

# VSP 5 Year Report for Skagit County

Report Period Ending: 01/20/2021

Submitter Name

Submitter Phone

Submitter Email

Has the county work group approved the content and submittal of this report?  Yes  No

Date of Approval

## PROTECTION Goals

- The watershed work group asserts that the work plan's PROTECTION goals and benchmarks have been met during the past five years.
- The watershed work group asserts that the work plan's PROTECTION goals and benchmarks have NOT been met during the past five years.

## ENHANCEMENT Goals

- The watershed work group asserts that the work plan's ENHANCEMENT goals and benchmarks have been met during the past five years.
- The watershed work group asserts that the work plan's ENHANCEMENT goals and benchmarks have NOT been met during the past five years.

## Strategies and Performance Metrics, Benchmark Results and Monitoring

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**

**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Critical Aquifer Recharge

1 - Nooksack

### Strategy/Metric Description

No degradation below baseline year

### Accomplishment

Submitted a public records request to obtain and review Consumer Confidence Reports from the Washington State Department of Health for Group A Water Systems in Skagit County. Compared the 2011 and 2018 reports for all reported analytes included in the individual Consumer Confidence Reports.

### Status

Met

### Benchmark Met?

Yes  No

### Comments

Benchmark was shown to be achieved by obtaining and

### Adaptive Management?

Yes  No

analyzing Group A water system Consumer Confidence Reports from the Washington State Department of Health for years 2011 and 2018. 42 responsive records were returned for 2011 and 44 were returned for 2018. There were two pre-treated violations for coliform in 2011 and no violations for any agricultural markers in the 2018 reports. Agricultural markers included coliform, nitrate, herbicide/pesticides, and volatile organic compounds. The methodology was consistent in all Water Resource Inventory Areas.

**Benchmark Monitoring**

The benchmark is being monitored by obtaining and reviewing all Consumer Confidence Reports within Skagit County. The monitoring methodology was consistent through all Water Resource Inventory Areas. The Consumer Confidence Reports were geo-referenced by zoning and broken down by all reported analytes. While obtaining the Consumer Confidence Reports, the Washington State Department of Health suggested supplementing the Consumer Confidence Report data with the U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database. WSDOH stated this data is refreshed quarterly for all public water systems. This data source will be added, in addition to obtaining Group A Water System Consumer Confidence Reports, for future five-year reports. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on addressing the violation.

**Monitoring sufficient?**

Yes     No

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Fish and Wildlife Habitat**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Frequently Flooded

1 - Nooksack

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Geologic Hazard

1 - Nooksack

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Wetlands

1 - Nooksack

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Critical Aquifer Recharge**

**3 - Lower Skagit - Samish**

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
No degradation below baseline year	Submitted a public records request to obtain and review Consumer Confidence Reports from the Washington State Department of Health for Group A Water Systems in Skagit County. Compared the 2011 and 2018 reports for all reported analytes included in the individual Consumer Confidence Reports.	Met

<u>Benchmark Met?</u>	<u>Comments</u>	<u>Adaptive Management?</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Benchmark was shown to be achieved by obtaining and analyzing Group A water system Consumer Confidence Reports from the Washington State Department of Health for years 2011 and 2018. 42 responsive records were returned for 2011 and 44 were returned for 2018. There were two pre-treated violations for coliform in 2011 and no violations for any agricultural markers in the 2018 reports. Agricultural markers included coliform, nitrate, herbicide/pesticides, and volatile organic compounds. The methodology was consistent in all Water Resource Inventory Areas.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Benchmark Monitoring**

The benchmark is being monitored by obtaining and reviewing all Consumer Confidence Reports within Skagit County. The monitoring methodology was consistent through all Water Resource Inventory Areas. The Consumer Confidence Reports were geo-referenced by zoning and broken down by all reported analytes. While obtaining the Consumer Confidence Reports, the Washington State Department of Health suggested supplementing the Consumer Confidence Report data with the U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database. WSDOH stated this data is refreshed quarterly for all public water systems. This data source will be added, in addition to obtaining Group A Water System Consumer Confidence Reports, for future five-year reports. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on addressing the violation.

**Monitoring sufficient?**

Yes     No

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Fish and Wildlife Habitat**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Frequently Flooded**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Geologic Hazard**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Wetlands**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline. Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

**Critical Aquifer Recharge**

**4 - Upper Skagit**

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
No degradation below baseline year	Requested, obtained, and reviewed Consumer Confidence Reports from the Washington State Department of Health for Group A Water Systems in Skagit County. There was no degradation below the baseline for Group A water systems for water quality parameters directly applicable to agricultural activities.	Met

<u>Benchmark Met?</u>	<u>Comments</u>	<u>Adaptive Management?</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Benchmark was shown to be achieved by obtaining and analyzing Group A water system Consumer Confidence Reports from the Washington State Department of Health for years 2011 and 2018. 42 responsive records were returned for 2011 and 44 were returned for 2018. There were two pre-treated violations for coliform in 2011 and no violations for any agricultural markers in the 2018 reports. Agricultural markers included coliform, nitrate, herbicide/pesticides, and volatile organic compounds. The methodology was consistent in all Water Resource Inventory Areas.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Benchmark Monitoring</u>	<u>Monitoring sufficient?</u>
The benchmark is being monitored by obtaining and reviewing all Consumer Confidence Reports within Skagit County. The monitoring methodology was consistent through all Water Resource Inventory Areas. The Consumer Confidence Reports were geo-referenced by zoning and broken down by all reported analytes. While obtaining the Consumer Confidence Reports, the Washington State Department of Health suggested supplementing the Consumer Confidence Report data with the U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database. WSDOH stated this data is refreshed quarterly for all public water systems. This data source will be added, in addition to obtaining Group A Water System Consumer Confidence Reports, for future five-year reports. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on addressing the violation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Fish and Wildlife Habitat

4 - Upper Skagit

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Frequently Flooded

4 - Upper Skagit

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Geologic Hazard

4 - Upper Skagit

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**  
**Benchmark: 1 - Within the intersect areas, no degradation below the statutory 2011 baseline of Group A water system water quality.**

Wetlands

4 - Upper Skagit

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge**

**Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.**

**1 - Nooksack**

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
No net loss of riparian buffer from the statutory baseline	In order to monitor change in riparian areas, Skagit County first updated waterbody locations for the National Hydrography Dataset through the Department of Ecology. Next a GIS layer of the VSP project area was developed in order to define the extent of the monitoring. The monitored project area contains all regulated waterbodies in Ag-NRL and RRC-NRL zones buffered in a GIS layer at the standard CAO width (Type S = 200 ft, Type F = 150 ft and Type N= 50 ft). The vegetation in this monitored area were classified as either Shrub or Tree for the 2011 and both the 2017 and 2019 aerial photography. Approximately 17,338 acres were assessed.	Met

