

Environmental Quality and Stewardship

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

Policy 4.1.1 ~~Anticipate the effects of climate change by keeping abreast of current scientific data and plan for adaptating City regulations and internal procedures as needed.~~

Policy 4.1.2 Collaborate with Federal and State fish and wildlife agencies to identify priority species (endangered, threatened, sensitive, and candidate species) and priority habitats ~~and~~ to determine appropriate protection and wildlife access measures.

Policy 4.1.3 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.

Policy 4.1.4 ~~Assist applicants in~~ Require ~~complying~~ in ~~ance~~ with Federal and State wildlife and endangered species regulations for all public and private sector projects. (*SEPA, SMP, SAO regulations*)

Policy 4.1.5 ~~Explore programs to provide incentives to residents and businesses to promote the use of measures to improve environmental quality, such as low impact development techniques, natural streambank restoration, non-toxic lawn care, composting, recycling, etc.~~

~~**Goal 4.2** An informed community that understands Tukwila's ecosystems and acts responsibly to maintain and protect them. (modified from Goal 4.4) Duplicates goal below – staff recommends alternative goal language.~~

Goal 4.2 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. (moved from Water Resources section)

Policy 4.2.1 Expand free educational programs and materials for the community about the multiple benefits of the City's sensitive areas, flood plains, the urban forest, and wildlife habitat and on individual responsibilities for their stewardship. (*modified from policy 4.4.1*)

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Policy 4.2.2 Provide individualized education and technical support to residential property owners and general guidance to businesses regarding environmental sensitive area stewardship. *(new policy)*

Policy 4.2.3 Continue to support the Tukwila Backyard Wildlife Program. *(formerly an implementation strategy)*

Goal 4.3 Increased number of Tukwila residents trained as environmental stewards and actively participating in environmental restoration and maintenance.

Policy 4.3.1 Sponsor joint City and citizen cleanup and restoration projects 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)*

Policy 4.3.2 Collaborate with environmental organizations and businesses to support recruiting and training of environmental stewards, identify restoration projects, and provide logistical support for their work.

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 Goal 4.4 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)*

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Wetlands/Watercourses/Fish and Wildlife Habitat

Goal 4.5 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)*

Policy 4.5.1 ~~Establish both internal processes and requirements for new private development 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).~~ Combined with 4.8.2.

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Policy 4.4.1 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)*

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Policy 4.5.2 Recognize, protect and enhance the value of watercourse and river riparian zones and other natural areas as wildlife corridors.

Policy 4.5.3 Develop best management practices for surface water drainage and street maintenance activities to avoid eliminating native riparian vegetation. Where riparian vegetation is disturbed through maintenance activities, restore vegetation with native species. *(proposed new policy)(SAO regulations and modifications to Surface Water practices)*

Policy 4.5.4 Identify 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 new policy)(combination of SAO regulations, Shoreline Master Program, Surface Water plans/policies and CIP and grants)*

Policy 4.5.5 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)*

Policy 4.5.6 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)*

Goal 4.6 Watercourses and their buffers, wetlands and wetland buffers protected from encroachment and degradation and improved through mitigation, enhancement and restoration projects. *(proposed new goal)*

Policy 4.6.1 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 wildlife habitat areas and their associated buffers. *(modified from Policy 4.1.1) (SAO regulations)*

Policy 4.6.2 Ensure mitigation sequencing is applied to avoid or minimize impacts to sensitive areas. *(SAO regulations)*

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Policy 4.6.3 Require and enforce ~~appropriate~~ 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)*

Policy 4.6.4 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)*

Policy 4.6.5 Allow off-site wetland mitigation only when there is greater functional benefit, no significant adverse impact to the adjacent property, and no significant adverse impact to existing wetlands or watercourses. 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)*

Policy 4.6.6 Explore allowing 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. *(would require change to SAO regulations)*

Policy 4.6.7 Explore developing creation of 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. ?? *(would require change in SAO regulations)*

Policy 4.6.8 Develop a program in collaboration with other agencies to provide guidance to property owners interested in using their property for sensitive area mitigation or shoreline mitigation.

