

memorandum

date March 12, 2010

to Lara Thomas, City of Duvall

from Aaron Booy, ESA Adolfson
Margaret Clancy, ESA Adolfson

subject Task 1.1 of SMA Grant Agreement: Identify Preliminary Shoreline Jurisdiction

Purpose

The purpose of this memorandum and accompanying map are to describe the approximate extent of Shoreline Management Act (SMA) jurisdiction within the City of Duvall and its UGA. This memo also describes the data sources used to identify preliminary shoreline jurisdiction boundaries.

Shoreline Jurisdiction Defined

The SMA governs designated “shorelines of the state” which include all “shorelines” and “shorelines of statewide significance” as defined in RCW 90.58.030. Shorelines are all marine waters, streams or rivers having a mean annual flow of 20 cfs or greater, and lakes with a surface area greater than 20 acres. Shorelines also include “shorelands” extending generally 200 feet landward of these waters, along with associated floodways, floodplain areas, and wetlands¹. Generally, “shorelines of statewide significance” include portions of Puget Sound, rivers west of the Cascade Range that have a mean annual flow of 1,000 cubic feet per second (cfs) or greater, rivers east of the Cascade Range that have a mean annual flow of 200 cfs or greater, and freshwater lakes with a surface area of 1,000 acres or more.

Shoreline Jurisdiction within Duvall

In the City of Duvall, SMA jurisdiction is confined to the Snoqualmie River and its adjoining shorelands. There are no other streams or rivers, marine waters, or lakes that meet the definition of shorelines of the state within the City or its UGA.

According to the USGS (1998) study entitled *Determining Upstream Boundaries on Western Washington Streams and Rivers Under the Requirements of the Shoreline Management Act of 1971*, the Snoqualmie River is the only

¹ According to WAC 173-22-040, shoreland areas associated with streams and rivers shall include the greater of:

- (a) Those lands which extend landward 200 feet as measured on a horizontal plane from the ordinary high water mark;
- (b) Those flood plains which extend landward 200 feet as measured on a horizontal plane from the floodway: Provided, That local government may, at its discretion, include all or a larger portion of the one hundred-year flood plain within the associated shorelands.
- (c) Those wetlands which are in proximity to and either influence or are influenced by the stream. This influence includes but is not limited to one or more of the following: Periodic inundation; location within a flood plain; or hydraulic continuity; and
- (d) Special criteria for those lands within a river delta flood plain (not applicable in Duvall).

river or stream within the City of Duvall (and UGA) that has a mean annual flow of 20 cfs or greater. The entire reach of the Snoqualmie River along the City's western boundary meets this criterion. The mean annual flow of this reach over the last 10 years is more than 3,500 cfs (USGS 1998), meaning that it meets the definition of a "shoreline of statewide significance". Cherry Creek, which drains the area to the north of the City and UGA, is also a shoreline of the state, but is located outside the City and UGA limits. Duvall's other main tributary streams, Coe-Clemons and Thayer Creeks, have mean annual flows well below 20 cfs and do not qualify as shorelines of the state.

According to City and King County hydrography / waterbody GIS data (2005) and 2009 aerial photography, there are no large lakes in the City of Duvall. Lake Rasmussen, the largest open water feature within the City and UGA, is well below 20 acres in surface area, and is therefore not subject to the SMA.

SMA jurisdiction in Duvall includes the waters of the Snoqualmie River between the ordinary high water mark (OHWM) and the western City limits (approximately the centerline of the river) and shoreland areas lying landward (upland) of the OHWM as depicted on the Figure 1. The shoreland areas include the entirety of the floodplain (Flood Hazard Area) associated with the river within the City and UGA, including all floodway areas. In addition, the shoreland areas include associated wetland areas and those areas within 200 feet landward of the OHWM extending beyond the floodplain. The OHWM, which roughly corresponds to top of the east bank, was identified based on limited field investigation and Washington State Department of Natural Resources (WDNR) ShoreZone Inventory digital data (2000). A more precise depiction of the OHWM location would require field verification.

Literature cited:

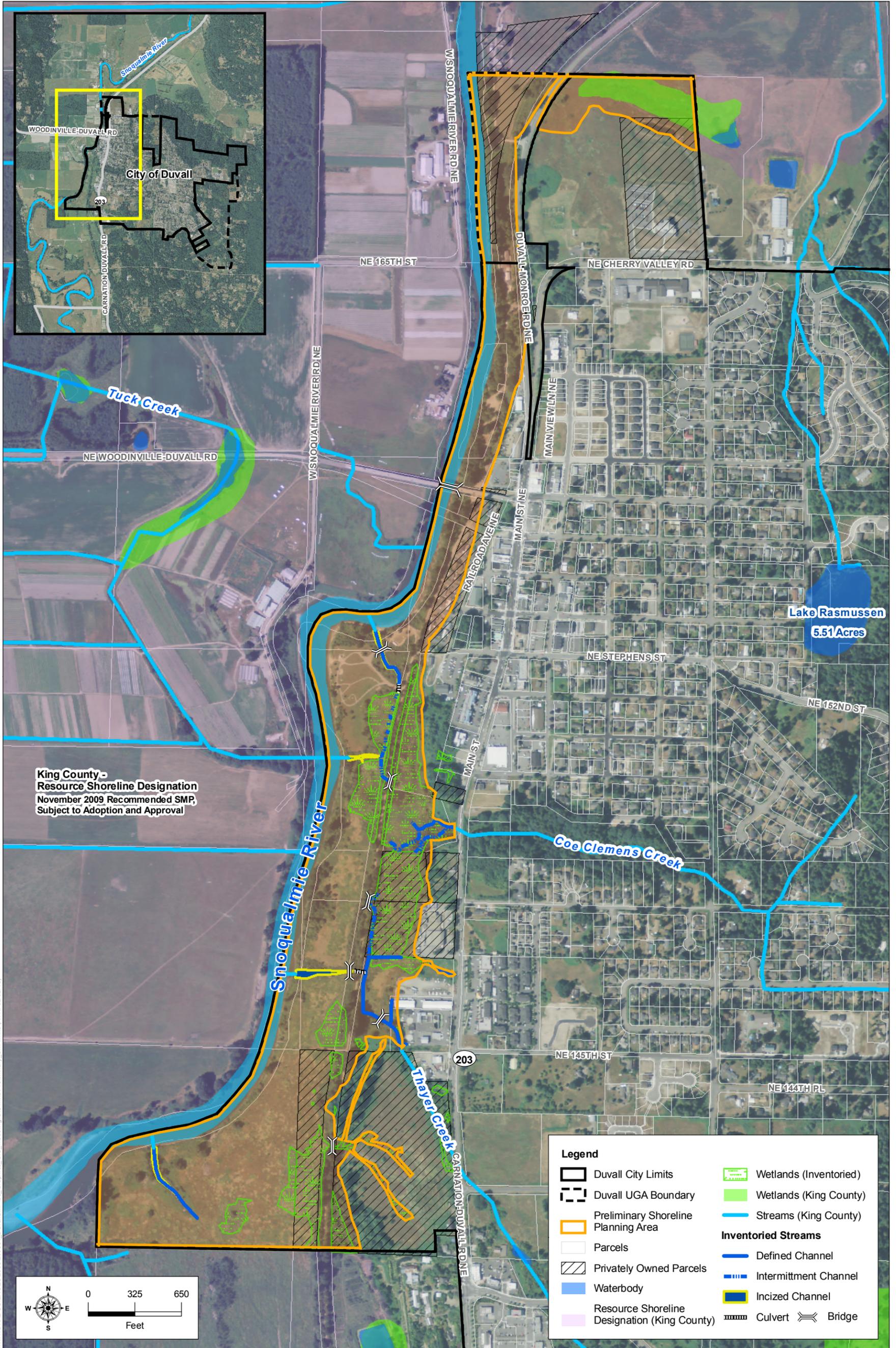
United States Geological Survey (USGS). 1998. Determination of Upstream Boundaries on Western Washington Streams and Rivers Under the Requirements of the Shoreline Management Act of 1971. By David L. Kresch, Water-Resources Investigations Report 96-4208. Prepared in cooperation with Washington State Department of Ecology.

City of Duvall. 2009. Draft McCormick Park Reconnaissance / Opportunities and Constraints Assessment. Prepared by ESA Adolfson.

King County. 2005. King County hydrology / waterbodies data set.

USGA. 2009. NAIP 2009 Aerial Imagery.

Washington State Department of Natural Resources. 2000. Washington State ShoreZone Inventory digital data. Olympia, Washington.

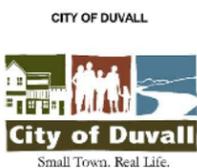


G:\NATURAL SCIENCES\2009\208504_Duval\SMP\05_Graphics_GIS_Modeling\GIS\SMP\05_Preliminary_SMA.mxd (ATR: 02/02/10)

SOURCE: City of Duval, 2008; ESA Adolphson, 2009; King County, 2005, 2009; NAIP (USDA), 2009 (Aerial)

Duval SMP . 208504

Figure 1
Preliminary Shoreline Planning Area
Duval, Washington



NOTE: This map is intended for planning purposes only. This map depicts the approximate location and extent of areas subject to the City of Duval SMP. The actual extent of the shoreline planning area requires a site-specific evaluation to identify the location of the ordinary high water mark and any associated wetlands. This map does not display the 100-year floodplain (special flood hazard area) associated with the Snoqualmie River, however the shoreline planning area includes the 100-year floodplain. In Duval, the 100-year floodplain associated with the Snoqualmie River has a standard elevation of approximately 45 feet NGVD 29.

All 'associated wetlands' are regulated as Shorelands per RCW 90.58.030. Wetlands immediately adjacent or physically connected to the Snoqualmie River are assumed to be associated with the shoreline, but not all wetlands on this map have been field-verified. The approximate extent and association of 'Inventoried wetlands' within the McCormick Park area have been field verified, however wetland presence, location, extent and degree of association with the river must be determined through site-specific investigation.

DRAFT COPY