

# CITY OF TUKWILA SHORELINE MASTER PROGRAM UPDATE

SEPA Environmental Checklist

Prepared for:

August 2008

City of Tukwila



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## ENVIRONMENTAL CHECKLIST

### A. BACKGROUND

**1. Name of the proposed project:**

City of Tukwila Shoreline Master Program Update  
(Proposed SMP amendment; Land Use File # L06-088)

**2. Name of Applicant:**

City of Tukwila

**3. Address and telephone number of applicant and contact person:**

Carol Lumb  
City of Tukwila, Department of Community Development  
6300 Southcenter Blvd., Suite 100, Tukwila, WA 98188  
Phone: 206-431-3661

**4. Date checklist prepared:**

August 11, 2008

**5. Agency requesting checklist:**

City of Tukwila

**6. Proposed timing or schedule (including phasing, if applicable):**

City Council Action expected February, 2009.

**7. Plans for future additions, expansion, or further activity related to or connected with this proposal:**

This update of the SMP is comprehensive. Shoreline master programs are required to be updated by amendment periodically by state law. The next comprehensive SMP update for Tukwila is scheduled for 2016 (RCW 90.58.080).

The City of Tukwila Comprehensive Plan and Municipal Code will be amended following adoption of the proposed SMP to ensure consistency and provide for implementation of the proposed SMP amendment.

**8. Environmental information that has been prepared, or will be prepared, directly related to this project:**

- City of Tukwila Draft Shoreline Master Program (July 2008);
- City of Tukwila Shoreline Inventory and Characterization Report (May 2007);
- City of Tukwila Shoreline Restoration Plan (May 2007); and

- City of Tukwila Cumulative Impacts Analysis Technical Memorandum (June 2008).

**9. Applications that are pending for governmental approvals or other proposals directly affecting the property covered by the proposal:**

No pending applications or approvals would be affected. Once adopted, the proposed SMP amendment would affect new development projects or activities located along SMP regulated shorelines (shoreline planning area) in Tukwila<sup>1</sup>. Permit applications for development in the shoreline planning area would be processed according to the SMP policies, regulations and procedures in effect at the time the application was determined to be complete.

**10. List of governmental approvals or permits that will be needed for the proposal:**

The proposed SMP amendment will need the following approvals:

- Review and threshold determination under the State Environmental Policy Act for Non-Project Actions;
- Adoption by the Tukwila City Council; and
- Approval by the Washington State Department of Ecology (RCW 90.58.090).

**11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:**

The proposal is to update the current City of Tukwila Shoreline Master Program (Ordinance No. 898, adopted June, 1974). The current SMP provides policies, regulations, and permitting procedures to govern development and other activities in the City's shorelines. Since that time, SMP goals and policies have been integrated as a chapter of the City's Comprehensive Plan. Development standards, use regulations, and permitting procedures have been codified in Chapter 18.44, Shoreline Overlay District, of the City's municipal zoning code. The City regulates portions of the City annexed since 1974 along the Green River by applying King County Shoreline Master Program provisions (K.C.C. Chapter 25.16). The proposed SMP amendment is comprehensive and has been prepared consistent with Department of Ecology guidelines (WAC 173-26-201).

The proposed SMP amendment is a citywide non-project action that affects activities and developments along the Green/Duwamish River within the City limits. The SMP addresses Green/Duwamish River shorelines within two Potential Annexation Areas (North PAA and South PAA). As properties within these areas are annexed, the City's updated SMP standards and regulations would apply without the need for amendments to the master program.

Under the Washington Shoreline Management Act (RCW 90.58), shorelines of the state are generally described as all marine shorelines and shorelines of

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<sup>1</sup> Tukwila's SMP regulated shorelines are located along the Green/Duwamish River; see Figure 2, Shoreline Jurisdiction.

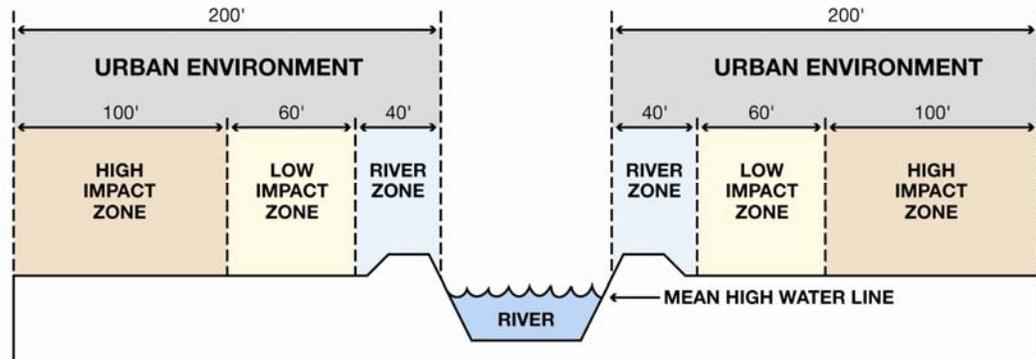
streams or rivers having a mean annual flow of 20 cfs or greater and lakes with a surface area 20 acres or greater. Shorelines of statewide significance include rivers west of the Cascade Range that have a mean annual flow of 1,000 cubic feet per second (cfs) or greater, large lakes and specific marine shorelines in Washington State. The shoreline area to be regulated under Tukwila's SMP must include all shorelines of statewide significance, shorelines of the state, and their adjacent shorelands, defined as the upland area within 200 feet of the ordinary high water mark (OHWM), as well as any associated wetlands. Associated wetlands are in proximity to and either influence or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act. These are typically identified as wetlands that physically extend into the shoreline jurisdiction, or wetlands that are functionally related to the shoreline jurisdiction through surface water connection and/or other factors. The shoreline planning area (within the city limits and in the PAAs) includes approximately 13.6 miles of the Green/Duwamish River, a shoreline of statewide significance, between approximately river mile (RM) 17.3 and RM 3.7 and the area 200 feet landward from the ordinary high water mark. The SMP is similar to the City's Comprehensive Plan (2005), in that it contains general goals and policies for several elements. The Comprehensive Plan elements are: Community Image, Economic Development; Housing, Natural Environment, Shoreline, Annexation, Residential Neighborhoods, Transportation Corridors, Tukwila South, Tukwila Urban Center, Manufacturing/Industrial Center, Utilities, Transportation, Capital Facilities, Roles and Responsibilities and Maintenance of the Plan. The City's Comprehensive Plan Shoreline element includes the current SMP goals and policies for shoreline environment designations; shoreline planning and management; land development use and economic vitality; private property rights; river design quality; access and recreational use; transportation; historical resource use; natural environment and habitat use; water quality, surface water and flood control use; and public health, safety and welfare. The proposed SMP amendment would update these goals and policies.

The City's long range objectives in the shoreline planning area are:

1. Preventing a net loss of ecological shoreline functions;
2. Providing for habitat protection, enhancement, and restoration to improve degraded shoreline ecological functions over time and protection of already restored areas;
3. Allowing continued and increased urban development in recognition of Tukwila's role as a regionally significant industrial and commercial center; and
4. Providing for improved flood control in coordination with King County and the Army Corps of Engineers.

The proposed SMP amendment contains three shoreline environment designations — Shoreline Residential Environment, Shoreline High Intensity Environment and Shoreline Urban Conservancy Environment. The shoreline designations are applied based on existing and planned land use (single family residential, multi-family residential, transportation, commercial and industrial uses), the navigability of the river and the presence of existing levees or revetments. These environment designations function as an overlay to provide additional policies and regulations in addition to the development standards and protections afforded in underlying zoning classifications in the shoreline planning

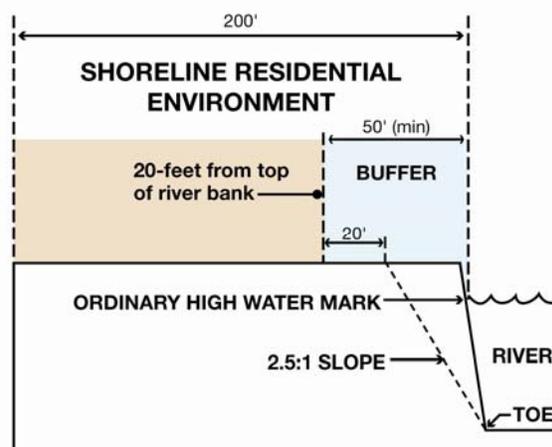
area. The existing SMP designates all shorelines in Tukwila as “Urban” and employs a tiered system of regulations based on the distance from the Green/Duwamish River mean high water mark, as illustrated by the three management zones in Figure 1.



