

CHAPTER 9

Stewardship Characterization

GOAL

Incorporate public values into watershed plan development, implementation, and refinement, and support long-term, community-wide commitment to improve and sustain watershed health.

INTRODUCTION

An educated and involved public is essential to achieve watershed health. Not only is it important for the public to participate in watershed programs and projects, it is also important to foster stewardship within the public to protect and enhance the functions of the watershed. The stakeholders in the Columbia Slough Watershed have a long history of public involvement in various issues and activities, including the current watershed planning process.

HISTORY OF PUBLIC INVOLVEMENT AND EDUCATION

The Columbia Slough Watershed has long been a focus of civic concern and activism. The watershed's unique characteristics, particularly its open spaces, wetlands, and recreational potential, have often been at odds with the development of major port and airport facilities, railroads, highways, and concentrated industrial and commercial uses.

Water quality issues have been of concern for many years. Only months after the levee system was completed in 1919, City of Portland engineers dug the City Canal (Peninsula Canal) in an unsuccessful attempt to flush sanitary wastes from the Lower Slough. Early industries discharged wastes directly to the Slough, and workers refused to handle logs fouled by exposure to the waterway. In the 1930s, Portland citizens and school children organized river cleanup campaigns. Activists, City staff, and the City Club promoted the removal of sewage and industrial waste from the City's waterways.

The City built the Columbia Boulevard Wastewater Treatment Plant (CBWTP) in 1952. As development and impervious surfaces increased, combined sewer overflows (CSOs) to the Columbia Slough occurred, as frequently as 150 times a year by 1990. The City completed a set of projects in 2000 that controlled CSOs to the Slough, reducing volume by 99.6 percent annually. In the upper watershed, the Mid-County Sewer Project brought sewer service to 40,000 residences during the 1990s. Considerable public involvement and education about Portland's sanitary and stormwater systems occurred during the 1990s as part of these projects.

Until fairly recently, many Portland residents were unfamiliar with the location of the Columbia Slough. Watershed location signs placed at the watershed boundaries have increased awareness to some extent. However, many people still think of the Slough mainly in terms of "dirty" water. This reputation is based in part on warning signs and flyers distributed by community activists in 1993 advising community members of the health risks associated with water contact and fish consumption. The Bureau of Environmental Services (BES) has since developed brochures, signs, and outreach activities concerning fish consumption in response to this community

activism. The Slough's reputation was further diminished in 1994 when the Slough became the second Oregon waterway added to the state 303(d) list of water bodies that are water quality limited because they do not meet the standards for certain pollutants. Total maximum daily loads (TMDLs) were subsequently established for bacteria, nutrients, chlorophyll *a*, dissolved oxygen, and toxic compounds. (See Chapter 6: Water and Sediment Quality Characterization.)

Current stewardship, public involvement, and education efforts are targeted to provide a more comprehensive understanding of the watershed's problems and opportunities. Despite its reputation, the Slough is a valuable community amenity. As early as 1903, the Olmsted Plan for Portland Parks cited the area's quiet waterways, scenic vistas, and recreation potential. The current 40-Mile Loop Trail Plan, Columbia Slough Trail Plan, and Lewis and Clark Greenway Heritage Trail provide public opportunities to enjoy the watershed's natural resources. The Columbia Corridor Association's activities guide development of the business infrastructure in the watershed.

PUBLIC INVOLVEMENT AND EDUCATION ACTIVITIES

Citizen Advisory Committees

Citizens serve on a variety of committees to advise BES on programs and projects. Past and current committees include:

- Columbia Slough Water Quality and Sediment Projects
- Stormwater Advisory Committee
- Columbia Slough Fish Advisory Committee
- Education Advisory Committee
- CBWTP Advisory Committee and CSO projects
- Wapato Wetlands Task Force
- Portland Utility Review Board (PURB), which oversees sewer and stormwater rates

Columbia Slough Watershed Council

BES is an active participant in the Columbia Slough Watershed Council, a 501(c)(3) nonprofit corporation. This 42-member volunteer council includes citizens, organizations, and local governments and agencies. BES staff provide information about BES projects and programs at monthly meetings and serve on a variety of Council committees.

