

GOALS AND POLICIES

Environmental Quality and Stewardship

GOAL EN-1 The City's air, land, and water resources are restored and protected for future generations and are resilient to a changing climate¹⁰.

POLICIES

Policy 1.1 Anticipate the effects of climate change by ~~keeping abreast of current scientific data~~ incorporating Best Available Science, considering long-term climate change projections, and planning for adaptative management of~~adapting~~ City regulations and internal procedures, as needed.

Policy 4.1.2 Develop and implement environmental strategies that use integrated and interdisciplinary approaches to environmental assessment and planning, in coordination with local jurisdictions, tribes, and other stakeholders.¹¹

Policy 1.3 Collaborate with federal, ~~and State,~~ and tribal¹² fish and wildlife agencies to identify priority habitats species (endangered, threatened, sensitive and candidate species) and priority habitats species, to ~~determine~~ establish appropriate protections and wildlife access measures to ensure no net loss of ecological functions and values.¹³

~~**4.1.32** Identify impacts to wildlife from new development, and ensure protection of priority fish and wildlife habitat including Osprey and Bald Eagle nests and Chinook and Bull Trout habitat when issuing permits for development or considering rezoning.~~¹⁴

Policy 14.1.434 Provide guidance to assist applicants in understanding and complying with federal and State fish and wildlife ~~and endangered species~~ regulations for all public and private sector projects.

Policy 1.4.1.545 Develop and implement programs that encourage and incentivize Tukwila residents and businesses to take active measures to protect, ~~and~~ enhance, and

¹⁰ Required by GMA goals

¹¹ Policy K_EN-2;

¹² EN-2

¹³ Consultant addition; other recycling policies are in Capital Facilities: partial K_EN-2

¹⁴ This policy should be eliminated for conciseness. Protection of priority species and habitats is included in Policy 4.1.2 and 4.1.4

plan for changing conditions of Tukwila’s natural environment to increase climate resiliency. Such measures could include, but are not limited to, the use of Low Impact Development (LID) techniques, natural streambank restoration, non-toxic lawn care, and composting and recycling, ~~among others~~.¹⁵

Policy

€1.6 Identify and preserve regionally significant open space networks through implementation of the Regional Open Space Conservation Plan. Develop strategies and funding to protect lands that provide the following valuable functions:

- a. Ecosystem linkages and migratory corridors crossing jurisdictional boundaries;
- b. Physical or visual separation providing buffers between incompatible uses;
- c. Active and passive outdoor recreation opportunities;
- d. Wildlife habitat and migration corridors that preserve and enhance ecosystem resiliency in the face of urbanization and climate change;
- e. Preservation of ecologically sensitive, scenic, or cultural resources; and
- f. Urban green space, habitats, and ecosystems.¹⁶

GOAL 4.22 An educated public that understands the importance of protecting **and enhancing the functions and values of environmentally critical environmentally critical sensitive areas, including fish and wildlife habitat conservation areas, wildlife and fish habitat in the City’s natural areas, wetlands, floodplains, watercourses** and the Green/Duwamish River, **and actively and** assists in **their** their stewardship.

POLICIES

Policy 2.4.2.1 Develop and eExpand free or low-cost educational programs and materials for the community about the ~~multiple~~ benefits of protecting and enhancing the City’s ~~environmentally critical sensitive~~ areas, ~~flood plains~~, the urban forest and wildlife habitat, and ~~about~~ individual responsibilities for their stewardship in a changing climate. The City should continue to develop and support community-oriented wildlife educational programs, such as the Tukwila Backyard Wildlife Program, and communicate the requirements of City environmental regulations

¹⁵ Consultant: Consider incentivizing measures that are resilient to a changing climate. Other practices that utilize the most current water conservation technologies and strategies such as water-smart landscapes, rainwater harvesting, and green infrastructure should also be considered and incentivized.

¹⁶ K EN-20, a-f

so as to maximize compliance and minimize code enforcement actions and environmental degradation.¹⁷

Policy 2.4.2.2 Provide individualized education and technical support to residential property owners and general guidance to businesses regarding environmental stewardship and climate change resiliency strategies.

~~**4.2.3** — Develop and continue to support community-oriented wildlife educational programs, such as the Tukwila Backyard Wildlife Program.~~¹⁸

~~**GOAL 4.3** — Increased number of Tukwila residents who are trained as environmental stewards and actively participate in environmental restoration and maintenance.~~¹⁹

~~**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.~~²⁰

Policy 2.4.3.3 Collaborate with environmental organizations and businesses to support recruiting and training of environmental stewards, identify and sponsor restoration projects, incorporate climate change-focused strategies and provide logistical support for their work. Action should be taken to encourage expanding the citizen volunteer base in Tukwila for restoration and enhancement of the City's natural areas to promote the continued health of these systems.²¹

The lack of a Goal #3 will be addressed with final formatting

Water Resources

GOAL 4.4 Water resources that function as a healthy, integrated system; provide a long-term public benefit from enhanced environmental quality; are resilient from a range of climate-related events including increased flood events, changes in water temperature, and drought; and have the potential to reduce public infrastructure costs.²²

¹⁷ Combined with Policy 4.3 to enhance conciseness.

¹⁸ Combined into 4.3.1

¹⁹ Removed – redundant with Goal 2.

²⁰ This policy should be eliminated and combined with Policy 4.3.2.

²¹ This policy should encourage collaborative efforts with the community to help ensure ecosystem functions are retained and are resilient to climate change.

²² Climate change is anticipated to impact water resources by increasing the frequency and severity of flooding and temperature-related impacts.