<u>Benchmark Met?</u>	<u>Comments</u>	<u>Adaptive Management?</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Benchmark of no net loss of riparian buffer below the statutory baseline was shown to be achieved through aerial photo interpretation and analysis. Skagit County obtains high resolution aerial photography from EagleView (formerly Pictometry) every two years since 2007. A GIS layer of the VSP project area was created, and all areas within the VSP Project Area were investigated for years 2011, 2017, and 2019. There was no net loss of riparian buffer from the statutory baseline through 2019 within WRIA 1.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Benchmark Monitoring</u>	<u>Monitoring sufficient?</u>
The benchmark of no net loss of riparian buffer below the statutory baseline is being monitored through high resolution aerial photo interpretation and analysis. First, waterbodies in the VSP Intersect Area were corrected and that data was updated with the Department of Ecology to be incorporated into the National Hydrography Dataset. Next, the regulated waterbodies were buffered with a GIS polygon based on standard buffer distances by water type. This area was monitored for change from the 2011 to 2017/2019 aerial photos. Skagit County receives these aerial photos every two years and will continue to use this data for change detection. This can also be supplemented with NOAA land coverages once the 1 meter land cover data becomes available.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<b>Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.</b>	<b>Frequently Flooded</b>
<b>Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.</b>	<b>1 - Nooksack</b>
<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>
Goal and Benchmark do not apply to this Critical Area.	<b><u>Status</u></b> N/A

<b>Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.</b>	<b>Geologic Hazard</b>
<b>Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.</b>	<b>1 - Nooksack</b>
<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>
Goal and Benchmark do not apply to this Critical Area.	<b><u>Status</u></b> N/A

<b>Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.</b>	<b>Wetlands</b>
<b>Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.</b>	<b>1 - Nooksack</b>
<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>
Goal and Benchmark do not apply to this Critical Area.	<b><u>Status</u></b> N/A

<b>Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.</b>	<b>Critical Aquifer Recharge</b>
<b>Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.</b>	<b>3 - Lower Skagit - Samish</b>
<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>
Goal and Benchmark do not apply to this Critical Area.	<b><u>Status</u></b> N/A

**Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

No net loss of riparian buffer from the statutory baseline

**Accomplishment**

In order to monitor change in riparian areas, Skagit County first updated waterbody locations for the National Hydrography Dataset through the Department of Ecology. Next a GIS layer of the VSP project area was developed in order to define the extent of the monitoring. The monitored project area contains all regulated waterbodies in Ag-NRL and RRC-NRL zones buffered in a GIS layer at the standard CAO width (Type S = 200 ft, Type F = 150 ft and Type N= 50 ft). The vegetation in this monitored area were classified as either Shrub or Tree for the 2011 and both the 2017 and 2019 aerial photography. Approximately 17,338 acres were assessed.

**Status**

Met

**Benchmark Met?**

Yes  No

**Comments**

Benchmark of no net loss of riparian buffer below the statutory baseline was shown to be achieved through aerial photo interpretation and analysis. Skagit County obtains high resolution aerial photography from EagleView (formerly Pictometry) every two years since 2007. A GIS layer of the VSP project area was created, and all areas within the VSP Project Area were investigated for years 2011, 2017, and 2019. There was no net loss of riparian buffer from the statutory baseline through 2019 within WRIA 3.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

The benchmark of no net loss of riparian buffer below the statutory baseline is being monitored through high resolution aerial photo interpretation and analysis. First, waterbodies in the VSP Intersect Area were corrected and that data was updated with the Department of Ecology to be incorporated into the National Hydrography Dataset. Next, the regulated waterbodies were buffered with a GIS polygon based on standard buffer distances by water type. This area was monitored for change from the 2011 to 2017/2019 aerial photos. Skagit County receives these aerial photos every two years and will continue to use this data for change detection. This can also be supplemented with NOAA land coverages once the 1 meter land cover data becomes available.

**Monitoring sufficient?**

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Frequently Flooded
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	3 - Lower Skagit - Samish

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Geologic Hazard
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	3 - Lower Skagit - Samish

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Wetlands
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	3 - Lower Skagit - Samish

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Critical Aquifer Recharge
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	4 - Upper Skagit

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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**Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.**

**4 - Upper Skagit**

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
No net loss of riparian buffer from the statutory baseline	In order to monitor change in riparian areas, Skagit County first updated waterbody locations for the National Hydrography Dataset through the Department of Ecology. Next a GIS layer of the VSP project area was developed in order to define the extent of the monitoring. The monitored project area contains all regulated waterbodies in Ag-NRL and RRC-NRL zones buffered in a GIS layer at the standard CAO width (Type S = 200 ft, Type F = 150 ft and Type N= 50 ft). The vegetation in this monitored area were classified as either Shrub or Tree for the 2011 and both the 2017 and 2019 aerial photography. Approximately 17,338 acres were assessed.	Met

<u>Benchmark Met?</u>	<u>Comments</u>	<u>Adaptive Management?</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Benchmark of no net loss of riparian buffer below the statutory baseline was shown to be achieved through aerial photo interpretation and analysis. Skagit County obtains high resolution aerial photography from EagleView (formerly Pictometry) every two years since 2007. A GIS layer of the VSP project area was created, and all areas within the VSP Project Area were investigated for years 2011, 2017, and 2019. There was no net loss of riparian buffer from the statutory baseline through 2019 within WRIA 4.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Benchmark Monitoring</u>	<u>Monitoring sufficient?</u>
The benchmark of no net loss of riparian buffer below the statutory baseline is being monitored through high resolution aerial photo interpretation and analysis. First, waterbodies in the VSP Intersect Area were corrected and that data was updated with the Department of Ecology to be incorporated into the National Hydrography Dataset. Next, the regulated waterbodies were buffered with a GIS polygon based on standard buffer distances by water type. This area was monitored for change from the 2011 to 2017/2019 aerial photos. Skagit County receives these aerial photos every two years and will continue to use this data for change detection. This can also be supplemented with NOAA land coverages once the 1 meter land cover data becomes available.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Frequently Flooded
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	4 - Upper Skagit

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Geologic Hazard
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	4 - Upper Skagit

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.	Wetlands
Benchmark: 2 - Within the intersect areas, no net loss of riparian buffer existing as of July 22, 2011, within the standard distances prescribed for each water type.	4 - Upper Skagit

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.	Critical Aquifer Recharge
Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.	1 - Nooksack

<u>Strategy/Metric Description</u>	<u>Accomplishment</u>	<u>Status</u>
Goal and Benchmark do not apply to this Critical Area.		N/A

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**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Within the VSP intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no new development that impedes floodplain habitat function inconsistent with that allowed by the flood code.