**Figure 1. Existing SMP Shoreline Management Zones**

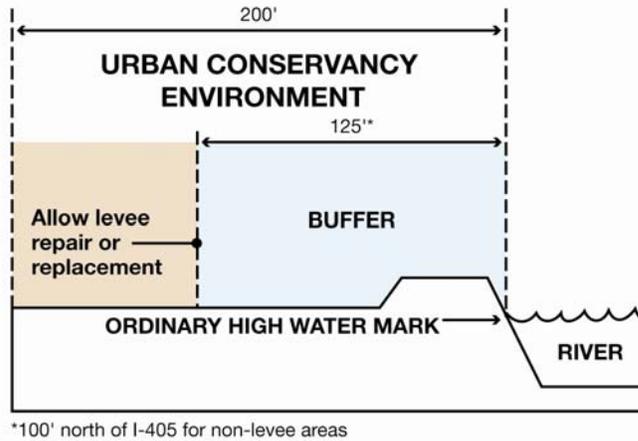
The proposed SMP environment designations divide the 200-foot area landward of the ordinary high water mark into two management areas – a buffer and an upland area between the buffer and the end of the 200 ft Shoreline Jurisdiction. Different buffer widths are proposed for each Shoreline Environment. The City’s current River Zone (protected buffer area) is 40 feet. King County’s existing buffer/setback is generally 20 feet for single family residential and 50 feet for commercial/industrial development.

The width of the proposed river buffer in the Shoreline Residential Environment would be determined by identifying the location where the river bank would achieve an angle of 2.5:1 and then setting back 20 feet from that location. However, in no case would the zone be less than 50 feet from the OHWM.



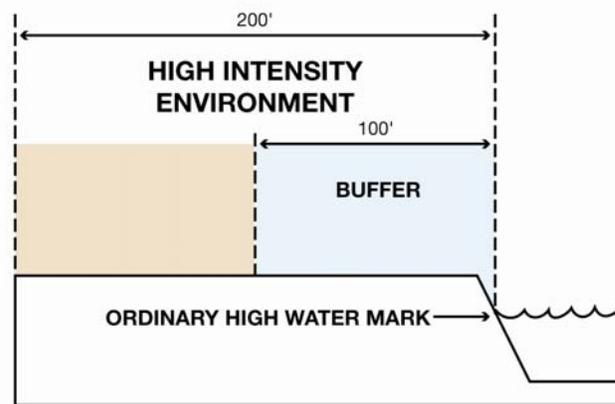
**Figure 2. Proposed Shoreline Residential Environment and Buffer**

In the Urban Conservancy Environment the proposed river buffer would be 125 feet for all areas south of I-405. For the areas north of I-405 in the Urban Conservancy Environment, a 100-foot buffer would be required (except for areas with levees, which would have a buffer width of 125 feet). This distance would be measured from the ordinary high water mark. Alternatively the buffer would be established as follows: the bank may be re-sloped to a 2.5:1 angle, planted with native vegetation and then an additional setback of 20 feet measured from the top of the new riverbank (also planted) is applied to provide the buffer.



**Figure 3. Proposed Urban Conservancy Environment and Buffer**

In the proposed High Intensity Environment, the river buffer would be 100 feet. This distance would be measured from the ordinary high water mark. Alternatively the buffer would be established as follows: the bank may be re-sloped to a 2.5:1 angle and planted with native vegetation; an additional setback of 20 feet (also planted) measured from the top of the new riverbank is applied to provide the full buffer width.



**Figure 4. Proposed High Intensity Environment and Buffer**

The proposed SMP amendment contains shoreline use regulations and shoreline development standards to be applied generally and in each shoreline environment. Shoreline use regulations define the general use restrictions, permitted uses, conditional uses, unclassified uses and prohibited uses within shoreline designations and associated management zones.

Shoreline development standards establish setbacks, design requirements (such as lighting, height restrictions and signage) and performance standards. Under the proposed SMP amendment, all shoreline development must also comply with standards and design guidance for surface water and water quality; flood hazard reduction; shoreline stabilization; archaeological, cultural and historic resources; impact mitigation; parking and loading; vegetation protection and landscaping; earth moving; and marinas, docks and piers.

In some cases, development standards and regulations that occur in other sections of the Tukwila Municipal Code (TMC) have been directly integrated into the SMP. The SMP amendment addresses protection of environmentally sensitive areas within the shoreline planning area and defines the relationship to the Growth Management Act.

The proposed SMP amendment contains sections that address administrative procedures, appeals, enforcement and penalties, the process for future SMP review and amendments, and liability.

Finally, the proposed SMP amendment contains a planning element addressing shoreline habitat restoration.

A separate technical memorandum, City of Tukwila Shoreline Master Program Update – Cumulative Impacts (June 2008), evaluates potential cumulative impacts associated with the proposed SMP amendment.

**12. Location of the proposal, including street address, if any, and section, township, and range; legal description; site plan; vicinity map; and topographical map, if reasonably available:**

The proposed SMP amendment is a city- and PAA-wide, non-project action that affects activities and developments in the City's planning area. The shoreline planning area in Tukwila includes approximately 13.6 miles of Green/Duwamish River between approximately river mile (RM) 17.3 and RM 3.7 and adjacent uplands within 200 feet of the ordinary high water mark (OHWM) (Figure 5).



## **B. ENVIRONMENTAL ELEMENTS**

### **1. Earth**

#### **a. General description of the site:**

Geology of the Green/Duwamish River watershed is the end product of mountain building, volcanic activity, glaciation, marine deposition, and post-glacial alluvial deposits. The region has been exposed to numerous geologic processes. See Sections 3.2.3 – 3.2.4, Shoreline Inventory and Characterization Report for further detail on geology, topography and soils and associated references.

#### **b. What is the steepest slope on the site (approximate percent slope)?**

Topography in the vicinity of Tukwila is characterized by upland plateaus and the broad floor of the Green / Duwamish River Valley. The surface of the upland plateaus rises as much as 400 feet above sea level. The upland areas exhibit low topographic relief with hills rising typically between 20 and 60 feet, poorly drained stream valleys, and local closed depressions. The floor of the Lower Green / Duwamish Valley is relatively flat with valley bottom gradients typically ranging from 10 to 20 feet per mile.

Within the shoreline jurisdiction, there are a few locations with slopes between 15 and 40 percent. However, the steepest topography is generally formed by over-steepened river banks, much of which is modified by levees and revetments. City maps indicate many locations where the river bank is greater than 40 percent slope. The existing levees typically form a 1.5H:1V slope (approximately 66% slope). Levee side slopes can reach or exceed 1H:1V slope in places.

#### **c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any prime farmland.**

In the vicinity of Tukwila, subsurface geology is a combination of bedrock, glacial, and interglacial sediments. Tertiary bedrock known as the Tukwila Formation is exposed along the valley walls as the Green / Duwamish Valley narrows north of the I-5 and I-405 intersection.

The Natural Resource Conservation Service (NRCS) has mapped soils in the King County area. The results of the surveys are documented in Soil Survey reports, and mapped as spatial data in SSURGO GIS databases.

Soils in and near the City of Tukwila and its PAA generally formed within: (1) alluvial materials in the valley bottoms, (2) recessional outwash materials on slopes and terraces, (3) glacial till materials on the nearby foothills, and (4) sedimentary bedrock.

Most of the City is mapped as Urban Land, indicating that it was covered with impervious surface or otherwise highly urbanized at the time of the

survey, except for south of South 180<sup>th</sup> Street. Soils within the Lower Green River Valley are typically mapped as silt loam as the dominant grain size. The most commonly mapped valley soils are Nooksack silt loam, Newberg silt loam, and Woodinville silt loam, reflecting the alluvial nature of the sediments being deposited and reworked as the stream channels meandered around the valley floor. Soils on top of the surrounding hills are typical of soils that have developed on till materials throughout the Puget Sound lowlands. Alderwood gravelly sandy loams (AmC, AgD and AgC) are broadly mapped.

See Map 3, Geology, and Map 5, Soils, Shoreline Inventory and Characterization.

**d. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.**

There are slopes with moderate to very high landslide potential within the shoreline planning area. See Map 7, Flood Hazard and Geologic Hazard Areas, in the Shoreline Inventory and Characterization.