Wetlands/~~Watercourses~~/Fish and Wildlife Habitat Conservation Areas

GOAL 4.5 Vital and self-sustaining fish and wildlife habitat areas **and habitat corridors are protected and restored and** that provide, where appropriate, opportunities for recreational and educational uses.²³

POLICIES

Policy 5.4.5.1 Restore, protect, and enhance watershed functions and values through environmentally critical~~sensitive~~ area restoration projects on public and private~~ly-owned~~ land to build resilience to climate change through ecological solutions. Restoration projects should improve habitat corridors and connections, particularly in riparian management zones and floodplain wetlands, wherever feasible.²⁴ ~~s, and by working with property owners to restore/improve environmentally critical sensitive areas on private property.~~

~~**4.5.2** Recognize, protect and enhance the value of watercourse and river riparian zones, springs and other natural areas as wildlife corridors.~~²⁵

Policy 5.4.5.32 Develop best management practices (BMPs) for stormwater management ~~surface water drainage~~ and street-related maintenance activities to avoid impacts to riparian management zones or other environmentally critical areas~~disturbing or destroying native riparian vegetation~~. Where riparian vegetation is disturbed through development or maintenance activities, restoration should be required to preserve the functions and values of the habitat~~restore vegetation with native species.~~²⁶

Policy 5.4.5.43 Identify staff, ~~and~~ financial support, or funding opportunities for restoration projects, wherever feasible, to enhance salmonid anadromous fish habitat in riparian management zones~~watercourses~~, wetlands and the Green/Duwamish River, including projects identified in the Shoreline Master Program (SMP) Habitat Restoration Program, ~~and~~ the Water Resource Inventory Area (WRIA) 9 Salmon Habitat Plan, WRIA 9 Duwamish-Green Watershed

²³ The inclusion of habitat corridors will aid in the protection of the function and values of fish and wildlife habitat conservation areas, as well as other environmentally critical areas.

²⁴ Supporting restoration opportunities that reconnect floodplain wetlands and restore natural processes will improve water quality, fish and wildlife habitat, and mitigate impacts of flooding and erosion. When planning and prioritizing restoration projects it will be important to identify locations where these efforts will be most beneficial and effective in the long-term.

²⁵ This policy should be eliminated and combined with Policy 4.5.1 for conciseness.

²⁶ This policy should plan for increased stormwater management demands associated with increased flood events to avoid the potential for overflow events and related adverse environmental impacts.

Restoration and Enhancement Plan, or other regional watershed restoration plans.²⁷

Policy 5.4 Ensure that new development, open space protection efforts, and mitigation projects support the State’s streamflow restoration law. Promote robust, healthy, and sustainable salmon populations and other ecosystem functions, working closely within WRIA 9 and utilizing adopted watershed plans.²⁸

Policy 5.4.5 Prohibit piping of watercourses, except where unavoidable for access purposes. Where ver feasible and practical, ~~to create healthy riparian habitat,~~ encourage removal of piped sections of watercourses ~~as part of~~ when permitting any new or redevelopment ~~and public projects~~ activities to improve riparian habitat functions and values.²⁹

Policy 5.4.5-6 Prohibit creation of new fish barriers and, where possible, encourage elimination of existing barriers to fish passage through implementation of capital improvement projects, coordination with regional partners and the WRIA 9 Lead Entity to seek funding opportunities, and by providing incentives to private sector development.³⁰

GOAL 4.6 Riparian management zones, floodplains, Watercourses and their buffers, wetlands, and their wetland buffers **are** protected from encroachment and degradation and improved through impact avoidance, mitigation, enhancement, and restoration projects to increase resiliency to impacts from climate change³¹.

POLICIES

Policy 6.4.6-1 Regulate land use and development, using Best Available Science, to protect and improve natural vegetation and hydrology, habitat corridors, and open spaces, ~~in order~~ to prevent significant erosion, sedimentation, or degradation of areas of

²⁷ This policy should be broadened to include enhancement of anadromous fish habitat, including salmonids, and utilization of regional Watershed Restoration Plans, when available.

²⁸ En-10

²⁹ This policy should be revised to expand encouragement of removal of piped watercourses for any type of development review and highlights the purpose of removal.

³⁰ Working with regional partners will strengthen this policy and lead to better long term collaboration and results.

³¹ Supporting restoration opportunities that reconnect floodplain wetlands and restore natural processes will improve water quality, fish and wildlife habitat, and mitigate impacts of flooding and erosion.

potential geologic instability, wetlands, ~~watercourses~~floodplains, fish and wildlife habitat areas and their associated buffers.³²

Policy 6.4.6.2 Ensure mitigation sequencing is applied to avoid or minimize impacts to environmentally critical~~sensitive~~ areas, consistent with federal and State guidelines.³³

Policy 6.4.6.3 Require and enforce mitigation in order to ensure no net loss of environmentally critical~~sensitive~~ area functions, as well as mitigation designed to replace environmentally critical~~sensitive~~ area acreage lost due to development.³⁴

Policy 6.4.6.4 Ensure the effectiveness of environmentally critical~~sensitive~~ area mitigation by ~~requiring adequate environmentally critical sensitive area studies and mitigation plans, the application of mitigation sequencing, financial assurances from project proponents to ensure mitigation success, and by~~ improving City oversight, tracking, ~~of maintenance~~ and monitoring of mitigation sites.³⁵

Policy 6.4.6.5 Allow off-site wetland mitigation only when a site-specific study, prepared by a qualified professional, documents that there are no feasible opportunities for on-site mitigation, is greater functional benefit, no significant adverse impact to the drainage sub-basin, and no significant adverse impact to existing wetlands or riparian management zones~~watercourses~~.³⁶

Policy 6.4.6.6 Consider creating a City in-lieu fee program 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, when a site specific study, prepared by a qualified professional, documents that there are no feasible opportunities for on-site mitigation.³⁷

Policy 6.4.6.7 In collaboration with other agencies, develop a program to provide guidance to property owners interested in restoring or enhancing~~using their property for~~

³² Wildlife and plant species and habitats already strained by urban fragmentation will be further stressed by climate change. Consideration of habitat corridors and open spaces will aid in the protection of the function and values of environmentally critical areas.

