

## CMZ Geomorphic Assessment

Reach ID	<input type="text" value="CL_15_01"/>	Date	<input type="text" value="8/15/2011"/>
Stream Name	<input type="text" value="Morse"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="15"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input style="width: 100%;" type="text"/>		

### Data Inventory

Topography Data	<input style="width: 85%;" type="text" value="LiDAR (hillshade and LiDAR), RWSE."/>
Orthophotographs	<input style="width: 85%;" type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input style="width: 85%;" type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

### Alluvial Landform

Geology Units and Erodibility	<input style="width: 95%;" type="text" value="Quaternary alluvium - high; continental glacial outwash, Fraser Age- moderate; Pysht Formation, upper Twin River Group - moderate; Makah Formation, middle Twin River Group - moderate"/>	Underfit Stream <input type="checkbox"/>
Soil Units and Texture	<input style="width: 95%;" type="text" value="Neilton v. gravelly loamy sand; Carlsborg-Dungeness Complex gravelly sandy loam; Schnorbush loam"/>	Alluvial Fans <input type="checkbox"/>
		Delta <input checked="" type="checkbox"/>
Other Basin Characteristics	<input style="width: 95%;" type="text"/>	Eroding Valley Margin <input checked="" type="checkbox"/>
		Terraces <input checked="" type="checkbox"/>
		Landslides <input type="checkbox"/>
		Sediment Input Changes <input type="checkbox"/>
		Discharge Changes <input type="checkbox"/>
		Channel Widening <input type="checkbox"/>
		Channel Movement <input type="checkbox"/>
		Tidal Influence <input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form		

Reach ID

CL\_15\_01

Stream Name

Morse

County

Clallam

**Stream Characteristics**

Stream Length (ft) 15793 Sinuosity 1.2 Channel Gradient 0.0095

Valley Length (ft) 12960 Alluvial Valley Width (ft) 1200 Valley Gradient (Underfit Streams):

Planform Type: Sinuous

Riparian Vegetation Left Bank Type and % Deciduous Riparian Buffer Width LB (ft) 125

Riparian Vegetation Right Bank Type and % Deciduous Riparian Buffer Width RB (ft) 125

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley 4.1

Key Geomorphic Features A series of avulsion channels exist out-of-phase with the current channel position. Landslide activity is evident in the valley walls.

**Infrastructure**

Levee/revetment  Structures Dense residential development close to stream.

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_15\_01

Stream Name

Morse

County

Clallam

Geomorphic Setting

Valley incised into continental glacial outwash to LiDAR rock. Little to no alluvial valley fill.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel or edge of 1st terrace above floodplain (valley margin), whichever is wider.

QA/QC Notes

Reach ID	<input type="text" value="CL_09_01"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Pysht"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="9"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Change in gradient, edge of tidal influence."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (LiDAR and hillshade), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Clallam Formation (nearshore sedimentary)- moderate; Pysht Formation, upper Twin River Group conglomerate."/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="LiDARach deposits; Tealwhit silt loam; Queets silt loam; Ozette glacial till silt loam"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_09\_01

Stream Name

Pysht

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_09\_01

Stream Name

Pysht

County

Clallam

Geomorphic Setting

Wide, alluvium filled delta plain. Very low gradient with strong tidal influence. Valley confined by LiDARrock.

Analyst Notes

CMZ mapped as alluvial valley extent.

QA/QC Notes

Reach ID	<input type="text" value="CL_09_02"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Pysht"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="9"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Change in gradient, edge of tidal influence."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (LiDAR and hillshade), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Clallam Formation (nearshore sedimentary) - moderate ; Makah Formation middle Twin River Group - moderate ; continental glacial till, Fraser Age - moderate ;"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Queets silt loam; Solleks v. gravelly loam; Ozette glacial till silt loam;"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_09\_02

Stream Name

Pysht

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %

Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %

Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Agriculture

Reach ID

CL\_09\_02

Stream Name

Pysht

County

Clallam

Geomorphic Setting

[Empty text box for Geomorphic Setting]

Analyst Notes

CMZ delimited along edge of alluvial valley or 1 meander wavelength around active geomorphic channel, whichever is less. Where there is evidence of recent erosion in valley margin geotechnical buffer indicated.

QA/QC Notes

[Empty text box for QA/QC Notes]

Reach ID	<input type="text" value="CL_09_03"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="S. Fork Pysht"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="9"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Tributary stream"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (LiDAR and hillshade), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Makah Formation&lt;br/&gt;middle Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Ozette glacial till silt loam;&lt;br/&gt;Palix loam."/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_09\_03

Stream Name

S. Fork Pysht

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Geomorphic Setting

Meandering stream in confined valley. Valley may LiDAR cut into sedimentary rock or unconsolidated glacial sediment (soils map and geology map don't agree).