The County's continued participation in the National Flood Insurance Program requires ongoing monitoring by the Department of Ecology through the Community Rating System. Ecology oversees the Community Assisted Visits (CAV) program which requires the correction of any non-compliance finding. Through an assessment of CAV report findings, the County ensured that there were no unresolved issues in the VSP intersect area related to ongoing agriculture.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark was achieved by obtaining and assessing Community Assisted Visit findings and classifying their zoning, their status as ongoing agriculture, and documenting their resolution status. There were no unresolved CAV findings related to ongoing agriculture.

Yes  No

**Benchmark Monitoring**

**Monitoring sufficient?**

The benchmark was monitored by obtaining all findings from the Community Assisted Visits from the Skagit County Planning and Development Services Department. Community Assisted Visits are lead by the Department of Ecology on behalf of the Federal Emergency Management Agency. These findings were then classified by zoning, ongoing agriculture status, and resolution status.

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**Geologic Hazard**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**Wetlands**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**Critical Aquifer Recharge**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A



**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Within the VSP intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no new development that impedes floodplain habitat function inconsistent with that allowed by the flood code.

The County's continued participation in the National Flood Insurance Program requires ongoing monitoring by the Department of Ecology through the Community Rating System. Ecology oversees the Community Assisted Visits (CAV) program which requires the correction of any non-compliance finding. Through an assessment of CAV report findings, the County ensured that there were no unresolved issues in the VSP intersect area related to ongoing agriculture.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark was achieved by obtaining and assessing Community Assisted Visit findings and classifying their zoning, their status as ongoing agriculture, and documenting their resolution status. There were no unresolved CAV findings related to ongoing agriculture.

Yes  No

**Benchmark Monitoring**

The benchmark was monitored by obtaining all findings from the Community Assisted Visits from the Skagit County Planning and Development Services Department. Community Assisted Visits are lead by the Department of Ecology on behalf of the Federal Emergency Management Agency. These findings were then classified by zoning, ongoing agriculture status, and resolution status.

**Monitoring sufficient?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Geologic Hazard**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Wetlands**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Within the VSP intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no new development that impedes floodplain habitat function inconsistent with that allowed by the flood code.

The County's continued participation in the National Flood Insurance Program requires ongoing monitoring by the Department of Ecology through the Community Rating System. Ecology oversees the Community Assisted Visits (CAV) program which requires the correction of any non-compliance finding. Through an assessment of CAV report findings, the County ensured that there were no unresolved issues in the VSP intersect area related to ongoing agriculture.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark was achieved by obtaining and assessing Community Assisted Visit findings and classifying their zoning, their status as ongoing agriculture, and documenting their resolution status. There were no unresolved CAV findings related to ongoing agriculture.

Yes  No

**Benchmark Monitoring**

The benchmark was monitored by obtaining all findings from the Community Assisted Visits from the Skagit County Planning and Development Services Department. Community Assisted Visits are lead by the Department of Ecology on behalf of the Federal Emergency Management Agency. These findings were then classified by zoning, ongoing agriculture status, and resolution status.

**Monitoring sufficient?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**Geologic Hazard**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Benchmark: 3 - Within the intersect areas, no new structures within the floodplain that are not compliant with the County's flood code, and no development that impedes floodplain habitat function inconsistent with that allowed by the flood code.**

**Wetlands**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**Critical Aquifer Recharge**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Geologic Hazard**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Data was collected from the Skagit County Planning and Development Services permit database for all agricultural structures permitted in Ag-NRL and RRc-NRL zones, i.e. the VSP intersect areas. Each permit file was reviewed to see if contained seismic hazard conditions and if those conditions were met.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark of ensuring all new agricultural structures comply with regulations for seismic standards was achieved by examining geohazard requirements and compliance for all agricultural structures in the VSP intersect areas. All Building Permits and Commercial Building Permits issued in the VSP intersect areas complied with geohazard conditions.

Yes  No

**Benchmark Monitoring**

**Monitoring sufficient?**

The benchmark was monitored through permit data obtained from Skagit County Planning and Development Services. The database was searched for all building permits within the VSP intersect areas from the statutory baseline through 2019. Each building permit was analyzed to ensure compliance with geohazard conditions. This research was coordinated with Skagit County's Building Official.

Yes  No

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Wetlands**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Geologic Hazard**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Data was collected from the Skagit County Planning and Development Services permit database for all agricultural structures permitted in Ag-NRL and RRc-NRL zones, i.e. the VSP intersect areas. Each permit file was reviewed to see if contained seismic hazard conditions and if those conditions were met.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark of ensuring all new agricultural structures comply with regulations for seismic standards was achieved by examining geohazard requirements and compliance for all agricultural structures in the VSP intersect areas. All Building Permits and Commercial Building Permits issued in the VSP intersect areas complied with geohazard conditions.

Yes  No

**Benchmark Monitoring**

**Monitoring sufficient?**

The benchmark was monitored through permit data obtained from Skagit County Planning and Development Services. The database was searched for all building permits within the VSP intersect areas from the statutory baseline through 2019. Each building permit was analyzed to ensure compliance with geohazard conditions. This research was coordinated with Skagit County's Building Official.

Yes  No

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Wetlands**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A



**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Frequently Flooded**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Geologic Hazard**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Data was collected from the Skagit County Planning and Development Services permit database for all agricultural structures permitted in Ag-NRL and RRc-NRL zones, i.e. the VSP intersect areas. Each permit file was reviewed to see if contained seismic hazard conditions and if those conditions were met.

Met

**Benchmark Met?**

**Comments**

**Adaptive Management?**

Yes  No

The benchmark of ensuring all new agricultural structures comply with regulations for seismic standards was achieved by examining geohazard requirements and compliance for all agricultural structures in the VSP intersect areas. All Building Permits and Commercial Building Permits issued in the VSP intersect areas complied with geohazard conditions.

Yes  No

**Benchmark Monitoring**

**Monitoring sufficient?**

The benchmark was monitored through permit data obtained from Skagit County Planning and Development Services. The database was searched for all building permits within the VSP intersect areas from the statutory baseline through 2019. Each building permit was analyzed to ensure compliance with geohazard conditions. This research was coordinated with Skagit County's Building Official.