³³ This policy should be revised to update the reference to environmentally critical areas.

³⁴ This policy should be revised to update the reference to environmentally critical areas.

³⁵ Portions of the existing policy are requirements in the CAO. It is recommended to revise the goal to focus on areas of improvement of implementation outside of the existing code requirements.

³⁶ The policy should be reinforced to document that there are no opportunities for on-site mitigation in compliance with mitigation sequencing.

³⁷ The policy should note the importance of landscape-scale, watershed-based restoration and mitigation projects and allow the City to consider off-site compensatory mitigation for projects in areas where compensatory mitigation can be difficult or impractical to achieve.

~~sensitive environmentally critical areas, mitigation or shorelines mitigation or associated buffers on their private property that public or private sector projects can utilize to compensate for impacts on project sites that lack opportunities for on-site mitigation.~~³⁸

~~In collaboration with other agencies, develop a program to provide guidance to property owners interested in using their property for environmentally critical sensitive area mitigation or shoreline mitigation.~~

Water Quality and Quantity

GOAL 4.7 Protect, enhance and plan for changing conditions of Tukwila's water resources for the benefits of recreation, fish and wildlife resources and habitat, flood protection, and open space to create a more climate resilient city for current and future generations.³⁹ ~~The water quality in Tukwila's wetlands, watercourses, fish and wildlife habitat areas and the Green/Duwamish River is improved over time.~~

POLICIES

Policy 7.1 Retrofit existing City surface water systems and improve surface water management through use of low-impact development (LID) techniques for all new development and redevelopment to improve the water quality of discharges.⁴⁰ ~~Improve surface water management and ensure provision of water quality treatment where required.~~

Policy 7.2 Prevent and reduce pollution streambank and channel erosion and sedimentation of water resources through implementation of surface water, stormwater, and land clearing regulations and inspections.^{41 42}

³⁸ This policy should provide additional specificity on the intent of the program to provide off-site mitigation opportunities where private property owners are willing to allow project proponents to conduct restoration or enhancement activities to compensate for impacts that have occurred on another site.

³⁹ Changing this language aligns this goal with sustainable practices that prioritize economic, environmental, and social benefits as well as adding a climate element.

⁴⁰ This language is in line with the Surface Water Management section of the Comprehensive Plan and is encouraged by the WA Dept. of Ecology. This will also allow for the elimination of policy 4.7.6 as it was incorporated into this policy.

⁴¹ While sediment is a type of water pollutant this policy should address all pollutants. Additionally, this policy should be expanded to include all erosion, not just erosion associated with streambanks and channels, this includes nearby hillsides and upland areas under development.

⁴² Similar to K-EN-24.

Policy 7.3 Adopt policies, regulations, and processes, related to new or existing fossil fuel facilities, which are designed to protect and preserve natural ecosystems from the construction and operational impacts of fossil fuel facilities, and prepare for and mitigate any impacts of fossil fuel disasters the community.⁴³

Policy 7.4 Prohibit the application of pesticides (insecticides, herbicides, fungicides, algaecides, rodenticides, etc.) to surface water systems or their buffers, unless warranted to protect ecological functions of the system, and inform applicators about State pesticide licensing regulations.⁴⁴

Policy 7.35 ~~Initiate educational~~ Develop public outreach materials and implement management programs to reduce the use of chemicals including fertilizers and pesticides, having negative impacts on the environment or human health ~~surface water systems or their buffers, unless warranted to protect ecological values and functions.~~⁴⁵

Policy 7.6 Prevent, mitigate, and remediate harmful environmental pollutants and hazards, including light, air, noise, soil, and structural hazards, where they have contributed to racialized health or environmental disparities, and increase environmental resiliency in frontline communities.⁴⁶

~~4.7.4 To protect water quality, promote natural yard care, alternatives to grass lawns, and proper waste management through educational programs and publicity.~~⁴⁷

~~4.7.5 Continue City monitoring for illicit surface water discharges, and ensure that action is taken to eliminate any such discharges.~~⁴⁸

~~4.7.6 Retrofit existing City surface water systems, including ditches conveying stormwater, to improve the water quality of discharges where there are significant water quality or fish and wildlife benefits.~~⁴⁹

⁴³ EN-26, c & b

⁴⁴ Was part of 4.7.3, but made a separated policy because of focus, application vs. education- see 4.7.4

⁴⁵ Pesticides is an all-encompassing term and examples of pesticides do not need to be included. Nutrient loading, partially caused by lawn and garden fertilizers, are a common cause of diminished water quality and should be included in this language. Human health should not be included under this policy as this policy is applicable to water quality and as such having good water quality will support human health. Applicators should already be aware of State pesticide licensing regulations and if not, then this could be considered one of the public outreach materials that are discussed within this policy (put into new policy 4.7.4)..

⁴⁶ EN-25

⁴⁷ Eliminate this policy and combine it with Policy 4.7.3 as discussed above.

⁴⁸ Eliminate this policy and combine it with Policy 4.7.2 as illicit surface water discharges would include pollutants from stormwater and land clearing.

⁴⁹ Eliminate this policy and incorporate it into policy 4.7.1.

GOAL 8 Surface water generated by urban development does not exceed pre-development discharge rates.