Analyst Notes

CMZ on LB defined as 1 meander wavelength around active geomorphic channel or edge of geomorphic floodplain, where terraces indicate valley is incised into highly erodible sediment. CMZ on RB defined as edge of alluvial valley, where valley wall appears to LiDAR sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_09_04"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Pysht"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="9"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input dataset"="" ecology="" streams"="" type="text" value="Disconnected streams in "/>		

**Data Inventory**

Topography Data	<input type="text" value="Partial coverage with LiDAR (LiDAR and hillshade), no RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="continental glacial till, Fraser Age - moderate ; Hoko River Formation, lower Twin River Group - moderate ; Makah Formation, middle Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Palix loam; Ozette glacial till silt loam; Ozette-Andeptic Udorthents complex gravelly silt loam."/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_09\_04

Stream Name

Pysht

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_09\_04

Stream Name

Pysht

County

Clallam

Geomorphic Setting

Broad alluvial valley cut into sedimentary LiDARrock. Right bank side of valley filled with unconsolidated sediment.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel, or edge of alluvial valley.

QA/QC Notes

Reach ID	<input type="text" value="CL_09_05"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Pysht"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="9"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Edge of available LiDAR data."/>		

**Data Inventory**

Topography Data	<input type="text" value="No LiDAR"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="continental glacial till, Fraser Age - moderate ; Hoko River Formation, lower Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Ozette glacial till silt loam; Palix loam."/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_09\_05

Stream Name

Pysht

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Agriculture

Reach ID

CL\_09\_05

Stream Name

Pysht

County

Clallam

Geomorphic Setting

LiDARdrock confined valley with limited alluvial fill.

Analyst Notes

Challenged Data Stream reach. CMZ delimited as edge of alluvial valley as determined from air photo investigation.

QA/QC Notes

Reach ID	<input type="text" value="CL_08_01"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Clallam"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="8"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Edge of delta plain."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; Pysht Formation, upper Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Queets silt loam; Palix loam;"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_08\_01

Stream Name

Clallam

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_08\_01

Stream Name

Clallam

County

Clallam

Geomorphic Setting

Delta plain, wide unconfined stream.

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active fluvial delta in quaternary sediment and as edge of active fluvial delta where confined by LiDARdrock.

QA/QC Notes

Reach ID	<input type="text" value="CL_08_02"/>	Date	<input type="text" value="8/16/2011"/>
Stream Name	<input type="text" value="Clallam"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="8"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Transition from confined to unconfined valley."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; Pysht Formation, upper Twin River Group - moderate; continental glacial till, Fraser Age - moderate ; Makah Formation, middle Twin River Group"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Queets silt loam; Palix loam; Ozette silt loam; Andeptic Udorthents"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_08\_02

Stream Name

Clallam

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Geomorphic Setting

Stream in wide alluvial valley that is incised into sedimentary rock and some unconsolidated glacial sediment

Analyst Notes

CMZ delineated as 1 meander amplitude buffer around active geomorphic channel in valley fill unconsolidated alluvial or glacial outwash sediment and as 1/2 meander amplitude buffer in valley wall sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_08_03"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Clallam"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="8"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; continental glacial till, Fraser Age - moderate; Makah Formation, middle Twin River Group"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Palix loam; Ozette silt loam; Andeptic Udorthents"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_08\_03

Stream Name

Clallam

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_08\_03

Stream Name

Clallam

County

Clallam

Geomorphic Setting

Stream confined in alluvial valley with fill of unconsolidated glacial sediment. The valley is incised into sedimentary rock and some unconsolidated glacial sediment

Analyst Notes

CMZ delineated as 1 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_13_01"/>	Date	<input type="text" value="8/8/2011"/>
Stream Name	<input type="text" value="Lyre"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="13"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Tributary junction, change in meander wavelength."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="ecologycmz.DBO.geologic_unit_poly_100k"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Pysht Formation, upper Twin River Group - moderate; continental glacial outwash, Fraser Age - moderate; Quaternary alluvium - high"/>	Underfit Stream	<input type="checkbox"/>
		Alluvial Fans	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Delta	<input type="checkbox"/>
		Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_13\_01

Stream Name

Lyre

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_13\_01

Stream Name

Lyre

County

Clallam

Geomorphic Setting

Valley incised in fluvial glacial sediments, perhaps to LiDARdrock leading downstream to quaternary alluvial delta.

