



# Voluntary Stewardship Program

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## WORK PLAN

DRAFT 8/29/16

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cover illustration by Brenda Cunningham

\_\_\_\_\_, 2016



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# Executive Summary

## Background

In 2007, the State Legislature adopted the legislation starting the process that led to the Voluntary Stewardship Program for the purpose of “resolving, harmonizing, and advancing commonly held goals for environmental protection and agricultural viability.”<sup>1</sup> Skagit County has been involved in the development of VSP since its inception and is committed to being a leader in implementation of one of the first County work plans.

In Skagit County, the long-running conflict over critical areas in areas of agricultural activity has contributed to substantial uncertainty in the local agricultural industry, with many millions of dollars misspent on litigation instead of habitat enhancement and fish recovery. The Skagit County Board of Commissioners has long recognized the tension between protection of watershed resources and ensuring the viability of agriculture, but has also supported policies that attempt to strike the appropriate balance between those competing goals. In this new era, Skagit County embraces the opportunity that the Voluntary Stewardship Program provides to demonstrate and measure the County’s commitment to stewardship of all our natural resources.

## Why is this important?

Skagit County’s Skagit and Samish watersheds are important both locally and regionally. The Skagit River is the largest source of fresh water and home to some of the largest salmon runs in Puget Sound, and Samish Bay is one of the leading shellfish producers in the state. The Skagit

*“Our health and the health of Puget Sound go together.”  
—William Ruckelshaus*

watershed is the third largest river on the west coast of the contiguous United States and the largest and “one of the most unspoiled strongholds of fish and wildlife habitat in the Puget Sound.”<sup>2</sup> The Skagit River hosts all five species of Pacific salmon, including six independent populations of threatened Chinook salmon, six populations of threatened steelhead, at least 26 local populations of threatened bull trout, three populations of chum salmon, two populations of Coho, and one each of pink and sockeye. Skagit County is often called the “last, best hope” for salmon recovery in Puget Sound.

At the same time, the agricultural industry is critical to Skagit County’s economy and rural character, and to the food security of Western Washington. Bountiful crops including the finest red potatoes in the world, hundreds of acres of tulip bulbs, dairy farms, berries, apples, and seed crops make our valley one of the most diverse and productive agricultural regions in the United States.

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<sup>1</sup> SSB 5248 (2007)

<sup>2</sup> Skagit Chinook Recovery Plan 2005, at 2.

## Our plan for natural resource stewardship

Moreover, protection of both critical areas and agriculture are not incompatible goals. As the Puget Sound Partnership Action Agenda proclaims, “agricultural lands [contribute to] critical fish and wildlife habitat and other ecosystem functions, especially in highly productive lower elevation riparian areas... maintaining the vibrancy of agriculture is crucial to recovering Puget Sound and instrumental in providing a high quality of life in the region.”<sup>3</sup>

The protection of existing riparian habitat will take place through aerial photography monitoring beginning in the baseline year of 2011. Baselines will be measured for each stream basin at the standard buffer distance for each stream type. The resulting measurements would be reflected in a table for each monitoring year.

The VSP legislation requires that this work plan include goals and benchmarks by which the work plan will be evaluated for success at specified intervals by both the Watershed Group and the State Conservation Commission. Our work plan includes both *participation* metrics (standards by which the level of participation in the Voluntary Stewardship Program is evaluated) and *environmental* metrics (standards by which we can determine if we are achieving protection or enhancement).

The VSP legislation identifies two types of environmental metrics—those for protection and others for enhancement—and contains different consequences for failures to achieve the different types. If the County fails to achieve protection, it must adapt to achieve those metrics on an approved timeline. If the County fails to achieve enhancement, it must develop a plan to achieve the enhancement, but is not required to implement that plan until funding is provided. Enhancement metrics will be achieved through incentivizing best management practices through a variety of mechanisms.

The success of this work plan depends on having a high-quality, structured, and iterative system for monitoring successes and failures and developing and implementing process improvements to achieve our goals and benchmarks.

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<sup>3</sup> Puget Sound Partnership, 2012/2013 Action Agenda for Puget Sound, page 51.

# About this Plan

## The VSP Legislation

In 2011, after a lengthy collaborative dialogue about how to manage the conflicts between critical areas protection and agricultural land preservation, the Washington State Legislature created the Voluntary Stewardship Program (“VSP”). The legislation provided an alternative to the traditional process, under the Growth Management Act, whereby counties were required to protect critical areas and could be challenged administratively and in court for failure to adopt sufficiently protective regulations. For more on the events leading to adoption of the VSP, see *The Road to Ruckelshaus* on page 23.

## Objectives

The overarching objectives of the statewide Voluntary Stewardship Program are to:

- protect critical areas, while maintaining and enhancing the long-term viability of agriculture in the watershed;<sup>4</sup>
- protect and enhance critical areas on lands used for agricultural activities through voluntary actions by agricultural operators;<sup>5</sup>
- encourage and foster a spirit of cooperation and partnership among county, tribal, environmental, and agricultural interests to better ensure the program success;<sup>6</sup>
- improve compliance with other laws designed to protect water quality and fish habitat;<sup>7</sup> and
- rely upon voluntary stewardship practices as the primary method of protecting critical areas and not require the cessation of agricultural activities.<sup>8</sup>

## The Implementation Process

In summary, the VSP legislation provides for the following process for implementation. The dates in parenthesis describe when Skagit County accomplished each step.

- County opts into VSP (December 19, 2011)
- County designates Watershed Group to develop work plan (November 10, 2014)
- County sends work plan to State Conservation Commission (\_\_\_\_\_)
- State VSP Technical Panel reviews work plan (within 45 days of receipt)
- County begins implementation of work plan

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<sup>4</sup> RCW 36.70A.700(2)(a) and 360.70A.725(3)(b).

<sup>5</sup> RCW 36.70A.705(1).

<sup>6</sup> RCW 36.70A.700(e).

<sup>7</sup> RCW 36.70A.700(f).

<sup>8</sup> RCW 36.70A.700(g).