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of the fill.**

No specific filling or grading is proposed.

Under the proposed SMP amendment, landfill in the shoreline planning area would be permitted only where it meets the following criteria:

- The amount of fill proposed is the minimum necessary to accomplish an allowed shoreline use.
- Impacts to the natural environment are minimized and mitigated.
- Water quality, river flows and/or fish habitat are not adversely affected.
- Public access and river navigation are not diminished.
- The project complies with all federal and state requirements.

The proposed SMP amendment includes new earth moving standards. Clearing, grading and landfill activities, where allowed, would include erosion control barriers, and any reasonable restriction on equipment, methods or timing necessary to minimize the introduction of suspended solids or leaching of contaminants into the river, or the disturbance of wildlife or fish habitats. Replanting in disturbed areas would be required. Landfill as part of an approved remediation plan for the purpose of capping contaminated sediments would be permitted.

**f. Could erosion occur as a result of clearing, construction, or use?**

Erosion control would be addressed on a project level basis through the City's grading requirements (TMC Chapter 16.54) and vegetation protection and environmentally sensitive areas standards contained in the SMP.

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?**

No new impervious area is specifically proposed.

The proposed river buffer development standards for setbacks in the proposed SMP Update and existing zoning regulations would control the amount of new impervious area allowed in the shoreline planning area. The proposed SMP amendment will rely on existing provisions for nonconforming uses and structures found in TMC 18.70 and developments consistent with state guidelines (WAC 173-27-080). TMC 18.70 allows existing nonconforming uses and developments to remain, but restricts expansion of those uses and developments within the river buffer. See Map 12, Impervious Surface, Shoreline Inventory and Characterization.

**h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.**

The proposed SMP amendment includes new earth moving policies and standards. New policies and regulations related to shoreline stabilization, vegetation protection and landscaping would also benefit habitat and slope stability in erosion prone areas.

Expanding the protected river buffer along the Green/Duwamish River shoreline under the proposed SMP amendment would reduce potential clearing and grading impacts on shorelines of the state.

Under the proposed SMP amendment, maintenance dredging of established navigation channels and basins would be restricted to maintaining previously dredged and/or existing authorized location, depth, and width. This restricts dredging beyond current TMC Chapter 18.44.110 requirements. Dredging activities must also comply with all federal and state regulations.

In addition to current grading requirements (TMC Chapter 16.54) and proposed vegetation protection regulations, clearing and grading activities in the shoreline planning area would be reviewed in association with all allowed shoreline development.

Where any portion of an area of potential geologic instability is cleared for development in the shoreline planning area, a landscaping plan for the site would have to be prepared. Vegetation would have to be sufficient to provide erosion and stabilization protection. The City could also impose conditions that address site-work problems such as installing erosion control and drainage systems well in advance of construction. A permit would be conditioned or denied if it is determined that a development would increase the potential of soil movement. Sensitive areas mitigation plans would also require that erosion control be addressed.

The City would be able to impose additional conditions to reduce or control erosion when reviewing shoreline substantial development permits or tree removal permits.

**2. Air**

- a. What types of emissions to the air would result from the proposal (e.g. dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.**

None.

- b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

No.

- c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.**

None.

**3. Water**

- a. Surface:**

- 1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, and wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Yes. The proposed SMP amendment applies to the Green/Duwamish River and associated wetlands. Approximately 12.3 river miles of the Green/Duwamish River are included within the City of Tukwila, from about RM 16 to RM 3.7. See Figure 3, Shoreline Planning Area. The Black River and the Green River converge to form the Duwamish River at approximately USGS River Mile (RM) 11 just north of Fort Dent Park at the eastern limit of the City of Tukwila. The Green/Duwamish River channel has been highly modified during the last 150 years. Modifications range from the installation of levees and revetments to straightening and dredging the Duwamish River for navigation purposes.

Map 5, Sensitive Areas in the Shoreline in the Draft SMP, shows mapped wetlands and other watercourses within the City's Shoreline Jurisdiction. The City's inventory identifies one wetland within or adjacent to the Green/Duwamish River's shoreline planning area, but the Fish and Wildlife Habitat areas (shown on the same map) include riverine wetlands within them. There may be other riverine wetlands along the river's edge that have not yet been mapped.

**2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

No. However, new development in the shoreline planning area (which includes work in or over the Green/Duwamish River and within 200 feet of the OHWM) would be subject to the provisions of the proposed SMP amendment.

The draft SMP contains policies for overwater structures and requires the submittal of federal and state permits before the City's permits are issued.

**3. Estimate the amount of fill and dredge material that could be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill materials.**

No filling or dredging is proposed.

See discussion of general limitations on fill within the shoreline planning area in B.1.e.

In the High Intensity Environment, dredging for the purposes of navigation and the remediation of contaminated sediments would be subject to a shoreline conditional use permit. In general, mitigation would be required for any proposals for dredging, filling, piping, diverting, relocation or other alterations of wetlands or watercourses.

**4. Will the proposal require surface water withdrawals or diversion? Give general description, purpose, and approximate quantities, if known.**

No.

**5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.**

Yes. The 100-year floodplain of the Green/Duwamish River is shown on Map 7, Flood Hazard and Geologic Hazard Areas, Shoreline Inventory and Characterization.

**6. Does the proposal involve discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No.

**b. Ground**

- 1. Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

No.

The glacial and alluvial materials that underlie much of the Green/Duwamish valley create a complex hydrogeologic system that includes recharge areas in the upland plain, and discharge areas in the valley. Past investigations have identified three significant aquifers in this region. See Section 3.3, Shoreline Inventory and Characterization. Groundwater will not be affected by the proposed SMP amendment.

- 2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.**

Not applicable.

Existing and proposed developments in the shoreline are required to be connected to the sanitary sewer system per TMC Title 14.

**c. Water Runoff (including storm water)**

- 1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Not applicable.

The proposed SMP amendment includes new policies and standards addressing surface water and water quality. New development in the shoreline planning area would have to comply with SMP standards. New developments would connect to the Tukwila Storm and Surface Water Utility system and discharge to the Green/Duwamish River. Any direct discharges to the River would have to meet SMP water quality policies and standards, State water quality standards, and existing stormwater management standards in TMC Chapter 14.30.

- 2. Could waste materials enter ground or surface waters? If so, generally describe.**

Not applicable.

**d. Describe proposed measures to reduce or control surface, ground, and runoff water impacts, if any.**

The proposed SMP amendment is a citywide non-project action. The proposed SMP amendment generally strengthens goals and policies related to the conservation and restoration of water quality.

Policies address pretreatment of surface water prior to discharge, prohibition of development that would cause an increase in surface runoff, stormwater detention/infiltration, and design of stormwater outfalls such that there is no net loss of shoreline ecological functions. New stormwater outfalls or maintenance of existing outfalls would be required to include shoreline restoration. Facilities such as marinas, boat yards and dry docks would also be regulated by the SMP to prevent discharge of contaminants to stormwater.

The proposed Shoreline Restoration Plan includes actions to improve water quality through enhanced stormwater best management practices. This restoration action would address the build up of fine sediments in the Green/Duwamish River.

**4. Plants**

**a. Types of vegetation found on-site:**

A 2003 inventory of shoreline habitat and riparian conditions ranked riparian vegetation quality in the City from low to high, based on an aerial photo analysis of the presence of native plants and the mix of vegetation (grass, shrubs and trees). The majority of the riparian area (52 percent) was rated as having low quality riparian vegetation, 36 percent had moderate quality vegetation and 12 percent had high quality vegetation. See Appendix B, Shoreline Inventory and Characterization.

The City riparian areas include the following plant species.

**Deciduous trees:** Oregon ash, Red alder, Black cottonwood, Big-leaf maple, Bitter cherry, other non-natives

**Evergreen trees:** Douglas fir, other non-natives

**Shrubs:** Blackberry, Japanese knotweed, Red-osier dogwood, Snowberry

**Herbs:** None documented

**Grass:** Reed canary grass, maintained lawns

**Pasture:** Agricultural field/pasture

**Wet Soil Plants:** Willow

**Water Plants:** None documented

**b. What kind and amount of vegetation will be removed or altered?**

None.

The proposed SMP amendment strengthens City goals and policies for protecting shoreline vegetation. Specific regulations related to clearing, grading, and landscaping activities require avoiding or minimizing impacts

to vegetation and replanting. The proposed SMP amendment would establish 50, 100 and 125 foot river buffers.

