

Environmental Quality and Stewardship

Proposed Goals:

The City's air, land and water resources are restored and protected for future generations. (in lieu of Goal 4.1)

An informed community that understands Tukwila's ecosystems and acts responsibly to maintain and protect them. (modified from Goal 4.4)

Increased number of Tukwila residents trained as environmental stewards and actively participating in environmental restoration and maintenance.

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Proposed Policies:

- Expand free educational programs and materials for the community about the multiple benefits of the City's sensitive areas and on individual responsibilities for their stewardship. (modified from policy 4.4.1)
- Sponsor joint City and citizen cleanup and restoration projects in the City's natural areas and expand the citizen volunteer base in Tukwila for restoration and maintenance of the City's natural areas. (formerly part of policy 4.4.1)
- Provide individualized education and technical support to residential property owners and general guidance to businesses regarding sensitive area stewardship. (new policy)
- Continue to support the Tukwila Backyard Wildlife Sanctuary Program. (formerly an implementation strategy)
- Collaborate with environmental organizations and businesses to support recruiting and training of environmental stewards, identify restoration projects, and provide logistical support for their work.

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- Identify impacts to wildlife from new development and ensure protection of existing priority wildlife habitat, including Osprey and Bald Eagle nests and Chinook and Bull Trout habitat, when issuing permits for development. Require compliance with Federal and State wildlife and endangered species regulations for all public and private sector projects. (*SEPA, SMP, SAO regulations*)
- Collaborate with Federal and State fish and wildlife agencies to identify priority species and priority habitats and to determine appropriate protection and wildlife access measures.

Water Resources

(insert a statement in the narrative portion of this section regarding the Green Duwamish Shoreline goals and policies)

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Overall Goals:

Water resources that function as a healthy, integrated system; provide a long-term public benefit from enhanced environmental quality; and have the potential to reduce public infrastructure costs. *(modified from Goal 4.5)*

An educated public that understands the importance of protecting sensitive areas, wildlife and fish habitat in the City's natural areas, wetlands, watercourses and the Green/Duwamish River and assists in their stewardship.

Wetlands/Watercourses/Fish and Wildlife Habitat

Proposed Goals:

Vital and self-sustaining fish and wildlife habitat areas that also provide, where appropriate, opportunities for recreational and educational uses, ~~where appropriate~~. *(modified from Goal 4.2)*

Watercourses and their buffers, wetlands and wetland buffers protected from encroachment and degradation and improved through enhancement and restoration projects. *(proposed new goal)*

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Place holder for possible new fish/salmon-specific goal

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Existing habitat for priority species of wildlife protected

Proposed Policies:

- Regulate land use and development, using Best Available Science, to protect **and improve** natural vegetation and hydrology **in order** to prevent significant erosion, sedimentation, or degradation of areas of potential geologic instability, wetlands, watercourses, **fish and**

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wildlife habitat areas and their associated buffers. (modified from Policy 4.1.1) (SAO regulations)

- Ensure mitigation sequencing is applied to avoid or minimize impacts to sensitive areas. (SAO regulations)
- Require and enforce appropriate ~~and timely~~ mitigation in order to ensure no net loss of sensitive area functions and designed to replace sensitive area acreage, and/or restore or enhance sensitive area functions lost due to development. (modified from policy 4.1.6) (SAO regulations)
- Ensure the effectiveness of sensitive area mitigation by requiring adequate sensitive area studies and mitigation plans, the application of mitigation sequencing to reduce potential adverse impacts to sensitive areas, financial assurances from project proponents to ensure mitigation implementation and maintenance, and by improving City oversight of maintenance and monitoring of mitigation sites. (new policy based on existing policy 4.1.5) (SAO regulations)
- ~~Require adequate financial guarantees to ensure that mitigation installation and mitigation maintenance and monitoring are implemented.~~ (new policy)

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- Establish internal processes to ensure watershed-scale evaluations of surface water management impacts for new private and public development, redevelopment and drainage system retrofits. (new policy) (SAO and Surface Water regulations)
- Allow off-site wetland ~~and flood control~~ mitigation when there is an equivalent greater functional benefit affected basin, no significant adverse impact to the adjacent property, and no significant adverse impact to existing wetlands or watercourses. ~~and where it may be~~