Yes  No

**Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.**

**Wetlands**

**Benchmark: 4 - Within the intersect areas, all new agricultural structures must comply with regulations for seismic hazard areas, e.g., soil liquefaction susceptibility.**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Critical Aquifer Recharge**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Fish and Wildlife Habitat**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Frequently Flooded**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Geologic Hazard**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Wetlands**

**1 - Nooksack**

**Strategy/Metric Description**

Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

**Accomplishment**

Skagit County obtained the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory, which is based on the NOAA Coast Change Analysis Program (C-CAP) protocol for determining land cover. The data set was narrowed down to our VSP intersect areas (all Ag-NRL and RRc-NRL zones). All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017.

**Status**

Met

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve no net loss of wetlands or buffers was shown to be achieved through analyzing the Washington State Department of Ecology's wetland change inventory. All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using high resolution EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017. In conclusion, 76% of sites had observed visible change. Of these, 78% of this change was due to natural causes such as river migration, shoreline migration, or natural plant growth or loss. 22% of sites that had observed visible change were due to human activity, however none of these sites showed wetland loss or a downgrade in land use classification. Changes detected were either slight variations in continued agriculture or visible gains in surface water and wetland habitat, such as quarries, retention ponds, or created wetlands.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

The benchmark was monitored by obtaining the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory data, narrowing down the change detection to VSP Intersect areas, and examining the sites identified as a wetland loss or downgrade. In future reporting, higher resolution imagery may be available and provide for more accurate analysis of land cover classification change.

**Monitoring sufficient?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Critical Aquifer Recharge**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Fish and Wildlife Habitat**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Frequently Flooded**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Geologic Hazard**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Wetlands**

**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

**Accomplishment**

Skagit County obtained the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory, which is based on the NOAA Coast Change Analysis Program (C-CAP) protocol for determining land cover. The data set was narrowed down to our VSP intersect areas (all Ag-NRL and RRc-NRL zones). All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017.

**Status**

Met

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve no net loss of wetlands or buffers was shown to be achieved through analyzing the Washington State Department of Ecology's wetland change inventory. All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using high resolution EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017. In conclusion, 76% of sites had observed visible change. Of these, 78% of this change was due to natural causes such as river migration, shoreline migration, or natural plant growth or loss. 22% of sites that had observed visible change were due to human activity, however none of these sites showed wetland loss or a downgrade in land use classification. Changes detected were either slight variations in continued agriculture or visible gains in surface water and wetland habitat, such as quarries, retention ponds, or created wetlands.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

The benchmark was monitored by obtaining the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory data, narrowing down the change detection to VSP Intersect areas, and examining the sites identified as a wetland loss or downgrade. In future reporting, higher resolution imagery may be available and provide for more accurate analysis of land cover classification change.

**Monitoring sufficient?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Critical Aquifer Recharge**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Fish and Wildlife Habitat**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Frequently Flooded**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**  
**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Geologic Hazard**

**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

---

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Benchmark: 5 - Within the intersect areas, no net loss of wetlands or buffers existing as of July 22, 2011.**

**Wetlands**

**4 - Upper Skagit**

**Strategy/Metric Description**

Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

**Accomplishment**

Skagit County obtained the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory, which is based on the NOAA Coast Change Analysis Program (C-CAP) protocol for determining land cover. The data set was narrowed down to our VSP intersect areas (all Ag-NRL and RRc-NRL zones). All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017.

**Status**

Met

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve no net loss of wetlands or buffers was shown to be achieved through analyzing the Washington State Department of Ecology's wetland change inventory. All sites with land cover classification changes indicating a wetland loss or downgrade between 2011 and 2016 were evaluated. In total, there were 54 sites examined. These were investigated further using high resolution EagleView aerial imagery, which is available for Skagit County for years 2011 and 2017. In conclusion, 76% of sites had observed visible change. Of these, 78% of this change was due to natural causes such as river migration, shoreline migration, or natural plant growth or loss. 22% of sites that had observed visible change were due to human activity, however none of these sites showed wetland loss or a downgrade in land use classification. Changes detected were either slight variations in continued agriculture or visible gains in surface water and wetland habitat, such as quarries, retention ponds, or created wetlands.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

The benchmark was monitored by obtaining the 2011 and 2016 Washington State Department of Ecology Wetlands Inventory data, narrowing down the change detection to VSP Intersect areas, and examining the sites identified as a wetland loss or downgrade. In future reporting, higher resolution imagery may be available and provide for more accurate analysis of land cover classification change.

**Monitoring sufficient?**

Yes  No



**Goal: 6 - Enhance critical areas in VSP intersect areas.**

**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Critical Aquifer Recharge**

**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

Goal: 6 - Enhance critical areas in VSP intersect areas.

Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.

Fish and Wildlife Habitat

1 - Nooksack

**Strategy/Metric Description**

FWHCA enhancements through voluntary, incentive based measures.

**Accomplishment**

Skagit County solicited consultants with a Request for Proposals to support the compilation of restoration data related to this goal. After rankings, the County selected The Watershed Company to assist in components of implementing the VSP Work Plan, including outreach and education and compiling all FWHCA restoration within the VSP Project area. The Watershed Company tallied restoration projects from a variety of sources, including the County’s Natural Resources Stewardship Program, the Skagit Conservation District’s Conservation Reserve Enhancement Program, the Skagit Watershed Council’s riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal.

**Status**

Exceeded

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve enhancements through voluntary, incentive-based measures was achieved by the ongoing implementation of existing programs, namely the County’s Natural Resources Stewardship Program and the Conservation District’s Conservation Reserve and Enhancement Program. For 2020, these subbasins had the following goals, which were all met: Samish/5 acres, Lower Skagit/2 acres, Fisher Carpenter/0.5 acres, Nookachamps/2 acres, Middle Skagit/5 acres, Upper Skagit/2 acres, and Sauk/1 acre. These were rolled up into WRIAs for this report.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

This benchmark was monitored by compiling restoration data since the statutory baseline year of 2011 through July 2020. Critical Area enhancement located within the VSP Project Area were identified and tallied for each subbasin identified in the County’s Work Plan, and rolled up by WRIA.

**Monitoring sufficient?**

Yes  No

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Frequently Flooded**  
**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Geologic Hazard**  
**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Wetlands**  
**1 - Nooksack**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Critical Aquifer Recharge**  
**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

Goal: 6 - Enhance critical areas in VSP intersect areas.

Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.

Fish and Wildlife Habitat

3 - Lower Skagit - Samish

**Strategy/Metric Description**

FWHCA enhancements through voluntary, incentive based measures.