# The Watershed Group

## Structure

On September 16, 2014, the Board of County Commissioners initiated participation in the Voluntary Stewardship Program, designated the County as the entity to coordinate the Watershed Group, and began the process to solicit Watershed Group participants.<sup>9</sup> In its resolution, the Board announced its desire to appoint Watershed Group members who have multiple interests and a demonstrated ability to collaborate. The Board designated the Natural Resources Division of the County Public Works Department to coordinate the Watershed Group and made the Watershed Group advisory to the Public Works Director.

## Role and Duties

RCW 36.70A.720 describes the duties of the Watershed Group, the most important of which is to develop the work plan. To that end, the advisory panel worked with county staff to develop the draft text of this work plan, while the technical review panel received the draft text and provided feedback on technical aspects of the plan.

After the work plan receives state approval, the statute provides for the Watershed Group to:

- (j) Conduct periodic evaluations, institute adaptive management, and provide a written report of the status of plans and accomplishments to the county and to the commission within sixty days after the end of each biennium;*
- (k) Assist state agencies in their monitoring programs; and*
- (l) Satisfy any other reporting requirements of the program.<sup>10</sup>*

See also Timelines for Reporting and Review on page 51.

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<sup>9</sup> Resolution R20140287.

<sup>10</sup> RCW 36.70A.720(1).

## Participation

The County received 21 letters from a broad range of individuals and groups with interest in serving on the Watershed Group. In November 2014, the Board appointed the following people to the Watershed Group advisory panel by Resolution R20140330:

### **John Anderson**

Lifelong Conway resident, longtime family farm background, Skagitonians to Preserve Farmland board member

### **Jodi Bluhm**

Lifelong Skagit County resident, Fir Island landowner, and Samish Indian Nation restoration specialist

### **Ann Childs**

Padilla Bay basin landowner, Stream Team member

### **Tyler Clark**

Skagit County Agricultural Advisory Board member, former manager of Skagit Conservation District and former WSU Extension Agent

### **Bill Dewey**

Samish basin landowner and Public Affairs Manager for Taylor Shellfish Farms

### **Oscar Graham**

Blanchard area landowner and critical areas and land use planning consultant

### **Oscar Lagerlund**

Lifelong Skagit dairy farmer, Drainage and Irrigation District 14 Commissioner, former Skagit County Planning Commissioner

### **David Olson**

Dike District 3 Commissioner; Farms, Fish, and Flood Initiative (3FI) Hydraulic and Hydrology committee member

### **Kenny Johnson**

Nookachamps dairy farmer; Skagit County Farm Bureau Board of Directors; former Skagit County Planning Commissioner

### **Jeff Schwab**

Lifelong Skagit resident; agricultural pesticide retailer; volunteer firefighter

### **Jason Vander Kooy**

Lifelong Skagit Delta dairy farmer; Dike District 1 Commissioner

### **John Wolden**

Lifelong Fir Island resident; Skagit Dike, Drainage, and Irrigation District 22 Commissioner; Tidegate Fish Initiative committee member

The Board appointed the following people to the Watershed Group technical review panel:

### **Daryl Hamburg**

Dike District 17 operations manager; Farms, Fish and Flood Initiative Oversight Committee member

### **Carolyn Kelly**

Skagit Conservation District Manager, Skagit Watershed Council board member, Clean Samish Initiative Executive Committee member

### **Kris Knight**

The Nature Conservancy project manager

### **Allen Rozema**

Skagitonians to Preserve Farmland Executive Director; Farms, Fish, and Flood Initiative (3FI) Oversight Committee member

### **Larry Wasserman**

Swinomish Indian Tribal Community Environmental Policy Director

The following County staff worked to develop the work plan:

**Emily Derenne**

Public Works Habitat Restoration Specialist and  
Natural Resource Stewardship Program Manager

**Josh Greenberg**

Senior Geographic Information Systems/  
Remote Sensing Analyst

**Rick Haley**

Public Works Water Quality Analyst and Water  
Quality Monitoring Program manager

**Jeff McGowan**

Public Works Salmon Habitat Specialist and  
Salmon Habitat Monitoring Program Manager

**Michael See**

Public Works Water Resources Section Manager

**Betsy Stevenson**

Planning & Development Services  
Natural Resources Senior Planner

**Kara Symonds**

Public Works Watershed Planner, Farmland  
Legacy Program Coordinator, VSP Watershed  
Group facilitator

**Ryan Walters**

Assistant Planning Director (2016-present)  
Deputy Prosecuting Attorney (2007-2015)  
Skagit County rep to Ruckelshaus (2007-2011)

## Plan Components

### Statutory Requirements

RCW 36.70A.720(1) and .735(1)(a) provide that the work plan must accomplish and include each of the elements below while maintaining the viability of agriculture in the watershed:

- (a) Review and incorporate applicable water quality, watershed management, farmland protection, and species recovery data and plans;*
- (b) Seek input from tribes, agencies, and stakeholders;*
- (c) Develop goals for participation by agricultural operators conducting commercial and noncommercial agricultural activities in the watershed necessary to meet the protection and enhancement benchmarks of the work plan;*
- (d) Ensure outreach and technical assistance is provided to agricultural operators in the watershed;*
- (e) Create measurable benchmarks that, within ten years after the receipt of funding, are designed to result in (i) the protection of critical area functions and values and (ii) the enhancement of critical area functions and values through voluntary, incentive-based measures;*
- (f) Designate the entity or entities that will provide technical assistance;*
- (g) Work with the entity providing technical assistance to ensure that individual stewardship plans contribute to the goals and benchmarks of the work plan;*
- (h) Incorporate into the work plan any existing development regulations relied upon to achieve the goals and benchmarks for protection;*

- (i) Establish baseline monitoring for: (i) Participation activities and implementation of the voluntary stewardship plans and projects; (ii) stewardship activities; and (iii) the effects on critical areas and agriculture relevant to the protection and enhancement benchmarks developed for the watershed;*
- (j) Conduct periodic evaluations, institute adaptive management, and provide a written report of the status of plans and accomplishments to the county and to the commission within sixty days after the end of each biennium;*
- (k) Assist state agencies in their monitoring programs; and*
- (l) Satisfy any other reporting requirements of the program.*

