

**SKOKOMISH RIVER BASIN
MASON COUNTY, WASHINGTON
ECOSYSTEM RESTORATION**

APPENDIX I

**HAZARDOUS, TOXIC, AND RADIOACTIVE
WASTE ASSESSMENT**

**Integrated Feasibility Report and
Environmental Impact Statement**



**US Army Corps
of Engineers®**
Seattle District

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**SKOKOMISH RIVER GENERAL INVESTIGATION
FEASIBILITY STUDY**

**HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE
ASSESSMENT**

FEBRUARY 23, 2015

SKOKOMISH GENERAL INVESTIGATION FEASIBILITY STUDY HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE ASSESSMENT

Executive Summary

The Skokomish River, located in Mason County, Washington is the primary drainage basin for the southeast region of the Olympic Peninsula. The river flows from its headwaters in the Olympic Mountains to Hood Canal. The basin consists of 80 mainstream river miles and 260 miles of tributaries. The primary concern to be addressed in this study is ecosystem degradation in the Skokomish River Basin, which includes the Skokomish Indian Reservation. High sediment load, reduced flows, and encroachment on the floodplain by man-made structures are causing continued degradation of natural ecosystem structures, functions, and processes necessary to support critical fish and wildlife habitat throughout the basin. The decline in populations has resulted in the listing of four anadromous fish species under the Endangered Species Act (ESA) (i.e., Chinook salmon, chum salmon, steelhead, and bull trout) that use the river as their primary habitat. The U.S. Army Corps of Engineers is preparing an Integrated Feasibility Report/Environmental Impact Statement (FR/EIS) for proposed ecosystem restoration in the Skokomish River Basin. The Skokomish Indian Tribe and Mason County are the non-Federal sponsors for the project. The Hazardous, Toxic, and Radioactive Waste (HTRW) Assessment was conducted in conformance with the pertinent procedures and limitations of the American Society for Testing and Materials international (ASTM) Standards E 1527 – 13 and ER 1165-2-132, *Hazardous, Toxic, and Radioactive Waste Guidance for Civil Works Projects*.

This HTRW Assessment is limited to identifying known and suspected HTRW issues that may impact project decisions. As part of this HTRW assessment, an HTRW Phase II investigation was performed at the Confluence Levee, locally known as ‘Car Body Levee’. The site reconnaissance occurred August 5, 2014 and no visual or olfactory evidence of HTRW releases was observed.

This assessment has revealed no evidence of HTRW contamination or potential for HTRW releases in connection with the area identified in the Skokomish recommended restoration plan.

SKOKOMISH GENERAL INVESTIGATION FEASIBILITY STUDY HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE ASSESSMENT

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1.0 Introduction

1.1 Involved Parties

The U.S. Army Corps of Engineers - Seattle District (Corps) and the non-Federal Sponsors – the Skokomish Indian Tribe from here on referred to as the “Tribe” and Mason County are currently engaged in a General Investigation (GI) Feasibility Study (FS) for the Skokomish River basin located in the southwestern portion of Puget Sound in northwestern Washington, primarily in Mason County and the Skokomish Indian Reservation. The primary concern to be addressed in this study is ecosystem degradation in the Skokomish River Basin, which includes the Skokomish Indian Reservation. High sediment load, reduced flows, and encroachment on the floodplain by man-made structures are causing continued degradation of natural ecosystem structures, functions, and processes necessary to support critical fish and wildlife habitat throughout the basin. The Corps signed a cost-sharing agreement with the Tribe and Mason County under the Corps’ ecosystem restoration authority. The FS will result in a feasibility report integrated with an environmental impact statement (EIS) that will assess various alternatives and potential environmental impacts associated with the ecosystem restoration project.

1.2 Authority

The Skokomish River General Investigation GI/FS for the Skokomish River Basin is being conducted under the authority of Section 209 of the Flood Control Act of 1962.

1.3 Guidance and Policy

The Corps Engineering Regulation (ER) providing policy on Corps involvement in ecosystem restoration and protection through Civil Works programs and activities is contained in ER 1165-2-501 *Civil Works Ecosystem Restoration Policy*. Corps policy providing guidance for consideration of issues and problems associated with HTRW, as defined in this regulation, which may be located within project boundaries or may affect or be affected by Corps Civil Works projects is contained in ER 1165-2-132, *Hazardous, Toxic, and Radioactive Waste Guidance for Civil Works Projects*, which defines HTRW as “...any material listed as a ‘hazardous substance’ under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).” ASTM International (ASTM) Standard E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* provides a comprehensive guide for conducting a Hazardous, Toxic, and Radioactive Waste (HTRW) Assessment. An assessment identifies known or suspected releases of hazardous substances (recognized environmental conditions) based on records review, site visit, and interviews.

1.4 Scope of Work

The Skokomish River GI is a basin-wide study; however, work by other entities constrains the limit of Corps' involvement to actions primarily in the lower Skokomish River Valley. This HTRW assessment documents known and suspected HTRW sites discovered through a search and review of all reasonably attainable federal, state, and local government information and records. An investigation of each property identified in the proposed alternative involved analysis of historical media including historical aerial photographs, a review of historical

records, interviews, and visual site inspections of the properties to identify any recognized environmental condition, as defined in ASTM Standard E 1527-13.