**c. List threatened or endangered species or critical habitat known to be on or near the site.**

According to WDNR Natural Heritage mapping, no rare plant species are documented in City shoreline areas (WDNR, 2006).

**d. Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on-site.**

No site-specific provisions are proposed.

The proposed SMP amendment includes new vegetation protection and landscaping requirements and specifically establishes river buffers. When development, re-development and maintenance occurs, the City would require removal of invasive vegetation and restoration of native vegetation in these river buffers.

The Shoreline Restoration Plan also includes policies and actions to remove invasive plants, conduct weed control and install native riparian species.

**5. Animals**

**a. Underline any birds and animals, which have been observed on or near the site or are known to be on or near the site:**

The Tukwila shoreline planning area provides habitat for a number of aquatic and terrestrial species. Detailed discussion is included in Shoreline Inventory and Characterization report.

Species that have been documented in the City's shoreline area include, but are not limited to:

**Fish:** Coho, Chinook sockeye, pink salmon, coastal cutthroat, steelhead, and bull trout/Dolly Varden char. Non-native Atlantic salmon are also present in the Green/Duwamish River.

**Birds:** Osprey, heron, common merganser, cormorant, and a variety of birds typically found in urban areas

**Amphibians:** None documented.

**Reptiles:** None documented.

**Mammals:** beaver, squirrel, rabbit, and a variety of mammals typically found in urban areas

**b. List any threatened or endangered species or critical habitat near the site.**

The Washington Department of Fish and Wildlife (WDFW) maintains priority habitat and species (PHS) information for Washington State, including the status of species as threatened or endangered. Priority

habitats and species within Tukwila include osprey and salmonids. Fish species distribution maps (WDFW, 2005) identify Priority Anadromous and Priority Resident Fish presence throughout the Green/Duwamish River. Every species of anadromous salmonid that is native to the west coast of North America (coho, Chinook, sockeye, and pink salmon and coastal cutthroat, steelhead, and bull trout/Dolly Varden char) are found in the Green/Duwamish watershed.

Puget Sound populations of bull trout, Chinook and steelhead are listed as threatened under the federal Endangered Species Act. The USFWS designated the Green River as critical habitat for bull trout (Federal Register, Vol. 70, No. 185) and NOAA Fisheries designated the Green River as critical habitat for Chinook salmon (Federal Register, Vol. 70, No. 170). NOAA Fisheries has not yet identified critical habitat for steelhead. No salmon spawning apparently occurs within the City limits due to a lack of adequate habitat.

**c. Is the site part of a migratory route? If so, explain.**

The City's shoreline jurisdiction is known to contain anadromous salmonids (species listed above). The City is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends from Alaska south to Mexico and South America.

**d. Proposed measures to preserve or enhance wildlife, if any.**

The proposed SMP amendment contains goals, policies, and development standards for the protection and restoration of natural vegetation in the shoreline.

Provisions for the protection of fish and wildlife habitat conservation areas (as well as mitigation for impacts to those areas) are incorporated into the proposed SMP amendment including watercourse and wetland buffer areas, and habitat protection requirements based on best available science and required sensitive areas studies.

The Shoreline Restoration Plan included in the proposed SMP amendment identifies potential projects and restoration priorities that would benefit fish and wildlife in the shoreline planning area. Projects include shoreline revegetation, bank stabilization, shallow water and off-channel habitat creation, removal of fish passage barriers, marsh and wetland restoration, installation of large woody debris and levee setbacks to widen the river channel and create room for vegetated mid-slope benches. Such restoration activities implemented over time would have a beneficial effect on shoreline fish and wildlife habitat.

The Tukwila SMP is meant to be consistent with and work in conjunction with other City, regional, State and federal programs to protect the functions and values of shoreline ecological resources. These programs include, but are not limited to, the following:

- Zoning and environmentally sensitive areas regulations (City);

- Stormwater management regulations (City);
- WRIA 9 Salmon Habitat Plan (regional);
- State Hydraulic Project Approval (Washington Department of Fish and Wildlife);
- National Pollutant Discharge Elimination System (Washington Department of Ecology);
- Federal Endangered Species Act compliance (NOAA and USFWS); and
- Federal Clean Water Act compliance (U.S. Army Corps of Engineers and Washington Department of Ecology).

**6. Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, oil, wood, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Not applicable.

- b. Would the project affect the potential use of solar energy by adjacent properties? If so, explain.**

No. The proposed SMP amendment includes a maximum building height limitation of 45-feet for properties in the shoreline jurisdiction. There is potential to increase that height by 10-25 percent if public access is provided. In the Transit Oriented Development area of the Tukwila Urban Center, the maximum building height is proposed to be five stories or 65 feet.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

Not applicable.

**7. Environmental Health**

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.**

No.

- 1. Describe special emergency services that might be required.**

Not applicable.

**2. Describe proposed measures to reduce or control environmental health hazards.**

Not applicable.

**b. Noise**

**1. What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?**

Not applicable.

**2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?**

Not applicable.

**3. Describe proposed measures to reduce or control noise impacts, if any.**

Not applicable.

**8. Land and Shoreline Use**

**a. What is the current use of the site and adjacent properties?**

The majority of the upper Green/Duwamish watershed, beyond the city limits, is in agricultural uses, managed forestland, parkland, or designated wilderness areas.

The Kent-Auburn Valley is a transitional area between the forest and agricultural activities upriver to the highly developed residential, industrial and commercial development in the cities of Kent, Tukwila, and Seattle. Within the valley, industrial, commercial, and residential land uses dominate the former Green River floodplain in the vicinity of Tukwila. The conversion of the flood plain was made possible by the installation of the Howard Hanson Dam and the numerous levees constructed throughout the lower Green River valley. South of the city, commercial and warehouse/industrial land uses dominate on the right bank in the City of Kent, with agricultural fields on the left bank within the Tukwila South annexation area.

The following summary of existing land use within the City of Tukwila is based on property information available on the King County Assessor's webpage (King County, 2006). Land use categories were aggregated into broad, more useful categories: retail/commercial, light and heavy industrial, recreational/open space, residential, and vacant land uses. Land use percentages below represent the parcel land use for those parcels within the shoreline planning area. Land use is described for each shoreline reach as described in the Shoreline Inventory and Characterization report: Reach G1 extending from RM 16 to 11 (southern

city/PAA limits to confluence with Black River; and Reach G2 extending from RM 11 to 6 (from Black River to northern city/PAA limits).

Within the Reach G1 planning area, the land use pattern is predominantly a mix of retail/commercial (28.4 percent overall, higher than 70 percent in the Tukwila Urban Center area) and light and heavy industrial (35.2 percent) lands. Additional significant existing land uses include recreational/open space areas (14.6 percent), and vacant residential, commercial, and industrial areas (15.9 percent). Small amounts of low and moderate-density residential areas (less than 1 percent) are also present in this reach. Land use near the west side of the Tukwila South PAA is predominantly undeveloped, vacant, or actively farmed agricultural lands, with small areas associated with industrial activity.

The land use pattern in Reach G2 and the North PAA is mainly manufacturing and industrial (30.8 percent), the majority of which is downstream of the East Marginal Way South bridge. In the southern portion of Reach G2, the existing land use pattern is predominantly a mix of residential (13.6 percent), retail/commercial (6.2 percent), and public parks, recreational, and open space lands (18.8 percent).

**b. Has the site been used for agriculture? If so, describe.**

Yes. The Green/Duwamish River Valley was historically used for agriculture. Portions of the South PAA are still actively farmed.

**c. Describe any structures on the site.**

Shorelines within the City are modified and contain commercial, industrial, residential, and park and recreational structures. Levees and revetments are common shoreline modifications throughout the shoreline planning area. See Map 8, Existing Levees and Revetments in Tukwila, and Map 12, Impervious Surface, in the Shoreline Inventory and Characterization Report.

Approximately 32.4 percent of all parcels within 0-50 feet of the OHWM, 62.7 percent of parcels 50-100 feet from the OHWM, and 74.7 percent of parcels 100-125 feet from the OHWM have structures on them.

**d. Will any structures be demolished? If so, what?**

No.

The proposed SMP amendment defines allowed uses and alterations within the shoreline planning area. The Shoreline Restoration Plan, discusses the potential for levee setbacks and other channel modifications, such as removal of fish passage barriers.

