

Stillaguamish Tribe Road Project 1999-2006



Casey Stevens, Planning Director, Stillaguamish Tribe of Indians
Tribal Transportation Symposium 4-17-2013







Supplemental Technical Memorandum for Wetland, Wetland Buffer, and Stream Buffer Mitigation

Supplemental Technical Memorandum for Wetland, Wetland Buffer, and Stream Buffer Mitigation

Sittiquamish Tribe
56-Acre Roadway (10264 CG)
July 25, 2005

Prepared for: Sittiquamish Tribe
Project: Wetland, Wetland Buffer, and Stream Buffer Mitigation

Chapter 39.82
CRITICAL AREA REGULATIONS

Critical Areas Regulations for Residential Projects

ADDITIONAL #15

The author, following the requirements of Chapter 39.82 in general, has written these regulations to address the specific needs of residential projects. The regulations are intended to be used in conjunction with the Critical Areas Regulations for Residential Projects, Chapter 39.82, and the Critical Areas Regulations for Commercial Projects, Chapter 39.83.

3. What are Critical Areas?

3.1 Wetland Critical Areas. Wetlands are defined as those areas that are periodically or permanently flooded or saturated, and that support a preponderance of aquatic plants and animals. Wetlands are critical areas because they provide a number of important functions, including: filtering pollutants, storing floodwaters, and providing habitat for wildlife.

3.2 Wetland Buffer Critical Areas. Wetland buffers are defined as those areas that are adjacent to wetlands and that are subject to the same or similar flooding or saturation as the wetlands. Wetland buffers are critical areas because they provide a buffer between wetlands and adjacent land uses, and they provide habitat for wildlife.

3.3 Stream Critical Areas. Streams are defined as those areas that contain water, whether flowing or not, and that are subject to the same or similar flooding or saturation as the wetlands. Stream critical areas are defined as those areas that are adjacent to streams and that are subject to the same or similar flooding or saturation as the streams. Stream critical areas are critical areas because they provide a buffer between streams and adjacent land uses, and they provide habitat for wildlife.

Wetland, Wetland Buffer, and Stream Buffer Mitigation Plan

Goals and Objectives

The purpose of this plan is to provide a detailed description of the wetland, wetland buffer, and stream buffer mitigation measures that will be implemented on the 56-acre roadway project. The plan is intended to be used in conjunction with the Critical Areas Regulations for Residential Projects, Chapter 39.82, and the Critical Areas Regulations for Commercial Projects, Chapter 39.83.

1. Wetland Mitigation Measures

- 1.1 Avoidance and Minimization. The project shall avoid and minimize impacts to wetlands and wetland buffers to the maximum extent practicable.
- 1.2 Compensation. The project shall compensate for any unavoidable impacts to wetlands and wetland buffers by creating or restoring wetlands and wetland buffers of equivalent or greater value.

2. Stream Mitigation Measures

- 2.1 Avoidance and Minimization. The project shall avoid and minimize impacts to streams and stream buffers to the maximum extent practicable.
- 2.2 Compensation. The project shall compensate for any unavoidable impacts to streams and stream buffers by creating or restoring streams and stream buffers of equivalent or greater value.

Wetland, Wetland Buffer, and Stream Buffer Mitigation Plan

Financial Summary

Item	Amount	Total
Professional Services	150,000	150,000
Construction	100,000	100,000
Materials	50,000	50,000
Other	10,000	10,000
Total	310,000	310,000

CD-ROM: Wetland, Wetland Buffer, and Stream Buffer Mitigation Plan

BIOLOGICAL ASSESSMENT

United States Department of the Interior
Bureau of Land Management
Washington, DC 20250

Robert D. Williams, P.E.
State Archeologist
Washington Office of Archeology and Historic Preservation
Post Office Box 480874
Olympia, Washington 98504-0874

July 25, 2005

MSN Historical

Page 1 of 1

MSN Historical

Page 1 of 1

MSN Historical

Page 1 of 1

Sittiquamish Tribe 56-Acre Road
July 25, 2005
Park Site

MSN Historical

Page 1 of 1

MSN Historical	MSN Historical	MSN Historical	MSN Historical
01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
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53	54	55	56
57	58	59	60
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65	66	67	68
69	70	71	72
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93	94	95	96
97	98	99	100

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND AFFAIRS
CRITICAL AREAS REGULATIONS
PROTECTIVE PLAN
SITTIQUAMISH INDIAN RESERVATION

CD-ROM: Sittiquamish Mitigation Plan

PREPARED FOR SITTIQUAMISH COUNTY
IN COOPERATION WITH
PERKETT, INC.
SITTIQUAMISH INDIAN RESERVATION

Sittiquamish Tribe
Natural Resources Department

Wetland Determination & Critical Area Study

Sittiquamish Tribe Driveway Project
23712 2367 Ave NE
Wetland Determination & Critical Area Study

Original Report

July 25, 2005

Mitigation Options for Transportation Projects



Sky Miller, P.E.
Water Resources Manager
Cardno, Inc.
Tribal Transportation Symposium 9-28-2016

Interagency Regulatory Guide

Advance Permittee-Responsible Mitigation

*U.S. Army Corps of Engineers
Washington State Department of Ecology
Washington State Department of Fish and Wildlife*