A geotechnical and HTRW investigation was performed at one recommended alternative area to identify if evidence of a potential release was present where car bodies were embedded in the levee. Activities associated with the HTRW investigation included brush clearing, physical evaluation of the car bodies and levee, hand-auger borings in locations where contaminated soil may be present, and background soil and sediment sampling.

1.5 Significant Assumptions

This report provides an overview of known and suspected environmental concerns, both past and present, based on availability of information at the time of the assessment. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the property may have occurred which could not be identified.

1.6 Limitations and Exceptions

This HTRW Assessment is limited to documenting known and suspected HTRW sites on or adjacent to the proposed alternatives that may affect the proposed alternatives as per ER 1165-2-501 and ER 1165-2-132.

1.7 Special Terms and Conditions

No special terms or conditions significant with respect to ER 1165-2-132 and ASTM E 1527-13 standards were made.

1.8 User Reliance

In accordance with ASTM E 1527-13 Section 7.5.2.1 “Reliance,” the environmental professional is not required to independently verify the information provided by various sources but may rely on the information unless there is actual knowledge that certain information is incorrect or unless it is obvious that certain information is incorrect based on other information obtained during the course of the investigation or otherwise actually known to the investigators conducting the assessment. At the present time all information identified to complete this preliminary assessment appears to be usable for its intended purposes.

2.0 Site Description

2.1 Location and Legal Description

The Skokomish River watershed covers approximately 240 square miles on the southeastern Olympic Peninsula and consists of three river sections which include the main stem of Skokomish River, the North Fork, and the South Fork. The North Fork originates in the northeastern section of the watershed where the majority of the river is diverted to Hood Canal by the Cushman Project. The South Fork originates in the southeastern section of the watershed in the Olympic Mountains, and drains an area of about 124 square miles. Flows of the South Fork are unregulated. With the Cushman Project diverting the majority of the North Fork flow, nearly all the flow of the main stem is fed by the South Fork. The main stem of the Skokomish River has a drainage of about 240 square miles and begins at the junction of the North and South Forks, about 9 miles upstream of Hood Canal. The main stem generally flows southeast and within the lower Skokomish River Valley where it flows through the Skokomish Indian Reservation into Annas Bay, Hood Canal.

The recommended alternative includes five project areas: Confluence Levee Removal, Upstream Large Woody Debris (LWD) Installation, Side Channel Reconnection, Wetland Restoration at River Mile 9, and Wetland Restoration at Grange (Figure 1). A legal description of these properties has not yet been provided, however, the legal descriptions are not expected to affect the professional determination provided herein.