**e. What is the current zoning classification of the site?**

The City's Zoning Map (TMC Title 18) follows the Comprehensive Plan land use designations. See discussion under B.8.f. below and Map 9, Comprehensive Land Use, Shoreline Inventory and Characterization.

King County zoning designations apply in the unincorporated North and South PAA until those areas are incorporated through annexation, at which time the Tukwila Comprehensive Plan land use designations and zoning would apply. King County zoning in the shoreline planning area in the North PAA is Industrial and in the South PAA is Agricultural.

**f. What is the current comprehensive plan designation of the site?**

Reach G1 (shoreline planning area from RM 16 to 11) is predominantly designated Tukwila Urban Center (32 percent) and Commercial/Light Industrial (27.8 percent, predominantly south of I-405). North of I-405 in this reach, designations include a mix of Low Density Residential, Medium Density Residential, Regional Commercial Mixed Use, and Commercial/Light Industrial. Other designations include Heavy Industrial. Significant portions of Low Density Residential areas within the reach's shoreline area are designated with a Public Recreation Overlay and are developed as Fort Dent Park, the Foster Golf Links and the Tukwila Community Center. Within the South PAA, along the western Green River shoreline, all areas are designated as Tukwila Valley South. The Comprehensive Plan element generally envisions an extension of commercial and industrial development for this shoreline area.

The Comprehensive Plan designates areas in Reach G2 (shoreline planning area from RM 11 to 6) as predominantly a mix of Manufacturing Industrial Center/Heavy (37 percent of the designated reach planning area, predominantly downstream of the East Marginal Way South bridge) and Low Density Residential (39.6 percent of the designated reach planning area, predominantly upstream of the East Marginal Way South bridge). Other designations in the Duwamish River reach include Manufacturing Industrial Center/Light, Commercial/Light Industrial, and Residential Commercial Center.

See Map 9, Comprehensive Land Use, Shoreline Inventory and Characterization Report.

**g. If applicable, what is the current shoreline master program designation of the site?**

The City's current SMP (1974, TMC 18.44) designates all shorelines as Urban Environment and employs a tiered system of regulations with the shoreline jurisdiction based on the distance from the Green River mean high water mark (MHWM). These tiered management zones within the Urban Environment are described below and in Figure 1.

- River Environment/Zone: a 40-foot wide zone extending landward from MHWM and having the most environmentally protective regulations;
- Low-Impact Environment/Zone: the area between the River Environment and 100 feet from the MHWM; and
- High-Impact Environment/Zone: the area between 100 and 200 feet from the MHWM.

The City regulates portions of the City annexed since 1974 by applying King County Shoreline Master Program provisions. Shorelines annexed since 1974 are designated Urban by the King County Shoreline Master Program (1978).

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

Yes. Tukwila Municipal Code Chapter 18.45 establishes environmentally sensitive areas (i.e., geologic hazard areas, wetlands, aquifer recharge areas, wellhead protection areas and stream areas) and associated regulatory requirements. The Green/Duwamish River is designated as a Type 1 watercourse. Specific standards for Type 1 watercourses (shorelines of the state) defer to the City's SMP for applicable regulations. The proposed SMP amendment establishes these regulations and incorporates regulations for other designated sensitive areas. Standards and regulations for designated sensitive areas that are physically located in the shoreline jurisdiction would apply to all shoreline uses and development. These standards protect the shoreline, tributaries to the Green/Duwamish River, associated wetlands, and adjacent upland areas. Environmentally sensitive areas that occur in the shoreline planning area include areas of potential geologic instability, wetlands, watercourses, and fish and wildlife conservation areas.

**i. Approximately how many people would reside or work in the completed project?**

Not applicable.

**j. Approximately how many people would the completed project displace?**

None.

**k. Describe proposed measures to avoid or reduce displacement impacts, if any.**

Not applicable.

**l. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

Shoreline environment designations (Shoreline Residential Environment, Shoreline High Intensity Environment and Shoreline Urban Conservancy Environment) are proposed based on existing and planned land use (single family residential, multi-family residential, transportation, commercial and industrial uses) and riverbank conditions such as the presence of existing levees or revetments. The shoreline environment designations function as an overlay that provides policies and regulations in addition to and generally consistent with the development standards and protections afforded in underlying zoning classifications and Comprehensive Plan land use designations. The goals and policies, designation criteria and boundary description of all the environment

designations are included in the proposed SMP. Figure 6 illustrates where the proposed Shoreline Designations are applied throughout the city. Considering existing land use, zoning and future land use designations will help to prevent incompatibility of adjacent uses. Further, the 200-foot area landward of the ordinary high water mark is proposed to be divided into buffer and non-buffer areas (see Figures in A.11 above). The proposed management areas and associated use restrictions limit land use impacts on shoreline ecological resources.

Two potential land use conflicts were identified in the Shoreline Cumulative Impacts technical memorandum (June 2008), including 1) levee maintenance and management and 2) existing development patterns and anticipated redevelopment. The first potential conflict relates to managing levees for public safety, flood prevention, and restoring shoreline ecological functions. A strategy for shoreline restoration encouraged by the proposed SMP involves stepping back, re-sloping and revegetating levees. Mid-slope benches would be created on the levees that could be planted without interfering with the levee prism. US Army Corps of Engineers levee maintenance standards prohibit trees and riparian vegetation over four inches in diameter on the levees themselves due to concerns over roots compromising the structural integrity of the levees. The second potential conflict relates to the constraints that the existing development pattern places on shoreline restoration actions, including levee setbacks, off-channel habitat restoration, wetland and stream restoration and riparian zone enhancements. Shoreline restoration goals and priorities will be considered as redevelopment occurs along the shoreline.

## 9. Housing

### a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

None. The proposed SMP amendment would not change the underlying Comprehensive Plan land use or zoning designations.

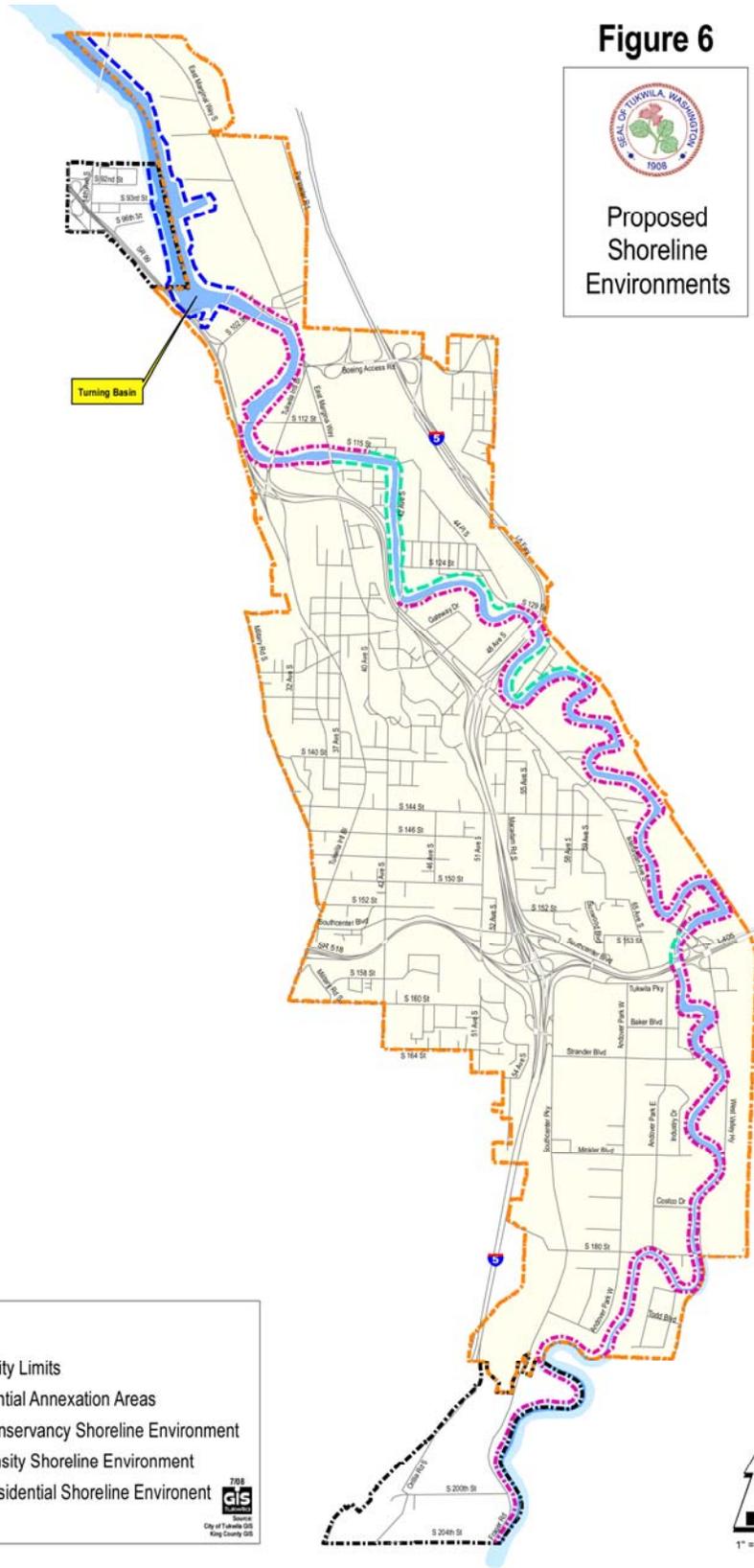
### b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None. The proposed SMP amendment would not change the underlying Comprehensive Plan land use or zoning designations.