## Plan Organization & Crosswalk to Statutory Requirements

This plan is organized into several logical parts, which together address each of the required plan components above:

- a description of the long **background** of the ag/critical areas controversy in Skagit County and a description of the efforts to resolve it and enhance watershed resources; (a)
- a **description of the process** that led to appointment of the watershed group and development of the work plan, including solicitation of input from stakeholders; (b)
- articulation of the County’s proposed **goals and benchmarks** for critical areas protection in areas of agricultural activity; (c)(e)
- a description of the proposed **voluntary measures** and technical assistance that the County will support and promote in support of our goals; (d)(f)(g)
- a description of the **regulatory backstop** the County proposes to ensure a minimum level of stewardship of our watershed resources; (h)
- a plan for **monitoring and adaptive management** to ensure that we react appropriately if we don’t maintain momentum toward achieving our goals; (i)(j)
- a listing of **timelines for reporting and review** of our progress, and several appendices. (j)(l)

# Background

## County and Environmental Context

Skagit County lies in the northwestern portion of Washington State, framed by the majestic Cascade Mountains to the east and the scenic San Juan Islands to the west. The Skagit River defines a majority of the landscape through the County, running from the mountains through a fertile valley to Puget Sound. The Skagit River is the third largest river in volume on the West Coast of the contiguous United States, after the Columbia and Sacramento Rivers. It provides about 20% of the fresh water flowing into Puget Sound, or nearly 10 billion gallons a day. The Skagit is the only river system in Washington that supports all five species of salmon. It contains some of the largest and healthiest wild Chinook salmon runs in Puget Sound and the largest pink salmon stock in Washington.<sup>11</sup>

The County is home to 116,901 residents, covers 1,735 square miles of land, contains 8 incorporated jurisdictions, and numerous communities. Residents are attracted to Skagit County for many reasons including its industries, rural character, agricultural landscape, diverse natural resources, and abundant recreational activities. From 2000 to 2010, the County's population increased by 13.5%.<sup>12</sup> Skagit County is home to four tribes: the Upper Skagit Tribe, the Swinomish Tribe, the Samish Indian Nation, and the Sauk-Suiattle Tribe.<sup>13</sup>

The County's eastern boundary falls on the Cascade Mountain crest. Three-fourths of the County is mountainous with a number of peaks that rise above 8,000 feet in elevation; the County's highest peak is Mount Buckner, which stands at around 9,100 feet in elevation. The terrain in the mountainous areas of eastern Skagit County is one of extreme topography and rugged scenic beauty, with numerous glaciers and perpetual snowfields. The peaks are sharply defined and the plentiful streams of the region cascade swiftly down to the lowlands. One-fourth of the County's area consists of lowlands and flat valley floors. Broad alluvial flat areas cover a major part of the southwestern portion of the county where the Skagit River delta extends into Skagit Bay. The northwestern part of the county, drained largely by the Samish River, is topographically similar.<sup>14</sup>

The Skagit River basin has a total drainage area of 3,115 square miles. The Skagit River originates near the 8,000-foot level of the Cascade Mountains in British Columbia, Canada and flows south and then west to the Skagit delta where it discharges through two distributaries, the North and South Forks, to Skagit Bay. The major cities on the Skagit River delta include Sedro-Woolley, Burlington, Mount Vernon, and La

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<sup>11</sup> Washington State Department of Ecology, Overview of the Basin, 2011

<sup>12</sup> U.S. Census Bureau, 2010 Census

<sup>13</sup> Governor's Office of Indian Affairs

<sup>14</sup> Washington State Water Program, Water Supply Bulletin No. 14, 1973

Conner. The basin extends about 110 miles in a north-south direction, reaching 28 miles into British Columbia, and approximately 90 miles in an east-west direction between the crest of the Cascade Mountains and Puget Sound. The Skagit River floodplain contains about 22,000 acres east of Sedro-Woolley and 74,000 acres west of Sedro-Woolley. Principal tributaries of the Skagit River are the Sauk, Baker, and Cascade rivers.<sup>15</sup>

Approximately 48% of Skagit County is in public ownership, mostly in the mountainous regions. The major public landowner is the federal government, including the Mt. Baker-Snoqualmie National Forest and the North Cascades National Park. A land cover analysis of the County revealed that approximately 71.3% of lands are classified as forest, 6.7% as agriculture, 6.6% as water, 4.8% as ice and rock, 3.2% as developed, 3.2% as grassland, 2.8% as wetland, and 1.4% as unconsolidated shore.<sup>16</sup>

## Agricultural Context

Agriculture is a principal industry in Skagit County. Commodities include milk, livestock, poultry, crops, and value added products. There are over 90 different crops grown in the County. Blueberries, raspberries, strawberries, tulips, daffodils, pickling cucumbers, specialty potatoes, Jonagold apples, and vegetable seed are some of the more important crops in the maritime valley. More tulip, iris, and daffodil bulbs are produced in Skagit County than in any other county in the United States. Ninety-five percent of the red potatoes grown in Washington are from Skagit County. Skagit County ranks first in Washington State in the “Nursery, Greenhouse, Floriculture, Sod” commodity category, fifth in Washington State in “Milk from Cows” production, and also fifth in the “Vegetable, Melon, Potatoes, and Sweet Potatoes” commodity category. Skagit County is a major producer of cabbage, table beet, and spinach seed for the world. There are seven vegetable seed companies in the county, most of which market products globally.

In addition to food and fiber products, agriculture in the region provides habitat for thousands of raptors and overwintering waterfowl. Numerous agricultural suppliers, organizations, and agencies serve the needs of this important industry, such as seed companies, food processors, growing associations, financiers, researchers, and farm machinery providers. Each year since 1999, over 20,000 people attend farm tours during the Festival of Family Farms to learn more about the bounty, beauty, and complexity of the valley’s working landscape.<sup>17</sup>

Other Puget Sound counties have experienced significant farmland losses. Working with farm families and other farm protection groups, Skagit County has worked to keep agriculture viable. Today, the County has protected more than 10,000 acres of fertile farmland from future development with its Farmland Legacy Program. This program allows the County to purchase development rights and conservation easements, which protects open space and productive farmland in perpetuity. Skagit County taxpayers are positive

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<sup>15</sup> U.S. Army Corps of Engineers, 2009

<sup>16</sup> Skagit County GIS, 2011

<sup>17</sup> Washington State University, Mount Vernon Cooperative Extension Office, 2014

about paying this property tax to preserve their rural lifestyle and protect agriculture. Surveys show citizens value this program.