POLICIES

~~**Policy 8.1** Demonstrate implementation of low impact development techniques through grant-funded public projects. Where feasible, incorporate such techniques into City capital facilities projects. Provide technical assistance to developers, and encourage the use of such techniques for stormwater management.⁵⁰~~

Policy 8.21 Require that all proposed development applications identify hydrologic features, both on- and off-site, that could be impacted by the project. Evaluate and prevent project impacts on on-site and off-site ~~watercourses~~ floodplains, wetlands, drainage features and springs to avoid adverse impacts to existing ~~environmentally critical~~ sensitive area hydrology. to meet today's climate needs and prepare for future climate needs.⁵¹

Flood Control

GOAL 9 ~~Protect and enhance t~~The natural flood attenuation functions of wetlands, floodplains and floodways and plan for increased seasonal flooding associated with climate change to be protected or restored and severe flooding potential is reduced to help and prevent damage to life, property, and public safety.⁵²

POLICIES

Policy 9.1 Restrict or prohibit development that could create a danger to health, safety, and property due to potential flood hazards, ~~by complying with federal regulations.~~⁵³

Policy 9.2 Coordinate and fund holistic flood hazard management efforts through the King County Flood Control District.⁵⁴

⁵⁰ Absorbed into Policy 2.2

⁵¹ This policy could either be removed, as it should be a requirement of the development code however adding language specific to climate change allows for it to be retained as a policy.

⁵² This changed language is in line with Climate Change projections for Washington State and will help utilize the natural floodplain to protect the city of Tukwila.

⁵³ Complying with federal regulations is not optional. Eliminate this language as it is a requirement and should already be occurring with development permits.

⁵⁴ EN-12

- Policy 9.3** Work cooperatively to meet regulatory standards for floodplain development as these standards are updated for consistency with relevant federal requirements including those related to the Endangered Species Act.⁵⁵
- Policy 9.34** Wetlands provide services that have the potential to reduce impacts of climate change. As such the City of Tukwila will promote wetland restoration and enhancement throughout the city and ensure that development avoids and minimizes impacts to wetlands and their buffers and provides compensatory mitigation to retain equal or greater wetland functions and values within the same drainage basin or watershed, and results in no net loss of wetland area except in limited circumstances. Minimize the alteration of natural surface water features that retain or carry floodwaters (such as wetlands, natural flood plains and streams), and prevent land alterations that would increase potential flooding.⁵⁶
- Policy 9.45** Plan for changes in seasonal flood events associated with climate change and ~~R~~Reduce flooding that adversely affects public health, safety, and general welfare, and protect against flood damage through surface water and flood management projects.⁵⁷
- Policy 9.56** Minimize adverse impacts to water resources by conserving native shoreline vegetation or requiring the use of bioengineering and natural solutions to enhance stream for banks and shoreline stability and reduce hazards associated with slope failures and erosion. Invasive plant removal and replacement of native trees and shrubs should be prioritized over retention of low functioning vegetation for bank stabilization or flood control projects, where technically possible and not cost-prohibitive.⁵⁸
- Policy 9.57** Require mitigation to achieve the goal of no net loss of ecological functions and maintenance of good water quality by requiring setbacks, buffers, and stormwater treatment and detention facilities to adhere to BAS recommendations and guidelines. ~~reduce adverse environmental impacts from engineered flood control measures on a case-by-case basis.~~⁵⁹

⁵⁵ EN-13

⁵⁶ This revised policy is better in line with BAS and incorporates the climate element.

⁵⁷ Climate change models predict an increase in winter rainfall events which has the potential to lead to increased seasonal flooding. By planning for these events the city will be able to prevent or reduce the adverse impacts associated with flood events.

⁵⁸ This revision will allow for the abatement of noxious weeds and low functioning vegetation while encouraging the retention of native plant species.

⁵⁹ This policy revision will help demonstrate compliance with the GMA requirement of BAS.

GOAL 10 (Levees) - MOVED TO CAPITAL FACILITIES

~~GOAL 4.10~~

~~The levee system south of I-405 is constructed, maintained and certified to meet the accreditation standards of the Federal Emergency Management Administration and the City's Shoreline Master Program.~~

~~POLICIES~~

~~4.10.1 Coordinate with King County Flood Control District and the U.S. Army Corps of Engineers to inspect and maintain the City's levee system.~~

~~4.10.2 Restrict levee encroachments by adjacent property owners.~~

~~4.10.3 Continue to work with the U.S. Army Corps of Engineers to develop levee vegetation policies, consistent with Pacific Northwest conditions, that enhance habitat while at the same time protecting public safety.~~

~~4.10.4 Coordinate with the City of Kent on flood control projects that affect both jurisdictions, while complying with Tukwila's Shoreline Master Program.~~

~~Implementation Strategies – Flood Control~~

- ~~• Regulate uses, development and redevelopment – including essential facilities – in flood plains, consistent with federal regulations.~~
- ~~• Prevent cumulative effects of obstructions in a flood zone by restricting development and other actions to zero increase in flood elevation.~~
- ~~• Require flood-proofing or elevation of structures above the base flood elevation when built in a flood zone.~~
- ~~• Encourage the use of LID for surface water management for new development or redevelopment, where appropriate.~~
- ~~• Prohibit placement of structures or fill in the floodplain that would cause an increase in the elevation of the “zero rise” floodway.~~
- ~~• Increase City staff expertise in bioengineering techniques for bank stabilization.~~
- ~~• Participate in County-wide flood control meetings sponsored by King County Flood Control District, the U.S. Army Corps of Engineers, and other applicable organizations.~~

Earth Resources

~~GOAL 4.11 _____~~

~~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.~~Protect the ecological integrity of the natural environment, including functions and services, while allowing for compatible growth and development by minimizing development in geologically hazardous areas and protecting surface water features.⁶⁰

POLICIES

Policy 11.1 In geologically hazardous areas, require areas where vegetation must remain undisturbed, land disturbance minimized and cut-and-fill construction limited, to protect slope stability on sites cleared for development. Require significant replanting and maintenance upon completion of development.