Analyst Notes

QA/QC Notes

Reach ID	<input type="text" value="CL_13_02"/>	Date	<input type="text" value="8/8/2011"/>
Stream Name	<input type="text" value="Lyre"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="13"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="ecologycmz.DBO.geologic_unit_poly_100k"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Pysht Formation, upper Twin River Group - moderate; continental glacial outwash, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_13\_02

Stream Name

Lyre

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_13\_02

Stream Name

Lyre

County

Clallam

Geomorphic Setting

Valley incised in fluvial glacial sediments, perhaps to LiDARdrock.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_04_01"/>	Date	<input type="text" value="8/9/2011"/>
Stream Name	<input type="text" value="Little Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="4"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium- high; Makah formation, middle Twin River Group - moderate"/>	Underfit Stream <input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets-Tealwhit complex (silty alluvium); PALIX (loam derived from non carbonate sedimentary rock)"/>	Alluvial Fans <input type="checkbox"/>
		Delta <input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin <input type="checkbox"/>
		Terraces <input type="checkbox"/>
		Landslides <input type="checkbox"/>
		Sediment Input Changes <input type="checkbox"/>
		Discharge Changes <input type="checkbox"/>
		Channel Widening <input type="checkbox"/>
		Channel Movement <input type="checkbox"/>
		Tidal Influence <input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form		

Reach ID

CL\_04\_01

Stream Name

Little Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_04\_01

Stream Name

Little Hoko

County

Clallam

Geomorphic Setting

Broad alluvial valley eroded into marine siliciclastic sedimentary rock.

Analyst Notes

CMZ delineated as 1/2 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_01"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Edge of tidal influence, change in gradient."/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Pysht Formation, upper Twin River Group - moderate; Makah Formation, middle Twin River Group - moderate; continental glacial till, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets-Tealwhit Complex (silty alluvium); Palix loam; Snahopish (v. gravelly loam); Ozette silt loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_01

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures   
Bridge  Other   
Road/Railroad  Notes   
Straightened Channel   
Agriculture

Reach ID

CL\_03\_01

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Alluvium filled delta plain confined by sedimentary LiDARdrock.

Analyst Notes

Channel position at mouth controlled by long shore bar. Strong avulsion potential. CMZ defined as a 1/4 meander amplitude buffer around active channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_02"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Tributary confluence, valley width change"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Makah Formation, middle Twin River Group - moderate; continental glacial till, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets-Tealwhit Complex (silty alluvium); Palix loam; Ozette silt loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_02

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_03\_02

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Broad alluvial valley confined by sedimentary LiDARdrock, valley right side has a deposit of unconsolidated quaternary sediment

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active channel in LiDARdrock and 1 meander amplitude buffer around active channel in unconsolidated sediment.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_03"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Tributary confluence, valley width change"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Makah Formation, middle Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets-Tealwhit Complex (silty alluvium); Palix loam; Ozette silt loam."/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_03

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_03\_03

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Broad alluvial valley confined by sedimentary LiDARdrock

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active channel

QA/QC Notes

Reach ID	<input type="text" value="CL_03_04"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; Makah Formation, middle Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets-Tealwhit Complex (silty alluvium); Palix loam; Ozette silt loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_04

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_03\_04

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Alluvial valley confined by sedimentary LiDARrock

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_05"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Disconnected reach in Ecology streams file"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR hillshade. No LiDAR or rwse available."/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age - high; Quaternary alluvium - high; Aldwell Formation - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets (silty alluvium); Ozette (silt loam); Andeptic Udorthents (gravelly silt loam)"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_05

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_03\_05

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Alluvial valley with some glacial till fill confined by volcanic and sedimentary LiDARdrock, backwater upstream of a bedrock constriction

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active geomorphic channel. Active erosion and significant geotechnical hazard at outside of meander LiDARnds.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_06"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Disconnected reach in Ecology streams file"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="siltstone and sandstone of LiDARar Creek formation - moderate; continental glacial till, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Klone-Ozette-Tealwhit-Complex silt loam; Ozette silt loam."/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_06

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_03\_06

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Valley incised into continental glacial till to sedimentary LiDARrock.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel. Or edge of floodplain, whichever was greater. Channel migration potential is somewhat dependent on weather channel has incised into LiDARrock beneath the glacial till or has just cut to the surface of bedrock and can easily erode laterally through glacial till. If the channel has incised into bedrock, a 1 active channel width buffer with geotechnical setback would be more appropriate.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_07"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Disconnected reach in Ecology streams file"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age- moderate; Ozette Lake-Clawah Ridge block (marine sedimentary) - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Klone-Ozette-Tealwhit-Complex silt loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text" value="Broad valley with deep glacial till fill."/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_07