In 1966, a progressive group of elected officials adopted the County's first zoning ordinance and shortly after passed a Large Acreage Lot Size, establishing a 30-acre-minimum lot size on agricultural land. That has since increased to a lot size of 40 acres in areas zoned as Agricultural-Natural Resources Lands, protecting the County from urban sprawl. The purpose of the Agricultural-Natural Resources Lands district is to provide for continued farming activities, conserve agricultural land, and reaffirm agricultural use, activities, and operations as the primary use of the district. In addition, Rural Resource-Natural Resources Lands also have a minimum lot size of 40 acres. The purpose of the Rural Resource-Natural Resources Lands district is to recognize and encourage the conservation of those lands that have the characteristics of both long-term commercially significant agriculture and forestry on-site or nearby.

### Value and Extent of Agriculture

Between the two principle zones intended for agriculture, Skagit has 89,277 acres zoned Agriculture-Natural Resource Lands and 26,871 acres zoned Rural Resource-Natural Resource Lands.<sup>18</sup> The 2012 Census of Agriculture cites 106,538 acres of land in farms with an average size of 99 acres, with a total market value of \$272,275,000 worth of products sold. This ranks Skagit County tenth among Washington counties for market value of products sold.<sup>19</sup> In 2013, Skagit County's food processing industry gross sales were \$630 million, which ranks Skagit County eighth in terms of food processing sales in Washington State.<sup>20</sup>

Agricultural practices vary among the County's different land forms. The soils of Skagit County are of two main groups: alluvial, or bottom-land, soils and upland soils. Most of the soils of the bottomlands are fertile and highly productive and have many different agricultural uses. These soils occur mostly in the valley and on the delta of the Skagit River. Within these soils, there are wide variations in color, texture, and thickness of the surface layer and in the character of the subsoil and substratum, with some soils having very slow internal drainage and underdrainage.<sup>21</sup> The poorly drained soils highlight the critical need of maintaining drainage infrastructure to agricultural production.

### Typical Agricultural Practices

The alluvial soils in the valley and on the delta of the Skagit River are fertile and highly productive supporting many different agricultural uses. Agricultural practices vary based on the commodity. For instance, some vegetable seed crops need over a decade in rotation. The following summarizes a sample agricultural stewardship practices employed producers in the Skagit Valley:

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<sup>18</sup> Skagit County Comprehensive Plan

<sup>19</sup> USDA Census of Agriculture, 2012

<sup>20</sup> Washington State Department of Revenue, 2013

<sup>21</sup> Soil Survey of Skagit County, WA, U.S. Department of Agriculture, 1960

- Routine soil samples to analyze for soil pH, lime requirement, nitrate nitrogen, phosphorus, potassium, calcium, magnesium, sodium, soluble salts, organic matter, and calculated cation exchange capacity
- Planting winter cover crops on most open (non-cropped) fields for soil health and benefit of waterfowl, shorebirds, raptors, and other wildlife
- Careful crop rotation to break disease cycles, rebuild organic matter content, balance nutrient cycles, and enhance complex microbiology
- Operating and maintaining sophisticated drainage infrastructure to break anaerobic soil cycles and promote soil health
- Supplemental irrigation as required to enhance yields
- Nutrient management, especially dairy, to monitor manure application management
- Manure application to cropped fields to promote microbial activity, add organic matter, and to reduce use of commercial fertilizers
- Research programs and projects with Washington State University, Mount Vernon Extension Office and others to verify best management practices
- Integrated Pest Management approach to allow natural systems to control pest and disease issues and minimize chemical control methods
- Modern, state of the art application equipment utilizing Precision Ag and GPS technology for precise target application of fertilizer and chemicals
- Use of alternating chemical disease control materials to eliminate or minimize disease resistant populations
- Rotating biological controls into the Integrated Pest Management process
- Multiple practices designed to reduce overall fertilizer and chemical usage, such as micro-application and common pattern
- Intermittent compost application for enhanced microbial and plant nutrient supply
- Fencing to keep livestock out of watercourses
- Complicated tillage methods to avoid soil compaction and periodic deep tillage to mitigate compaction for enhanced crop yield and improved water percolation
- Reduction of soil tillage when possible to reduce expense and improve soil tilth concerns
- Proper seed selection for high yield, appropriate for local conditions, and physical constraints
- Product testing and Good Agricultural Practices certification to ensure food safety
- Pesticide residue monitoring program in agricultural watercourses
- Adaptive management decision matrix to address arising issues

# The Growth Management Act and Critical Areas Protection

## GMA Goals and Directives

The Washington State Growth Management Act (GMA), adopted in 1990, provides general direction to local governments in creating local comprehensive plans and development regulations. GMA contains fourteen unprioritized planning goals for local government to consider as they develop land use plans and development regulations.<sup>22</sup> Alas, these goals and directives frequently conflict. For example, conservation of agricultural lands figures prominently among those goals:

*(8) Natural resource industries. Maintain and enhance natural resource-based industries, including productive timber, **agricultural**, and fisheries industries. **Encourage the conservation** of productive forest lands and **productive agricultural lands**, and discourage incompatible uses.*

But at the same time, GMA includes goals related to the conservation of fish habitat and water quality:

*(9) Open space and recreation. Retain open space, enhance recreational opportunities, **conserve fish and wildlife habitat**, increase access to natural resource lands and water, and develop parks and recreation facilities.*

*(10) Environment. Protect the environment and enhance the state's high quality of life, including air and **water quality**, and the availability of water.<sup>23</sup>*

While the planning goals provide for local discretion, GMA also includes mandatory direction to counties to designate and conserve agricultural lands of long-term commercial significance<sup>24</sup> and designate critical areas,<sup>25</sup> “use the best available science in developing policies and development regulations to protect the functions and values of critical areas,” and “give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.”<sup>26</sup>

Local plans and regulations are presumed valid upon adoption, but can be challenged for non-compliance with GMA to the Growth Management Hearings Board and then appealed to the courts. Skagit County has spent millions of dollars and more than twenty years attempting to balance these objectives.

