

APPENDIX B

Regulatory Background

INTRODUCTION

Federal, state, and local regulations govern many of the actions the City takes to preserve and protect natural resources and promote watershed health. This appendix provides an overview of the regulatory requirements that affect activities in the Columbia Slough Watershed. Some of these requirements apply to the entire City, while others are specific to the watershed. Other sections of the Characterization Report contain additional discussion about the relationship of regulatory issues to planning and implementation activities in the Slough.

FEDERAL REGULATIONS

Federal regulations protect endangered species (Endangered Species Act), water quality (Clean Water Act), and drinking water resources (Safe Drinking Water Act).

Endangered Species Act (ESA)

The Endangered Species Act (ESA) of 1973 provides for the conservation of threatened and endangered plant and animal species and the ecosystems on which they depend. The National Marine Fisheries Service (now called National Oceanic and Atmospheric Administration [NOAA] Fisheries), has enacted regulations that make it unlawful to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed species, or even to attempt to engage in such conduct. The definition of “harm” includes habitat modification if the modification kills or injures fish by significantly impairing essential behavioral patterns such as feeding, sheltering, rearing, migrating, breeding, and spawning (COP 2002). The City of Portland is taking proactive steps to protect and aid in the ultimate recovery of Chinook salmon which are found in the lower slough. Other species protected under the ESA are also found in the slough watershed such as Bald Eagles.

In the Lower Slough, summer water temperature and loss of habitat are of particular concern for Chinook survival.

Clean Water Act

The Clean Water Act (CWA) of 1972 and later amendments regulate discharges of pollutants to waters of the United States from both point sources (such as wastewater treatment plants and industrial discharges) and nonpoint sources (such as stormwater runoff). The CWA calls for the “restoration and maintenance of the chemical, physical and biological integrity of the Nation’s water.” It also states the intent “where attainable, to achieve water quality that promotes protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water” (COP 2002). The CWA also protects jurisdictional wetlands. The City of Portland has responsibilities related to the following four sections of the CWA.

Section 303(d)

Under section 303(d) of the CWA, states are required to develop lists of impaired waters that do not meet state water quality standards. The Oregon Department of Environmental Quality (DEQ) has developed a statewide 303(d) list that identifies water bodies that are “water quality limited” because they do not meet the standards for certain pollutants. DEQ then establishes total maximum daily loads (TMDLs) that specify the maximum amounts of the designated pollutants the water body can receive from all point and nonpoint sources. DEQ has established TMDLs for bacteria, dissolved oxygen, and toxics in the Columbia Slough, and is currently developing a TMDL for temperature.

Section 401

Under Section 401, applicants for a federal license or permit must certify that any discharges into waters of the United States that result from the activity will comply with state water quality standards. DEQ administers Section 401 water quality certifications, and makes the decision of whether to certify, deny, or condition permits or licenses.

The major federal licenses and permits subject to Section 401 are Section 402 and 404 permits (see below), Federal Energy Regulatory Commission (FERC) hydropower licenses, and Rivers and Harbors Act Section 9 and 10 permits. Section 404 permits are by far the most common federal permit that requires Section 401 certification. Examples of activities that may require a Section 404 permit and Section 401 water quality certification include:

- Fill or excavation in a wetland or on a streambank
- Construction in a wetland
- Construction of boat ramps
- Construction or modifications of dams, dikes, bridges, or combined sewer outfalls
- Stream channelization
- Stream diversion

Section 402

The National Pollutant Discharge Elimination System (NPDES) permitting program (Section 402 of the CWA) requires sources of point and nonpoint pollutants to have an NPDES permit. DEQ administers NPDES permits in Oregon. Several types of NPDES permits apply to the Columbia Slough Watershed:

- An NPDES Industrial Stormwater General Permit (called a 1200 COLS permit) regulates point source stormwater discharges to the Slough from certain types of business and industry. The permit requires regulated facilities to develop a stormwater pollution control plan that identifies pollutant sources and specifies best management activities to minimize the impact on stormwater quality.
- The Columbia Boulevard Wastewater Treatment Plant holds an NPDES Point Source Permit for treated wastewater discharges to the Columbia River. The permit regulates the discharge of total suspended solids (TSS), biochemical oxygen demand (BOD), *E. coli*, settleable solids, water temperature, and flow.