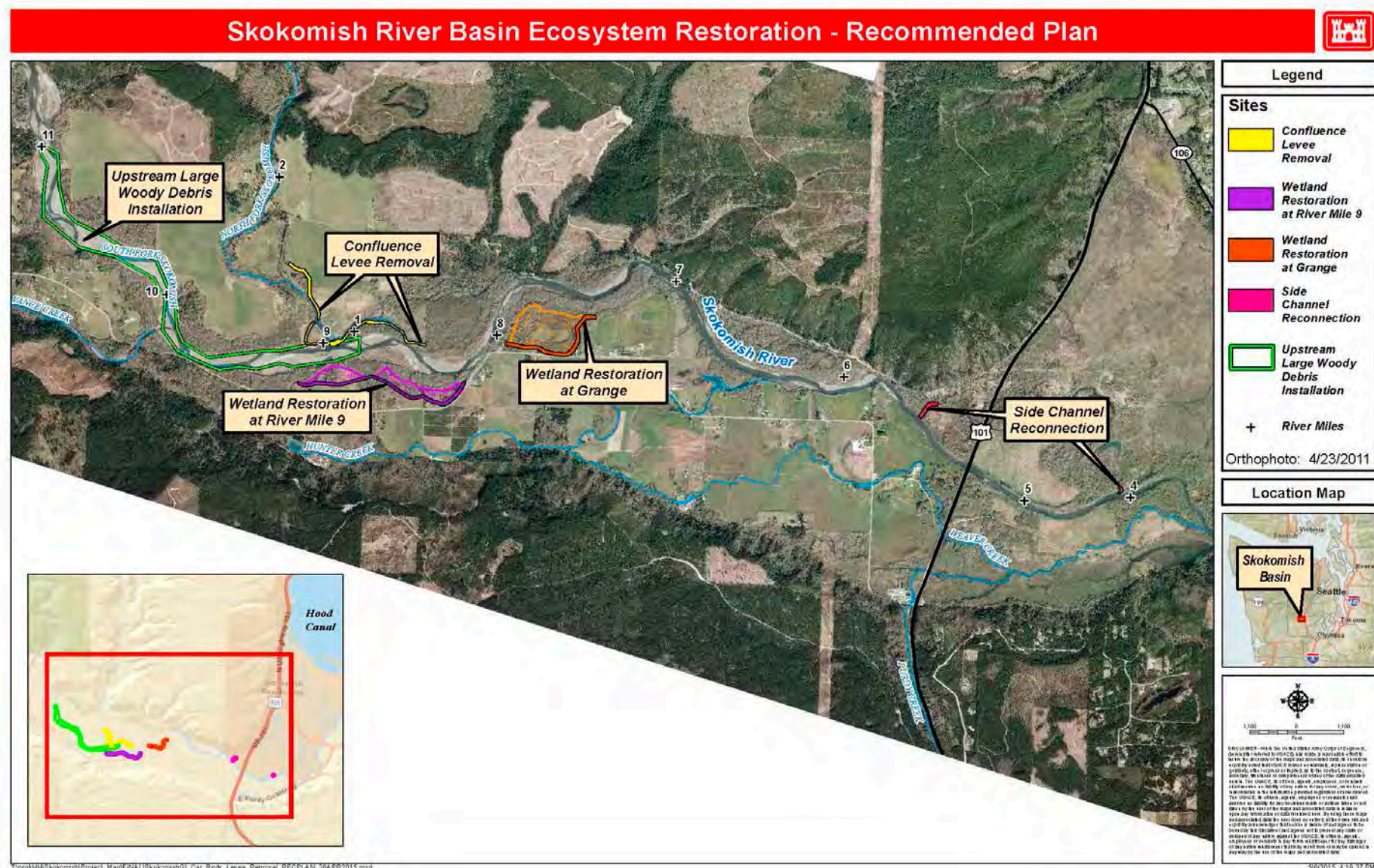


Figure 1 Map of Recommended Alternatives

2.2 Site and Vicinity General Characteristics

In general, the Skokomish area being considered for habitat restoration includes forested areas, agricultural areas, and private property.

The Confluence Levee Removal area is at the confluence of the North Fork and South Fork of the Skokomish River. The Confluence Levee is locally known as the Car Body Levee. The existing levee is approximately 5,400 ft long and covered in dense vegetation. Four rusted, abandoned car bodies were visually identified in the structure of the levee. (A description of the car bodies is included in Annex B-1 of Appendix H).

The area referred to as Upstream LWD Installation is located between river mile 9 and river mile 11. The area impacted is located within the Skokomish River channel. The river is surrounded on both sides by trees and shrubs.

The area referred to as the Side Channel Reconstruction area is an abandoned side channel that lies between river mile 4 and river mile 5.6. This area is bordered by the Skokomish River and vacant forested land.

The area referred to as Wetland Restoration at River Mile 9 is located at river mile 9 and is bordered by the South Fork of the Skokomish River and agricultural land. This area is mostly riparian land and consists of an existing agricultural berm.

The area referred to as Wetland Restoration at Grange area is located from river mile 7.5-8. This area is mostly riparian and consists of an existing agricultural berm. It is bordered by the Skokomish River and agricultural lands.

2.3 Regional and Site Geology

The site is located adjacent to the Skokomish River in a broad, (approximately ¾-mile wide) flat river valley about 5 miles southwest of the river's delta as it enters the Hood Canal. Geologic mapping for the site was obtained from the Geologic Map of the Skokomish Valley and Union 7.5-minute Quadrangles, Mason County, Washington (Polenz et al. 2010). Near-surface geology at the site is mapped as Quaternary age alluvium (Qa). Alluvium at the site typically consists of loose to medium dense, silty sand with gravel. Hills above the river valley (to the north and south) are generally mapped as glacial till (Qgt) with various ice contact deposits mapped between the upland glacial till and lowland alluvium. Occasional peat (Qp) zones are mapped in the valley, although not in the vicinity of the explorations for this study.

2.4 Uses of the Property

General property uses of the Skokomish area being considered for this study include natural forest/river habitat, timberland, agricultural uses (hay production, cattle grazing, and other crops), private homeownership, and some small businesses.

2.5 Uses of Adjoining Property

Uses of adjoining properties include those listed in section 2.3.

2.6 Descriptions of the Structures, Roads, Other Improvements on the Site

Structures in the study area include residential and non-residential buildings. Non-residential structures in the study area include schools, barns and other farming-related buildings, tribal services buildings such as a health clinic and administrative offices, a fish hatchery that covers roughly 6 acres, a fire station, the local Grange Hall, and a church. The area surrounding the lower river and estuary is Skokomish Tribe reservation land. There are no structures located directly on the properties being considered for the recommended alternative.

The existing Highway 101 Bridge is in the vicinity of the Side Channel Reconnection site and is estimated to be adequate in width and height to convey flows associated with this restoration project.

There are multiple levees, dikes and revetments that were built by valley residents to combat local flood problems. The levees were built using available materials, and were constructed without engineering design. Most of the levees along the river were originally constructed in the 1950s and 1960s, and were raised or connected during the 1980s and 1990s.

3.0 Records Review

3.1 Standard Environmental Records

Known and suspected contaminated sites were assessed using Standard environmental record sources (electronic databases). The following list of sources was accessed on January 11, 2011.

- U.S. Environmental Protection Agency’s EnviroMapper at <http://www.epa.gov/emefdata/em4ef.home>. Provides information about environmental activities that may affect air, water, and land.
- Resource Conservation and Recovery Act (RCRAInfo) at http://www.epa.gov/enviro/html/rcris/rcris_query_java.html. Provides information about facilities that store, treat, or dispose of municipal or industrial waste. While a facility may be identified as using materials through reporting requirements, they may not be contaminated;
- Washington State Department of Ecology’s Facilities Site Access at <http://www.ecy.wa.gov/fs/>. Provides known regulated state and federal cleanup sites, hazardous waste generators, hazardous and solid waste management facilities, licensed laboratories, farms that draw water from a well, and underground storage tanks that have an active or potential impact on the environment.; and
- Washington State Department of Ecology’s Integrated Site Information System - Web Reporting (ISIS) databases at < <https://fortress.wa.gov/ecy/tcpwebreporting/reports.aspx>>. List of confirmed and suspected contaminated sites in multiple programs. Some of these sites may be active and some may be closed because cleanup was completed.