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Agriculture

Reach ID

CL\_03\_07

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Broad valley with deep glacial till fill, apparently low gradient but no high resolution topographic data available.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_03_08"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Disconnected reach in Ecology streams file"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age- moderate, Ozette Lake-Clawah Ridge block (marine sedimentary) - moderate erodibility; LiDARar Creek, conglomerate of - moderate"/>	Underfit Stream <input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Klone-Ozette-Tealwhit-Complex silt loam"/>	Alluvial Fans <input type="checkbox"/>
		Delta <input type="checkbox"/>
Other Basin Characteristics	<input type="text" value="Broad valley with deep glacial till fill."/>	Eroding Valley Margin <input type="checkbox"/>
		Terraces <input type="checkbox"/>
		Landslides <input type="checkbox"/>
		Sediment Input Changes <input type="checkbox"/>
		Discharge Changes <input type="checkbox"/>
		Channel Widening <input type="checkbox"/>
		Channel Movement <input type="checkbox"/>
		Tidal Influence <input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form		

Reach ID

CL\_03\_08

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)	<input type="text" value="5300"/>	Sinuosity	<input type="text" value="1.4"/>	Channel Gradient	<input type="text"/>
Valley Length (ft)	<input type="text" value="3700"/>	Alluvial Valley Width (ft)	<input type="text" value="300"/>	Valley Gradient (Underfit Streams):	<input type="text"/>
Planform Type:	<input type="text" value="Sinuous"/>				
Riparian Vegetation Left Bank Type and %	<input type="text" value="Mixed forest"/>			Riparian Buffer Width LB (ft)	<input type="text" value="150"/>
Riparian Vegetation Right Bank Type and %	<input type="text" value="Mixed forest"/>			Riparian Buffer Width RB (ft)	<input type="text" value="150"/>
Functional Wood Present	<input checked="" type="checkbox"/>	Logjams Present	<input type="checkbox"/>	Wetlands % of Alluvial Valley	<input type="text" value="0"/>
Key Geomorphic Features	<input type="text"/>				

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input type="checkbox"/>	Notes	<input type="text" value="Abandoned railroad grade"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_03\_08

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Broad valley with deep glacial till fill, apparently low gradient but no high resolution topographic data available.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel in glacial till and 1/2 meander amplitude buffer around active geomorphic channel in sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_05_01"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age - moderate , Ozette Lake-Clawah Ridge block (marine sedimentary moderate erodibility); LiDARar Creek, siltstone and sandstone of - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Klone-Ozette-Tealwhit-Complex silt loam; Ozette Andeptic Udorthents Complex very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text" value="Valley with deep glacial till fill confined by sedimentary LiDARrock."/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_05\_01

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_05\_01

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Broad valley with deep glacial till fill, apparently low gradient but no high resolution topographic data available.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel in glacial till and 1/2 meander amplitude buffer around active geomorphic channel in sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_06_01"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Herman"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="6"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age - moderate; LiDARar Creek, siltstone and sandstone of - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Ozette silt loam; Andeptic Udorthents very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
Other Basin Characterisitcs	<input type="text"/>	Delta	<input type="checkbox"/>
		Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_06\_01

Stream Name

Herman

County

Clallam

**Stream Characteristics**

Stream Length (ft)	<input type="text" value="3828"/>	Sinuosity	<input type="text" value="2.1"/>	Channel Gradient	<input type="text" value="0.012"/>
Valley Length (ft)	<input type="text" value="2184"/>	Alluvial Valley Width (ft)	<input type="text" value="500"/>	Valley Gradient (Underfit Streams):	<input type="text"/>
Planform Type:	<input type="text" value="Sinuous"/>				
Riparian Vegetation Left Bank Type and %	<input type="text" value="Mixed forest, deciduous near stream"/>			Riparian Buffer Width LB (ft)	<input type="text" value="150"/>
Riparian Vegetation Right Bank Type and %	<input type="text" value="Mixed forest, mostly deciduous"/>			Riparian Buffer Width RB (ft)	<input type="text" value="150"/>
Functional Wood Present	<input checked="" type="checkbox"/>	Logjams Present	<input type="checkbox"/>	Wetlands % of Alluvial Valley	<input type="text" value="0"/>
Key Geomorphic Features	<input type="text"/>				

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input type="checkbox"/>	Notes	<input type="text"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_06\_01

Stream Name

Herman

County

Clallam

Geomorphic Setting

Steep creek in sedimentary LiDARrock valley with some quaternary alluvial fill emerging into broad valley with deep glacial till fill, possibly on an alluvial fan.