- The City of Portland holds an NPDES Municipal Separate Storm Sewer System (MS4) Discharge Permit that regulates nonpoint source stormwater discharges and designates best management practices within the City.
- NPDES Stormwater Discharge Permits are required for any construction project larger than one acre to control erosion and reduce sedimentation into waterways.

Section 404

Section 404 regulates sediment removal and fill in waters of the United States, including wetlands. Oregon Division of State Lands permits are required for activities that disturb more than 50 cubic yards of sediment below ordinary high water mark or from a wetland. The permit requires, in order of priority, avoiding impacts to the natural resource, minimizing impacts, and mitigating impacts. The U.S. Army Corps of Engineers and the Oregon Division of State Lands jointly administer Section 404 removal/fill permits.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) of 1974 provides a comprehensive national framework to ensure the quality and safety of drinking water supplies. The Underground Injection Control (UIC) program under the SDWA protects underground sources of drinking water by regulating various classes of underground injection. Underground injection is defined as any system, structure, or activity that places fluid below the ground or subsurface, including sumps, drill holes, geothermal reinjection wells, stormwater disposal wells, large-capacity cesspools, and motor vehicle waste disposal wells. The Columbia Slough Watershed contains over 3270 sumps, some of which are subject to UIC regulation.

STATE REQUIREMENTS

State requirements take two forms: those that protect natural resources directly and those that affect the way development occurs to make it less damaging to natural resources.

Sediment Consent Order

DEQ and the City of Portland entered into a consent order in October 1993 to conduct a remedial investigation and feasibility study of contaminated sediments in the Columbia Slough. The consent order sets out a phased schedule to investigate and evaluate the sources and potential risks of sediment contamination in the Columbia Slough. The order contains deadlines for specific activities for the first year and stipulated penalties for failure to comply with its deadlines and requirements. This work entails identifying areas with the highest levels of sediment contaminants, identifying problem chemicals and their potential sources, predicting the potential risk to human health and the environment, and identifying sediment cleanup options and their associated costs. The City has met all the deadlines specified in the order. (See Section 4: Water and Sediment Quality, for additional information.)

Amended Stipulation and Final Order (ASFO) for Combined Sewer Overflows

The City of Portland and DEQ entered into a legal agreement, called the Amended Stipulation and Final Order (ASFO), in 1994. The ASFO requires Portland to do the planning, design, construction, and operation necessary to reduce the discharge of combined sewer overflows (CSOs) to the Columbia Slough by over 99 percent by 2001 and to the Willamette River by 94 percent by 2011.

In December 2000, the City of Portland completed a \$195 million set of projects that have eliminated over 99 percent of CSOs to the Columbia Slough. This translates into one overflow every five years in the winter and one every ten years in the summer. Approximately 1.2 billion gallons of CSOs are no longer discharged into the Slough each year.

Goal 5

Goal 5, one of Oregon's 19 statewide planning goals, requires Oregon counties and cities to protect natural resources and conserve scenic and historic areas and open spaces. It calls for inventories of various natural resources, one of which is riparian corridors (including streams, riparian areas, and fish habitat). Local governments must then determine significant sites for inventoried resources and develop programs to achieve the goal of resource protection. Actions that protect riparian areas and improve water quality help fulfill Goal 5 requirements. Metro prepares a regional Goal 5 program, and local governments are required to comply with Goal 5 by developing local programs.

REGIONAL REQUIREMENTS

Metro Title 3

Title 3 (Water Quality, Flood Management, and Fish and Wildlife Conservation) of Metro's Urban Growth Management Functional Plan is intended to protect the beneficial water uses and functions and the resource values within designated water quality and flood management areas. Title 3 implements the following Oregon Statewide Planning Goals:

- Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces
- Goal 6: Air, Water, and Land Resources Quality
- Goal 7: Areas Subject To Natural Disasters and Hazards

Title 3 limits or mitigates the impact of development activities; protects life and property from dangers associated with flooding; protects and enhances water quality; and works toward a regional coordination program to protect regionally significant fish and wildlife areas. Cities and counties in Metro's jurisdiction, including the City of Portland, must bring their planning policies and zoning codes into conformance with Title 3 requirements.