**Accomplishment**

Skagit County solicited consultants with a Request for Proposals to support the compilation of restoration data related to this goal. After rankings, the County selected The Watershed Company to assist in components of implementing the VSP Work Plan, including outreach and education and compiling all FWHCA restoration within the VSP Project area. The Watershed Company tallied restoration projects from a variety of sources, including the County’s Natural Resources Stewardship Program, the Skagit Conservation District’s Conservation Reserve Enhancement Program, the Skagit Watershed Council’s riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal.

**Status**

Exceeded

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve enhancements through voluntary, incentive-based measures was achieved by the ongoing implementation of existing programs, namely the County’s Natural Resources Stewardship Program and the Conservation District’s Conservation Reserve and Enhancement Program. For 2020, these subbasins had the following goals, which were all met: Samish/5 acres, Lower Skagit/2 acres, Fisher Carpenter/0.5 acres, Nookachamps/2 acres, Middle Skagit/5 acres, Upper Skagit/2 acres, and Sauk/1 acre. These were rolled up into WRIAs for this report.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

This benchmark was monitored by compiling restoration data since the statutory baseline year of 2011 through July 2020. Critical Area enhancement located within the VSP Project area were identified and tallied for each subbasin identified in the County’s Work Plan, and rolled up by WRIA.

**Monitoring sufficient?**

Yes  No

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Frequently Flooded**  
**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Geologic Hazard**  
**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Wetlands**  
**3 - Lower Skagit - Samish**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Critical Aquifer Recharge**  
**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

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Goal: 6 - Enhance critical areas in VSP intersect areas.

Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.

Fish and Wildlife Habitat

4 - Upper Skagit

**Strategy/Metric Description**

FWHCA enhancements through voluntary, incentive based measures.

**Accomplishment**

Skagit County solicited consultants with a Request for Proposals to support the compilation of restoration data related to this goal. After rankings, the County selected The Watershed Company to assist in components of implementing the VSP Work Plan, including outreach and education and compiling all FWHCA restoration within the VSP Project area. The Watershed Company tallied restoration projects from a variety of sources, including the County’s Natural Resources Stewardship Program, the Skagit Conservation District’s Conservation Reserve Enhancement Program, the Skagit Watershed Council’s riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal.

**Status**

Exceeded

**Benchmark Met?**

Yes  No

**Comments**

The benchmark to achieve enhancements through voluntary, incentive-based measures was achieved by the ongoing implementation of existing programs, namely the County’s Natural Resources Stewardship Program and the Conservation District’s Conservation Reserve and Enhancement Program. For 2020, these subbasins had the following goals, which were all met: Samish/5 acres, Lower Skagit/2 acres, Fisher Carpenter/0.5 acres, Nookachamps/2 acres, Middle Skagit/5 acres, Upper Skagit/2 acres, and Sauk/1 acre. These were rolled up into WRIAs for this report.

**Adaptive Management?**

Yes  No

**Benchmark Monitoring**

This benchmark was monitored by compiling restoration data since the statutory baseline year of 2011 through July 2020. Critical Area enhancement located within the VSP Project area were identified and tallied for each subbasin identified in the County’s Work Plan, and rolled up by WRIA.

**Monitoring sufficient?**

Yes  No

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Frequently Flooded**  
**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Geologic Hazard**  
**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal: 6 - Enhance critical areas in VSP intersect areas.**  
**Benchmark: 6 - Within the intersect areas, by 2020 enhance 5 acres in Samish, 2 acres in Lower Skagit, 0.5 acres in Fisher Carpenter, 2 acres in Nookachamps, 5 acres in Middle Skagit, 2 acres in Upper Skagit, and 1 acre in Sauk subbasins.**

**Wetlands**  
**4 - Upper Skagit**

**Strategy/Metric Description**

**Accomplishment**

**Status**

Goal and Benchmark do not apply to this Critical Area.

N/A

**Goal Results**

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**

**Wetlands**  
**1 - Nooksack**

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

**Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.**

**Wetlands**  
**3 - Lower Skagit - Samish**

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Wetlands  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

The goal of achieving protection of aquifer recharge areas was met through investigating Group A water system test results which yielded no violations to investigate further. The VSP Intersect Areas are also protected by regulations including state and federal pesticide regulations and the County's agricultural watercourse protection measures found in SCC 14.24.120(4)(b) which requires agricultural operators to apply farm chemicals with all requirements stated on the chemical container labels and limit application of crop nutrients to agronomic rates intended for that particular crop. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on remediation.

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

The goal of achieving protection of aquifer recharge areas was met through investigating Group A water system test results which yielded no violations to investigate further. The VSP Intersect Areas are also protected by regulations including state and federal pesticide regulations and the County's agricultural watercourse protection measures found in SCC 14.24.120(4)(b) which requires agricultural operators to apply farm chemicals with all requirements stated on the chemical container labels and limit application of crop nutrients to agronomic rates intended for that particular crop. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on remediation.

**Adaptive Management?**

Yes  No



Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

The goal of achieving protection of aquifer recharge areas was met through investigating Group A water system test results which yielded no violations to investigate further. The VSP Intersect Areas are also protected by regulations including state and federal pesticide regulations and the County’s agricultural watercourse protection measures found in SCC 14.24.120(4)(b) which requires agricultural operators to apply farm chemicals with all requirements stated on the chemical container labels and limit application of crop nutrients to agronomic rates intended for that particular crop. As noted in the Work Plan, if a contamination is found and believed to be due to agricultural activity, the County will work with the Washington State Department of Agriculture and agricultural operators in the drainage area on remediation.

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Frequently Flooded  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Frequently Flooded  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Frequently Flooded  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Geologic Hazard  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Geologic Hazard  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Geologic Hazard  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 1 - Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Wetlands  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Wetlands  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Wetlands  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Frequently Flooded  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Frequently Flooded  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Frequently Flooded  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Geologic Hazard  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Geologic Hazard  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Geologic Hazard  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

The goal to protect, restore where practical, and enhance fish and wildlife populations and their associated habitats with no degradation below the statutory 2011 baseline was met through an aerial photo monitoring and assessment methodology. Within WRIA 1, there was no net loss of riparian buffer between 2011 and 2019. The monitored riparian areas were classified based on vegetation height. Losses of greater than 0.25 acre became a dataset to investigate. Staff developed a flow chart to systematically address losses. A multidisciplinary team has reviewed all losses capture by the 2017 aerial photo change detection; the additional losses from 2019 will also be put through the flow chart, categorized, and investigated. The Watershed Group will adopt a strategy by September 2021 to work with landowners where losses have occurred. All unexcused vegetation losses were documented and are available for review in a GIS format. In addition, VSP intersect areas are protected by regulations including the County's CAO for Ongoing Agriculture and its watercourse protection measures.