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_06_02"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Herman"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="6"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age - moderate; LiDARar Creek, siltstone and sandstone of - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Klone-Ozette-Tealwhit-Complex silt loam; Andeptic Udorthents Complex very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characterisitcs	<input type="text" value="Valley with deep glacial till fill confined by sedimentary LiDARdrock."/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_06\_02

Stream Name

Herman

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_06\_02

Stream Name

Herman

County

Clallam

Geomorphic Setting

Steep creek in sedimentary LiDARrock valley with some quaternary alluvial fill

Analyst Notes

CMZ defined as 1 meander amplitude buffer around active geomorphic channel in glacial till and 1/2 meander amplitude buffer around active geomorphic channel in sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_07_01"/>	Date	<input type="text" value="8/17/2011"/>
Stream Name	<input type="text" value="Herman"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="6"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="LiDARar Creek, siltstone and sandstone of - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Andeptic Udorthents Complex very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characterisitcs	<input type="text" value="Valley with deep glacial till fill confined by sedimentary LiDARrock."/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_07\_01

Stream Name

Herman

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_07\_01

Stream Name

Herman

County

Clallam

Geomorphic Setting

Steep creek in sedimentary LiDARrock valley with some quaternary alluvial fill

Analyst Notes

CMZ defined as 1/2 meander amplitude buffer around active geomorphic channel in sedimentary rock.

QA/QC Notes

Reach ID	<input type="text" value="CL_10_01"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="Deep"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="10"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium; Pysht Formation, upper Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
		Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
		Eroding Valley Margin	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silty alluvium; Palix loam"/>	Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_10\_01

Stream Name

Deep

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_10\_01

Stream Name

Deep

County

Clallam

Geomorphic Setting

Narrow alluvial valley with quaternary alluvial fill incised into sedimentary LiDARrock.

Analyst Notes

CMZ delimited as 1 meander wavelength in quaternary alluvium and 1/2 meander wavelength in LiDARrock.

QA/QC Notes

Reach ID	<input type="text" value="CL_12_01"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="W. Twin"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="12"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium; Pysht Formation, upper Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_12\_01

Stream Name

W. Twin

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_12\_01

Stream Name

W. Twin

County

Clallam

Geomorphic Setting

Alluvial valley confined in sedimentary LiDARrock emerging onto a delta plain.

Analyst Notes

CMZ delineated as 1 active channel width buffer around active geomorphic channel or extent of delta plain, whichever is wider.

QA/QC Notes

Reach ID	<input type="text" value="CL_11_01"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="E. Twin"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="11"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium; Pysht Formation, upper Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_11\_01

Stream Name

E. Twin

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_11\_01

Stream Name

E. Twin

County

Clallam

Geomorphic Setting

Alluvial valley confined by sedimentary LiDARdrock emerging onto a delta plain.

Analyst Notes

CMZ delineated as 1 active channel width buffer around active geomorphic channel or extent of delta plain, whichever is wider.

QA/QC Notes

Reach ID	<input type="text" value="CL_01_01"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Sooes"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="1"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; Continental glacial till, Fraser Age - moderate; Crescent formation, pillowed- low; Elk Lake block (siltstone and sandstone of)"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Kydaka-Zeeka-Complex silt clay loam; Ozette silt loam"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characterisitcs	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_01\_01

Stream Name

Sooes

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_01\_01

Stream Name

Sooes

County

Clallam

Geomorphic Setting

Broad alluvial valley LiDAR between glacial terraces and volcanic bedrock. Very low gradient and approaching delta plain.

Analyst Notes

CMZ delineated as 1 meander wavelength buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_01_02"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="Sooes"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="1"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Elk Lake block (siltstone and sandstone of)- moderate; Continental glacial till, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Kydaka-Zeeka-Complex silt clay loam; Ozette silt loam; Andeptic Udorthents very gravelly loam; Snaonish very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characterisitcs	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_01\_02

Stream Name

Sooes

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_01\_02

Stream Name

Sooes

County

Clallam

Geomorphic Setting

Narrow alluvial valley cut through glacial till to sedimentary LiDARrock

Analyst Notes

CMZ delineated as 1 meander wavelength buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_01_03"/>	Date	<input type="text" value="8/19/2011"/>
Stream Name	<input type="text" value="Sooes"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="1"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Tributary junction; change in valley width and degree of incision."/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Elk Lake block (siltstone and sandstone of) - moderate; Snag Peak block, siltstone and sandstone of - moderate; Continental glacial till, Fraser Age - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Tealwhit silt loam; Ozette silt loam; Andeptic Udorthents very gravelly loam; Snaonish very gravelly loam."/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_01\_03