The standard environmental search results are displayed on Figure 2. Table 1 details the database search results by further describing the sites displayed on Figure 2. All but two of the listed sites are either remediated and closed or are permitted generators without known contamination. One site is a fish hatchery awaiting soil cleanup and one is a Washington State Department of Transportation (WSDOT) brownfields site. Neither site is expected to impact the project location.

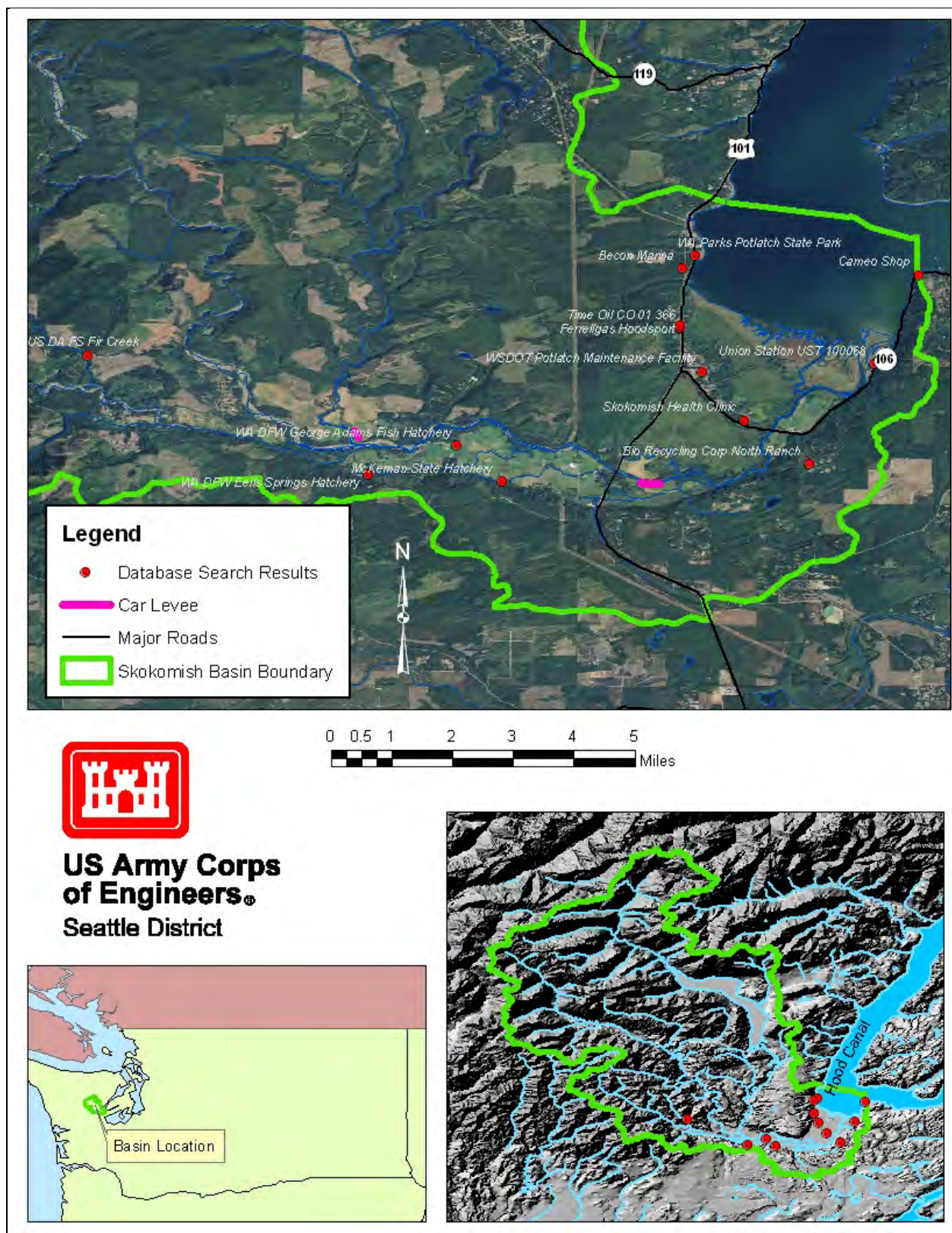


Figure 2 Facilities Locations

Table 1 Facilities details

<i>Name</i>	<i>Address</i>	<i>Notes</i>
WA DFW George Adams Fish Hatchery	W 40 Skokomish Valley Rd. Shelton, WA 98584	Emergency/Haz Chem Rpt TIER2 ¹ ; Hazardous Waste Generator - Conditionally Exempt small Quantity Generator; and Upland Fish Hatchery GP ²
WA DFW Eells Springs Hatchery	7570 W. Eells Hill Rd. Shelton, WA 98584-9758	Emergency/Haz Chem Rpt TIER2 ¹ and Upland Fish Hatchery GP ²
McKernan State Hatchery	411 W. Deyette Rd. Shelton, WA 98584-9760	UST LUST Facility: 1,000 gallon diesel tank was removed (1999) The site is currently awaiting cleanup. Upland Fish Hatchery GP ²
WA Parks Potlatch State Park	N. 21020 HWY 101 Shelton, WA 98584	UST reported removed. No closure date recorded.
Union Station	E 4941 ½ HWY 106 Union WA 98592	Closure in progress of three USTs.
Cameo Shop	6843 E. Hwy 106 Union, WA 98592	Three leaded gasoline USTs where removed. No closure date recorded.
Becon Marina AKA: CBM Sales Inc.	E 5561 Hwy 101 Union, WA 98592-0337	2 USTs (2,000 gal diesel and 1,500 gal leaded gasoline) removed. No closed date recorded.
Time Oil CO 01 366	N. 19930 Hwy 101 Shelton, WA 98584	Emergency/Haz Chem Rpt TIER2 ¹
Ferrellgas Hoodsport	N. 19920 Hwy 101 Shelton WA, 98584	Emergency/Haz Chem Rpt TIER2 ¹
Bio Recycling Corp North Ranch	820 E Webb Hill Rd. Union WA, 98592	Enforcement Final (Ecology Program W2R). An Enforcement action (i.e. Penalty, Order, Notice) was finalized, issued to the respective party, indicating the enforcement action was taken (2/10/2009; no end date recorded)
Skokomish Health Clinic	N 100 Tribal Center Road Shelton, WA 98584	RCRA Hazardous Waste Generator, Large Quantity Generator.
WSDOT Potlatch Maintenance Facility	Unknown Skokomish Indian Reservation	A Brownfields site in which a phase I assessment was completed in 2005. No further progress is reported.
US DA FS Fir Creek	T21N R5W S3, Hoodsport WA 98548	Hazardous Waste Generator, Large Quantity Generator

1 Businesses that store 10,000 pounds or more of a hazardous chemical or 500 pounds or less, depending on the chemical, of an extremely hazardous chemical on site at any one time must report annually. Reports are sent to the State Emergency Response Commission (represented by Washington State Department of Ecology) Local Emergency Planning Committees, and local fire departments for emergency planning (product, not waste).

2 General permits issued to operators of upland fin-fish hatching and rearing operations to regulate discharges to state waters.

3.2 User Provided Information

There is no user supplied information in this HTRW Assessment. Title records, environmental liens, and owner information will be identified during later phases of the feasibility study.

3.3 Historical Records

3.3.1 Historic Photographs