**Adaptive Management?**

Yes  No

**Goal Met?**

Yes     No

**Comments**

The goal to protect, restore where practical, and enhance fish and wildlife populations and their associated habitats with no degradation below the statutory 2011 baseline was met through an aerial photo monitoring and assessment methodology. Within WRIA 3, there was no net loss of riparian buffer between 2011 and 2019. The monitored riparian areas were classified based on vegetation height. Losses of greater than 0.25 acre became a dataset to investigate. Staff developed a flow chart to systematically address losses. A multidisciplinary team has reviewed all losses capture by the 2017 aerial photo change detection; the additional losses from 2019 will also be put through the flow chart, categorized, and investigated. The Watershed Group will adopt a strategy by September 2021 to work with landowners where losses have occurred. All unexcused vegetation losses were documented and are available for review in a GIS format. In addition, VSP intersect areas are protected by regulations including the County's CAO for Ongoing Agriculture and its watercourse protection measures.

**Adaptive Management?**

Yes     No

**Goal: 2 - Protect, restore where practical, and enhance fish and wildlife populations and their associated habitats. No degradation below the statutory 2011 baseline.**

**Fish and Wildlife Habitat  
4 - Upper Skagit**

**Goal Met?**

Yes  No

**Comments**

The goal to protect, restore where practical, and enhance fish and wildlife populations and their associated habitats with no degradation below the statutory 2011 baseline was met through an aerial photo monitoring and assessment methodology. Within WRIA 4, there was no net loss of riparian buffer between 2011 and 2019. The monitored riparian areas were classified based on vegetation height. Losses of greater than 0.25 acre became a dataset to investigate. Staff developed a flow chart to systematically address losses. A multidisciplinary team has reviewed all losses capture by the 2017 aerial photo change detection; the additional losses from 2019 will also be put through the flow chart, categorized, and investigated. The Watershed Group will adopt a strategy by September 2021 to work with landowners where losses have occurred. All unexcused vegetation losses were documented and are available for review in a GIS format. In addition, VSP intersect areas are protected by regulations including the County's CAO for Ongoing Agriculture and its watercourse protection measures.

**Adaptive Management?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Wetlands  
1 - Nooksack**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Wetlands  
3 - Lower Skagit - Samish**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Wetlands  
4 - Upper Skagit**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Frequently Flooded  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

The goal of no degradation below the statutory baseline and protecting hydrologic functions and reduce the potential for physical injury and property damage associated with flooding was achieved through investigating Community Assisted Visit findings. In addition, VSP intersect areas are protected by regulations including the County's flood damage prevention regulations found in SCC Chapter 14.34. Agricultural activities are allowed in frequently flooded areas, but new land clearing or new structures must follow rules adopted to ensure the County's compliance with the National Flood Insurance Program, and by extension, the National Marine Fisheries Service biological opinion for NFIP compliance with the Endangered Species Act. The NFIP requires the County to have a regulatory component approach to comply with these mandates.

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Frequently Flooded  
3 - Lower Skagit - Samish**

**Goal Met?**

Yes  No

**Comments**

The goal of no degradation below the statutory baseline and protecting hydrologic functions and reduce the potential for physical injury and property damage associated with flooding was achieved through investigating Community Assisted Visit findings. In addition, VSP intersect areas are protected by regulations including the County's flood damage prevention regulations found in SCC Chapter 14.34. Agricultural activities are allowed in frequently flooded areas, but new land clearing or new structures must follow rules adopted to ensure the County's compliance with the National Flood Insurance Program, and by extension, the National Marine Fisheries Service biological opinion for NFIP compliance with the Endangered Species Act. The NFIP requires the County to have a regulatory component approach to comply with these mandates

**Adaptive Management?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Frequently Flooded  
4 - Upper Skagit**

**Goal Met?**

Yes  No

**Comments**

The goal of no degradation below the statutory baseline and protecting hydrologic functions and reduce the potential for physical injury and property damage associated with flooding was achieved through investigating Community Assisted Visit findings. In addition, VSP intersect areas are protected by regulations including the County's flood damage prevention regulations found in SCC Chapter 14.34. Agricultural activities are allowed in frequently flooded areas, but new land clearing or new structures must follow rules adopted to ensure the County's compliance with the National Flood Insurance Program, and by extension, the National Marine Fisheries Service biological opinion for NFIP compliance with the Endangered Species Act. The NFIP requires the County to have a regulatory component approach to comply with these mandates.

**Adaptive Management?**

Yes  No

**Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.**

**Geologic Hazard  
1 - Nooksack**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No



Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Geologic Hazard  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Geologic Hazard  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 3 - Protect hydrologic functions and reduce the potential for physical injury and property damage associated with flooding. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Wetlands  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Wetlands  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Wetlands  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Critical Aquifer Recharge  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Frequently Flooded  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Frequently Flooded  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Frequently Flooded  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Geologic Hazard  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

This goal was achieved through collecting and monitoring all permit data for agricultural structures in the VSP intersect area and ensuring all geohazard conditions were met. Because most of the Ag-NRL and RRC-NRL zones are in diked and drained areas, the major geological hazard within areas of agricultural activities are those within a high liquefaction susceptibility as indicated on the Liquefaction Susceptibility Map of Skagit County issued by the Washington Department of Natural Resources. The geotechnical reports associated with each building permit in the VSP intersect areas reviewed for permit compliance, including the liquefaction analysis. This generally includes testing to ensure adequate soil capacities for building foundation design.

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Geologic Hazard  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

This goal was achieved through collecting and monitoring all permit data for agricultural structures in the VSP intersect area and ensuring all geohazard conditions were met. Because most of the Ag-NRL and RRC-NRL zones are in diked and drained areas, the major geological hazard within areas of agricultural activities are those within a high liquefaction susceptibility as indicated on the Liquefaction Susceptibility Map of Skagit County issued by the Washington Department of Natural Resources. The geotechnical reports associated with each building permit in the VSP intersect areas reviewed for permit compliance, including the liquefaction analysis. This generally includes testing to ensure adequate soil capacities for building foundation design.

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Geologic Hazard  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

This goal was achieved through collecting and monitoring all permit data for agricultural structures in the VSP intersect area and ensuring all geohazard conditions were met. Because most of the Ag-NRL and RRC-NRL zones are in diked and drained areas, the major geological hazard within areas of agricultural activities are those within a high liquefaction susceptibility as indicated on the Liquefaction Susceptibility Map of Skagit County issued by the Washington Department of Natural Resources. The geotechnical reports associated with each building permit in the VSP intersect areas reviewed for permit compliance, including the liquefaction analysis. This generally includes testing to ensure adequate soil capacities for building foundation design.