Policy 11.2 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.

Policy 11.3 Require the use of erosion control measures 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.

Policy ~~4~~11.4 Utilize geotechnical reports and other existing resources to update the City's GIS data to incorporate and maintain a geologically hazardous areas layer.~~Incorporate information from geotechnical reports and documented landslide and erosion-prone areas into the City's GIS data.~~⁶¹

Policy 11.5 Ensure that proposed development projects in mapped coal mine hazard areas adequately consider and mitigate for possible risks.

Policy 11.6 Actively manage protective forest canopies on geologically hazardous slopes, both public and private, through regulatory requirements, incentives, investment, and partnerships.

⁶⁰ By protecting the functions and services of the natural environment and reducing development in geologically hazardous areas the city can help reduce costs associated with flooding, erosion, and other natural disasters.

⁶¹ There are many resources currently available that contain geologically hazardous areas information. The WA Department of Natural Resources has a Geologic Information Portal available to the public at <https://www.dnr.wa.gov/geologyportal>.

Urban Forestry

GOAL 4.12 _____

Trees are recognized by Tukwila citizens, businesses, City staff and decision-makers for their benefits to the environment, **climate adaptation**, urban infrastructure, and their aesthetic value.⁶² ~~benefits to the environment, ability to sequester carbon, capacity to lower urban heat, the role they play in urban~~ improving urban infrastructure and their aesthetic value.

POLICIES

Policy 12.1 Develop a formal urban forest management plan to promote and guide preservation, restoration and maintenance of a sustainable urban forest that is consistent with tree canopy goals and ecosystem management priorities, using the goals and policies of this chapter as a basis for guidance.⁶³

Policy 12.2 Ensure that the benefits of trees are factored into site design, zoning and permit decisions, including resistance to drought, retention of large or significant trees, tree canopy considerations, and the preservation of open space, tree, and green space.⁶⁴

~~**4.12.3** Ensure that regulations recognize that larger trees provide more benefits than small trees, and that canopy over impervious surfaces is crucial to mitigating urban heating and surface water interception.~~⁶⁵

Policy 12.3 ~~Continue Seek to create and~~ fund an urban forester/municipal arborist position ~~Continue to expand the Urban Environmentalist's role position,~~ within the City, ~~or contract for such services,~~ to provide expertise for urban forest management planning, incorporate climate resiliency strategies, provide oversight of tree planting and maintenance, and assistance to all City departments that have responsibilities for tree management.⁶⁶

⁶² Trees can aid in mitigating the impacts of climate change by providing shade, carbon storage and other related benefits.

⁶³ Urban heat island effect can be mitigated through establishment and retention of tree canopy. Open spaces and native landscaping should be managed to maintain ecosystem functions and contribute to habitat connectivity on a City-wide landscape-scale.

⁶⁴ Development actions, such as converting forests into impervious surfaces, can increase the urban heat island effect. Encouraging the preservation of open spaces and considering trees that are resistant to drought can help reduce the impacts of climate change.

⁶⁵ This policy should be eliminated and combined with Policy 4.12.2

⁶⁶ A licensed arborist or urban forester benefits the City by providing guidance on appropriate strategies that will improve the resiliency of planned or existing urban forests to the impacts associated with a changing climate.

- Policy 12.4** Educate the public, elected officials and City staff about the importance of urban forest planning and management and benefits provided by trees in Tukwila.⁶⁷
- Policy 12.5** Develop tree valuation methods to reflect the value trees provide, including considering the benefits that trees provide in a changing climate for use in assessing fines, determining damages, or estimating loss of tree benefits.⁶⁸
- Policy 12.6** Identify funding sources to support urban forestry planning and management, and establish an urban forestry budget and account to preserve and enhance the urban forest sites on publicly-owned property.⁶⁹
- Policy 12.7** Consider developing an “exceptional” or “heritage” tree program to foster tree appreciation in the community and encourage retention of open and green spaces.⁷⁰
- Policy 12.8** Enhance the urban tree canopy to provide wildlife habitat, support community resilience, mitigate urban heat, manage stormwater, conserve energy, protect and improve mental and physical health, and strengthen economic prosperity. Prioritize places where Black, Indigenous, and other People of Color communities; low-income populations; and other frontline community members live, work, and play.⁷¹
- Policy 12.979** Encourage public and partner organization involvement in urban forest stewardship, through ~~through~~ volunteer events, free training workshops, and other ~~means~~ related community events.⁷²
- GOAL 4.13_** Overall City-wide tree canopy increased in diversity and total cover, with an increase in the use of native species, to a total of 29% by 2034, and No Net Loss

⁶⁷ This policy should be expanded to include the importance of urban forest planning and management for clarity and continuity with the other policies in this section.

⁶⁸ The assessment of tree valuation should include the future benefits that trees provided in contributing to climate resiliency, particularly for shade and carbon storage.

⁶⁹ This policy should be expanded to define the purpose of the urban forestry planning and management fund to support City departments that have responsibilities for tree management and preservation.

⁷⁰ Open spaces contribute to habitat connectivity and ecosystem functions. Retention of tree canopy can help mitigate the urban heat island effect.

