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Shoreline Inventory

INTRODUCTION

As a foundation for the development of the goals policies and regulations in the City’s Shoreline Master Program, the City conducted an inventory and assessment of natural and built conditions along the shorelines of Sultan.

This inventory, the Shoreline Characterization, identifies existing conditions and provides an analysis that evaluates the components that make up the ecological health of the shoreline jurisdiction and identifies areas with potential for conservation and restoration of ecological functions.

This chapter excerpts portions of that inventory and analysis. Please consult Appendix E: Shoreline Characterization for a full discussion of the complex issues associated with the Sultan shoreline.

Study Area Boundary

Under the State Shoreline Management Act, the City’s shoreline jurisdiction includes areas within the City limits that are 200 feet landward of the floodway or ordinary high water mark of waters that have been designated as “shorelines of statewide significance” or “shorelines of the state” or their “associated wetlands.”¹

The City of Sultan is located in Snohomish County, situated on the northern bank of the Skykomish River between River Mile2 (RM) 34.4 near the mouth of the Sultan River and RM 35.7 near the mouth of the Wallace River (Figure 1). The City of Sultan encompasses approximately 1,916 acres, or about three square miles. U.S. Highway 2 (US 2) and the Burlington Northern Santa Fe (BNSF) Railroad corridors run east-west through southern portions of the City. The City’s urban growth area (UGA) contains an additional 550 acres, or approximately 0.86 square miles comprised of residential development and undeveloped areas.

The study area for the Sultan Shoreline Characterization includes all land currently within the City’s shoreline jurisdiction. These areas include lands within the City limits adjacent to the Skykomish River, Sultan River and Wallace River.

¹ These terms are discussed in more detail in Chapter I: *Introduction*, and in the definitions section.

² As defined by the distance upstream from the confluence with the Snohomish River.



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Land adjacent to the Sultan River within the City’s UGA is also generally described. Table 1 indicates the total length of each river, and the total length of each river segment within the City’s shoreline jurisdiction.

Table 1. Rivers within Sultan Shoreline Jurisdiction

River	Total River Length	Length within Sultan’s Shoreline Jurisdiction
Skykomish River (mainstem)	50 miles	1.4 miles
Sultan River	30.4 miles	1.3 miles (within City limits) 1.6 miles (within City’s UGA)
Wallace River	15.1 miles	0.3 miles

Source: (Williams, et al., 1975)

The Sultan and Wallace Rivers are designated as “shorelines of the state” because their mean annual flow upstream of the City of Sultan is equal to or greater than 20 cfs.

Although Winters and Wagleys creeks flows are less than 20 cfs, those portions of both creeks that fall within designated floodways of the Sultan and Skykomish Rivers respectively are within the City’s shoreline jurisdiction. The Skykomish River is designated as a “shoreline of statewide significance” because its mean annual flow upstream of the City is equal to or greater than 1000 cfs.

Inventory

For the purposes of categorizing distinct segments of the City’s shorelines for planning purposes, the City’s shoreline jurisdiction was classified into four relatively homogeneous segments.

The City’s UGA shoreline was addressed in an additional segment. These segments were grouped to correspond with the level of ecological functions provided by each segment for salmonids (including but not limited to streambank vegetation, potential spawning areas, and off-channel habitat).



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Table 2. Shoreline Planning Segments

Segment	River	Approximate Length (feet)	Approximate River Mile	Approximate Acreage
A	Sultan River (East Bank – from north of River Park to City Limits)	6,336	0.1 to 1.3	185
	Sultan River (West Bank – from west of the wastewater treatment plant to the City limits)	1,056	0.3 to 0.5	
B	Sultan River (East Bank – confluence with Skykomish and River Park)	528	0 to 0.1	13
	Sultan River (West Bank – from confluence with Skykomish including Sportsman's Park and the wastewater treatment plant)	1,584	0 to 0.3	
C	Skykomish River (North Bank within City Limits – from confluence with Sultan River to confluence with Wallace River)	7,392	34.3 to 35.7	68
	Wallace River (confluence with Skykomish within City Limits)	1,584	0 to 0.3	
D	Wallace River (Some portions – from Cemetery Park to 339th Ave. SE)	2,640	0.3 to 0.8	3
E	Sultan River (City Limits to UGA Boundary – East Bank)	8,448	1.3 to 2.9	89

Runoff alternatives will be addressed by a Surface Water Management Plan currently being developed by the City. The downtown area of the City is served by combined stormwater and sanitary sewer conveyance. High-flow periods during storms can result in combined flows of wastewater and stormwater and the discharges of untreated sewage through stormwater outfalls into the Sultan and Skykomish Rivers.

Shoreline Modifications

The shoreline modifications (i.e., structural alterations of the river's natural bank, such as levees, dikes, floodwalls, riprap, bulkheads, docks, piers or other in-water structures) present along Sultan rivers include bulkheads in residentially developed areas along the Skykomish River, riprap along the Skykomish River, and pilings supporting the US 2 and BNSF bridges near the confluence of the Sultan and Skykomish Rivers.

Existing and Potential Public Access Sites

The City of Sultan, Sultan School District, and Washington Department of Fish and Wildlife have developed a variety of park, recreation, and open space facilities within the City, many of which provide access to the shoreline jurisdiction. These resource areas include wildlife conservancies and natural areas as well as trails, boat ramps and other recreational areas.



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Critical Areas and Special Status Species

A range of sources provide information on the location of various critical areas within the Sultan shoreline jurisdiction. The Shoreline Characterization Report contains information on critical areas such as frequently flooded areas, stream areas, wetland areas, and steep slope areas.

Information on special status fish and wildlife species and habitat areas was obtained from several sources. Special status species are species that are listed or proposed for listing under the State or Federal Endangered Species Act, identified by WDFW as state Priority Species, or identified by the U.S. Fish and Wildlife Service (USFWS) as Species of Concern. The following special status species may occur within the vicinity of the City:

- Wintering bald eagles (*Haliaeetus leucocephalus*)
- Bull Trout (*Salvelinus confluentus*)
- Chinook Salmon (*Oncorhynchus tshawytscha*)
- Long-eared Myotis (Bat) (*Myotis evotis*)
- Long-legged Myotis (Bat) (*Myotis volans*)
- Olive-sided Flycatcher (*Contopus cooperi*)
- Pacific Lamprey (*Lampetria tridentata*)
- Peregrine Falcon (*Falco peregrinus*)
- River Lamprey (*Lampetria ayresi*)
- Western Gray Squirrel (*Sciurus griseus*)
- Western Toad (*Bufo boreas*)

Floodplains and Channel Migration Zones

Floodplains are a substantial feature in the City, extending through much of the City's shoreline jurisdiction, as well as beyond the shoreline to other portions of the City, including the central business district. The City is highly flood-prone, having the highest number of flood insurance policies of all Snohomish County cities and towns; the seventh highest number of claims of all Washington State cities and towns; and the sixteenth highest number of claims of the 286 jurisdictions that participate in the National Flood Insurance Program in Washington State.



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Other Areas of Potential Interest

Priority habitats, rapidly developing waterfronts, eroding shorelines, or other degraded sites with potential for ecological restoration were identified through document research and during a field reconnaissance of the study area in February 2003.

Opportunity Areas

Opportunity areas are those areas within the shoreline jurisdiction that may be appropriate for protection and /or restoration, including elements such as wetlands, habitat, riparian (streamside) vegetation, and river banks modified by riprap or bulkheads. Opportunity areas were identified through a literature review as well as a field reconnaissance of the study area in February 2003. These areas and their characteristics are described in more detail in the Shoreline Characterization Report.

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