Historical aerial photos of the sites identified in the recommended alternative were obtained from Google earth. The aerial photos show that land use has remained mostly farm land. There have been some changes to the forested areas over the last 20 years. There is no evidence of activities that would have caused HTRW contamination or could potentially cause a release. Figures 3 through 8 are historical and recent aerial photographs of the five project areas.



Figure 3 Confluence Levee Removal area circa 1994 (U.S. Geological Survey)



Figure 4 Confluence Levee Removal area circa 2013 (U.S. Geological Survey)



Figure 5 Upstream Large Woody Debris Installation area circa 2005 (U.S. Geological Survey)



Figure 6 Upstream Large Woody Debris Installation area circa 2013 (U.S. Geological Survey)



Figure 7 Side Channel Reconnection area circa 1994 (U.S. Geological Survey)



Figure 8 Side Channel Reconnection area circa 2013 (U.S. Geological Survey)



Figure 9 Wetland Restoration at River Mile 9 area circa 1994 (U.S. Geological Survey)



Figure 10 Wetland Restoration at River Mile 9 area circa 2013 (U.S. Geological Survey)



Figure 11 Wetland Restoration at Grange area circa 1994 (U.S. Geological Survey)



Figure 12 Wetland Restoration at Grange area circa 2013 (U.S. Geological Survey)

3.3.2 Historic maps

There are no historical maps included in the HTRW Assessment. Based on aerial photos, land use was not changed sufficiently in any of the five areas to warrant a search for historic maps. The historical use of the subject property was researched through other standard sources.

4.0 Site Reconnaissance

A site reconnaissance was performed on August 5, 2014 per section 9 of ASTM E 1527 – 13. The objective of the site visit was to determine if any evidence of a release could be identified at any of the alternative locations. Sites visited during reconnaissance included: Confluence Levee Removal area, the Upstream LWD Installation area, the Wetland Restoration at River Mile 9 area and the Wetland Restoration at Grange area. Due to access limitations, the Side Channel Reconnection area was not visited during the site visit.

4.1 Methodology and Limiting Conditions

The project team systematically observed the recommended plan project and adjacent areas. Some of the limiting conditions included the depth of the river and the thickness of trees and shrubs on the levees that prevented visual observation of soil conditions.

4.2 General Site Setting

Current and past property uses observed were residential, agricultural farm land, and forested/ river habitat. The Skokomish River valley is mostly flat topography with mostly silty sand and gravel soil composition.

Structures observed were mostly residential. There were some barns and abandoned homes observed. The roads consist of pavement and gravel, and are well maintained.

4.3 Interior and Exterior Observations

There were no interior inspections performed as part of this HTRW Assessment. There are no buildings located on the properties of interest and adjacent properties are residential or agricultural farm land. There were no buildings identified that would be expected to contain hazardous material.

During the site visit on August 5, 2014, observations were made of the Confluence Levee Removal area, the Upstream Large Woody Debris Installation area Wetland Restoration at River Mile 9 area, and Wetland Restoration at Grange area. There were no past or current uses observed or suspected that would indicate the presence of hazardous substances. There were no odors, pools of liquid, drums, or storage tanks observed.