### c. **Describe proposed measures to reduce or control housing impacts, if any.**

Not applicable.

Figure 6



**Legend**

- Tukwila City Limits
- PAA Potential Annexation Areas
- Urban Conservancy Shoreline Environment
- High Intensity Shoreline Environment
- Urban Residential Shoreline Environment

708  
 GIS  
 Source:  
 City of Tukwila GIS  
 King County GIS

**10. Aesthetics**

- a. What is the tallest height of any of the proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?**

No specific structures are proposed. The proposed SMP amendment includes a maximum building height limitation of 45-feet for some properties in the shoreline jurisdiction. There is potential to increase that height by 10-25 percent if public access is provided. In the Transit Oriented Development area of the Tukwila Urban Center, the maximum building height is proposed to be five stories or 65 feet.

- b. What views in the immediate vicinity would be altered or obstructed?**

Not applicable.

- c. Describe proposed measures to reduce aesthetic impacts, if any.**

No specific measures are proposed.

The proposed SMP amendment strengthens goals and policies to protect views and aesthetic visual quality in the shoreline planning area. Aesthetics must be considered when developing shoreline property. Height limits, policies promoting protection of native vegetation, and restoration planning would minimize aesthetic impacts and potentially enhance the aesthetics of the shoreline over time. The SMP contains Design Guidelines intended to improve the aesthetic characteristics of shoreline development.

**11. Light and Glare**

- a. What type of light and glare will the proposal produce? What time of day would it mainly occur?**

Not applicable.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

Not applicable. Height limitations for structures in the shoreline are intended, in part, to preserve views. Standards included in the SMP for the High Intensity and Urban Conservancy Environments are intended to prevent spillover and glare on adjacent properties and the river channel.

- c. What existing off-site sources of light or glare may affect your proposal?**

Not applicable.

**d. Describe the proposed measures to reduce or control light and glare impacts, if any.**

Lighting standards to be applied in the High Intensity and Urban Conservancy Environments as explained above.

**12. Recreation**

**a. What designated and informal recreational opportunities are in the immediate vicinity?**

There are significant formal and informal public access opportunities for enjoyment and use of the Green/Duwamish River in Tukwila. A primary goal of the Shoreline Master Plan is to increase public access to shorelines. The City's 2008 Parks, Recreation, and Open Space Plan describes the parks, golf courses, open spaces, and trails in the City's shoreline planning area. See Map 10, Parks, Open Space and Public Access, Shoreline Inventory and Characterization Report.

Several City and County parks and open space areas offer access to the Green/Duwamish River shoreline. Excluding regional trail systems, approximately 16.4 percent of the Green/Duwamish River shoreline planning area is developed as parks or designated open space.

King County owns and maintains the Green/Duwamish River Trail (River Trail), which passes through the City. The River Trail provides public access to the shoreline (but limited physical access to the water's edge) throughout much of the City. The River Trail begins near the intersection of 27th Avenue South and South 102nd Street within the northern extent of the City, and continues to the south, extending beyond the southern borders of the City and the South PAA to the City of Auburn. Within the City limits, the River Trail generally follows the course of the Green River, but extends away from the river for two short stretches: along Interurban Avenue South from RM 7 to RM 7.6 and again from RM 9.4 to RM 10.4 (at the Foster Golf Course). The River Trail crosses the river five times within the City, with the majority of the trail along the western shoreline and three short segments along the eastern bank.

The River Trail connects a series of parks that border the Green River throughout the City. Upstream (south) of the Interstate 405 crossing to the southern border of the City and the South PAA, there are limited park or other public access opportunities within Reach G1 (shoreline planning area from RM 16 to 11). Bicentennial Park (1.0 acre) and P-17 Pond Park (2.0 acres) are both integrated with the trail and provide additional recreational opportunity (picnic tables and benches) along the trail corridor. There are no public access locations in Tukwila, with the exception of the trail, within the South PAA shoreline area.

Between the Interstate 405 and Interstate 5 crossings, within portions of Reaches G1 (defined above) and G2 (shoreline planning area from RM 11 to 6), public access is provided via parks and golf courses in the shoreline. Foster Golf Links (67 acres), and Fort Dent Park (King County,

54 acres) all provide visual shoreline access and recreation opportunities, and are linked via the regional trail system.

Small portions of the river downstream (north) of the Interstate 5 crossing are also designated as parks. In Reach G-2, Cecil Moses Park (2.0 acres) provides picnic tables and public restrooms and connects with the trail. Parks that provide physical and/or visual access to the river on the opposite shoreline from the trail include Duwamish Park (3.0 acres), Tukwila Community Center (12 acres), and Codiga Park (still under construction but open to the public, 3.0 acres). Codiga Park has an informal trail that allows access to a beach, which is used frequently for fishing. A more formal trail, a hand-carry boat launch, a picnic shelter and parking are planned for construction in late 2008. In addition to shoreline access, these parks provide a variety of other active and passive recreational activities. Picnic tables, benches and exercise guides/facilities are interspersed at various points along the trail, in addition to those provided within the trail adjacent parks.

Unofficial recreational fishing sites and fishing shelters are found at various locations along the entire Green/Duwamish shoreline in Tukwila. There are currently no boat launch facilities on Tukwila's shoreline, but one is planned in Reach G-2 at the Codiga Farms site at River Mile 10.

**b. Would the proposed project displace any existing recreational uses? If so, describe.**

No.

**c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.**

The proposed SMP amendment includes goals and policies to increase the amount and diversity of opportunities for public recreation and access to and along the river, including visual and cultural access, access to the water's edge, opportunities for small boat navigation and access, and connections to other neighborhoods, consistent with the shoreline character. The proposed shoreline design guidelines, development standards and public access standards are intended to prevent impacts to recreation and encourage shoreline public access. The proposed SMP goals and policies promoting new recreation opportunities will be implemented through the City's Walk and Roll Plan, Parks and Open Space Plan, King County Green River Trail Master Plan, and the public access standards in the SMP.

**13. Historic and Cultural Preservation**

**a. Are there any places or objects listed on or eligible for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

As part of the Visioning Tukwila process that led to the development of Tukwila's Comprehensive Plan in 1995, historic and cultural land uses within the City were identified. Several of these sites are located within the Shoreline Planning Area. See Map 11, Historic and Cultural Sites, Shoreline Inventory and Characterization. Due to the sensitive nature of some of the archaeological and Early Native American sites, they are not identified on the map. However, commemorative markers along the Green/Duwamish River shoreline reflect and represent Native American uses. A summary of specific historic and cultural resources eligible for national, state or local preservation is provided below.

The Washington State Department of Archeology and Historic Preservation maintains a database of sites that have been inventoried and cataloged by State Archeologists, as well as a database of sites that are protected by Washington's Historic Register (WHR) and the national register (NR). A search of the database for inventoried sites within the City's shoreline planning area revealed a series of sites of 'Pre-Contact' (Native American) and 'Historic' (Non-native American) nature. Sites inventoried with Native American significance in Tukwila included a broad range of artifacts, including: lithic scatters, mammal bones, a traditional fishing camp, a subsistence farming area, areas of charcoal, shells, chipped stone fragments, and a V-shaped fish trap in the river's main channel. Sites inventoried with 'Historic' significance included a historic camp and a historic railroad grade originally constructed in 1874 as part of the Columbia & Puget Sound Railroad. A search of the database for WHR and NR sites within the City's shoreline planning area revealed no designated sites. Several of the inventoried sites discussed above are noted to be potentially eligible for WHR and/or NR status. Given these findings, there is a high probability of additional archaeological resources near the shoreline of the Green/Duwamish River. These resources, if existing in the City and PAA, may have been removed or destroyed during construction of the levees, or they may be below areas previously disturbed by construction.