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~~combined with City-sponsored programs.~~ Preference for mitigation sites shall be given first within Tukwila's portion of the Green-Duwamish watershed and then elsewhere in the watershed. (modified from policy 4.1.8) (SAO regulations)

- Allow payment into an in-lieu fee program for mitigation outside of Tukwila where ecological benefits of such actions will be significantly greater than mitigation locations in the City. ?? (possible new policy – would require change to SAO regulations)
- Develop (explore?) an in-lieu fee program in the City for future wetland mitigation or collaborate with King County to establish in-lieu fee sites in Tukwila for wetland restoration projects, including projects along the Green/Duwamish River shoreline. ?? (possible new policy would require change in SAO regulations)
- Restore watershed function through sensitive area restoration projects on publicly owned lands and by working with property owners to restore/improve sensitive areas on private property. (modified from policy 4.1.3)
- Recognize, protect and enhance the value of watercourse and river riparian zones and other natural areas as wildlife corridors.
- ~~Where a drainage ditch conveys a natural watercourse,~~ Develop best management practices for and follow surface water drainage and street maintenance activities practices to avoid eliminating native riparian vegetation. Where riparian vegetation is disturbed through maintenance activities, restore vegetation with native species to improve riparian function. (proposed new policy)(SAO regulations and modifications to Surface Water practices)
- Provide staff and financial support for restoration projects, wherever feasible to enhance salmonid habitat in watercourses, wetlands and the Green/Duwamish River, including projects identified in the Shoreline Master Program Habitat Restoration Program and the Water Resource Inventory Area 9 Salmon Habitat Plan. (proposed

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new policy)(combination of SAO regulations, Shoreline Master Program, Surface Water plans/policies and CIP and grants)

- Prohibit piping of watercourses except where unavoidable for access purposes. Where feasible and practical to create healthy riparian habitat, encourage removal of piped sections of watercourses as part of new or redevelopment and public projects. *(modified policy 4.1.3) (SAO regulations and CIP/grant projects)*
- Prohibit creation of new fish barriers and, where possible, eliminate existing barriers (as identified in the Surface Water Comprehensive Plan) to fish passage through implementation of capital improvement projects and by providing incentives to private sector development. ~~open channels for watercourse conveyance.~~ *(modified policy 4.1.3) (SAO regulations and CIP/grant projects)*

Water Quality/Quantity

Proposed Goals:

Improved water quality in Tukwila's wetlands, watercourses, fish and wildlife habitat areas and the Green/Duwamish River through improvements in stormwater management. (proposed new goal)

Stormwater from urban development that does not exceed pre-development discharge rates and provides water quality treatment where required. ~~levels and aquatic resources that are protected from harmful stormwater discharges~~. (proposed new goal)

Proposed Policies:

- Demonstrate implementation of low-impact development techniques through grant-funded public projects and encourage the use of such techniques for stormwater management in new and existing development. Where feasible, incorporate such techniques into City capital facilities projects. (proposed new policy)(*Surface Water regulations*)

(Note: Low impact development techniques will be required by Washington State Department of Ecology in 2015 – narrative following this policy will acknowledge this up coming requirement – until required, the City will encourage the use of LID techniques and use public projects and workshops to demonstrate LID techniques.)

- Ensure that proposed development and mitigation plans consider hydrology on a watershed scale to avoid adverse impacts to sensitive areas from changes in hydrologic patterns and ensure careful evaluation of changes in water levels on wetlands and watercourses. (proposed new policy)
- Retrofit existing City stormwater systems to improve water quality of stormwater discharges where there are significant water quality

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benefits. *(proposed new policy)(Surface Water plan and CIP funded projects).*

- Prevent streambank erosion and sedimentation of water resources through adequate implementation of surface water and land clearing regulations and inspections. *(proposed new policy)(Surface Water regulations, Land clearing regulations)*
- Initiate educational and management programs to reduce the use of chemicals with negative impacts on the environment or human health and prohibit the application of pesticides to surface water systems or their buffers unless no other form of invasive plant control is effective. *(proposed new policy)(Surface Water regulations, SAO regulations, Shoreline Master Program regulations)*
- Promote natural yard care by Tukwila residents through educational programs and publicity. *(proposed new policy)*
- Continue inspection programs to ensure proper maintenance of stormwater management systems. *(proposed new policy)(Surface water regulations)*
- Continue City monitoring for illicit surface water discharges and ensure that action is taken to eliminate any such discharges. *(modified from policy 4.1.4)(Surface Water Regulations)*
- Carry out capital improvement projects and eliminate harmful pollutants from stormwater inflows to improve water quality in Tukwila Pond in order to better support fish and waterfowl habitat and enhance public enjoyment of the Tukwila Pond Park. *(proposed new policy)(Surface Water regulations)*

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Flood Control

Proposed Goal: The natural flood attenuation functions of wetlands, floodplains and floodways are protected to help prevent damage to life, property and public safety.