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<sup>22</sup> Thirteen goals are listed in RCW 36.70A.020; the goals and policies of the Shoreline Management Act are incorporated into GMA as the fourteenth goal by RCW 36.70A.480.

<sup>23</sup> RCW 36.70A.020 (partial).

<sup>24</sup> RCW 36.70A.060.

<sup>25</sup> RCW 36.70A.170.

<sup>26</sup> RCW 36.70A.172.

## Five types of critical areas

The Growth Management Act and the County's Critical Areas Ordinance (CAO) recognize five types of critical areas:

- wetlands;
- critical aquifer recharge areas;
- frequently flooded areas;
- geologically hazardous areas; and
- fish and wildlife habitat conservation areas.

This last group, fish and wildlife habitat, includes streams and streamside areas.<sup>27</sup> Fish and wildlife habitat conservation areas are of primary importance to the question of critical areas protection in areas of agricultural activity. Approximately 85 percent of terrestrial vertebrate species in Washington State use riparian habitat for essential life activities.<sup>28</sup> While salmon are not the exclusive focus of fish and wildlife habitat critical areas, they receive the most attention.

## Critical area protection through vegetated buffers

The standard approach to protection of these fish and wildlife habitat conservation areas, such as streams, is to prohibit or limit land uses adjacent to the critical area. These limited use areas, known as buffers, vary in width depending on the habitat quality. For example, in Skagit County's critical areas ordinance for non-ag activities, the required standard buffer distances range from 50 feet for seasonal and non-fish streams up to 200 feet for shorelines of the state.

## Merits of streamside vegetation

There are several important reasons to maintain streamside vegetation:<sup>29</sup>

1. **Recruitment of Large Woody Debris (LWD) to the Stream.** LWD creates habitat within the stream channel necessary to maintain salmon/trout and other aquatic organisms' productive capacity and species diversity. Trees, large branches, and root wads that fall into a stream create refuge pools for salmon that allow them to forage for food, save energy, and gain protection from predators. The pools also serve as thermal refuges in streams with elevated temperatures. LWD also helps sort stream gravels necessary for spawning salmonids.
2. **Shade.** Shading by the forest canopy maintains cooler water temperatures and influences the availability of oxygen for salmon/trout and other aquatic organisms. The recruitment of particulate organic matter (POM) is another important function riparian zones provide. Detrital

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<sup>27</sup> But specifically excludes "such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company." RCW 36.70A.030(5).

<sup>28</sup> Washington State Department of Ecology. "Agricultural-related water quality risks." Updated July 2012.

<sup>29</sup> These purposes of riparian buffers are briefly codified in Skagit County's critical areas code at SCC 14.24.530(1)(a).

organic matter such as leaves, cones, and needle litter are food sources for aquatic and terrestrial consumers important to aquatic food chains.

3. **Bank Integrity (Root Reinforcement).** Bank integrity helps maintain habitat quality and water quality by reducing bank erosion and providing habitat structure and in-stream hiding cover for salmon/trout and other aquatic organisms. Decreased erosion helps to reduce the amount of fine sediment in the channel which can clog salmonid spawning gravel reducing aeration of buried eggs and ultimately leads to decreased survival of eggs.
4. **Runoff Filtration.** Filtration of nutrients and sediments in runoff (surface and shallow subsurface flows) helps maintain water quality. Riparian vegetation can filter pollutants such as sediments, nutrients, road salt, and agricultural chemicals from upland areas that enter into the stream habitat.
5. **Wildlife Habitat.** Functional wildlife habitat for riparian-dependent species is based on sufficient amounts of riparian vegetation to provide protection for nesting and feeding. Riparian areas also provide critical wildlife habitat for aquatic habitat modifiers such as beaver and many other terrestrial predators or scavengers associated with salmonid populations.

## The Evolution of Skagit County's ag-CAO

### In the Beginning

Skagit County adopted its first critical areas ordinance that included protection of anadromous fish habit on May 13, 1996.<sup>30</sup> This first effort included an exemption for “existing and on-going agricultural resource land management operations including related development and activities which do not result in expansion into a critical area or its buffer or do not result in an increase in impact to a critical area beyond that which has been occurring prior to the effective date of this ordinance.”<sup>31</sup> On appeal, the Growth Management Hearings Board found that the exemption for agricultural activities was too broad and failed to comply with GMA.<sup>32</sup> The County tried again, but in its next ruling, the Growth Board found the County ordinance still had deficiencies and directed the County, to among other things, adopt benchmarks, timelines, and monitoring to ensure that the County's program would actually protect critical areas.<sup>33</sup>

### The Millennial Effort

In 2000, through **Ordinance 18069**, Skagit County adopted an extensive, detailed, science-based program of incentivized, planted, and managed buffers and adaptive management. Landowners in Ag-NRL and Rural Resource-NRL zoned lands adjacent to streams had four options to institute buffers adjacent to those streams. Within one year of the effective date of the ordinance, a landowner would need to:

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<sup>30</sup> Ordinance 16156.

<sup>31</sup> Former SCC 14.06.090(2).

<sup>32</sup> *Friends of Skagit County, et al., v. Skagit County*, No. 96-2-0025, Final Decision and Order (January 3, 1997) at 9, available at <http://www.gmhb.wa.gov/LoadDocument.aspx?did=816>.

<sup>33</sup> *Friends of Skagit County, et al., v. Skagit County*, No. 96-2-0025, Compliance Hearing Order (September 16, 1998) at 30, available at <http://www.gmhb.wa.gov/LoadDocument.aspx?did=818>.