CITY OF PORTLAND REQUIREMENTS

City Code

Several titles of Portland's City Code address natural resource protection and watershed health by regulating activities that affect the built and natural environments.

- **Title 10—Erosion and Sediment**, contains requirements for development and construction-related activities to control the creation of sediment and prevent the discharge of erosion and other pollutants from construction sites.
- **Title 17 – Public Improvements**, contains requirements for stormwater, drainage, water quality, wastewater, streets, public utilities, and other public improvements.
- **Title 24 – Building Regulations**, contains requirements for the design, construction, quality of materials, use, occupancy, location, and maintenance of all buildings, structures, and land.
- **Title 29 – Property Maintenance Code**, contains requirements for the storage of materials on private property, accumulation of garbage/debris, and other private property issues.
- **Title 33 – Planning and Zoning**, contains requirements that guide development throughout the City. There are provisions for protecting natural resources or gaining other desired outcomes, such as development, within specific areas of the City.

Administrative Rules

Administrative rules are binding requirements, regulations, or procedures that interpret and support implementation of City code. A number of administrative rules address natural resource protection and watershed health, including:

- The City of Portland Stormwater Management Manual (1999; revised 2002), which identifies requirements for reducing the impacts of stormwater runoff quantity and pollution resulting from new development and redevelopment.
- The City of Portland Erosion Control Manual (2002), which specifies measures for temporary and permanent erosion prevention and sediment control. An erosion, sediment, and pollutant control plan is required when doing City-permitted ground-disturbing activity (such as building, clearing, grading, public works, or street opening), and must be submitted with the permit application.

Planning and Zoning

Comprehensive Plan

The Comprehensive Plan is the current adopted land use plan that guides the future growth and development of the City of Portland. It includes a set of goals, policies, and objectives that apply to the entire City. The plan also includes a list of significant public works projects and a set of

mapped features (including land use designations, street classifications, the City limits, and the urban service boundary).

The Comprehensive Plan also incorporates goals, policies, and objectives contained in neighborhood and community plans that apply only to specific parts of the City. In 1992, City Council adopted the *Albina Community Plan*, which applies to the neighborhoods of Kenton, Bridgeton, Sunderland, Piedmont, Arbor Lodge, Woodlawn, Humboldt, Overlook, Concordia, Vernon, King, and Beaumont-Wilshire within the Columbia Slough Watershed. Implementation of the *Albina Community Plan* has brought high-density housing, businesses and employment, better transportation systems, and open space/parks to the Albina community.

Environmental Zones

Portland's zoning code (Title 33) implements the Comprehensive Plan and other land use plans. The zoning code identifies base zones in the City (open space, single-dwelling residential, multi-dwelling residential, commercial, employment and industrial) and the uses allowed in each. It also identifies overlay zones that address specific subjects, such as environmental resources, and may be applicable in a variety of areas in the City. These overlay zones are placed over the base zones.

Environmental zones are one type of overlay zone (Chapter 33.430). They protect resources and functional values (the benefits provided by the resources) that the City has identified as providing benefits to the public. Development in environmental zones requires developers to, in order of priority, avoid, minimize, or mitigate impacts to the natural resources of the area.

Two environmental overlay zones exist under the current zoning code:

- The protection zone (p-zone) provides the highest level of protection to the most important resources and functional values. Development is approved only in rare and unusual circumstances when the development can demonstrate a public benefit.
- The conservation zone (c-zone) conserves important resources and functional values while allowing environmentally sensitive urban development.

The application of the environmental zones is based on detailed citywide and regional studies that have been carried out in eight separate areas of the City. The City has adopted the following two environmental study reports for the Columbia Slough Watershed:

- Columbia Corridor Industrial and Environmental Mapping Project
- East Buttes, Terraces, and Wetlands Conservation Plan

The City is working on an update to its environmental land use planning program which may modify e-zones to better protect important riparian resources and upland areas. Part of the update involves updated inventories of natural resources.

