

Goal 6 Air, Water, and Land Resources Quality

□ Section 2, Water Resources Quality

BACKGROUND

Statewide Planning Goal 6: Air, Water and Land Resources Quality

“To maintain and improve the quality of the air, water and land resources of the state.”

The City of Lake Oswego surrounds Oswego Lake and lies in the eastern portion of the Tualatin Valley, approximately eight miles south of Portland. There are three major drainage basins within Lake Oswego’s Urban Services Boundary: Oswego Lake, Tualatin River and the Willamette River. All surface water runoff in Lake Oswego eventually finds its way to the Willamette River, the Tualatin River, or Oswego Lake. Each drainage basin is a complex system of topography, vegetation and hydrology. Water flows through these drainage basins via a network of interconnected creeks and streams. Thus water pollution anywhere in a drainage basin can not only affect the nearest stream, but also all other downstream waters and sometimes groundwater.

As Lake Oswego has grown, natural surfaces that used to absorb surface water have been covered over with streets, parking lots and buildings. Excess rainwater, often carrying pollutants from these impervious surfaces, flows directly into storm drains and ditches. This creates high water levels which result in flooding, stream bank erosion, sedimentation and damage to wildlife and vegetation habitat. In addition, water pollution can come from many other sources such as sewage treatment plants, industry, agriculture and chemicals used to maintain lawns and landscaped areas.

The Oswego Lake and Tualatin River drainages are “water quality limited” based on standards set by the Oregon Department of Environmental Quality. A “water quality limited” stream is one which will not meet water quality standards even after conventional secondary wastewater treatment and application of effluent limits for industrial sources. Pollutants which affect these water bodies include varying amounts of excessive nutrients, sediments, fecal coliform bacteria, copper and other metals, household and industrial chemicals, oil and grease.

To comply with the Federal Clean Water Act, the Oregon Environmental Quality Commission, (EQC) established strict new water quality standards in 1990 aimed at reducing pollution. In particular, the EQC set limits for the amount of phosphorus that may be discharged from surface water runoff into both the Tualatin River and Oswego Lake. These limits are called Total Maximum Daily Loads (TMDLs). Like other communities in the area, Lake Oswego has been given a specific Load Allocation - the maximum amount it can discharge into either basin.

Lake Oswego, is also required to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) requirements. This is a program authorized by the Federal Clean Water Act to control a broad range of pollutants originating from both point and non-point sources. Lake Oswego,

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Clackamas County and the Unified Sewerage Agency are undertaking a joint effort to comply with NPDES requirements within the Urban Services Boundary.

In March, 1991 Lake Oswego and Clackamas County retained a consulting firm to prepare a Surface Water Management (SWM) Plan for the major drainages within the City's Urban Services Boundary. The SWM Plan serves as the primary document to guide enhancement of water quality within the City's USB. In addition to areas incorporated within the City, the study included portions of the City of Rivergrove and unincorporated Clackamas County. The SWM Plan consists of four parts: 1) Public Awareness and Involvement; 2) Flood Control Management; 3) Water Quality Management; and, 4) Implementation. The Surface Water Management Plan also serves to meet the drainage related public facility plan requirements pursuant to Oregon Administrative Rules (OAR) 660-11-010.

A Surface Water Management (SWM) Committee composed of elected and appointed officials, citizens and staff was formed to monitor and assist in the surface water management planning effort. This group also coordinated a public involvement process. The SWM Committee developed the following community objectives for Lake Oswego's Surface Water Management Program which have been incorporated into the following Comprehensive Plan Water Quality Goals, Policies and Recommended Action Measures.

- Create opportunities for citizen participation and awareness.
- Promote using natural systems rather than closed pipe to convey runoff.
- Prevent pollution from getting into runoff.
- Allocate costs in an equitable manner to all who would benefit from improvements.
- Cooperate with other affected communities and agencies.

Summary Of Major Issues

The following are some of the issues and changed circumstances and conditions which were considered in the update of this element of the Comprehensive Plan.

- Lake Oswego is required to comply with National Pollutant Discharge Elimination System (NPDES) surface water regulations.
- Water bodies within the Tualatin River and Oswego Lake drainages have been designated as being "water quality limited" by the Oregon Department of Environmental Quality (DEQ).
- Oregon Environmental Quality Commission (EQC) established Total Maximum Daily Loads (TMDLs) for phosphorus entering the Tualatin River and Oswego Lake drainages.