- sign up with CREP, and submit documentation to the County, and receive a bonus payment from the County for enrollment;
- obtain a site-specific conservation farm management plan, approved by the County, that included riparian buffers and best management practices;
- develop a Custom Buffer Plan (CBP) that might be a combination of the other options, and demonstrate that the CBP met best-available science; OR
- enroll in the Managed Agricultural Riparian Plan (MARF), a new County program that required planting and maintaining a 50-foot forested riparian buffer and a 25-foot vegetated filter strip, included an adaptive monitoring program to ensure the MARF worked to preserve or enhance fish habitat, and included lease payments to the property owner for at least five years to compensate the property owner for the land taken out of production.

Landowners that did not choose one of these options within one year would be subject to the standard buffer requirements. The program enjoyed substantial interest and many initial enrollments during its brief history, but ultimately was not implemented. As the Growth Management Hearings Board put it:

*Two years ago we said the MARF framework looked sound and found it in compliance. County staff and the [Science Advisory Panel] then worked very hard to put the required “flesh” on the plan. The Tribe succeeded in getting the MARF framework found noncompliant in Superior Court. The County then had to start all over again to develop a plan that would comply...If the MARF had not been taken to Court and another of the options still being challenged by the Tribe in Court, the County would now be implementing the MARF rather than starting over again.<sup>34</sup>*

Even in 2002, the Growth Management Hearings Board was tiring of the litigation:

*We ask all the parties to put down their weapons and work together to develop and implement a plan which meets the GMA obligations to protect critical areas and fisheries and also the GMA obligations to conserve agricultural lands of long term commercial significance and the farmers who work those lands.<sup>35</sup>*

## The No Harm Standard

In June 2003, the County adopted [Ordinance O20030020](#), which formed the basis for the ag-critical areas regulations the County has had in place since 2003. The ordinance:

- exempts “ongoing agriculture” from the requirement to observe riparian setbacks or plant buffers where none currently exist;

<sup>34</sup> *Swinomish Indian Tribal Community v. Skagit County*, No. 02-2-0012c, Final Decision and Order and Compliance Hearing Order (December 30, 2002) at 21, available at [www.gmhb.wa.gov/LoadDocument.aspx?did=502](http://www.gmhb.wa.gov/LoadDocument.aspx?did=502).

<sup>35</sup> *Id.*, at 22.

- requires a minimum standard of stewardship of riparian areas via compliance with a specified set of “watercourse protection measures,” i.e., bright-line rules based on NRCS practice standards for a minimum standard of stewardship of riparian areas.

After appeal by the Swinomish Tribe, the Growth Board found the County’s new ordinance largely compliant. The Growth Board noted that:

*[T]he record demonstrates that no other jurisdiction in the state has been required to go to the lengths that Skagit County has been forced to go to study, document and impose local regulations upon existing agricultural activity.<sup>36</sup>*

## MONITORING

Because the County’s no-harm ordinance is not *precautionary*, the Growth Board required the County to create a monitoring and adaptive management program for its Ag-CAO.<sup>37</sup> The monitoring program consists of two parts:<sup>38</sup>

- the **Water Quality Monitoring Program**, intended to determine stream water quality conditions and trends; and
- the **Salmon Habitat Monitoring Program**, intended to measure physical streams conditions important to salmon habitat.

Both programs, which include sampling sites both in agricultural areas and non-agricultural areas, have quality assurance project plans approved by the US Environmental Protection Agency. The programs were very good at their task of evaluating water quality trends but were not well-suited to providing useful data for an adaptive management program, which the County did not develop. The Growth Board found the Ag-CAO non-compliant principally because of this lack of effective adaptive management:

*Fundamentally, the program lacks benchmarks and triggers for corrective action and the ability to detect the cause of any deterioration in the existing functions and values of [fish and wildlife habitat conservation areas] in a timely way so that the current protection measures could be adjusted to provide adequate protection of fish habitat.<sup>39</sup>*

<sup>36</sup> *Swinomish Indian Tribal Community v. Skagit County*, No. 02-2-0012c, Final Decision and Order and Compliance Hearing Order (December 8, 2003) at 7, available at [www.gmhb.wa.gov/LoadDocument.aspx?did=469](http://www.gmhb.wa.gov/LoadDocument.aspx?did=469).

<sup>37</sup> WAC 365-195-920 required “an effective adaptive management program” if a non-precautionary approach is taken. Id at 46.

<sup>38</sup> Initially adopted by **Resolution R20030211** (2003); later revised by **Resolution R20040211** (2011).

<sup>39</sup> *Swinomish Indian Tribal Community v. Skagit County*, No. 02-2-0012c, Compliance Order – Adaptive Management (January 13, 2005) at 2, available at [www.gmhb.wa.gov/LoadDocument.aspx?did=274](http://www.gmhb.wa.gov/LoadDocument.aspx?did=274).

# The Road to Ruckelshaus

## INITIATIVE 933

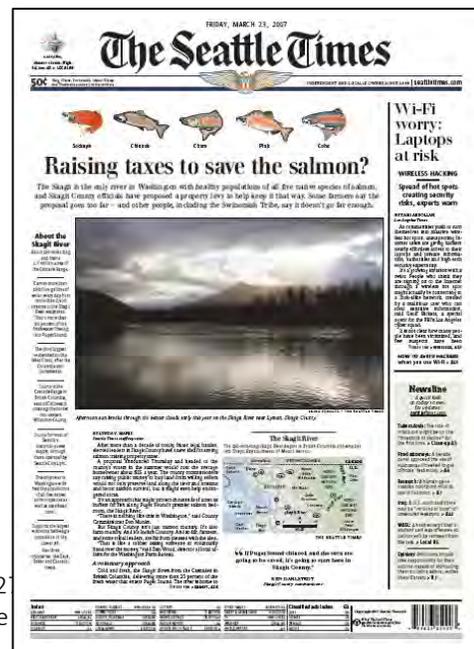
In 2006, driven partly by the statewide controversy over the impact of critical areas protection on agricultural lands, the Washington State Farm Bureau filed a state initiative that would have required government to pay compensation to property owners for the costs of property regulation.<sup>40</sup>

I-933 did not enjoy much success in Skagit County. A prominent Skagit farmer appeared in television commercials for the “no” campaign and both Skagitonians to Preserve Farmland and the Mount Vernon-based Western Washington Agricultural Association endorsed the opposition.<sup>41</sup> Initiative 933 was soundly defeated in the state, with 63% of voters casting ballots opposed. But no county voted more strongly against it than Skagit County, where 71% voted against.

