habitat conditions for western painted turtles (*Chrysemys picta bellii*) inhabiting the Smith and Bybee Wetlands Natural Area in North Portland. The species is listed Sensitive-Critical by Oregon Department of Fish and Wildlife, and the Smith-Bybee area is home to one of only two remaining large populations in the state. The largest group of painted turtles at Smith-Bybee is located in the ponds and sloughs area along North Marine Drive. Upland nesting habitat at that site was composed of sand fill, which provides poor nesting substrate for turtles because it does not hold the chamber shape created by nesting females. This project included the removal of sand fill and its replacement with native silt loam to create better substrate for nesting painted turtles on a half-acre expanse of nesting habitat.

During 2004-2005, Metro amended the sand with native silt loam and seeded the area with a mix of native grasses and forbs. This is the fourth and final annual monitoring report for this project.

Fourth-year Monitoring Results

Nest searches: Elayne Barclay conducted nest searches for Metro again in 2008. She searched the project area and surrounding potential nesting areas 18 times from May 24th to September 15th. Site visits this year were concentrated in June and July to monitor nesting activity more closely during those months. Ms. Barclay recorded 10 suspected complete nests and 3 disturbed nests in the project area. Most of the completed nests were located in the area with soil improvements, and all of the disturbed nests were located in unimproved sandy soil. She also observed two nesting females outside the project area; one had been captured and marked in July 1994 in a nearby slough. Fortunately the shell notches were intact enough for us to identify the animal. In August and September, a total of 5 shells were found that appeared to be remains from successful hatching.

Much less human impact was noted in 2008.

Expenditures for 2008

All funds for this project were provided by the T6 settlement. As of December 2008, the following expenses have been incurred:

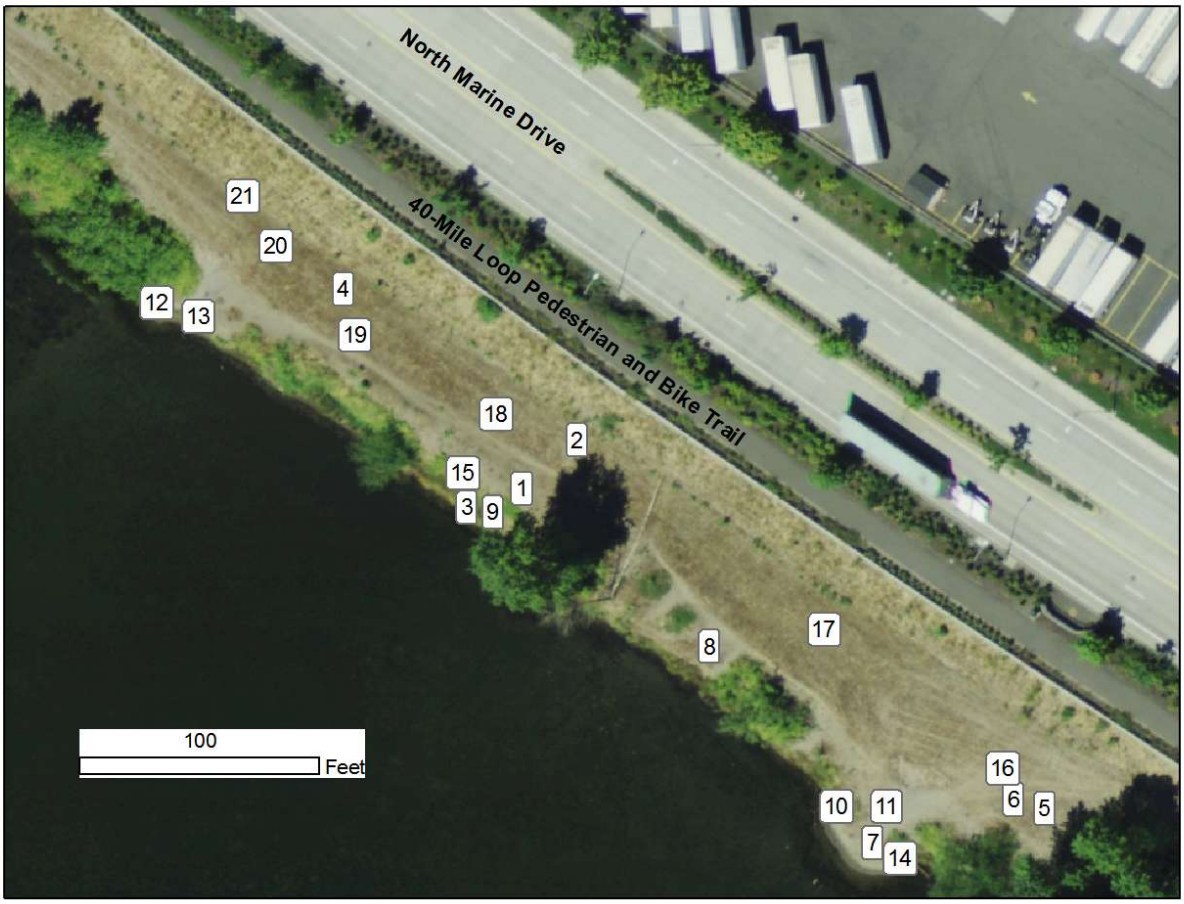
$40,067.72	Expenditures through December 31, 2007
2,559.91	Contracted turtle nest monitoring services
$42,627.63	Total spent to date

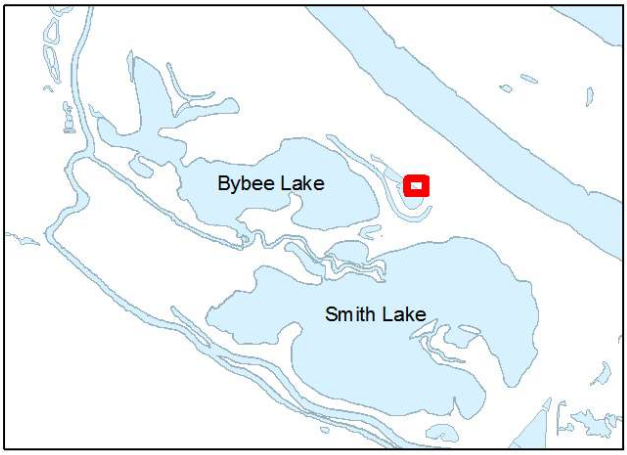
A total of $3,112.37 remains after completion of this project and associated monitoring. These funds were shifted to the Large Woody Debris installation project at Smith-Bybee, also funded by the T6 spill settlement. Progress for that project is reported separately.

Project Summary and Conclusions

This project succeeded in improving nesting habitat conditions for western painted turtles at Smith and Bybee Wetlands Natural Area. Soil amendments provided better structure for painted turtles, and monitoring work indicates that the amended soil was preferred by turtles. Combined with adjacent work that blocked vehicular access to the nesting grounds and parking lot removal that reduced human disturbance, this nesting habitat project greatly improved conditions for this sensitive species.

2007 Turtle Nesting Activity





Numbers indicate locations where nesting activity was observed, whether (1) incomplete nest, (2) disturbed nest, or (3) intact or suspected intact nest.

E. Stewart, Metro Parks and Greenspaces, April 2008