Stream Name

Sooes

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_01\_03

Stream Name

Sooes

County

Clallam

Geomorphic Setting

Very narrow alluvial valley cut through glacial till to sedimentary LiDARrock

Analyst Notes

CMZ delineated as 1 meander wavelength buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_02_01"/>	Date	<input type="text" value="8/22/2011"/>
Stream Name	<input type="text" value="Seiku"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Break in Slope, probably edge of tidal influence"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (LiDAR and RWSE)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; Continental glacial till, Fraser Age (moderate edibility); Makah Formation - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Palix Loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input checked="" type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_02\_01

Stream Name

Seiku

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_02\_01

Stream Name

Seiku

County

Clallam

Geomorphic Setting

Delta plain. Fluvial valley cut into broader valley that is filled with glacial till.

Analyst Notes

CMZ delimited as the greater of the extent of delta plain; or 1/2 meander amplitude buffer around active channel in unconsolidated quaternary sediment or 1 active channel width in sedimentary LiDARrock.

QA/QC Notes

Reach ID	<input type="text" value="CL_02_02"/>	Date	<input type="text" value="8/22/2011"/>
Stream Name	<input type="text" value="Seiku"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Edge of LiDAR data"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (LiDAR and RWSE)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary Alluvium - high; Continental glacial till, Fraser Age (moderate edibility); Makah Formation - moderate; Hoko River Formation, lower Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Palix Loam"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text" value="Knickpoint at upper end of reach indicates instability and channel widening are possibly propagating upstream."/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input checked="" type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input checked="" type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_02\_02

Stream Name

Seiku

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_02\_02

Stream Name

Seiku

County

Clallam

Geomorphic Setting

Alluvial valley confined by sedimentary LiDARrock. Glacial till remnant terraces above stream.

Analyst Notes

CMZ delimited as 1 active channel width buffer around active geomorphic channel or 1 meander amplitude buffer around active channel, whichever is greater.

QA/QC Notes

Reach ID	<input type="text" value="CL_02_03"/>	Date	<input type="text" value="8/22/2011"/>
Stream Name	<input type="text" value="Seiku"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial till, Fraser Age - moderate; Aldwell Formation - moderate; Lizard Lake, basaltic sandstone &amp; conglomerate of; Crescent Formation - low"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Ozette Andeptic Udorthents Complex gravelly silt loam; Makah gravelly loam"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input checked="" type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_02\_03

Stream Name

Seiku

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_02\_03

Stream Name

Seiku

County

Clallam

Geomorphic Setting

Alluvial valley filled with glacial till. Active channel confined by sedimentary LiDARdrock on RB and eroding into unconsolidated till on LB.

Analyst Notes

QA/QC Notes

Reach ID	<input type="text" value="CL_02_05"/>	Date	<input type="text" value="8/22/2011"/>
Stream Name	<input type="text" value="Seiku"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Discontinuous reaches in Ecology Streams shapefile."/>		

**Data Inventory**

Topography Data	<input type="text" value="USGS 1:24k topo map as a DRG (USA_Topo_Maps)"/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution, Google Earth"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - moderate; Hoko River Formation, lower Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Queets silt loam; Palix Loam; Ozette Andeptic Udorthents Complex gravelly silt loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input checked="" type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_02\_05

Stream Name

Seiku

County

Clallam

**Stream Characteristics**

Stream Length (ft)	<input type="text"/>	Sinuosity	<input type="text"/>	Channel Gradient	<input type="text"/>
Valley Length (ft)	<input type="text"/>	Alluvial Valley Width (ft)	<input type="text"/>	Valley Gradient (Underfit Streams):	<input type="text"/>
Planform Type:	<input type="text" value="Sinuous"/>				
Riparian Vegetation Left Bank Type and %	<input type="text"/>			Riparian Buffer Width LB (ft)	<input type="text"/>
Riparian Vegetation Right Bank Type and %	<input type="text"/>			Riparian Buffer Width RB (ft)	<input type="text"/>
Functional Wood Present	<input checked="" type="checkbox"/>	Logjams Present	<input type="checkbox"/>	Wetlands % of Alluvial Valley	<input type="text"/>
Key Geomorphic Features	<input type="text"/>				

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input checked="" type="checkbox"/>	Notes	<input type="text"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_02\_05

Stream Name

Seiku

County

Clallam

Geomorphic Setting

Alluvial valley confined by sedimentary LiDARrock.

