

## CHAPTER 12 ENVIRONMENTAL

### 12.1 Introduction

The quality of the natural environment in Woodinville is one of the basic tenets of Woodinville's vision of the future. Further, maintaining the viability of the natural environment is a prudent and cost effective public goal, which enhances not only the quality of life for residents, but also the economic vitality of the community. The Environmental Element's overall goal is to preserve the City's natural systems in order to protect public health, safety, and welfare, and to maintain the integrity of the natural environment.

As an urban community with considerable environmental resources, Woodinville continues its long-standing effort to balance multiple concerns. The City's natural resources include 6 drainage basins, some with salmonid-bearing streams, several wetlands, a lake, and shoreline on the Sammamish River. Portions of the City also include steep slopes and open forested areas because many undeveloped sites in the City are constrained by environmentally sensitive areas. Woodinville's challenge for the future will be to accommodate growth while protecting and enhancing natural systems on these lands.

The Environmental Element provides a policy basis for the protection and enhancement of Woodinville's natural environment. While the Environmental Element contains policies that relate directly to many aspects of the natural environment, the concept of environmental protection and preservation is integrated into all aspects of the Comprehensive Plan.

The following goals, policies, and implementation strategies represent a continued effort to protect and enhance our environment for the future. City Staff shall review annually the implementation strategies and consider them when developing their work plan.

### 12.2 Goals and Policies

#### GOAL ENV-1: To reduce the waste stream.

##### Policies

- ENV-1.1 Support public outreach and education in conservation efforts.
- ENV-1.2 Encourage participation in recycling.
- ENV-1.3 Explore and support creative solutions in the reduction of waste and conservation of resources.
- ENV-1.4 Support waste reduction/recycling programs for City departments and encourage procurement of recycled content materials.
- ENV-1.5 Periodically review codes to improve efficiency, conservation and recycling of natural resources.

#### GOAL ENV-2: To promote energy conservation.

##### Policies

- ENV-2.1 Periodically review codes to improve efficiency and conservation of energy resources.

**ENV-2.2** Consider energy conservation technologies for energy use reduction.

**ENV-2.3** Encourage the use of renewable technologies.

**GOAL ENV-3: To preserve and enhance aquatic and wildlife habitat.**

**Policies**

**ENV-3.1** Encourage preservation of the urban forest.

**ENV-3.2** Identify and ensure the protection of sensitive habitat areas, including wetlands, streams and shorelines.

**ENV-3.3** Maintain a standard of no net loss in the functions and values of sensitive habitat features, including wetlands, streams, lakes and shoreline areas.

**ENV-3.4** Maintain connectivity between sensitive areas, including the Sammamish River and related streams, to provide safe travel routes for wildlife and fish and improve the biological integrity of sensitive habitat areas.

**ENV -3.5** Support watershed-based salmon recovery efforts and compliance with the requirements of the Endangered Species Act (ESA).

**ENV-3.6** Periodically review and update the Shoreline Master Program and sensitive areas regulations to ensure consistency with the policies of this Comprehensive Plan, the Shoreline Management Act and the Department of Ecology shoreline regulations.

**ENV-3.7** Encourage the use of native plants in residential and commercial landscapes.

**ENV-3.8** Consider and incorporate the best available science, consistent with the GMA and applicable rules, in developing regulations for fish and wildlife habitat areas, wetlands, and other critical areas.

**ENV-3.9** Employ adaptive management for natural habitat. Adaptive management allows the City to monitor and make adjustments to its regulations as appropriate in response to changing conditions or new information.

**ENV-3.10** Encourage acquisition of sites that protect habitat, stream corridors and provide aquatic habitat.

**ENV-3.11** Encourage the restoration of ecological functions and the natural environment in environmentally damaged areas.

**ENV-3.12** Participate in efforts to minimize drawdowns and warming of the Sammamish River.

**GOAL ENV-4: To protect the public from floods, landslides, erosion and other natural hazards resulting from disturbance of the environment.**

**Policies**

**ENV-4.1** Protect public safety in potential seismic, flood hazard and slide hazard areas.

**ENV-4.2** Minimize the adverse effects of development on topographic, geologic and hydrologic features, and native vegetation.

**ENV-4.3** Control the quantity and velocity of surface water runoff.

**GOAL ENV-5: To protect and improve water quality.**

**Policies**

**ENV-5.1** Preserve aquifer-recharge areas.

**ENV-5.2** Include enhancement of shorelines and waterways with adjacent development activities.

**ENV-5.3** Minimize impervious surfaces.

**ENV-5.4** Minimize impacts of recreational uses on water quality.

**ENV-5.5** Protect the quality and quantity of water in waterways, wetlands, floodplains and watersheds from degradation.

**GOAL ENV-6: To promote the preservation of Northwest woodland character.**

**Policies**

**ENV-6.1** Protect and conserve open space, including transition buffers between urban and rural areas.

**ENV-6.2** Encourage public access where appropriate to environmentally sensitive areas and sites that are unique to Woodinville.