## SALMON HERITAGE PROGRAM

In March 2007, Skagit County unveiled a proposal for a comprehensive program to acquire conservation easements along key salmon streams in agricultural areas. The effort, known as the **Salmon Heritage Program**, was modeled on the County’s successful Farmland Legacy program, and was intended to resolve the long-running controversy over riparian habitat on actively farmed land. The Salmon Heritage Program planned to raise funds through a countywide ballot measure, pay fair market value for riparian habitat easements, and jointly manage that habitat in cooperation with the tribal-led Skagit River System Cooperative. **A 2005 Elway poll** found 7 in 10 county residents would be “willing to pay a dollar or two per month in property taxes” to “help preserve fish and wildlife.”

“I-933 went too far, and was wrong for Skagit County. But the farmers who supported I-933 had a valid point, and we’re directly responding to their concerns,” Skagit County Commissioner Ken Dahlstedt said at the time. “The Salmon Heritage Program will help meet the County’s obligation to protect salmon and water quality, but at the same time will ensure farmers aren’t bearing the burden alone. The Salmon Heritage Program actually does more for agriculture than I-933 would have done. It’s the right thing to do for farmers, for salmon, and for the future of our county.”<sup>42</sup>



<sup>40</sup> Eric Pryne, “I-933 finds support lukewarm,” Seattle Times (August 2) Post I-933: Critical issues—and areas—still merit attention,” Seattle

<sup>41</sup> “Family farmers oppose Initiative 933,” Cascadia Advocate, September 18, 2006.

<sup>42</sup> “Skagit County Commissioners Announce Plan to Create Skagit County Salmon Heritage Program,” Skagit County Press Release, March 21, 2007.

The program was unveiled to great fanfare, including a front-page article in the Seattle Times.<sup>43</sup> The initial public reaction to the Salmon Heritage Program was positive, and polling data suggested broad support for habitat acquisition as a means of balancing the environment and property rights. However, the notion of raising county property taxes as the sole funding source for such a program proved considerably less popular; the Skagit watershed is a regional asset that produces regional benefits, and the cost of restoration ought to be shared regionally. In a recessionary climate marked by several failed school district bond measures, the County put pursuit of the program on hold when the Legislature intervened in the critical areas dispute.

### CALLING A TIMEOUT

The hard-fought campaign for Initiative 933 also struck a chord within the Legislature. In April 2007, the Legislature imposed a three-year timeout on changes to critical areas ordinances as applied to agricultural activities, and tasking the William D. Ruckelshaus Center with leading a stakeholder process to develop policy options for resolution of the longstanding conflict.<sup>44</sup>

### THE SUPREME COURT DECISION

While the Ruckelshaus Center geared up for the policy debate, in September 2007, the Supreme Court finally issued its decision on the long-running litigation between the County and the Swinomish Tribe. Although widely hailed as a victory for the County, the results were actually quite mixed. The Court found that the GMA requirement to “protect” critical areas means that the County need only maintain the status quo, and did not require the County to improve the conditions of critical areas to some enhanced or prior condition. The Court also determined that the County had the authority to protect critical areas through a non-precautionary approach rather than impose mandatory buffers. But in doing so, the County has an obligation to create a monitoring and adaptive management program that ensures that its approach achieves the standard of protection—and the Court found that the County’s program lacked the essential benchmarks and triggers for action to ensure protection is achieved:

*...under GMA regulations, local governments must either be certain that their critical areas regulations will prevent harm or be prepared to recognize and respond effectively to any unforeseen harm that arises. In this respect, adaptive management is the second part of the process initiated by adequate monitoring.*<sup>45</sup>

### The Ruckelshaus Negotiations

The Supreme Court decision arrived soon after the Ruckelshaus Center began its policy analysis, and changed the dynamics of that conversation. The first year was devoted to the formation of an advisory committee composed of agricultural, environmental, county, and tribal interests; development of

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<sup>43</sup> Lynda V. Mapes, *Raising taxes to save salmon?*, Seattle Times, Mar. 23, 2007, at A1.

<sup>44</sup> SSB 5248 (2007).

<sup>45</sup> *Swinomish Indian Tribal Community v Growth Management Hearings Board*, at 32.

operating ground rules; and an exchange of issues, concerns, and ideas among the participants. Faculty from UW and WSU and staff of the Center also initiated fact finding on the topics specified by the original legislation: critical areas ordinances, the Conservation Reserve Enhancement Program, conservation easements, buffer widths, requirements of federally approved salmon recovery plans, the impact of agriculture on Puget Sound recovery efforts, and compliance with water quality requirements.

In 2008, the advisory committee reviewed several presentations and draft reports on the fact-finding topics. Meetings in 2009 were largely devoted to crafting a the outline of an agreement that would focus and maximize voluntary approaches for agricultural stewardship while protecting and enhancing ecological functions that support clean water and productive habitat. Although at one point the proposal was evolving toward designating local watershed councils or conservation districts as the implementation groups, Skagit County argued that counties, as the entities on the hook for achieving success, needed to be able to determine how best to implement the program.

During the 2010 legislative session, representatives of the agriculture, environmental, and county caucuses testified in support of legislation extending the process, and the extension (SSB 6520) was signed into law. The Center embarked on a new approach for 2010, creating three work groups to focus on key unresolved issues:

- The accountability and privacy work group worked on procedures to ensure that voluntary stewardship efforts would be reviewed for adequacy and verified for completion. At the same time, the work group recognized that landowner privacy and confidentiality are an essential element of voluntary participation;
- Consequences to be used if desired outcomes are not achieved through voluntary programs or approaches; and
- Program implementation.

The Center also coordinated discussions with appropriate state agencies. The Center’s final report was completed in October 2010.