Proposed Policy: *(all implemented by Floodplain Management regulations)*

- Restrict or prohibit uses that could create a danger to health, safety and property due to potential erosion or flood hazards.
- Minimize the alteration of surface water features that retain or carry floodwaters (such as wetlands, natural flood plains) and prevent land alterations that would increase potential flooding.
- Require that structures located in areas subject to flooding, be constructed to protect against flood damage, including ensuring that finished floor elevations comply with federal regulations.
- Minimize adverse impacts to water resources by using bioengineering and natural solutions for bank stabilization or flood control projects, wherever feasible. *(proposed new policy)(already in Shoreline Master Program – new for Sensitive Areas and Surface Water regulations)*
- Require mitigation to reduce adverse environmental impacts from engineered flood control measures. *(SAO, Floodplain Management and Shoreline Master Program regulations)*

Earth Resources

Proposed Goal: Potential impacts and liabilities associated with development in areas of potential geologic instability and coal mine hazard areas are minimized, erosion is prevented and natural surface water features are protected from loss, disruption or channelization. (modified from existing Comp Plan Goal 4.3)

Proposed Policies: (all implemented by combination of SAO regulations and land clearing regulations)

- Require geotechnical studies for any development proposal on slopes over 15% to ensure that design takes into account soil characteristics, surface and groundwater, and the presence of trees and native vegetation and their role in slope stabilization.
- On steep slopes, require areas where vegetation remains undisturbed, land disturbance is minimized and cut and fill construction is limited to protect slope stability on sites cleared for development and require significant replanting with appropriate plants upon completion of development. (modified from policy 4.3.3)
- For development on steep slopes, require setbacks for buildings and other infrastructure where needed from the top and/or toe of steep slopes to reduce risks of slope failure and risks to public safety. (proposed new policy)
- Require the use of erosion prevention best management practices and where warranted, written erosion and sediment control plans to minimize erosion during and after construction activities on steep slopes or other erosion-prone areas. (proposed new policy)
- Incorporate information from geotechnical reports and documented landslide and erosion-prone areas into the City's GIS. (proposed new policy)
- Ensure that proposed development projects in mapped coal mine hazard areas adequately consider and mitigate for possible risks. (proposed new policy)

Archaeological, Paleontological, and Culturally Significant

Resources sites (move shaded section to Chapter 1 and combine with Historical Preservation) Add the following new text to the Natural Environment chapter narrative:

“The protection of archaeological, paleontological and culturally significant resources crosses several Comprehensive Plan topic categories – these areas can be viewed as environmentally sensitive but the City’s Parks and Open Space Plan also includes a number of goals or policies on natural areas and historical resources (including archaeological resources). For the purposes of the Comprehensive Plan, these topics will be addressed in Chapter 1, Community Image.”

Proposed Goal: ~~Protected~~ Paleontological and archaeological artifacts and sites with cultural significance are protected and preserved (*modified from existing Comp Plan Goal 4.6*)

Proposed Policies:

- ~~Inventory sites and adopt~~ **Implement measures existing regulations** to ensure that paleontological and archaeological materials and site details are preserved for posterity. (*modified from Policy 4.6.1*)
- **Ensure that the potential for the existence of paleontological and archaeological sites is considered during development of new construction projects.** (*proposed new policy*)
- **Identify and protect culturally significant sites and develop interpretive information about them to foster public appreciation of historical traditions and practices.**

Open Space Network (leave in Community Image Chapter)

Existing /Proposed Goal: A network of lands, connected where possible with other ~~such regional~~ **open space** networks, that includes and connects Tukwila's recreational amenities, historical sites, water resources, **wildlife corridors** and other natural resources and provides visually and environmentally significant bands of vegetation that contrast with the built environment. (modified from Comprehensive Plan Goal 1.10, Community Image Chapter).

Urban forestry/trees (new – to be developed)