

# Jackson Bottom Wetland Preserve

*by Shelley Matthews*

YEAR

4

south of the City of Hillsboro in the floodplain of the Tualatin River



## **BEFORE**

*Wetland degraded by agriculture and urbanization*



## **AFTER**

*New native plants provide wildlife habitat and improve wetland functions*

There is historical evidence that the Tualatin River Basin contained a diverse mixture of upland, open water, shallow marsh, and wet prairie habitats. The natural values and functions of the watershed have been drastically altered by agriculture practices, dairy industries, and urbanization. This habitat was further degraded by the introduction of exotic plants and animals. The Jackson Bottom Wetlands, Habitat Biodiversity Program has returned a portion of a site known as “Kingfisher Marsh” to native plant communities.

The project site at Kingfisher Marsh in Jackson Bottom was previously excavated to remove the upper layer of soil containing reed canary grass. Efforts related to this grant project focused on restoring native vegetation to this site. An irrigation system was installed and 12 native wetland species were planted: Douglas spirea, red osier dogwood, Columbia sedge, slough sedge, smartweed, bulrush, scouler's willow, Pacific willow, Oregon ash, common chokecherry, wapato, and sago pondweed. An important goal in the irrigation program was to limit the amount of water available to the encroaching reed canary grass located on the upper fringe of the project site. Short sections of soaker hoses were used to apply the water close to each plant to conserve water and to limit the supply of water to the canary grass.

To celebrate the Tualatin Watershed and restoration efforts, and to honor the groups and individuals involved, Jackson Bottom hosted two celebrations, the “Spring Wetlands Celebration” and “Common Water, Common Ground” at the Washington County Fair Grounds.

## **Benefits**

- Increased the habitat value and diversity of Kingfisher Marsh by providing a native plant interface for wildlife.
- Increased the number of native plant species; provided a place for seed collection and cuttings for future restoration at the project site and within the greater Tualatin watershed.
- Improved an area of Jackson Bottoms so that it more closely resembles known historical conditions.
- Developed restoration information and created guidelines for irrigation, maintenance, and monitoring of native planting programs.

## **Budget**

Total proposed – \$31,050

Total actual – \$28,144

Metro/U.S. Fish and Wildlife Service grant awarded – 5,500

Grant dollars spent - \$5,385

## **Helpful Hints – what worked, what didn't**

- Involve the public.
- Use a low-tech irrigation system. By setting up a format and using simple garden and ooze hoses, it was easy to recruit volunteers and it limited the amount of water available to the encroaching reed canary grass.
- Gain additional donations such as plants, hoses, tools, etc.
- Increase plant diversity; partners for this project were able to plant over 6,000 cuttings, bare root stock, and potted native wetland plants.

- Involve schools from the beginning (i.e., starting with the planning process), so they have project ownership.
- Be creative with the many ways you can involve schools. For this project, school busses dropped students off at the nursery, on the way to the project site, for an introduction to the nursery industry and to pick up plants. This saved a great deal of time and energy.
- Keep a project log to record the timeline and tasks as they occur, particularly for long-term projects.
- Take lots of pictures. Good photos are critical to successful monitoring.
- Always seek advice from a diverse group of advisors to improve upon your project. The collective brain is extremely valuable.
- Not all plants survived. Two major floods brought beavers, so beaver screens were installed to increase plant survival rates.
- Pumping water from the marsh to irrigate new plantings did not work well. The pump and hoses were too difficult for volunteers to set up and, in late summer when water levels dropped, the pumps sucked up too much mud.

### **Partners**

Jackson Bottoms Wetland staff  
 Northwest Service Academy  
 Cedar Park Middle School  
 David Hill Elementary  
 Portland State University  
 Marylhurst College  
 Pacific University  
 Northwest Regional Education Service District  
 Cascade Education Corps.  
 Oregon Graduate Institute  
 Spring Wetlands Celebration volunteers  
 Environmental Protection Agency  
 Oregon Department of Fish and Wildlife  
 U.S. Fish and Wildlife Service  
 Metro  
 Hillsboro Chamber of Commerce  
 Epsom Inc.  
 Walker Macy Landscape Architects  
 Unified Sewerage Agency

### **Contact**

Patrick Willis, Jackson Bottom Wetlands Coordinator, (503) 681-6206

## **Timeline and tasks**

Fall 1995	Began photo monitoring of the site; researched sources and ordered plants; began baseline data collection
September 1995	Met with resource advisory team
Winter 1996	Scheduled school groups/volunteers for planting
Winter-Spring 1996	School groups monitored water level changes
Winter 1996	Flood delayed and changed monitoring schedule
April 1996	Established a permanent elevation survey point at Kingfisher Marsh for monitoring water levels
Spring 1996	School groups began planting
May 1996	Spring Wetlands Celebration
June 1996	Purchased and installed irrigation equipment; more planting by Cascade Education Corps
June–October 1996	Volunteers and interns irrigated plants
July 1996	Set-up transact study system
October 1996	Removed irrigation equipment for winter
Fall 1996	Began initial site maintenance; more flooding
Fall & Winter 1996-97	Continued photo monitoring
Winter 1997	Scheduled school groups/volunteers for planting; ordered plant materials
April 1997	During spring, Monitored plant success through floods
Spring 1997	School groups began planting
May 1997	Watershed Celebration; re-installed irrigation equipment
June 1997	Started irrigation; prepared final grant report