**ENV-6.3** Preserve and protect public views of mountains and valley corridors.

**ENV-6.4** Minimize noise pollution.

**ENV-6.5** Minimize artificial light pollution.

**ENV-6.6** Encourage the use of native plants in all new street landscapes and street frontage improvements.

**GOAL ENV-7: To protect and promote air quality.**

**Policies**

**ENV-7.1** Promote regional air quality standards in coordination with the Puget Sound Air Pollution Control Agency and the Puget Sound Regional Council.

**ENV-7.2** Encourage reduction of vehicle emissions.

**ENV-7.3** Encourage the use of low emission forms of heating, cooling and ventilation systems.

**ENV-7.4** Work with other jurisdictions and agencies to improve air quality.

**ENV-7.5** Consider the air quality implications of new growth and development when considering annexations, making Comprehensive Plan and zoning changes, and planning street and utility extensions.

**ENV-7.6** Promote public reduction of air pollutants such as carbon monoxide (CO); ozone (Hc and Nox); and particulate matter (PM10).

**GOAL ENV-8: Explore innovative opportunities for environmental protection, maintenance and enhancement objectives as a part of all city planning and development review.**

**Policies**

**ENV-8.1** Promote environmentally friendly and economically viable design.

**ENV-8.2** Continue to evaluate the incorporation of incentives into the City's environmental regulations.

**ENV-8.3** Encourage development that enhances environmental resources and important natural systems.

**ENV-8.4** Coordinate with local agencies and organizations to develop environmental protection programs that will educate citizens on environmental issues.

**ENV-8.5** Promote Low Impact Development techniques as an alternative to standard development practices such as, using natural systems to maintain and enhance environmental quality by having them perform such functions as cleaning air and water, and controlling storm water runoff.

**ENV-8.6** Utilize natural filtration systems such as rain gardens with high infiltrations soils, bio-channels, green roofs, and ecology embankments.

**ENV-8.7** Practice land cover management which includes forest and topsoil preservation, native growth protection easements, dense vegetation zones, and preservation of tree canopy zones.

**ENV-8.8** Reduce effective impervious surface areas by narrowing residential streets and encouraging the use of shared driveways, cul-de-sac planters, rain gardens, and porous pavement for streets and sidewalks.

**ENV-8.9** Provide education to all stakeholders concerning natural systems and associated programs and regulations (e.g. Arbor Day events, Salmon Watcher Program, Sammamish ReLeaf, education pamphlets, environmental work shops and neighborhood meetings). Encourage and promote environmental stewardship programs, and techniques in managing urban forests, streams and wetland systems.

**ENV-8.10** Provide incentives for low impact development such as: property tax abatements and credits; reduction of permit fees or other development standards; density bonuses limited to green development and achieved ratings for Lead Environmental Energy Design (LEED); and the preservation and planting of native vegetation in commercial and residential development.

## 12.3 Implementation Strategies and Monitoring

### 12.3.1 Implementation Strategies

The following goals and policies of the Environmental Element can be implemented through a variety of methods. However, implementation may occur over a number of years and is dependent on resources available to the City and the community. Listed below are a number of tools the City can use to further the goals and objectives of the Environmental Element.

1. Maintain resources that provide recycling information for local citizens. *(Implements ENV-1.1)*
2. Work with Department of Natural Resources to determine the feasibility of gray water usage in the business/residential sector. *(Implements ENV-1.2 & 1.3)*
3. Evaluate city codes for utilization of gray water usage in the business/residential sector. *(Implements ENV-1.3 & 1.5)*
4. Develop programs to educate homeowners and developers on the availability and acceptability of recycled building materials. *(Implements ENV-1.1 & 1.2)*
5. Coordinate with other agencies to conduct annual composting seminars. *(Implements ENV-1.2)*
6. Research the feasibility of creating a permanent community yard waste facility. *(Implements ENV-1.1 & 1.3)*
7. Work with neighboring jurisdictions to promote regional recycling opportunities other than curbside recycling, such as: King County Hazardous Waste Program. *(Implements ENV-1.2)*
8. Promote energy conservation resources regarding energy efficient appliances, HVAC and alternative energy sources. *(Implements ENV-1.2)*
9. Re-establish, where appropriate, riparian vegetation along the Sammamish, Little Bear Creek and other streams through bank rehabilitation, bioengineering techniques, and aquatic habitat enhancement projects. *(Implements ENV-3.3 & 3.5)*
10. Identify and conserve wildlife habitat including corridors, nesting and foraging areas within or adjacent to natural areas, open spaces, and developed urban areas. *(Implements ENV-3.2 & 3.4)*
11. Prepare an inventory of critical areas. Identify, map and classify sensitive areas including lakes, ponds, wetlands, rivers and streams. *(Implements ENV-3.2 & 4.1)*
12. Continue community involvement in streamside rehabilitation, enhancement projects and stewardship programs. *(Implements ENV-3.5)*
13. Work with King and Snohomish counties to identify opportunities to provide open space and greenbelts adjacent to the City of Woodinville to ensure a transition buffer between adjoining urban and rural designated areas. *(Implements ENV-6.1)*
14. When evaluating development proposals on land adjacent to critical areas, include the effect on stream and wetland functions, fish and wildlife habitat, flood storage, water quality and recreation. *(Implements ENV-3.4, 3.7, 3.8, 3.9 & 3.11)*
15. Develop and maintain a standard of no net loss of wetlands. *(Implements ENV-3.7)*
16. Review and revise as necessary the City's buffer requirements to meet best available science standards for critical areas. *(Implements ENV-3.8)*
17. Develop a monitoring program to ensure that natural features and sensitive areas are not adversely impacted by surface water runoff systems. *(Implements ENV-3.9)*
18. Implement best management practices to reduce erosion during construction, reduce water contamination and support storm water systems that maximize aquifer recharge. *(Implements ENV-3.2 & 4.2)*
19. Incorporate best available science in development regulations. *(Implements ENV-3.8)*

