East Delta Park, Phase II

by Shelley Matthews

YEAR 6

in Portland, off I5 exit 306b, at the intersection of N. Denver Ave. and Martin Luther King Jr. Blvd.

BEFORE

Himalayan blackberry was removed from the edges of the pond, leaving bare areas in need of revegetation

AFTER

Native vegetation was reestablished to improve bank stability, water quality, and fish and wildlife habitat

This is the continuation of a riparian restoration project began in 1996 at two ponds located on the west edge of East Delta Park in north Portland. East Delta Park is a sports center for organized sports and other activities, which draws tens of thousands of people annually. The ponds on the west edge of the park are a remnant of, and a link with, the natural environment. They are a home for waterfowl and other wildlife.

Prior to Phase I, blackberries and reed canary grass surrounded the ponds, and there was little vegetative species diversity. A number of large poplars, willows, and other trees were adjacent to the ponds. The ponds are in a passive recreation area, with picnic tables nearby and play equipment not far away. The ponds have some through flow, but are also fed by ground water, run-off from I5, and storm sewer lines. They act to contain floodwater and had filled in with silt.

A 750 ft. section of the northernmost pond was selected for this restoration effort because it is more accessible to the public and is most in need of improvement. In phase I, a portion of the streambank (300 ft.) was restored to a more natural state; invasive blackberries and reed canary grass were removed and native species were planted to diversify and enhance the vegetative cover. In phase II, the streambank restoration was completed (400 ft.) and pond sediment was tested for contaminants and hazardous waste to determine the feasibility of future dredging.

Restoration efforts included controlling the existing invasive vegetation, preparing the site, and planting it with appropriate native plant material. The planting was multi-layered and included the use of many shade producing canopy trees, which historically dominated in the Columbia Slough. The area was also heavily planted with fast growing shrubs that could successfully compete with the blackberry and reed canary grass until the canopy trees became established. Vine maple, red flowering currant and other plant varieties were added for the benefit of wildlife and for aesthetic appeal. In addition the area was seeded with a native grass mix to compete with weedy grasses and to slow the re-establishment of blackberry. The mix had some true wildflowers to attract butterflies. Plants were mulched to retain water and contribute to soil fertility.

At the time the Phase II sediment tests were performed, the ponds were approximately 8-10 inches deep and were overgrown with giant knotweed and farrot feather. The sediment was tested for metal from highway run-off as well as some pesticides to determine the feasibility of dredging the pond to remove the invasive weeds. The goal was to plant native wetland vegetation in its place and create a better habitat for aquatic species. The sediment tests revealed favorable results and the Parks and Recreation District anticipated they would be able to increase the depth of the pond from about 10 inches to 5 feet in the center.

Benefits

- Diversified vegetation and improved habitat diversity and health for aquatic species, resident and migratory birds, and other animal species.
- Provided a valuable example of good land management and increased public awareness.
- Enhanced aesthetic value of the property.
- Determined it would be feasible to increase the pond's depth and allow for future potential benefits such as planting native wetland vegetation, increasing stormwater retention, and reintroducing native fish species.

- Due to the location, the site can be used as an interpretive center for both Portland Parks and the proposed Native American Cultural Center.

Budget

Total Proposed – $14,960
Total Actual – $15,033
Metro/U.S. Fish and Wildlife Service grant award – $7,300
Grant Dollars Spent - $7,300

Helpful Hints – what worked, what didn't

- 80% survival rate for plantings. Replaced lost trees and added more.
- Morning glory invaded area after the blackberry was removed. A layer of mulch about 6 inches deep was used to help control this invasive weed.

Partners

Envirocorps
Portland Parks and Recreation, Urban forestry Division and Horticultural Services Unit

Contact

Charley Davis, Portland Parks and Recreation, Urban Forestry Division (503) 823-4523

Timeline and Tasks

August 1997 – April 1998	Prepped site and removed blackberry
May 1998	Planted native trees, shrubs, and ground covers
June 1998	Completed planting of native species and provided maintenance for new vegetation