**US Army Corps
of Engineers**
Seattle District



DEPARTMENT OF
ECOLOGY
State of Washington



December 2012
Ecology Publication no. 12-06-015

Advance Mitigation Plan

December 2012

Lower Wapato Combined Habitat Project

Prepared by:



Prepared for:



Prepared on behalf of:

Port of Tacoma
PO Box 1837
Tacoma WA 98401-1837



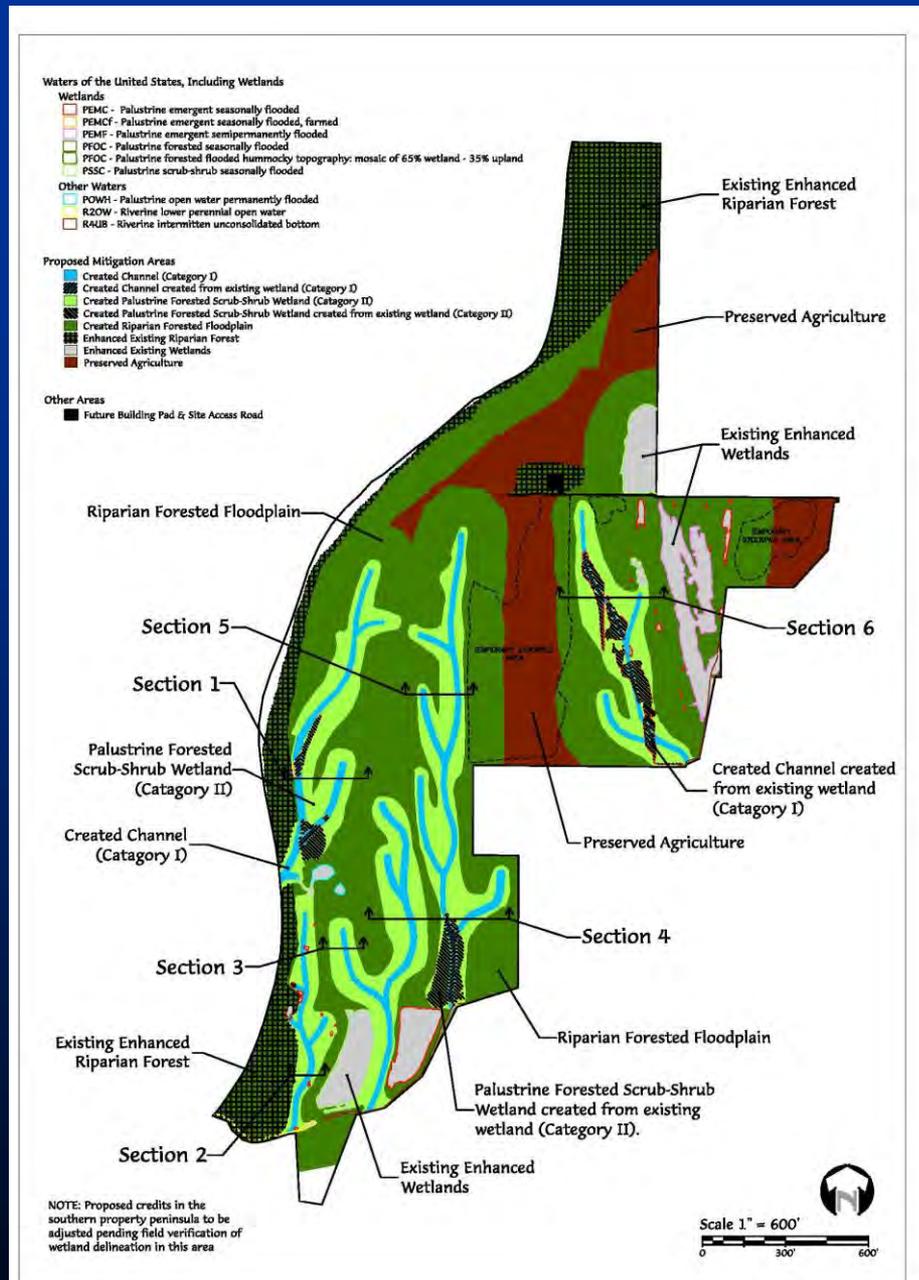
Stillaguamish's Purdy Site





Nookachamps Mitigation Bank

- Re-connect floodplain
- Provide off-channel habitat
- Create/enhance wetlands
- Re-plant native forest
- Provide a Primitive Trail
- Create 101 Wetland Credits



Technical Reports

- Wetland Delineation
- Title Report analysis
- Boundary Survey
- Environmental Site Assessment
- Hydrodynamic Model
- Geomorphic Evaluation
- Groundwater Wells and Stream gauge monitoring
- Biological Assessment
- Archaeological Resources Study
- Unanticipated Discovery Protocol
- Topographic Survey
- Conceptual & Final Design
- Permit Documents (13)



Restoration & Management Plan

- Project Site Description
- Goals & Objectives
- Habitat Restoration Design & Site Plan
- Engineered Stamped Drawings & Specifications
- Planting Plan & Specifications
- Invasive Species Management Plan
- Establishment Period Monitoring Plan
- Maintenance and Contingency Plan
- Site Protection; Financial and Legal