⁷¹ EN-11

⁷² This policy should be expanded to clarify “other means”. Promotion of community events could help encourage public participation and highlight the importance of urban forest stewardship.

of canopy cover in individual zoning categories, or environmentally critical areas and open spaces.⁷³

Canopy cover in individual zoning categories increased by 2034 as listed below:*

Light Industrial zones: 3% increase from 20%, to achieve 23% cover

Heavy Industrial zones: 1% increase from 9%, to achieve 10% cover

Tukwila Urban Center and Tukwila South: 5% increase from 13%, to achieve 18% cover

Office and Commercial: 3% increase from 29 %, to achieve 32% cover

Parks: 5% increase from 38%, to achieve 43% cover

Public Rights-of-Way: Increase canopy coverage through street tree planting.

Low-Density Residential: Maintain current City-wide canopy coverage of 47%

Medium- and High-Density Residential: Maintain current City-wide coverage of 40%

POLICIES

Policy

13.1 The City shall adopt and implement updated tree canopy goals and shall continue to amend policies to support stormwater management and water quality improvement in receiving waters. The City will provide mapping of City-owned or operated properties with tree canopy no later than December 31, 2028, as based on available existing data.⁷⁴

Policy 4.13.12 Promote and support a systematic approach to enhancing the city through carefully planned plantings and ongoing maintenance of street trees, public landscaping, and open spaces to support a sustainable and environmentally just future for residents of Tukwila.⁷⁵

Promote tree retention throughout the City by:

- ~~implementing educational programs for property owners and managers regarding tree selection and care, applicable regulations, selecting a qualified arborist, and other issues;~~
- ~~except for hazard trees or trees that interfere with underground or overhead utilities, prohibiting removal of any tree four inches or larger in diameter at breast height (dbh) on all undeveloped property without an approved development or~~

⁷³ This policy will be modified upon finalization of the 2023 tree inventory data; it has been broadened, while still retaining the intent of increased canopy and no net loss. By proposing to increase diversity of trees, as well as total canopy cover, the City will be more likely to resist the effects of a changing climate. Per the 2024-29 NPDES permit, by December 31, 2028, Permittees will need to adopt and implement the City's updated tree canopy goals and policies to support stormwater management and water quality improvement in receiving waters.

⁷⁴ Per 2024-29 NPDES permit

⁷⁵ Most of these policy points are implemented into other policies within this section. Proposed language encompasses these points in addition to addressing the urban heat island effect which can have detrimental effects on residents in underserved areas. By promoting and enhancing tree canopy cover and access to open space the public welfare and urban habitat areas can be greatly improved.

~~other land use permit, to provide the opportunity to preserve healthy trees during development;~~

- ~~• promoting the mutual goals of tree protection and urban development through the implementation of incentive programs and flexible site development regulations, especially to retain tree groves; and~~
- ~~— requiring financial assurances for required tree replanting and maintenance.~~
- ~~• acquire or support the protection of forested lands as possible to support tree canopy goals.~~

Policy 4.13.23 ~~Improve retention of trees on steep slopes~~ Promote soil stability using natural drainage systems and retention of existing native vegetation when determined feasible and practical by a qualified geotechnical engineer in a site -specific assessment.⁷⁶

Policy 4.13.34 ~~Conduct forest practices within~~ Continue to protect trees in environmentally critical sensitive areas and the shoreline areas in a manner that ensures water quality, maintains, or increases tree canopy cover, and maintains native vegetation buffer strips sufficient to protect fish populations and to avoid erosion of stream banks ~~through relevant regulations.~~⁷⁷

Policy 4.13.45 Ensure that required replacement trees at maturity will ~~have~~ provide an equivalent or greater shade cover larger canopies than the removed tree(s), and replacement trees are suitable species fit for future conditions based on climate change models. This may result in the need to have multiple trees replace a single tree and will allow for the flexibility of avoiding conflict with ~~except where~~ existing or future infrastructure and/or public or private utilities ~~impede the planting of large trees.~~⁷⁸

~~**4.13.5** Develop mechanisms for protecting tree roots for public and private surface and~~⁷⁹ ~~underground infrastructure installation, including — in some cases — requiring the presence of a certified arborist when working in the critical root zone; replacement of trees where damage is unavoidable; and either requiring replanting or payment into a tree replacement fund as compensation, if planting on-site is not feasible. Establish reasonable procedures to ensure consideration of tree root protection during routine or~~

⁷⁶ It is important to promote the use of native vegetation to stabilize slopes when site conditions allow, however certain circumstances may require other methods of soil stabilization.

⁷⁷ This language will add clarity to the importance of the urban canopy in environmentally critical areas and the role they play in maintaining ecological integrity of these areas.

⁷⁸ It is not always appropriate or desirable to have a species with a larger tree canopy. Preferred language would result in greater shade cover without necessarily required a larger canopy from a single tree.

⁷⁹ NG: We have this now.

~~emergency maintenance of existing utilities, and provide training to City and other public utility maintenance staff on root protection techniques.⁸⁰~~

~~4.13.6 Establish criteria for requiring professional assessment and corrective actions by property owners who damage code required landscaping, street trees, or other required trees by topping, poor pruning practices or root disturbance.⁸¹~~

~~4.13.7 Where trees are regulated and required replacement trees cannot be accommodated on a site, establish procedures for off-site planting of replacement trees or payment into a dedicated tree replacement fund.⁸²~~

Policy 4.13.86 Promote the utilization of grants and other funding opportunities to ~~D~~develop tree planting and urban forest rehabilitation programs for City parks, open spaces, wildlife habitats and corridors, and other publicly owned lands. Collaborate with other agencies, such as Washington’s Department of Transportation, to promote planting in highway interchanges and other locations that are underserved or at higher risk to being vulnerable to the effects of climate change.⁸³

Policy 4.13.97 Collaborate with other government, non-profit organization, school, and private sector entities, to promote urban forest management and restoration, the use of native plants in the urban landscape, and removal of impervious surfaces to support the City’s tree canopy cover goals and mitigate the urban heat island effect.⁸⁴

~~4.13.10 Provide flexibility in the landscape code to promote increased tree planting and/or planting of large canopy trees, and reward the preservation of existing healthy trees to assist in meeting the City’s canopy goals.⁸⁵~~

Policy 4.13.118 Evaluate current ~~parking lot landscape development~~ requirements to identify opportunities to increase tree canopy, and ~~Also identify opportunities to remove de-pavement and install appropriate plantings. and re-plant.~~ Priority

⁸⁰ Added this last statement to 14-3.