BES and the Council co-sponsor tours, yearly workshops, special events, classes, and training sessions that involve thousands of adults and children. These events and classes include:

- Eyes on the Slough (volunteer monitoring program)
- Slough 101, Wetlands 101, and Groundwater 101 workshops
- Explorando el Columbia Slough, a Spanish-language family environmental education festival
- Columbia Slough Small Craft Regatta and a variety of Canoe the Slough events
- Soup on the Slough, a lunch and learn event
- Columbia Slough Watershed Council awards celebration
- A variety of stewardship events focused on vegetation restoration and planting
- Great Blue Heron Week tours, activities, and events
- Wild in the City tours and events

- Slough School programs and activities.

A Portland State University study conducted in 1996-97 found that Council members donated an average of more than 7 hours per month to Council activities, with very active members donating more than 17 hours per month. In 2004, more than 6,400 persons participated in Watershed Council activities.

BES Outreach Education Program

The Columbia Slough Watershed encompasses five of the Portland School District's 10 high schools, five of its 18 middle schools, and 15 of its 64 grade schools. It also includes the Parkrose and Reynolds School Districts and nine private or charter schools.

BES's outreach education program has three main aspects: classroom activities for school-age children; site-based watershed education for preschool, elementary, secondary, and college students at Whitaker Ponds Nature Park and other field sites such as Ramsey Lake Wetlands, Johnson Lake, Portland's Water Pollution Control Lab, and the Columbia Children's Arboretum; and community education. During fiscal year 2002-2003, BES's classroom-based education program reached 3,200 students in watershed schools; 1,020 students received site-based water quality education at Whitaker Ponds; and 1,000 persons participated in educational tours and activities at the CBWTP and Water Pollution Control Laboratory.



Students examine macroinvertebrates collected from the floating biology lab at Whitaker Ponds.

The City of Portland, Metro, and Portland Public Schools jointly own Whitaker Ponds Nature Park. Located at the geographic center of the watershed, on the Whitaker (southern arm) Slough and two freshwater ponds, it is a principal environmental education site in Portland. It includes an education shelter with an ecoroof, an ADA (Americans with Disabilities Act) accessible dock and freshwater biology study site, and a constructed wetland/underground stormwater treatment facility that demonstrates both engineered and natural pollution reduction capabilities. A rudimentary, but often-used, canoe landing is also located at Whitaker Ponds.

Another significant education effort by BES has been the development and distribution of two watershed videos called *Clean Rivers: Why should I Care?* These videos feature students from

the watershed and convey watershed messages and information. An independent video, *The Water in my Backyard* (produced by Rainbow Video and Film) focuses on Slough water quality, fish safety, and environmental equity issues. These videos have also been distributed in Spanish and Russian versions.

Community education and involvement opportunities include family and adult site-based education at Whitaker Ponds, Naturescaping workshops, revegetation and planting events, community fairs, and other events.

Outreach and activities about the Columbia Slough fish advisory have been targeted to anglers, residents, students, health educators, and others. More than 80 community groups and their members and clients have been reached by these BES efforts to date. Newspaper articles, radio reports, and bilingual outreach workers utilizing translated materials have carried the message about Columbia Slough fish and Columbia Slough Watershed issues to much of Portland's non-English-speaking community.

In addition to BES and the Watershed Council, other groups such as Portland Parks and Recreation, Metro, the Lower Columbia River Estuary Partnership, and the Audubon Society of Portland also provide a variety of environmental education experiences in the watershed.

Downspout Disconnection Program

BES's Downspout Disconnection Program disconnects roof downspouts from the City's piped sewer system. Public participation has been a major part of this program. Almost 2,000 volunteers have helped disconnect downspouts at 6,700 residences in the Columbia Slough Watershed, eliminating 134 million gallons of stormwater runoff annually from the collection system. Many of the volunteers have been members of community nonprofit groups who performed the disconnections as a fundraising effort. Portland's Office of Neighborhood Involvement was a key partner in this successful effort. BES also distributed stormwater education materials to all residents in the disconnection areas under this program.

Disconnection activities are now focusing on the Willamette Watershed; however, efforts to maintain and evaluate disconnections in the Columbia Slough Watershed continue.

CONCLUSIONS

The Columbia Slough Watershed is a vibrant area of the city with a rich history of civic engagement and watershed stewardship activities. Current watershed activities engage a large number of residents, school children, professionals, and organizations each year. Their energies, insights, and knowledge bring valuable energy and resources to the City's efforts to improve and protect the watershed.