4.4 Float Trip Observations (Summer 2010)

Members of the project team conducted a float trip through the main stem of the Skokomish River on 30 July 2010 (the HTRW assessor did not attend). The team noted two (2) levee areas containing junked automobiles; 1) in the main stem approximately a half-mile east of Highway 101 and, 2) in the north fork, near the confluence with the main stem. .

4.5 Interviews and Letters

An interview was performed with Rich Geiger of Mason County. Mr. Geiger was not aware of any current or historical uses of the project area that would suggest hazardous substance use. Rich spoke with the owner of the Confluence Levee and was told there is a potential for more car

bodies to be uncovered with the removal of the levee; however, there should not be any concern about HTRW releases based on results from the physical investigation. Mr. Geiger was aware of permits in the project area for the placement of large woody debris and bank armoring as part of restoration activities.

A letter from EPA Region 10, dated April 7, 2014, supported and encouraged the removal of the Confluence Levee. At the time the letter from EPA was written, the recommended plan referred to the Confluence Levee as the Car Body Levee. Frequent inundation of the levee in recent decades, and results from the site investigation were used as the rationale for very low concern of HTRW releases at this location.

A review of Department of Ecology's toxic cleanup site database confirmed that the Confluence Levee Removal area of the Skokomish River Basin contains no known HTRW as described in a letter from Washington Department of Ecology, dated April 7, 2014. At the time the letter from the Department of Ecology was written, the recommended plan referred to the Confluence Levee as the Car Body Levee.

The Mason County interview summary and letter from EPA Region 10 and Department of Ecology are provided in Appendix A.

5.0 HTRW Phase II Investigation of Confluence Levee

Mason County contracted Landau Associates to conduct an HTRW investigation at Confluence Levee (Mason County 2014) (see Annex B-1 of Appendix H for details and photos). Naming conventions for some features included in the recommended plan have evolved over time. At the time the report was written the Confluence Levee was referred to as the Car Body Levee. During the investigation, the visible car bodies were observed with the following results. Two of the four car bodies did not contain engines, two of the cars did not have fuel tanks, and none of the cars had batteries. No tires were visible on any of the cars. One fuel tank was visible and it was empty. There was no visible or olfactory evidence of petroleum contaminated soil. The site was heavily vegetated suggesting that soils in the area around the car bodies were not contaminated.

Shallow soil samples (top 6 inches) were collected along the crest of the levee, at the location of the four identified car bodies, and at a downed telephone pole in an attempt to sample soil with the highest likelihood of containing contamination. Samples were tested for VOCs, lead, total petroleum hydrocarbons- gasoline range, and total petroleum hydrocarbons- diesel range. Background samples were also collected for comparison. A photo-ionization detector (PID) was used to identify volatile organic compounds during boring. Results for 33 soil samples were compared to the Model Toxic Control Act (MTCA) Method A Soil Cleanup Levels for unrestricted use which establish administrative processes and standards to identify, investigate, and clean up facilities where hazardous substances have come to be located.

There were no soil chemical detections above the MTCA Method A Soil Cleanup Levels and no volatile organics identified with the PID. The proposed action alternatives would not create any hazard to the public or the environment through transport, use, or disposal of hazardous materials. There are no identified CERCLA-regulated substances involved with any of the proposed restoration sites. The four cars at the Confluence Levee have been present in the levee for decades and investigation results indicate that there is no hazardous or toxic waste resulting from the abandoned car bodies. The Washington Department of Ecology has provided a letter confirming that there are no active or proposed cleanup sites within the Skokomish River Basin.

6.0 Findings and Conclusion

This assessment did not reveal evidence of known or suspected HTRW contamination or potential for HTRW releases in connection with the area identified in the Skokomish recommended restoration plan.

The known, suspected, and potential releases shown in Table 1 include underground storage tanks, storage of hazardous chemicals, known surface water discharges, and listings as hazardous waste facilities. There do not appear to be any significant or ongoing point sources. Non-point sources may include agricultural runoff to surface waters. There does not appear to be any information indicating an impact from non-point sources on soil, surface water or sediment.

An HTRW Assessment of the project area was performed in July 2014 in conformance with the scope and limitations of ASTM Standard E 1527-13. There were no sampling results that warranted further evaluation or investigation within the footprint of the recommended plan, including the Confluence Levee Removal site. At this time, the cars are assumed to be solid waste that will be disposed of by the Non-Federal Sponsors at an appropriate disposal site.

This report concludes that recognized environmental conditions that pose an immediate risk to human or ecological health due to current or past activities were not observed within the project area, adjacent properties, or known hazardous substances or petroleum products releases nearby within the limitation of this HTRW Assessment.

7.0 References

Mason County Department of Public Works. 2014. *Final Geotechnical Data Report Geotechnical and HTRW Investigation*, Skokomish General Investigation, Skokomish Washington.

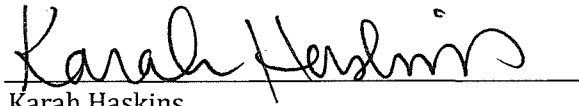
Polenz, M., et. al. 2010. *Geologic Map of the Skokomish Valley and Union 7.5-Minute Quadrangles, Mason County, Washington*. Washington Division of Geology and Earth Resources, Open File Report 2010-3, scale 1:24,000. June.