20. Review the Department of Ecology surface water standards for possible future implementation to City regulations. *(Implements ENV-3.6)*
21. Limit development in flood hazard areas. *(Implements 4.1)*
22. Identify and map potentially hazardous areas. *(Implements 3.2, 4.1)*
23. Regulate land use activities that pose a risk to aquifer contamination. *(Implements 5.1)*
24. Utilize joint parking facilities and alternative modes of transportation. *(Implements ENV-5.3)*
25. Continue involvement in WRIA 8 planning to protect the waterways, wetlands, floodplains and watersheds from degradation. Continue to support jurisdictional, county, and agency inter-local agreements. *(Implements ENV 3.2, 3.5 & 3.12)*
26. Consider the Tri County Model 4(D) Rule Response Proposal as a guidance tool to ESA response. *(Implements ENV-3.5)*
27. Protect the quality and quantity of ground water through the development of regulations, and support the development of ground water management plans. *(Implements ENV-3.2 & 5.1)*
28. Maintain natural vegetation coverage at levels sufficient to moderate surface water runoff and to protect the integrity of stream channels. *(Implements ENV-3.1, 3.2, 3.7 & 6.1)*
29. Study drainage, flooding, storm water runoff, and storm water retention and recharge in and around Woodinville in cooperation with tribal, federal, state and local jurisdictions to determine appropriate mitigation to eliminate polluted water from entering local streams and the Sammamish River. *(Implements ENV-5.5)*
30. Maintain design guidelines which use focused rather than diffused lighting in exterior areas. *(Implements ENV-6.5)*
31. Review design guidelines to encourage the usage of motion sensors for exterior lighting. *(Implements ENV-2.1, 2.2 & 6.5)*
32. Develop a guide/appendix with illustrations to the current design guidelines that better communicate the use of native plants. *(Implements ENV-6.6)*
33. Continue to support the Tree Board's efforts in achieving a healthy, sustained community urban forest. *(Implements ENV-3.1 & 6.5)*
34. Continue to support the Salmon Task Force's efforts in salmon protection and recovery. *(Implements ENV-3.5)*
35. Coordinate with Puget Sound Air Pollution Control Agency to establish an air quality monitoring station in Woodinville. *(Implements ENV-7.1)*
36. Cooperate with State, regional and local agencies and jurisdictions to develop transportation control measures and/or similar mobile source emission reduction programs. *(Implements 7.1 & 7.2)*
37. Collaborate with other jurisdictions and agencies in ways to leverage for federal and state programs and funding for clean air protection and enhancement. *(Implements 7.4)*
38. Promote reduction of air pollutants through methods such as:
  - a. trip reduction strategies,
  - b. employer-based transportation management programs,
  - c. work schedule changes,
  - d. ridesharing programs,
  - e. improved public transit,
  - f. dedicated facilities for high-occupancy vehicles,
  - g. traffic flow improvements,
  - h. parking management,
  - i. park-and-ride facilities, and
  - j. Concentrated and mixed-used development. *(Implements 7.2)*
39. Adopt city vehicle purchasing standards to include recommendations for dual or alternative fuel use vehicles. *(Implements ENV-7.2)*
40. Add burn ban warning to the City website. *(Implements ENV- 7.1 & 7.3)*

41. Discourage the use of wood burning stoves and fireplaces in new development. *(Implements ENV-7.3)*
42. Promote programs for Low Impact Development such as Master Builders Green Built Program. *(Implements Env-8.3, 8.4 & 8.6)*
43. Continue to include Environmental quality as evaluation criteria for capital facilities projects. *(Implements ENV-8.1)*
44. Provide funding for continuing education of staff in approaches to environmental issues, renewable resources, and technologies. *(Implements ENV-2.3 & 8.5)*