Analyst Notes

CMZ defined as 1 active channel width buffer around active geomorphic channel.

QA/QC Notes

Reach ID	<input type="text" value="CL_15_02"/>	Date	<input type="text" value="8/15/2011"/>
Stream Name	<input type="text" value="Morse"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="15"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR (hillshade and LiDAR), RWSE."/>
Orthophotographs	<input type="text" value="ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Quaternary alluvium - high; continental glacial outwash, Fraser Age - high; Pysht Formation, upper Twin River Group - moderate; Makah Formation, middle Twin River Group - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text" value="Neilton v. gravelly loamy sand; Carlsborg-Dungeness Complex gravelly sandy loam; Schnorbush loam"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input checked="" type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input checked="" type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input checked="" type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_15\_02

Stream Name

Morse

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %  Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %  Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_15\_02

Stream Name

Morse

County

Clallam

Geomorphic Setting

Valley incised into continental glacial outwash to LiDAR rock. Little to no alluvial valley fill.

Analyst Notes

CMZ delimited as 1 channel width buffer around active geomorphic channel

QA/QC Notes

Reach ID	<input type="text" value="CL_06_00"/>	Date	<input type="text" value="8/24/2011"/>
Stream Name	<input type="text" value="Herman"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="6"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text"/>
Orthophotographs	<input type="text"/>
Additional Data	<input type="text"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/>		Note: If checked, fill out CMZ Basin Hydrology Form	
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>

Reach ID

CL\_06\_00

Stream Name

Herman

County

Clallam

**Stream Characteristics**

Stream Length (ft)	<input type="text"/>	Sinuosity	<input type="text"/>	Channel Gradient	<input type="text"/>
Valley Length (ft)	<input type="text"/>	Alluvial Valley Width (ft)	<input type="text"/>	Valley Gradient (Underfit Streams):	<input type="text"/>
Planform Type:	<input type="text"/>				
Riparian Vegetation Left Bank Type and %	<input type="text"/>			Riparian Buffer Width LB (ft)	<input type="text"/>
Riparian Vegetation Right Bank Type and %	<input type="text"/>			Riparian Buffer Width RB (ft)	<input type="text"/>
Functional Wood Present	<input type="checkbox"/>	Logjams Present	<input type="checkbox"/>	Wetlands % of Alluvial Valley	<input type="text"/>
Key Geomorphic Features	<input type="text"/>				

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input type="checkbox"/>	Notes	<input type="text"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_06\_00

Stream Name

Herman

County

Clallam

Geomorphic Setting

Analyst Notes

Reach is within CMZ of Hoko, a larger order stream.

QA/QC Notes

Reach ID	<input type="text" value="CL_02_04"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Seiku"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Stream incised into glacial drift"/>		

**Data Inventory**

Topography Data	<input type="text" value="10 m DEM, 10 m DEM based RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000; DNR Clallam Soils; NWI"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Continental glacial drift - high"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input checked="" type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input checked="" type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
Hydrological Analysis Needed	<input type="checkbox"/>	Note: If checked, fill out CMZ Basin Hydrology Form	
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>

Reach ID

CL\_02\_04

Stream Name

Seiku

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %

Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %

Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad

Straightened Channel  Notes

Agriculture

Reach ID

CL\_02\_04

Stream Name

Seiku

County

Clallam

Geomorphic Setting

Alluvial valley confined by glacial drift and LiDARrock

Analyst Notes

CMZ defined as 1 CW buffer around active channel

QA/QC Notes

Reach ID	<input type="text" value="CL_03_04*"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="LiDARrock canyon"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR, 10 m DEM based RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Crescent Group Marine Sedimentary Rocks - high"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characterisitcs	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_04\*

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)	<input type="text" value="15900"/>	Sinuosity	<input type="text" value="1.05"/>	Channel Gradient	<input type="text" value="0.0027"/>
Valley Length (ft)	<input type="text" value="15000"/>	Alluvial Valley Width (ft)	<input type="text" value="200"/>	Valley Gradient (Underfit Streams):	<input type="text"/>
Planform Type:	<input type="text" value="Confined"/>				
Riparian Vegetation Left Bank Type and %	<input type="text"/>			Riparian Buffer Width LB (ft)	<input type="text"/>
Riparian Vegetation Right Bank Type and %	<input type="text"/>			Riparian Buffer Width RB (ft)	<input type="text"/>
Functional Wood Present	<input type="checkbox"/>	Logjams Present	<input type="checkbox"/>	Wetlands % of Alluvial Valley	<input type="text"/>
Key Geomorphic Features	<input type="text"/>				