8.0 Signature & Qualification Page

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 Code of Federal Register (CFR) 312 and the ASTM Standard.

I have the specific qualifications, based on education, training, and experience to assess a property of the nature, history, and setting of the Property. I have developed and performed the Hazardous, Toxic, and Radioactive Waste Assessment in conformance with the ASTM and CERCLA standards and practices set forth in 40 CFR 312 and the ASTM standard.

PREPARED BY:

A handwritten signature in black ink, appearing to read "Karah Haskins", is written over a horizontal line.

Karah Haskins
Physical Scientist

9.0 Assessors Professional Experience

Karah Haskins, Physical Scientist

Education:

University of Washington, BS, Earth and Space Science, 2012

Brief Summary of Relevant Experience:

Ms. Haskins has spent five years working for the U.S. Army Corps of Engineers - Seattle District as a Physical Scientist for the Environmental Engineering and Technology branch. She provides technical expertise and guidance for the remediation of hazardous and toxic waste in groundwater, soil, and sediments sites for Department of Defense cleanup programs and the EPA CERCLA (Superfund) program.

APPENDIX A:

Mason County Interview Summary

EPA Region 10 Letter

Department of Ecology Letter

Interview Record				
Site: Skokomish GI				
Interview Type: Phone Location of Visit: n/a Date: January 7, 2015 Time: 0930-0945				
Interviewers				
Name		Title		Organization
Karah Haskins		Physical Scientist		USACE
Interviewees				
Name	Organization	Title	Telephone	Email
Rich Geiger	Mason County		360-427-9436 Ext 118	rjgeiger@masoncd.org
Summary of Conversation				
OBJECTIVE: The objective of the interview is to obtain information indicating presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment 1. What is your knowledge of prior and current uses of the project area? Rich spoke with previous owner of "Car body levee". He was told that there are potentially more car bodies that are covered with sediment, but there should not be a concern about pollutants based on previous survey of the area. During removal of "Car body levee" care should be taken for encountering more car bodies. The other properties are historical agriculture land and there is no record of any releases to these areas. 2. What is your knowledge of prior and current uses of adjacent properties to the project area? In between the old confluence due south at the intersection of W Skokomish Valley Rd there is a former 76 gas station. Rich noted that it was probably not properly decommissioned and that it is not close to the from the project areas. There have been no reports of closure or releases at the 76 Station. 3. Are you aware of any releases to the project area or surrounding areas? There have been no releases... 4. Are you aware of any environmental reports written for the project area or surrounding areas? Such as, Environmental site assessment reports, environmental compliance audit reports, environmental permits (HW disposal permits, NPDES permits, etc), community right-to-know plans, risk assessments, etc. 5. There have been several projects that include permits to place woody debris and bank armoring upstream of River Mile 9 On the other side of the RM 9 there were dike repairs that occurred under emergency circumstances and were later permitted. 6. Any other information that might be pertinent to the site assessment? The facilities identified in the records search are not a concern. They are not located near any of the project areas.				
Additional Site-Specific Comments				



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

April 7, 2014

Ms. Nancy C. Gleason
U.S. Army Corps of Engineers
CENWS-EN-ER
P.O. Box 3755
Seattle, Washington 98124

Re: Skokomish River Basin Ecosystem Restoration Draft Integrated Feasibility Report and
Environmental Impact Statement – EPA Region 10 Project Number 10-056-COE

Dear Ms. Gleason:

The U.S. Environmental Protection Agency has reviewed the Skokomish River Basin Ecosystem Restoration Draft Integrated Feasibility Report and Environmental Impact Statement (DEIS). We are submitting comments in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. We appreciate this opportunity to review the proposed restoration plans.

In order to address significant degradation of natural processes that sustain ecological functions of the watershed, the Corps of Engineers proposes to take actions that restore aquatic ecosystem processes, structure, and function in the lower 11 river miles of the Skokomish River Basin. The Corps conducted a General Investigation and Feasibility Study which revealed the need for and potential solutions to providing year-round fish passage around the confluence of the North and South Forks, reconnecting and restoring side channel and tributary networks, improving riparian and floodplain habitats, and improving pool depth and frequency.

In addition to the No Action Alternative, five action alternatives are proposed. Three of these (Alternatives 7, 23, and 28) stem from the base action of removing the car body levee on the north side of the mainstem; two (Alternatives 45 and 60) stem from the base action of riverbed excavation or dredging. Both base actions would include limited placement of large woody debris (LWD). These alternatives were developed through a cost-effectiveness/incremental cost analysis (CE/ICA), whereby the Corps included a progressive number and array of restoration actions or increments within the Basin to meet the purpose and need. The Tentatively Selected Plan, also known as the Preferred Alternative, is Alternative 27, which is the same as Alternative 28 but without the Dips Road Setback increment.

We are rating the Draft EIS and its Preferred Alternative 27 as LO, Lack of Objections. An explanation of the EPA rating system is enclosed for your use. We support the Corps' efforts to restore ecosystem process, structure, and function in the lower Skokomish River Basin and appreciate that the Skokomish Tribe, resource agencies, and Mason County have been involved in the watershed studies and the generation of alternatives. To ensure that intended outcomes are achieved, we recommend that the Preferred Alternative be selected, implemented, and subsequently monitored, evaluated and, where necessary, modified, with continued hands-on involvement of these same partners.