⁸¹ Eliminate this policy. It is repetitive of Policy 4.13.5, which we largely already have.

⁸² Eliminate this policy. It is repetitive of Policy 4.13.5

⁸³ There are many opportunities for grants and other funding sources that should be utilized whenever possible. The proposed language will help promote these funding sources while expanding the areas that can benefit from these programs while preparing for a changing climate and making Tukwila a more equitable place for its residents.

⁸⁴ Broadening the language of this policy will help address not just the tree canopy but other factors that play a role in mitigating the effects of a changing climate.

⁸⁵ This policy should be eliminated as the code likely does not restrict increased plantings so long as they do not interfere with utilities or other infrastructure, and it is already a policy to preserve existing trees or replace them per Policy 4.13.5.

should be given to areas or zoning designations that are currently underserved or lack proximity to public open spaces and recreational areas.⁸⁶

GOAL 4.14 Tukwila’s streetscapes and landscaped areas are sustainable and attractive, and its urban forest is healthy, diverse, and safe.

POLICIES

Policy 4.14.1 ~~Conduct periodic~~Develop tree/urban forest inventories ~~if indicated by an urban forestry management plan,~~ and assess the health of trees and forests in Tukwila’s public spaces to determine maintenance needs and restoration opportunities. Any restoration should be done in coordination with Policy 4.13.8.⁸⁷

Policy 4.14.2 Develop maintenance plans and programs for trees on City property or rights-of-way to ensure that maintenance pruning is properly carried out, that diseases and pest infestations are managed, that hazardous trees are identified and managed in a timely manner to reduce risks, ~~and that~~ invasive vegetation is properly managed, and any replacement trees are sustainably located following the concept of “right tree, right place.”⁸⁸

Policy 4.14.3 ~~Modify~~Consistent with ~~Maintain effective~~ landscape code requirements, and educate property owners, property managers, City and public and private utility maintenance staff, and landscape ~~maintenance companies~~contractors and tree companies to promote best practices for soil preparation, planting techniques, pruning (including near utility lines), trenching, root protection, and general tree care.⁸⁹

4. Policy 14.4 Enforce landscape regulations including financial guarantees, monitoring, and maintenance to ensure successful plant establishment. Landscape code should state qualified professional requirements for landscape design, installation and maintenance~~Ensure that landscaping and replacement trees in new development or re-development are properly cared for and thrive in perpetuity,~~

⁸⁶ This policy could be broadened to include all development standards, not just parking lot landscaping standards, within each zoning designation while also promoting equity.

⁸⁷ Periodic maintenance and coordination with restoration efforts supports the sustainability goal. 14.13.8 = “Develop tree planting and urban forest rehabilitation programs for City parks and other publicly-owned lands. Collaborate with other...”

⁸⁸ Streetscapes and utility corridors must be managed for public safety and long-term sustainability. Ensuring that tree management is based on expert advice that considers surrounding land use is important to reduce maintenance needs and increase sustainability. This may involve a plan that provides approved lists of tree species for specific land uses (e.g., city street, utility corridor).

⁸⁹ Simplified policy language. The focus here is on education.

~~through such means as maintenance agreements, monitoring and enforcement.~~⁹⁰

~~⁹¹~~

~~**Policy 4.14.65** Ensure ~~Modify~~ landscape code considers wildlife habitat corridors and urban heat island effect in landscape development standards. This includes ~~to~~ requiring a diversity of tree species native to the ecoregion in landscape planting plans as site conditions allow, and consideration of species already present in the vicinity.~~⁹²

~~**4.14.7** Establish minimum standards and landscape specifications to ensure long-term tree health for street trees, required landscape trees and required replacement trees, including minimum soil volume, soil quality, plant quality, planting techniques, irrigation, mulching, tree pruning, and prohibition of topping.~~⁹³

~~**4.14.8** Develop an approved/recommended tree list for street trees, landscape perimeter plant ing and parking lots that recognizes the importance of the concept of “right tree, right place”, taking into account available planting space and infrastructure/utility conflicts, and that considers the importance of species diversity, climate conditions, canopy coverage goals, allergy issues, urban wildlife benefits, and tolerance of urban conditions.~~⁹⁴

~~**4.14.89** Work with electric utility providers to limit trimming of trees and other vegetation to that which is necessary for the safety and maintenance of transmission lines, where feasible and according to American National Standards Institute (ANSI) professional arboricultural specifications and standards. Explore options to increase resources for directional pruning to maintain large trees near overhead utilities.~~⁹⁵

⁹⁰ Simplified policy to apply more broadly. This revision is consistent with current regulations under TMC 18.52–Landscape Requirements. Qualified professional standards are listed under Landscape Plan Requirements TMC 18.52.110. Current code requires professional certifications for design; BMPs are noted for installation and maintenance.

⁹¹ This policy was eliminated and combined with Policy 4.14.4 above.

⁹² Cleaned up policy language and included references to climate change stressors and resiliency strategies.

⁹³ This policy should be eliminated. It is already covered by Policies 4.14.2 and 4.14.4 above. If a qualified professional prepares the design and installs the trees (consistent with CMC 18.40.130), then the additional policy language is unnecessary.

