

# Fernhill Wetlands – Dabbler’s Marsh

in Forest Grove, bounded by Highway 47 bypass, Fernhill Road; Geiger Road and property owned by the Unified Sewerage Agency



The project was to enhance and restore a 5- to 7-acre portion of an existing wetlands and create new wetlands on city-owned property near Forest Grove treatment plant. There was excavation to create new waterways being choked out by reed canary grass. The excavation opened water to varying depths of between 1 and 3 feet with spoils being used to create islands for nesting and escapement habitat.

Spoils were seeded with clover and big trefoil at a rate of 20 pounds per acre. Planting of cattails and bulrush were made in the marsh areas to provide new emergent vegetation. Trees and shrubs were used as buffers and to create habitat diversity. The wetlands is restricted to passive recreation and educational opportunities accessible by foot only.

The project site included areas of wetlands, wet meadows, and upland/riverine vegetation. An unnamed tributary of the Tualatin flowing from the north provides a source of water. The tributary has a continuous flow throughout the dry season. The wetlands/wet meadow area was completely overgrown with a monoculture of reed canary grass, thereby reducing the diversity of the wetlands habitat.

## AFTER

*Restored wetland habitat*

## Benefits

The project was designed to enhance existing wetland resources by reestablishing and increasing the original open water habitat with its adjacent emergent and scrub shrub vegetation. The goal was to increase habitat diversity through the protection of existing vegetation and tree stands and planting appropriate native wetlands and uplands plants. The new habitat has brought more waterfowl to the wetlands and a beaver has since set up residence and improved on the human-made weir structures.

The project brought together diverse local groups to create an enhanced wetland that offers opportunities for wildlife viewing, passive recreation, outdoor education and research. Pacific University and local school groups will continue with native plantings and nest box installations.

## Budget

Proposed – \$72,133

Actual – \$72,133

Metro/US Fish and Wildlife grant award – \$20,000

## Helpful hints – what worked, what didn't

- Keep things moving once you have a plan. Designate a person who will see the project through all the steps in a timely manner. This is essential to project completion.
- For this project a good excavation operator was essential. If you know someone who you are comfortable with or have had past success with use that person. Otherwise, ask around for references. We found paying a competitive hourly wage was better than pricing the whole project in a lump sum.
- Investigate the plant communities within the area. Some plants are not worth planting. Look at size, appropriateness to site and availability of plant material. Keep track of what is doing well and what didn't for revision to your planting plan and replacement. Make sure to water the plants the first two years.

## Partners

Jack Broome, The Wetlands Conservancy

Bruce Copenhagen, city of Forest Grove

John Doran, Forest Grove Chamber of Commerce

John Edge, Audubon Society

David Eisenhauer, Ducks Unlimited

## Timeline and tasks

July 1, 1991 ..... Permits

September 1991 ..... Excavation

October 1991 ..... Seeded spoil materials to prevent erosion with legume and annual rye grass mixture

March 1992 ..... Planting of shrubs and trees along riparian and wetland edge

October 1992 ..... Planting of shrubs and trees along riparian and wetland edge and replacement of plant mortality

Neil Hazel, Oregon Waterfowl and Wetlands Association

Gene Herb, Oregon Department of Fish and Wildlife

John Jackson, Unified Sewage Agency

Greg Johnson, DMD, Oregon Waterfowl and Wetlands Association

Michael O'Brian, city of Forest Grove

John Vallery, Oregon Hunters Association

## Contact

Jack Meade, Unified Sewage Agency, 648-8716



### BEFORE

*Non-native reed canary grass is a problem*

# Fernhill Wetlands

in Forest Grove, bounded by Highway 47 bypass, Fernhill Road; Geiger Road and property owned by the Unified Sewerage Agency



## AFTER

*Enhanced wildlife habitat*

The Fernhill Wetlands area comprises approximately 160 acres. The grant was requested for the enhancement of 2.5 acres of natural wetland and wet meadow that are overgrown with a monoculture of reed canary grass. The Fernhill Concept Master Plan (June 1992) provided a set of goals and objectives to create a multi-purpose wetland system that serves to improve water quality for the Tualatin River. It offers the combined benefits of wildlife habitat enhancement, recreational enjoyment, education/research opportunities, and improved quality of life for present and future generations.

Surface water quality and wildlife habitat improvement were two problems addressed by the project. The restored and enhanced wetlands were to reduce the amount of non-point source pollution in storm water entering the Tualatin River. Reductions of surface water pollutants are necessary to achieve the total maximum daily loading limits for the Tualatin River set by the DEQ. This proposal was to achieve higher water quality by increasing

pond area and volume, thus allowing additional settlement of particulates laden with pollutants. The increased biodiversity of the wetlands system was also to facilitate the filtering of soluble nutrients prior to reaching the Tualatin River.

There was a need to recover as much of the land area engulfed by reed canary grass as possible. Habitat for nesting waterfowl had virtually disappeared in areas dominated by reed canary grass. The project was designed to prevent re-establishment of the monoculture by forming deep open water and shallow ponds and by reestablishing conditions favorable to native wetland species. The project recreated a mosaic of open pond and island habitat that was to greatly increase the bio-diversity of the wetland area.

## Benefits

It is well recognized that wetlands are among the most productive natural ecosystems in the world. Protection and enhancement of these sensitive areas provide numerous benefits, including food and habitat for fish and wildlife, water quality improvement, flood protection,

erosion control, open space protection and opportunities for recreation, education and wetlands/water quality research. Restoration of 2.5 acres of wetlands at the Fernhill site will improve its function as an integral part of a complex system of wetlands that provide forage and resting sites for a diversity of migrating waterfowl passing through the region annually.

### Budget

Proposed – \$36,061  
 Actual withdrawn  
 Metro/US Fish and Wildlife grant award – \$10,000

### Reason for withdrawal

Mitigation was planned on adjacent land and Metro money may not be used in mitigation projects. This project will be folded into mitigation.

### Helpful hints – what worked, what didn't

Project had to be withdrawn due to conflicting mitigation use in the area. The site will be developed as a wetlands mitigation site and the plan will be expanded to accommodate project needs.

### Partners

- Gene Herb, Oregon Department of Fish and Wildlife
- John Jackson, Unified Sewerage Agency
- Greg M. Johnson, DMD, Oregon Waterfowl and Wetlands Association
- Michael O'Brien, city of Forest Grove
- Neal Hazel, Oregon Waterfowl and Wetlands Association
- John Doran, Forest Grove Chamber of Commerce
- John Vallery, Oregon Hunters Association
- Jack Broome, The Wetlands Conservancy, Inc.
- Local schools
- Nearby residents
- Rob Stockhouse and Pacific University

### Proposed timeline and tasks

- Fall 1993 - March 1995 ... Develop press releases
- Oct. 1, 1993 ..... City zoning approvals and permits application  
 DSL/COE removal/fill permit application
- Nov. 1, 1993 ..... Obtain all required approvals and permits;  
 field staking/preparation
- Nov. 5, 1993 -
- September 1994 ..... Site prep/grading
- Nov. 15, 1993 ..... Develop photographic history of project
- Feb. 15, 1994 - fall 1994 ... Buffer planting
- March 31, 1995 ..... Project completion

### Contact

Jack Meade, Unified Sewerage Agency, 648-8716