Natural Resources Management Plans

Under the environmental zoning code, natural resource management plans (NRMPs) provide an alternative to case-by-case environmental reviews (Chapter 33.430.310). NRMPs cover large ecosystems such as a forests, creeks, sloughs, or watersheds. They must address all resources and functional values (the benefits provided by the resources) to be conserved and/or protected by environmental zones within the plan boundaries. They must also address all significant detrimental impacts of the uses that are allowed by the plan. In this way, NRMPs provide the means to evaluate the cumulative effects of development or mitigation on the environmental resources of an area.

Four NRMPs exist within the Columbia Slough Watershed:

- Smith and Bybee Lakes Natural Resources Management Plan
- Peninsula Drainage District No. 1 Natural Resources Management Plan
- East Buttes, Terraces, and Wetlands Conservation Plan
- East Columbia Neighborhood Natural Resources Management Plan

Plan Districts

Plan districts (Chapter 33.500) address concerns unique to an area when other zoning mechanisms (e.g., base and overlay zones) cannot achieve the desired results . An area may be unique based on natural, economic, or historic attributes; be subject to problems from rapid or severe transitions of land use; or contain public facilities that require specific land use regulations for their efficient operation. Each plan district has its own nontransferable set of regulations.

The following plan districts exist within the Columbia Slough Watershed:

- Columbia South Shore Plan District
- Portland International Raceway (PIR) Plan District
- Cascade Station/Portland International Center (CS/PIC) Plan District

Columbia South Shore Plan District

The Columbia South Shore Plan District contains a mix of commercial and industrial uses, with some residential. City backup drinking water wells are also located within this district. The plan district regulations encourage the development of the area as an industrial employment center that will attract a diversity of employment opportunities. The regulations also protect significant environmental and scenic resources and maintain the capacity of the area's infrastructure to accommodate future development.

Portland International Raceway (PIR) Plan District

The PIR Plan District (Chapter 33.564) is part of West Delta Park and has a unique and varied character. The natural setting is a broad, open natural area with unusual expansive vistas of the Columbia River floodplain. The plan district's purpose is to preserve and enhance the special character and opportunities of this area. This goes beyond simply ensuring that development within the racetrack core area does not negatively affect the other areas. It also requires careful design and balance so the recreational and entertainment uses do not overwhelm the natural

setting, and the natural setting continues to enhance the recreational and entertainment uses. PIR is also developing a master plan for the site.

Cascade Station/Portland International Center (CS/PIC) Plan District

The CS/PIC Plan District (Chapter 33.508) contains requirements for landscaping, stormwater management, and development in the eastern portion of Portland International Airport. It encourages the development of a commercially viable mix of transit-supportive and pedestrian-sensitive office, hotel, entertainment, retail, and industrial employment centers, while protecting significant environmental, open space, and cultural features. All allowed uses and activities are meant to complement and serve ongoing airport operations and services, both within and outside the plan district boundaries. Special development guidelines and bicycle-pedestrian connections are included to address the plan district's proximity to the Columbia Slough and Columbia Slough Trail.

Wellhead Protection Program

The City of Portland's Bureau of Water Works operates a wellfield capable of producing close to 100 million gallons of drinking water per day. Water is drawn from 25 wells in four aquifers spread over a five-square-mile area in Portland, Gresham, and Fairview. Most of the wellfield is within the Columbia Slough Watershed and within the Columbia South Shore Plan District. The groundwater supplements Portland's Bull Run water supply for emergencies and summer demand.

Portland, Gresham, and Fairview have developed and adopted, in 2003, a new Columbia South Shore Wellhead Protection Program that regulates new and existing businesses operating within the wellfield boundaries. Residential and agricultural property owners are also being asked to minimize the potential impacts of their activities by adopting best management practices. Existing commercial and industrial facilities that handle, transport, or manage hazardous materials or wastes will be required to retrofit their sites with containment and spill control features over the next five years. Gresham and Fairview have adopted the program.

REFERENCES

City of Portland 2002. *Framework for Integrated Management of Watershed and River Health*.

City of Portland. *Zoning Code*.