We agree, as stated in the DEIS, that the broad-scale alteration of the river bottom that would result from the Riverbed Excavation Alternatives 45 and 60 would cause significant risk to salmon habitat, and we do not support their selection. We do support the full range of actions and increments included in Alternative 28, and encourage project partners to seek alternative funding sources to implement the Dips Road Setback as well as the other proposed increments contained in Alternative 27.

In the enclosure, we offer additional comments and recommendations for your consideration in preparing the Final EIS. We thank you for the opportunity to review the Skokomish River Basin Draft Feasibility Report and Ecosystem Restoration EIS, and look forward to successful implementation. If you would like to discuss these comments or need more information, please contact me at 206-553-1601 or via electronic mail at reichgott.christine@epa.gov, or Elaine Somers of my staff at 206-553-2966 or via electronic mail at somers.elaine@epa.gov.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure

**U.S. Environmental Protection Agency
Detailed Comments for the
Skokomish River Basin Draft Integrated Feasibility Report and EIS**

Upper Watershed Characterization – current condition and trend

While problems, opportunities, and objectives for restoration are examined within the context of the entire watershed, the focus of the proposed project is within the lower 11 miles of the watershed. The Draft EIS discusses the activities that have led to degradation within the Skokomish River Basin, including those that have affected the upper South Fork Skokomish, but provides little information regarding the restoration actions that have occurred in the upper watershed. It would be helpful to include more information regarding the historic and current restoration efforts upstream of the project area, because the condition of the upper watershed has bearing on the success of efforts downstream.

Recommendation: In the Affected Environment and Environmental Consequences sections of the EIS, include more information regarding the nature and location of historic and current restoration actions in the upper South Fork Skokomish and the resulting ecological conditions and trends that would contribute to the relative success of the proposed actions.

Water Quality

Adequate water quality and appropriate water temperatures are among the basic requirements for anadromous fish in the system (p. 73). Water quality problems noted in the project area include warm temperatures, low dissolved oxygen, and high levels of bacteria and nutrients. These factors also contribute to low oxygen conditions in Hood Canal. The location and design of restoration actions can contribute to reducing these water quality problems in the project area and estuary.

Recommendation: As project design is refined, locate and design restoration actions, such as levee setbacks and riparian plantings, to reduce pollutant inputs and improve water quality within the project area and downstream estuary to the maximum possible extent.

Large Woody Debris

The Draft EIS (p. 22) states that the general goal is to use 64 logs per river mile that are two to three feet in diameter and 15 to 30 feet long for constructing engineered log jams (ELJs). Because these are large logs, it is important to ensure that restoration actions in the project area do not result in loss of important late old structure trees/stands elsewhere with associated ecological impacts.

Recommendation: Be mindful of the origin and associated impacts of obtaining large logs for the ELJs. To minimize impacts, consider sourcing logs that are certified by the Forest Stewardship Council, or that are obtained from federal lands administered under the Northwest Forest Plan. Tree root wads, where obtainable, are also valuable in ELJs.

Hazardous, Toxic Waste

While Corps policy regarding Hazardous, Toxic, and Radioactive Waste sites allows consideration of alternative project plans that avoid HTRW sites (Appendix 1, p. 1), we wish to convey that we fully support and encourage the removal of the car body levee as a base action for the proposed Skokomish ecosystem restoration. Due to the current lack of information regarding potential soil/water/sediment contamination from the 1950s-era cars used to construct the car body levee and the fact that this has been frequently inundated in recent decades, we have no basis upon which to register a high level of concern for residual contamination. However, when the Corps conducts sampling this summer, we offer the following recommendations:

Recommendations:

- Research the types of contaminants typically found in junk yards beneath car storage areas and test for those components. This should include metals, petroleum products, and antifreeze.
- Test the soil and sediments both upstream and downstream of the car body mass. If there is no detection upstream, use the results as a control or background sample. Then test beneath and downstream of the car bodies for the same suite of analytes.
- Report any contamination encountered to the Washington Department of Ecology hotline. For further information, contact Kris Grinnell at Ecology at 360-407-7382.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

Mamie Brouwer
Project Manager, Civil Works Branch
U.S. Army Corps of Engineers
Seattle District, CENWS-PM-CP-CJ
P.O. Box 3755
Seattle, WA 98124

Dear Ms. Brouwer,

This letter is intended to provide the Corps of Engineers with additional information regarding the car body levee site proposed as part of the Skokomish River Basin Ecosystem Restoration General Investigation (GI) Study. The GI study team recently identified the Tentatively Selected Plan (TSP) which includes removal of a car body levee near the confluence of the North and South Forks of the Skokomish River. The Seattle District has requested confirmation from the Washington Department of Ecology that the proposed car body levee project site contains no known hazardous or toxic waste.

A review of Department of Ecology's toxic cleanup site database has confirmed that the car body levee area of the Skokomish River Basin contains no known hazardous or toxic waste. There are no cleanup projects active or proposed at this site at this time, and there are no active cleanup sites within the Skokomish River Basin.

Should hazardous or toxic waste be discovered during the removal of the levee, that discovery should be reported to Ecology following the procedures for reporting a spill outlined on Ecology's website: <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>.

Respectfully,

A handwritten signature in black ink, appearing to read "Kristopher M. Grinnell".

Kristopher M. Grinnell
Toxics Cleanup Program
Washington Department of Ecology