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Water Quality/Quantity

Goal 4.7 ~~The improved~~ water quality in Tukwila's wetlands, watercourses, fish and wildlife habitat areas and the Green/Duwamish River ~~is improved through improvements in stormwater management and provision of water quality treatment where required.~~ (proposed new goal) ~~Language revised to read as an end statement.~~

Policy 4.7.1 ~~Improve stormwater management and ensure provision of water quality treatment where required.~~

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Policy 4.7.2 Prevent and reduce streambank and channel erosion and sedimentation of water resources through implementation of surface water and land clearing regulations and inspections. *(proposed new policy)(Surface Water regulations, Land clearing regulations)*

Policy 4.7.3 Initiate educational and management programs to reduce the use of chemicals with negative impacts on the environment or human health. Prohibit the application of pesticides (insecticides, herbicides, fungicides, algicides, rodenticides, etc.) to surface water systems or their buffers unless warranted to protect ecological functions of the system. *(proposed new policy)(Surface Water regulations, SAO regulations, Shoreline Master Program regulations)*

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Policy 4.7.4 Promote natural yard care and proper waste management by Tukwila residents to protect water quality through educational programs and publicity. *(proposed new policy)*

Policy 4.7.5 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)*

Policy 4.7.6 Retrofit existing City stormwater systems, including ditches conveying stormwater, to improve water quality of stormwater discharges where there are significant water quality benefits. *(proposed new policy) (Surface Water plan and CIP funded projects).*

~~Carry out capital improvement projects that reduce or eliminate harmful pollutants from stormwater inflows to improve water quality. *(proposed new policy)(Surface Water regulations)*~~ **This policy integrated with Policy 4.7.5 above.**

Goal 4.8 Stormwater from urban development that does not exceed pre-development discharge rates. ~~and provides water quality treatment where required.~~ *(proposed new goal)*

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Policy 4.8.1 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 upcoming requirement – until required, the City will encourage the use of LID techniques and use public projects and workshops to demonstrate LID techniques.

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Policy 4.8.2 ~~Require that all proposed development identify both on-and off-site hydrologic features that could be impacted by the project. Require that all proposed development and mitigation plans~~ Evaluate project impacts on on-site and off-site watercourses, wetlands, drainage features and springs hydrology on a watershed scale to avoid adverse impacts to preserve existing sensitive area hydrology. *(proposed new policy- combines language from policy 4.5.1)*

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Policy 4.8.3 Continue inspection programs to ensure proper maintenance of stormwater management systems. *(proposed new policy)(Surface water regulations)*

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Flood Control

Goal 4.9: The natural flood attenuation functions of wetlands, floodplains and floodways are protected to help prevent damage to life, property and public safety.

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

Policy 4.9.1 Restrict or prohibit developmentuses that could create a danger to health, safety and property due to potential erosion or flood hazards.

- Policy 4.9.2 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.

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Policy 4.9.3 ~~Require that structures located in areas subject to flooding, be constructed to p~~Protect against flood damage, including ensuring that finished floor elevations- by complying with current federal regulations.

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Policy 4.9.5 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)*

Policy 4.9.6 Require mitigation to reduce adverse environmental impacts from engineered flood control measures. *(SAO, Floodplain Management and Shoreline Master Program regulations)*

Earth Resources

Goal 4.10: 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
(all implemented by combination of SAO regulations and land clearing regulations)*

Policy 4.10.1 Require geotechnical studies for any development proposal on slopes over 15% to ensure that design takes into account ~~soil~~ geologic characteristics, surface and groundwater, and the presence of trees and native vegetation and their role in slope stabilization.

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Policy 4.10.2 On steep slopes, ~~Require~~ areas where vegetation must remain 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)*

Policy 4.10.3 ~~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)*

Policy 4.10.4 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)*

Policy 4.10.5 Incorporate information from geotechnical reports and documented landslide and erosion-prone areas into the City's GIS data. *(proposed new policy)*

Policy 4.10.6 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:

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“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: **(all implemented through SEPA review and/or existing City, State and Federal regulations.)**

Policy XX.1 ~~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)*

Policy XX.2 **Ensure that the potential for the existence of paleontological and archaeological sites is considered during development of new construction projects.** *(proposed new policy)*

Policy XX.3 **Identify and protect culturally significant sites and develop interpretive information about them to foster public appreciation of historical traditions and practices.**

Urban forestry/trees (new – to be presented at a future meeting)