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
1 - Nooksack

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
3 - Lower Skagit - Samish

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 4 - Minimize risk to life, property, infrastructure, and resources caused by disrupting geologically hazardous areas or by locating development in areas subject to naturally hazardous geologic processes. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
4 - Upper Skagit

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Wetlands  
1 - Nooksack**

**Goal Met?**

Yes  No

**Comments**

The goal to preserve and protection wetlands to prevent their continual loss and degradation with no degradation bellow the statutory baseline was achieved through the analysis of wetland change data. 91% of sites are located in WRIA 3, 9% of sites are located in WRIA 4 and no sites were returned for WRIA 1. After the analysis of the changes from the 2011 to 2016 dataset, none of 54 investigated sites showed wetland loss or a downgrade in land use classification. In addition, VSP intersect areas are protected by regulations including SCC 14.24.070(2) which requires any expansion of agriculture into critical area or its buffer to comply with the substantive and procedural provisions of the critical areas code.

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Wetlands  
3 - Lower Skagit - Samish**

**Goal Met?**

Yes  No

**Comments**

The goal to preserve and protection wetlands to prevent their continual loss and degradation with no degradation bellow the statutory baseline was achieved through the analysis of wetland change data. 91% of sites are located in WRIA 3, 9% of sites are located in WRIA 4 and no sites were returned for WRIA 1. After the analysis of the changes from the 2011 to 2016 dataset, none of 54 investigated sites showed wetland loss or a downgrade in land use classification. In addition, VSP intersect areas are protected by regulations including SCC 14.24.070(2) which requires any expansion of agriculture into critical area or its buffer to comply with the substantive and procedural provisions of the critical areas code.

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Wetlands  
4 - Upper Skagit**

**Goal Met?**

Yes  No

**Comments**

The goal to preserve and protection wetlands to prevent their continual loss and degradation with no degradation bellow the statutory baseline was achieved through the analysis of wetland change data. 91% of sites are located in WRIA 3, 9% of sites are located in WRIA 4 and no sites were returned for WRIA 1. After the analysis of the changes from the 2011 to 2016 dataset, none of 54 investigated sites showed wetland loss or a downgrade in land use classification. In addition, VSP intersect areas are protected by regulations including SCC 14.24.070(2) which requires any expansion of agriculture into critical area or its buffer to comply with the substantive and procedural provisions of the critical areas code.

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge  
1 - Nooksack**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge  
3 - Lower Skagit - Samish**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Critical Aquifer Recharge  
4 - Upper Skagit**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Frequently Flooded  
1 - Nooksack**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

**Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.**

**Frequently Flooded  
3 - Lower Skagit - Samish**

**Goal Met?**

Yes  No

**Comments**

**Adaptive Management?**

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Frequently Flooded  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Geologic Hazard  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Geologic Hazard  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Geologic Hazard  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 5 - Preserve and protect wetlands to prevent their continual loss and degradation. No degradation below the statutory 2011 baseline.

Fish and Wildlife Habitat  
4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Wetlands  
1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Wetlands

3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Wetlands

4 - Upper Skagit

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Critical Aquifer Recharge

1 - Nooksack

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Critical Aquifer Recharge

3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Critical Aquifer Recharge

4 - Upper Skagit

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Frequently Flooded

1 - Nooksack

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Frequently Flooded

3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Frequently Flooded

4 - Upper Skagit

**Goal Met?**

**Comments**

Yes  No

**Adaptive Management?**

Yes  No



Goal: 6 - Enhance critical areas in VSP intersect areas.

Geologic Hazard

1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Geologic Hazard

3 - Lower Skagit - Samish

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Geologic Hazard

4 - Upper Skagit

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

Goal: 6 - Enhance critical areas in VSP intersect areas.

Fish and Wildlife Habitat

1 - Nooksack

**Goal Met?**

**Comments**

**Adaptive Management?**

Yes  No

Yes  No

The goal to achieve FWHCA enhancements by subbasin was shown to be achieved through the implementation of existing restoration programs. Restoration project information was gathered from a variety of project sources, including the County's Natural Resources Stewardship Program, the Skagit Conservation District's Conservation Reserve Enhancement Program, the Skagit Watershed Council's riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal. Acres planted by subbasin include: Samish = 58.5 acres (goal of 5), Lower Skagit = 49.2 acres (goal of 2), Fisher Carpenter 19.5 acres (goal of 0.5), Nookachamps = 16 acres (goal of 2), Middle Skagit = 155.4 acres (goal of 5), Upper Skagit = 18 acres (goal of 2), and Sauk = 5 acres (goal of 1). By WRIA, these these plantings total 7.1 acres for WRIA 1, 272.8 acres for WRIA 3, and 41.7 acres for WRIA 4.

**Goal Met?**

Yes  No

**Comments**

The goal to achieve FWHCA enhancements by subbasin was shown to be achieved through the implementation of existing restoration programs. Restoration project information was gathered from a variety of project sources, including the County’s Natural Resources Stewardship Program, the Skagit Conservation District’s Conservation Reserve Enhancement Program, the Skagit Watershed Council’s riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal. Acres planted by subbasin include: Samish = 58.5 acres (goal of 5), Lower Skagit = 49.2 acres (goal of 2), Fisher Carpenter 19.5 acres (goal of 0.5), Nookachamps = 16 acres (goal of 2), Middle Skagit = 155.4 acres (goal of 5), Upper Skagit = 18 acres (goal of 2), and Sauk = 5 acres (goal of 1). By WRIA, these these plantings total 7.1 acres for WRIA 1, 272.8 acres for WRIA 3, and 41.7 acres for WRIA 4.

**Adaptive Management?**

Yes  No

**Goal Met?**

Yes  No

**Comments**

The goal to achieve FWHCA enhancements by subbasin was shown to be achieved through the implementation of existing restoration programs. Restoration project information was gathered from a variety of project sources, including the County’s Natural Resources Stewardship Program, the Skagit Conservation District’s Conservation Reserve Enhancement Program, the Skagit Watershed Council’s riparian database, and the Recreation and Conservation Office PRISM database. These projects were overlaid with the VSP project area created as part of the FWHCA protection goal. Acres planted by subbasin include: Samish = 58.5 acres (goal of 5), Lower Skagit = 49.2 acres (goal of 2), Fisher Carpenter 19.5 acres (goal of 0.5), Nookachamps = 16 acres (goal of 2), Middle Skagit = 155.4 acres (goal of 5), Upper Skagit = 18 acres (goal of 2), and Sauk = 5 acres (goal of 1). By WRIA, these these plantings total 7.1 acres for WRIA 1, 272.8 acres for WRIA 3, and 41.7 acres for WRIA 4.