One site within the City's Green/Duwamish River planning area is on King County's Local Landmarks List. The Fourteenth Avenue South Bridge, originally constructed in 1930 and designated by the County in 1996, spans the river near the northern extent of the City's limits.

In the South PAA, there is a house that is eligible for the National Register of Historic Places (the home of the Mess family who settled and farmed much of the land in this area in the mid-1800s).

**b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.**

None other than those described above in B.13.a.

**c. Describe proposed measures to reduce or control impacts, if any.**

Both the existing SMP and proposed SMP amendment include goals and policies to recognize the Green/Duwamish River's contribution to Tukwila history and community identity. Policies seek to identify, enhance, restore and protect sites with historic and cultural value and through development of interpretive and educational programs. The Comprehensive Plan also establishes a goal to maintain, preserve, and enhance the City's historic, cultural, and archeological resources to provide a sense of local identity and history to the community. Policies direct the City to preserve and protect these sites from incompatible land uses and consider developing an official local designation status, which would recognize and protect designated sites.

The proposed SMP amendment would not change the City's current process for evaluating archeological and historical resources on a parcel-by-parcel basis during development review. The proposed SMP contains provisions for consultations with affected tribes.

#### 14. Transportation

- a. **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.**

No specific transportation projects are included in the proposed SMP amendment.

There are a number of local, state, and interstate travel routes through the City providing strategic regional connections that pass within close proximity and span the Green/Duwamish River. Many other public roadways pass through or are aligned within the shoreline planning area of the Green/Duwamish; these roads provide local access to the businesses and residences found within the planning area. See Map 12, Impervious Surface, Shoreline Inventory and Characterization. Of the major arterials in the City, five are highlighted in this section due to their local and regional importance and interaction with the shoreline environments. These roadways are: West Valley Highway, Tukwila International Boulevard (formerly called Pacific Highway and also known as Highway 99), Interurban Avenue, Southcenter Boulevard, and State Route 599. Discussion of Interstate Highways is limited to crossings of I-5 and I-405, as these are the only areas where these freeways are in close proximity to the Green/Duwamish River.

**West Valley Highway** is aligned along the eastern side of the Green River from south of the I-405 crossing to near South 188th Street. The two-to-four lane arterial is surrounded by a mix of office, industrial, and commercial uses, with some older single residential units and newer apartment structures.

**Tukwila International Boulevard** (Highway 99) was a precursor to Interstate 5 and still contains vestiges of the old highway with commercial activity mixed with a few residential buildings. Tukwila International Blvd. is only in close proximity to the shoreline planning area in the Duwamish

River Reach, at and around the crossing noted in the bridges discussion below.

**Interurban Avenue** is isolated from most of the community but has good access to the interstate system. The two-to-four lane arterial is surrounded by a mix of office, industrial, commercial and significant recreational uses, and travels along and in close proximity to the River from the south end of Fort Dent Park to the I-5 overpass.

**Southcenter Boulevard** (from Interurban Avenue to Pacific Highway South) is the newest of the corridors and, unlike the others, it is characterized primarily by office and residential uses, with only limited commercial use. Southcenter Boulevard is in close proximity to the Lower Green River Reach at and around where it crosses the river near the arterial's intersection with Interurban Avenue.

**State Route 599** passes between Highway 99 to the west and I-5 to the east, traveling along the Duwamish River Reach in the area opposite the river from the Allentown community. The highway is a major regional connector and experiences high traffic volumes, especially during rush-hour periods.

Eleven bridges cross the Green River in Reach G1 (shoreline planning area from RM 16 to 11), and there is one bridge in the South PAA. Moving upstream, from north to south, reach bridges include: pedestrian bridges for the Green River Trail at either end of Fort Dent Park; a five lane bridge for Interurban Avenue South; a four lane bridge providing on-and off-ramp access to Interstate 405; a five lane bridge for Southcenter Boulevard; an eight lane bridge for Interstate 405; a four lane bridge for Strander Boulevard; a bridge for a railroad spur from the Union Pacific rail corridor; a six lane bridge for South 108th Street; and a pedestrian bridge for the Green River Trail near the South 108th Street bridge. Within the G1-PAA planning area at the south end of the city, there is a four-lane bridge for South 200th Street.

Ten bridges cross the Duwamish River within Reach G2 (shoreline planning area from RM 11 to 6). Moving upstream from north to south, they include: a two lane draw bridge for 14th/16th Avenue South; a private Boeing access bridge near Francis Avenue South; a two lane bridge for South 102nd Street; a pedestrian bridge for the Green River Trail at South 112th Street; a five lane bridge for Tukwila International Boulevard (also known as Pacific Highway South) that also includes a crossing for the Green River Trail; a two lane bridge for East Marginal Way South; a pedestrian bridge near South 119th Street and 42nd Avenue South; a two lane bridge for 42nd Avenue South; a ten lane bridge for Interstate 5; a two lane bridge for 56th Avenue South; and a pedestrian and golf cart bridge for Foster Golf Course.

- b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

Transit services in Tukwila are provided by King County Metro and Sound Transit.

- c. How many parking spaces would the completed project have? How many would the project eliminate?**

Not applicable.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe.**

Not applicable.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

Not applicable.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Not applicable.

- g. Describe proposed measures to reduce or control transportation impacts, if any.**

The proposed SMP amendment includes shoreline policies and regulations for circulation and shoreline access. The goal for shoreline transportation is to provide safe corridors and amenities for pedestrians, cyclists and users of public transportation, allowing more citizens to access and enjoy the river. Policies seek to separate pedestrian and non-motorized traffic from vehicular traffic along the shoreline, maximize natural areas through site planning, clearly demarcate public versus private shoreline access, ensure navigability of the Green/Duwamish River up to the turning basin for large vessels and upriver from there for smaller watercraft, and reduce transportation impacts on the environment. The proposed SMP amendment includes development standards for parking within the shoreline planning area, maintenance and repair of existing streets, and bridges and installation of new streets and bridges.

Shoreline transportation policies will be incorporated into the City's Comprehensive Plan and the regulations into the Zoning Code.

## **15. Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally explain.**

No.

- b. Describe proposed measures to reduce or control direct impacts on public services.**

Not applicable.

**16. Utilities**

- a. Underline utilities currently available at the site:**

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, cable, septic systems, other

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

No new utilities are proposed. The proposed SMP amendment includes provisions for allowing utility uses within the shoreline planning area.

**C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: \_\_\_\_\_

Name (print): \_\_\_\_\_

Title: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

## **D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS**

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

### **1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

The proposal would not directly increase discharges to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. All development and redevelopment in the shoreline jurisdiction would be subject to applicable local, State, and Federal regulatory requirements, in addition to the provisions of the proposed SMP amendment.

#### **Proposed measures to avoid or reduce such increases are:**

Most of Tukwila's shoreline planning area is fully developed and future development activities on shoreline properties would largely occur as redevelopment (see Shoreline Master Program Update – Cumulative Impacts technical memorandum). The proposed SMP amendment would help to ensure that existing vegetation is protected and any discharges are mitigated as redevelopment occurs.

The proposed SMP amendment (Land Use File # L06-088) includes policies and regulations for shoreline protection, addressing potential impacts of specific shoreline uses and modifications. The proposed shoreline environment designations function as an overlay to specifically manage uses within the shoreline planning area. Buffers and development standards within each shoreline environment designation restrict uses that would result in adverse impacts to shoreline ecological resources.

### **2. How would the proposal be likely to affect plants, animals, fish, or marine life?**

A goal of the proposed SMP amendment is to ensure no net loss of shoreline ecological functions, consistent with RCW 90.58.020 and WAC 173-26-186. As redevelopment occurs in accordance with the proposed SMP amendment, degradation of the natural environment and shoreline ecological functions will be avoided, minimized, or mitigated. Through new shoreline designations, goals, policies, development standards, use regulations, and mitigation requirements, the proposed SMP amendment provides protection and enhancement of fish and wildlife habitat, native vegetation, and environmentally sensitive areas in the shoreline planning area. Additionally, the proposed Shoreline Restoration Plan projects are intended to improve shoreline ecological functions that have been degraded over time from past development activities. These elements are further discussed above in Section B. of this checklist.

**Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

- Changes to Shoreline Environment Designations

The current SMP shoreline designation, Urban, would be changed under the proposed SMP amendment to Shoreline Residential Environment, Shoreline Urban Conservancy and Shoreline High Intensity Environment. These proposed designations were developed recognizing shoreline characteristics, including existing and planned land uses, and they refine the use and development standards. Proposed buffers (which are expanded from existing buffers), goals, policies, and regulations were updated in each of these designations to achieve no net loss in ecological shoreline function as redevelopment occurs.

- Changes to Development Standards and Use Regulations

The proposed SMP amendment includes specific development standards, use regulations and design guidelines that are generally more protective than the current SMP and are consistent with WAC 173-26. The proposed shoreline development and use regulations encourage shoreline conservation and public access, and prohibit activities that would cause adverse impacts to the shoreline ecology while continuing to allow legal uses and development. The changes relevant to plant and animal protection are generally summarized below; see also the Shoreline Master Program Update – Draft Cumulative Impacts Analysis (June 2008).

- Earth-moving (including dredging) standards are expanded.
- In-water and over-water development is further restricted.
- The river buffer is expanded and development standards and uses provisions within the buffer are more protective.
- Use regulations are tailored to meet the goals of each shoreline designation, including meeting the goal of no net loss of shoreline ecological processes and functions.
- Shoreline vegetation protection and enhancement is a key priority within the river buffer.
- Environmentally sensitive areas regulations are integrated into the proposed SMP.
- Environmental impact mitigation regulations are expanded.
- Shoreline stabilization and erosion control regulations are more restrictive.
- Shoreline permitted and conditional uses are specifically defined such that new uses in the shoreline planning area are further limited.

Over time these changes will likely have a net beneficial effect on shoreline ecological processes as properties are redeveloped.

- Restoration Planning

Based on ecological information developed through the Shoreline Inventory and Characterization, the proposed Shoreline Restoration Plan includes a full listing of

restoration projects and ongoing programs that would ultimately improve ecological processes and functions.

Consistent with WAC 173-26-186, the proposed SMP amendment also includes new policies that provide for habitat protection, enhancement, and restoration to improve degraded shoreline ecological functions over time and protect already restored areas. The proposed SMP identifies the following general shoreline restoration opportunities.

- Removing non-native, invasive plant species and re-vegetating with native riparian forest species;
- Removing artificial debris and walls that harden channel banks;
- Integrating the reconnection of floodplains, levee setbacks, and other ecosystem restoration techniques with future flood and river management efforts; and
- Easements and property acquisition to allow for levee setbacks, side channel reconnection, and channel migration.

### **3. How would the proposal be likely to deplete energy or natural resources?**

The proposed SMP amendment would not result in depletion of energy or natural resources.

#### **Proposed measures to protect or conserve energy and natural resources are:**

No specific measures are proposed.

### **4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

The proposed SMP amendment integrates and expands on existing Tukwila policies, plans and regulations for the management of environmentally sensitive areas (including wetlands; TMC Chapter 18.45), public access and recreation (Comprehensive Plan; Park, Recreation and Open Space Plan (May, 2008) and historic and cultural resources (Comprehensive Plan). Proposed SMP measures to protect threatened species are meant support and implement the WRIA 9 Salmon Habitat Plan.

There are no prime farmlands or wild and scenic rivers in the City.

#### **Proposed measures to protect such resources or to avoid or reduce impacts are:**

Proposed measures to protect such resources and reduce impacts are referenced above and further discussed in section B. of this checklist.

**5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

Development and land use patterns are well established and there is little undeveloped land along Tukwila's shorelines. In order of most to least prevalent, the shoreline area generally includes industrial, retail and commercial, park and recreation, open space and vacant land, and residential land uses. The proposed SMP amendment would continue to be implemented as an overlay to Comprehensive Plan and zoning land use policies and regulations. The proposed SMP would not be incompatible with existing land use policies, regulations or associated land use designations. The proposed SMP amendment would lead to prioritization of some land uses over others (such as water dependent uses over non-water dependent uses north of the Turning Basin) and encouragement of water enjoyment uses within the shoreline planning area. See further discussion under section B. in this checklist.

**Proposed measures to avoid or reduce shoreline and land use impacts are:**

Based on the developed nature of the City's shoreline, the lack of extensive vacant developable land, and consistency among land use regulations and long-range plans, reasonable foreseeable development will likely be redevelopment of property rather than new development. Redevelopment would not likely result in significant changes in land use along the shoreline.

**6. How would the proposal be likely to increase demands on transportation or public services and utilities?**

The proposed SMP amendment would not establish new patterns of land use or increased density of existing land use patterns. As described above, reasonable foreseeable development will likely be redevelopment of property rather than new development. Redevelopment will not likely result in significant changes to or increased demand for public services or infrastructure.

**Proposed measures to reduce or respond to such demand(s) are:**

Since increased demands are not anticipated, no specific measures are proposed.

**7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements of the protection of the environment.**

In general, the City's proposed SMP update (Land Use File # L06-088) will not conflict with other local, state or federal laws. The SMP is meant to be consistent with and work in conjunction with City, regional, State and Federal programs to protect the functions and values of shoreline resources and protect the health and safety of City residents. These programs include, but are not limited to, the following:

***City Programs***

City of Tukwila Municipal Code, Title 18, Zoning: Consistent with WAC 173-26, development standards for environmentally sensitive areas (Chapter 18.45) that are physically located in the shoreline jurisdiction have been incorporated into the proposed SMP.

City of Tukwila Municipal Code, Chapter 16.54, Grading

City of Tukwila Municipal Code, Chapter 14.30, Stormwater Management Standards

**Regional**

WRIA 9 Salmon Habitat Plan: This regional recovery plan was developed in response to the listings of Chinook salmon and bull trout as threatened species under the Endangered Species Act. The City has ratified the plan and is an active participant in its implementation.

**State and Federal Regulations**

A number of State and Federal agencies may have jurisdiction over land or natural elements in the City's shoreline jurisdiction. The State and Federal regulations affecting shoreline-related resources include, but are not limited to:

Endangered Species Act: The Federal ESA addresses the protection and recovery of federally listed species. The ESA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly referred to as the National Marine Fisheries Service), and the United States Fish and Wildlife Service (USFWS). The City of Tukwila's proposed SMP would support implementation of the WRIA 9 Salmon Habitat Plan, which seeks to restore habitat for federally listed species.

Clean Water Act (CWA): The federal CWA requires states to set standards for the protection of water quality for various parameters, and it regulates excavation and dredging in waters of the U.S., including wetlands. Certain activities affecting wetlands in the City's shoreline planning area or work in the adjacent rivers may require a permit from the U.S. Army Corps of Engineers and/or Washington State Department of Ecology under Section 404 and Section 401 of the CWA, respectively.

Hydraulic Project Approval (HPA): The Washington Department of Fish and Wildlife (WDFW) regulates activities that use, divert, obstruct, or change the natural flow of the beds or banks of waters of the state and may affect fish habitat. Projects in the shoreline jurisdiction requiring construction below the ordinary high water mark of Puget Sound or streams in the city could require an HPA from WDFW. Projects creating new impervious surface that could substantially increase stormwater runoff to waters of the state may also require approval.

National Pollutant Discharge Elimination System (NPDES): Ecology regulates activities that result in wastewater discharges to surface water from industrial facilities or municipal wastewater treatment plants. NPDES permits are also required for stormwater discharges from industrial facilities, construction sites of one or more acre, and municipal stormwater systems that serve populations of 100,000 or more. Tukwila is currently developing regulations and programs to meet NPDES Phase II federal permit requirements for Western Washington. New regulations to control illicit discharges and manage surface water runoff from new developments are to be adopted by August 2009.

State of Washington Review of Proposed SMP Amendment. Additionally, the Washington State Department of Ecology will review the proposed City SMP for consistency with the Shoreline Management Act (RCW 90.58) and WAC 173-26.

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- City of Tukwila. 2008. Draft Shoreline Master Program. June 24, 2008.
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