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input checked="" type="checkbox"/>	Notes	<input type="text"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_03\_04\*

Stream Name

Hoko

County

Clallam

Geomorphic Setting

LiDARdrock confined valley

Analyst Notes

CMS delimited as edge of alluvial valley with a small buffer to account for possible erosion of colluvium

QA/QC Notes

Reach ID	<input type="text" value="CL_03_05*"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Confined canyon"/>		

**Data Inventory**

Topography Data	<input type="text" value="LiDAR and 10m DEM based RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000;"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Crescent Basalt - low; Continental Glacial Till - high"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input checked="" type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_05\*

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %

Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %

Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment	<input type="checkbox"/>	Structures	<input type="text"/>
Bridge	<input type="checkbox"/>	Other	<input type="text"/>
Road/Railroad	<input type="checkbox"/>	Notes	<input type="text"/>
Straightened Channel	<input type="checkbox"/>		
Agriculture	<input type="checkbox"/>		

Reach ID

CL\_03\_05\*

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Valley confined by basalt

Analyst Notes

CMZ delimited as 150 foot buffer around active channel

QA/QC Notes

Reach ID	<input type="text" value="CL_03_06*"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="3"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text" value="Confined valley"/>		

**Data Inventory**

Topography Data	<input type="text" value="10 DEM and 10m DEM based RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Ozette Lake Calawa Ridge Block - low; LiDARar Creek Siltstone and Sandstone, Mass Wasting Deposits, Continental Glacial Drift, Continental Glacial Till - low"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input checked="" type="checkbox"/>
		Landslides	<input checked="" type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_06\*

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %

Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %

Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel   
Agriculture

Reach ID

CL\_03\_06\*

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Confined valley cut through glacial drift and till to LiDARrock

Analyst Notes

QA/QC Notes

Reach ID	<input type="text" value="CL_03_07*"/>	Date	<input type="text"/>
Stream Name	<input type="text" value="Hoko"/>	Assessed By	<input type="text" value="Andrew Nelson"/>
Stream Number	<input type="text" value="2"/>	Checked By	<input type="text"/>
County	<input type="text" value="Clallam"/>		
Reach Breaks:	RM Downstream <input type="text"/>	RM Upstream	<input type="text"/>
Reason for Reach Breaks	<input type="text"/>		

**Data Inventory**

Topography Data	<input type="text" value="10 DEM and 10m DEM based RWSE"/>
Orthophotographs	<input type="text" value="Google Earth and ESRI I3 - Imagery 2009 ~1ft resolution"/>
Additional Data	<input type="text" value="DNR Geology 1:100,000"/>

**Alluvial Landform**

Geology Units and Erodibility	<input type="text" value="Mass wasting deposits, continental glacial drift - moderate"/>	Underfit Stream	<input type="checkbox"/>
Soil Units and Texture	<input type="text"/>	Alluvial Fans	<input type="checkbox"/>
		Delta	<input type="checkbox"/>
Other Basin Characteristics	<input type="text"/>	Eroding Valley Margin	<input type="checkbox"/>
		Terraces	<input type="checkbox"/>
		Landslides	<input checked="" type="checkbox"/>
		Sediment Input Changes	<input type="checkbox"/>
		Discharge Changes	<input type="checkbox"/>
		Channel Widening	<input type="checkbox"/>
		Channel Movement	<input type="checkbox"/>
		Tidal Influence	<input type="checkbox"/>
Hydrological Analysis Needed <input type="checkbox"/> Note: If checked, fill out CMZ Basin Hydrology Form			

Reach ID

CL\_03\_07\*

Stream Name

Hoko

County

Clallam

**Stream Characteristics**

Stream Length (ft)  Sinuosity  Channel Gradient

Valley Length (ft)  Alluvial Valley Width (ft)  Valley Gradient (Underfit Streams):

Planform Type:

Riparian Vegetation Left Bank Type and %

Riparian Buffer Width LB (ft)

Riparian Vegetation Right Bank Type and %

Riparian Buffer Width RB (ft)

Functional Wood Present  Logjams Present  Wetlands % of Alluvial Valley

Key Geomorphic Features

**Infrastructure**

Levee/revetment  Structures

Bridge  Other

Road/Railroad  Notes

Straightened Channel

Agriculture

Reach ID

CL\_03\_07\*

Stream Name

Hoko

County

Clallam

Geomorphic Setting

Channel incised ~40 ft into mass wasting deposits and glacial drift

Analyst Notes

QA/QC Notes