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- Lake Oswego, Clackamas County and Rivergrove have completed the “Lake Oswego Surface Water Management Plan” which is intended to guide efforts to:
 - a. Control the quality of urban runoff to the Tualatin River and Oswego Lake drainage basins;
 - b. Provide a capital improvement program to implement a surface water management program; and,
 - c. Serve as the drainage related public facility plan pursuant to Oregon Administrative Rules (OAR) 660-11-010.

GOALS, POLICIES, AND RECOMMENDED ACTION MEASURES

GOAL

The City shall:

- a. Reduce water pollution and ensure that future land use activities protect and enhance area water quality, and;
- b. Protect and enhance the functions and values of the natural ground and surface water drainage systems.

POLICIES

1. Protect the natural surface water drainage systems and enhance water quality by treating and controlling run-off and pollution at the source.
2. Favor the use of the natural drainage system and other non-structural methods to treat, convey and dispose of run-off.
3. Lake Oswego’s management of surface water shall:
 - a. Restore, protect and enhance water quality and the physical and biological integrity of rivers, lakes and stream corridors and their associated environmental values including natural vegetation, fish and wildlife habitats;

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- b. Promote public safety and minimize damage to public and private property by surface water run-off; and,
 - c. Educate and involve the community in opportunities to restore, protect and enhance water quality.
4. Fund surface water management programs in a manner which allocates costs based upon the impact a development has upon the surface water management system.
5. Require all development to:
 - a. Comply with applicable local, state and federal water quality and erosion control standards; and,
 - b. Implement measures to minimize run-off from the development site during and after construction.
6. Develop and implement intergovernmental agreements with local, regional, state and federal agencies to implement measures to minimize the quantity of pollutants entering ground and surface waters from both point and non-point sources.
7. Facilitate the extension of the City's sanitary sewer systems to areas within the Urban Services Boundary where failing septic systems are contaminating ground and surface waters, provided:
 - a. Those properties benefiting from sewer extension pay their commensurate share of the cost of service; and,
 - b. Annexation occurs prior to any property receiving service.
8. Improve the water quality of Oswego Lake by working with DEQ, Oswego Lake Corporation and area residents and businesses within the Lake's drainage basin to implement water quality programs and projects.
9. Restore the environmental functions and values of stream corridors as a means to enhance water quality.

RECOMMENDED ACTION MEASURES

- i. Develop joint policies and inter-governmental agreements with surrounding jurisdictions and appropriate state agencies to protect surface and ground water resources within and adjacent to the Urban Services Boundary.

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- ii. Work closely with adjoining counties and jurisdictions to:
 - a. Monitor development impacts on surface and groundwater resources in adjoining unincorporated areas to ensure compliance with state requirements and that no “down-stream” pollution impacts occur within the Lake Oswego Urban Services Boundary;
 - b. Ensure that septic tanks and other potential contaminant sources do not result in groundwater or aquifer contamination within the USB; and,
 - c. Comply with National Pollutant Discharge Elimination System (NPDES) surface water regulations.
- iii. Work with the Department of Environmental Quality and surrounding jurisdictions to ensure those streams that flow through the City, and all other water bodies, maintain high levels of water quality. Develop joint programs to acquire better water quality data for these resources.
- iv. Carefully monitor the condition of the sewer interceptor located in Oswego Lake to ensure that it does not contribute to pollution problems.
- v. Implement programs to protect riparian areas and stream corridors and enhance water quality such as:
 - a. Acquisition of property and conservation easements;
 - b. Ongoing efforts to re-vegetate degraded stream banks and install appropriate erosion control; and,
 - c. Development standards which require measures such as setbacks, erosion control, re-vegetation and preservation of natural vegetation.
- vi. Work with DEQ to ensure the efficient use of public funds in meeting the coordinated requirements of the NPDES and Environmental Quality Commission Rules for the Tualatin basin.
- vii. Maintain an accurate inventory of stream corridors and their respective environmental conditions as a basis from which to restore their contribution to water quality.
- viii. Coordinate with the plans of local, state, regional, and federal agencies to contain and clean up hazardous waste spills or sites that either contaminate or have the potential to contaminate water resources.
- ix. Integrate management and operation activities associated with water quality and drainage control requirements for all rivers, lakes, streams, and wetlands within the City watershed.

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- x. Work with surrounding jurisdictions and the Oregon Department of Environmental Quality (DEQ) and the Environmental Quality Commission (EQC) to comply with EQC rules for the Tualatin basin.