**Adaptive Management?**

Yes  No

**Participation Strategies and Performance Metrics**

Enter your best estimate of the number of Producers in the County watersheds:

1041

**Goal: 7 - From baseline year through July 2020, 15 enrollments in the local voluntary enhancement programs, e.g. Natural Resources Stewardship Program**

**Benchmark: 7 - Number of landowners enrolled in the local voluntary enhancement programs, e.g. Natural Resources Stewardship Program**

<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>	<b><u>Status</u></b>
From the baseline year of 2011 through July 2020, number of enrollments in the Natural Resources Stewardship Program, a local voluntary enhancement program.	From 2011 to 2020, the County's Natural Resources Stewardship program completed over 48 projects. These projects include native plantings, fencing, and/or the installation of large woody debris. Data was obtained from the County's NRSP Coordinator.	Exceeded

**Goal: 8 - From baseline year through July 2020, 6 enrollments in the current use open space tax program**

**Benchmark: 8 - Number of landowners enrolled in the current use tax program**

<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>	<b><u>Status</u></b>
From the baseline year of 2011 through July 2020, number of enrollments into Current Use Open Space Tax Programs	From 2011 to 2020, the Skagit County Hearing Examiner approved 106 enrollments or transfers into the Current Use Open Space tax programs. Data was obtained from the Skagit County Hearing Examiner, which posts all decisions to their website.	Exceeded

**Goal: 9 - From baseline year through July 2020, 9 enrollments in the Conservation Reserve Enhancement Program, Wetland Reserve Program, or other relevant federal programs**

**Benchmark: 9 - Number of landowners enrolled in federal enhancement programs, e.g. Conservation Reserve Enhancement Program, Wetland Reserve Program**

<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>	<b><u>Status</u></b>
From the baseline year of 2011 to July 2020, number of enrollments into the Conservation Reserce Enhancement Program, Wetland Reserve Program, or other relevant federal programs.	Skagit Conservation District implemented over 29 Conservation Reserve Enhancement Program contracts in the reporting period. Data was obtained from the Skagit Conservation District annual reports. In addition, Skagit County contracted with the Conservation District to implement six specific projects under the VSP, including a Cover Crop Program, AgWeather Stations, Plantings, Manure Pump, Cattle Alleyway, and Watering Station projects.	Exceeded

**Goal: 10 - From baseline year through July 2020, execute 6 protective easements**

**Benchmark: 10 - Number of landowners executing protective easements**

<b><u>Strategy/Metric Description</u></b>	<b><u>Accomplishment</u></b>	<b><u>Status</u></b>
From the baseline year of 2011 through July 2020, number of enrollments in the local Farmland Legacy Program.	Between 2011 and 2020, Skagit County worked with 61 farm families or businesses to execute Farmland Legacy Program Grant Deed of Conservation Easements. These easements collectively protect 4,465 acres of agricultural land and eliminate 78 development rights.	Exceeded

## Critical Area Monitoring

Monitoring Activity: Community Assisted Visit data from the Washington State Department of Ecology and Skagit County Planning and Development Services

### Included Critical Area(s):

Frequently Flooded

Type of data

Timeframe/season for field sampling or data collection (e.g., summer only, annually, monthly)

Desired accuracy of the Analysis

Observed mean

Number of samples drawn from existing data

Observed standard deviation

What statistical test was performed? (Ex. t-test, ANOVA, time series, regression, etc.)

Is the observation statistically significant?  Yes  No

Did the underlying data meet statistical test assumptions (e.g., normality)?  Yes  No

Briefly describe the outcome of the monitoring and why VSP implementation/lack of implementation contributed to the observations

Adaptive Management needed?  Yes  No

**Monitoring Activity: Consumer Confidence Reports from the Washington State Department of Health on Group A Water Systems in Skagit County**

**Included Critical Area(s):**

Critical Aquifer Recharge

Type of data

Timeframe/season for field sampling or data collection (e.g., summer only, annually, monthly)

Desired accuracy of the Analysis  Observed mean

Number of samples drawn from existing data  Observed standard deviation

What statistical test was performed? (Ex. t-test, ANOVA, time series, regression, etc.)

Is the observation statistically significant?  Yes  No

Did the underlying data meet statistical test assumptions (e.g., normality)?  Yes  No

Briefly describe the outcome of the monitoring and why VSP implementation/lack of implementation contributed to the observations

Adaptive Management needed?  Yes  No

**Included Critical Area(s):**

Geologic Hazard

Type of data

Timeframe/season for field sampling or data collection (e.g., summer only, annually, monthly)

Desired accuracy of the Analysis  Observed mean

Number of samples drawn from existing data  Observed standard deviation

What statistical test was performed? (Ex. t-test, ANOVA, time series, regression, etc.)

Is the observation statistically significant?  Yes  No

Did the underlying data meet statistical test assumptions (e.g., normality)?  Yes  No

Briefly describe the outcome of the monitoring and why VSP implementation/lack of implementation contributed to the observations

Adaptive Management needed?  Yes  No

**Included Critical Area(s):**

Wetlands

Input datasets used

Year of map/imagery for comparison with 2011 baseline

Spatial accuracy of least accurate input layer  Units for spatial accuracy

Classification accuracy of least accurate input layer

Field verification of overall accuracy: Omission

Field verification of overall accuracy: Commission

Field verification of overall accuracy: Kappa

Briefly describe the outcome of the monitoring and why VSP implementation/lack of implementation contributed to the observations

Adaptive Management needed?  Yes  No

**Monitoring Activity: Aerial imagery riparian area change detection**

**Included Critical Area(s):**

Fish and Wildlife Habitat Conservation Areas

Input datasets used This analysis utilized Skagit County's high resolution aerial photography from EagleView (formerly Pictometry). The 2011 and 2017/2019 images were compared and intermediary images were used to narrow down findings. Skagit County has acquired these images ever two years starting in 2007.

Year of map/imagery for comparison with 2011 baseline

Spatial accuracy of least accurate input layer  Units for spatial accuracy

Classification accuracy of least accurate input layer

Field verification of overall accuracy: Omission

Field verification of overall accuracy: Commission

Field verification of overall accuracy: Kappa

Briefly describe the outcome of the monitoring and why VSP implementation/lack of implementation contributed to the observations

Adaptive Management needed?  Yes  No