⁹⁴ This policy should be eliminated; the city adopted a list of approved trees in 2017, plus it is redundant with Policy 4.14.2. Appropriate street tree species should be covered in the “maintenance plans and programs for trees on City property or rights-of-way” under Policy 4.14.2

⁹⁵ This policy should be eliminated; it is generally covered under Policy 4.14.3 above. Specific requirements for utilities may be incorporated into landscape regulations, but all projects should be held to professional standards. A specific policy for transmission lines appears to be unnecessary.

~~4.14.910 Perform vegetation management that is needed in utility rights-of-way that are located in environmentally critical sensitive areas or shoreline areas, in a manner that will maintain, restore or improve the shoreline or environmentally critical sensitive area ecological function.⁹⁶~~

CLIMATE CHANGE

~~Goal 4.15: Tukwila’s residents are empowered by Tukwila City infrastructure and investments enable Tukwila residents to make choices that emit lower greenhouse gas emissions.~~

~~Policy 15.1 Adopt and implement policies and programs that support King County’s target of reducing greenhouse gas emissions by 75% by 2040 (compared to a 2007 baseline), including net-zero emissions through carbon sequestration and other strategies, by 2050. Evaluate and update these targets over time to incorporate the latest climate science and statewide targets aimed at limiting the most severe impacts of climate change and keep global warming growth under 1.5 degrees Celsius (2.7 degrees Fahrenheit).⁹⁷~~

~~Policy 15.2 Plan for development patterns that minimize air pollution and greenhouse gas emissions, through the following actions:~~

- ~~a. Direct growth to Urban Centers and other mixed-use or high-density locations that support mass transit, encourage non-motorized modes of travel, and reduce trip lengths.⁹⁸~~
- ~~b. Through interjurisdictional and local efforts, facilitate modes of travel other than single-occupancy vehicles including transit, walking, bicycling, and carpooling;⁹⁹~~
- ~~c. Encourage the transition to a sustainable energy future by reducing demand through efficiency and conservation, supporting the development of energy management technology, and meeting reduced needs from sustainable sources.¹⁰⁰~~
- ~~d. Support and provide incentives to increase the percentage of new development and redevelopment– both public and private–to be built at higher-performing energy and environmental standards.~~

⁹⁶ This policy could be deleted. Environmentally critical area regulations require no net loss of stream/wetland/buffer functions. The way this policy is phrased, it implies Net Ecological Gain is the goal, which is more than required under No-Net-Loss. Recommend the City review the intent and consider deleting this policy if No-Net-Loss standards are deemed sufficient. No-Net-Loss is what’s required under the WAC 365-196-830(4).

⁹⁷ EN-27

⁹⁸ K EN-28a.

⁹⁹ K EN-28b and d

¹⁰⁰ K EN-4

e. Implement infrastructure design manuals that incorporate energy saving strategies and develop regulations that provide extra flexibility or density bonuses to proposals that implement green building standards, such as the Living Building Challenge or LEED certification.¹⁰¹

Policy 4.15.13 Reallocate public space dedicated to carbon intensive uses, such as single occupant vehicle lanes and parking, toward transit, pedestrian, and bike facilities.¹⁰²

~~403~~

Policy 4.15.24 Develop minimum standards for rights-of-way and new private streets that require facilities for safe protected bicycle and pedestrian routes to all destinations.¹⁰⁴

Policy 15.5 Ensure all federal and state air quality standards are met and reduce emissions of air toxics and greenhouse gases.¹⁰⁵

Policy 4.15.56 Recognize that dense development utilizes less resources per person, and promote greater densities and mixed uses near Tukwila's urban centers and high-capacity transit. Work with local transit and transportation agencies to provide additional multi-modal access and transit frequency to underserved areas.¹⁰⁶

Policy 4.15.67 Recognize, protect, restore, and enhance Tukwila's natural resources, by expanding or improving existing parks, wetlands, estuaries, and the urban tree canopy, and enhancing access to passive and active recreation areas, improving air and water quality, and improving growing the urban tree canopy opportunities for carbon sequestration in Tukwila.¹⁰⁷

Policy 4.15.78: Prioritize investments in areas that in proximity to ~~contain~~ underserved and historically marginalized populations in order to ensure that all Tukwila residents have equal access to public spaces, natural areas, the urban tree

¹⁰¹ K_EN28C and E

¹⁰² K_EN-28 and EN-28b

~~⁴⁰³ K_EN-28B~~

¹⁰⁴ K_EN-28 and EN-28b

¹⁰⁵ WAC 173-420-080, MPP-En-22

¹⁰⁶ K_EN-28a, and d

¹⁰⁷ K_EN-32

canopy, and the opportunity to make low-emission choices in a low-pollutant environment, regardless of their race, social, or economic status.¹⁰⁸

Policy 4.15.9 In order to minimize air pollution and greenhouse gas emissions, facilitate modes of travel other than single-occupancy vehicles including transit, walking, bicycling, and carpooling, plus, for trips that must be made via single-occupant vehicle, facilitate electric vehicle adoption by creating requirements for electric vehicle charging installations in residential and commercial developments.¹⁰⁹

RELATED INFORMATION

Natural Environment Background Report

Tukwila Sensitive Areas Map

Tukwila Shoreline Master Program

WRIA 9 Salmon Habitat Enhancement Plan

Abandoned Underground Coal Mine Hazards Assessment Report

Tukwila Urban Tree Canopy Assessment

Tukwila Municipal Code, Chapter 18.45
[Green Tukwila 20-year Stewardship Plan](#)

¹⁰⁸ [K_EN5 and EN-25](#)

¹⁰⁹ [EN-30](#)