### **ESHB 1886: THE VOLUNTARY STEWARDSHIP PROGRAM**

In April 2011, the Legislature adopted [Engrossed Substitute House Bill 1886](#), creating the Voluntary Stewardship Program as an *alternative approach* within GMA to the requirement to protect “critical areas in areas used for agricultural activities through development regulations...” and to achieve the twin goals of habitat protection and agricultural land preservation.<sup>46</sup> If the participating watershed is achieving its goals and benchmarks, the county is not required to update development regulations to protect critical areas as they specifically apply to agricultural activities.

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<sup>46</sup> RCW 36.70A.710(1).

## Skagit County Enrollment in VSP

The VSP legislation set a deadline of January 22, 2012, for interested counties to enroll. In making that decision to enroll and designate priority watersheds, the statute required the County to consider:

- (a) The role of farming within the watershed, including the number and acreage of farms, the economic value of crops and livestock, and the risk of the conversion of farmland;*
- (b) The importance of salmonid resources in the watershed;*
- (c) An evaluation of the biological diversity of wildlife species and their habitats in the geographic region including their significance and vulnerability;*
- (d) The presence of leadership within the watershed that is representative and inclusive of the interests in the watershed;*
- (e) Integration of regional watershed strategies, including the availability of a data and scientific review structure related to all types of critical areas;*
- (f) The presence of a local watershed group that is willing and capable of overseeing a successful program, and that has the operational structures to administer the program effectively, including professional technical assistance staff, and monitoring and adaptive management structures; and*
- (g) The overall likelihood of completing a successful program in the watershed.<sup>47</sup>*

In August 2011, the Board of County Commissioners adopted Resolution [R20110239](#), setting the stage for consideration of enrollment in VSP. Following that resolution, staff prepared an analysis of the statutorily required considerations<sup>48</sup> and drafted an ordinance that proposed minor changes to the County's ag-CAO, enrolled all of the County's watersheds in VSP, and nominated both the Skagit and Samish as priority watersheds. After thorough review and recommendation by both the County's Agricultural Advisory Board and the County Planning Commission, the Board adopted the ordinance on December 19, 2011.<sup>49</sup>

After enrollment in VSP, the County moved to dismiss the litigation pending before the Growth Management Hearings Board. The GMHB did so on March 22, 2012.

### SELF-FUNDING

The VSP legislation does not obligate counties to being implementation of VSP until the state provides funding. After three years of waiting for that funding, and after conferring with tribes and other

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<sup>47</sup> RCW 36.70A.710(4).

<sup>48</sup> *Evaluating Enrollment in the ESHB 1886 Voluntary Stewardship Program: An Analysis of Critical Factors, Costs, and Benefits*, Skagit County, December 16, 2011.

<sup>49</sup> [Ordinance O20110013](#) Enrolling County in VSP and modifying Ag-CAO (December 19, 2011).

interested stakeholders, Skagit County decided in 2014 to initiate County participation in VSP even without state funding.<sup>50</sup>

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<sup>50</sup> Resolution R20140287 (September 16, 2014).

# Goals & Benchmarks

## Definitions

The VSP legislation requires that the work plan include “goals and benchmarks”—metrics by which the work plan will be evaluated for success (see Timelines for Reporting and Review on page 51). The legislation requires two types of metrics, which it variously refers to as goals or benchmarks: participation metrics and environmental metrics.

**Participation metrics** are standards by which the level of participation in VSP is evaluated:

*Develop goals for participation by agricultural operators conducting commercial and noncommercial agricultural activities in the watershed necessary to meet the protection and enhancement benchmarks of the work plan;*<sup>51</sup>

**Environmental metrics** are standards by which we can determine if we are achieving protection or enhancement. The work plan must:

*Create measurable benchmarks that, within ten years after the receipt of funding, are designed to result in (i) the protection of critical area functions and values and (ii) the enhancement of critical area functions and values through voluntary, incentive-based measures.*<sup>52</sup>

The VSP legislation identifies two types of environmental metrics—those for **protection** and others for **enhancement**—and contains different consequences for failures to achieve the different types. If the County fails to achieve protection, it must adapt to achieve those benchmarks on an approved timeline.<sup>53</sup> If the County fails to achieve enhancement, it must develop a plan to achieve the enhancement, but is not required to implement that plan until “funding is provided.”<sup>54</sup>

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<sup>51</sup> RCW 36.70A.720(1)(c).

<sup>52</sup> RCW 36.70A.720(1)(e).

<sup>53</sup> RCW 36.70A.720(2)(b)(iii).

<sup>54</sup> RCW 36.70a.720(2)(b)(iv).

## Participation Benchmarks

The work plan adopts the following goals for participation by agricultural operators in the subject area. Each participation metric will be achieved by July 1 of the noted year. Metrics are cumulative.

Metric	2017	2018	2019	2020	2021
VSP Outreach Contacts	50	100	150	200	250
Enrollments in local voluntary enhancement programs (e.g., NRSP, NRCS conservation practices)	5	10	15	20	25
Enrollments in current use open space tax program	2	4	6	8	10
Enrollments in CREP & other relevant federal programs	3	6	9	12	15
Survey Responses	0	300	0	400	0
Protection easements	3	6	9	12	15

## Protection Benchmarks

The VSP legislation defines protection as preventing “the degradation of functions and values existing as of July 22, 2011.”<sup>55</sup> This work plan establishes the County’s protection benchmarks consistent with that definition.

### Defining Protection

This work plan seeks to maintain the **functions and values** of “fish and wildlife habitat conservation areas” (FWHCAs). The County’s existing ag-CAO defines the “functions and values” of FWHCAs to mean water quality, large woody debris, riparian buffer characteristics and width, and channel morphological characteristics (i.e., channel complexity).<sup>56</sup> The County’s standard CAO describes how riparian buffers, which are the standard prescription for how to protect watercourses and riparian areas, provide recruitment of large woody debris to the stream, shade, bank integrity, runoff filtration, and wildlife habitat.<sup>57</sup>

Generally, “protection” is achieved when the amount of vegetated buffer adjacent to applicable watercourses is maintained at, or improves from, its July 22, 2011, baseline levels.

<sup>55</sup> RCW 36.70A.703(8).

<sup>56</sup> SCC 14.24.120(1)(a). For more on the intent of riparian buffers, see SCC 14.24.530(1)(a).

<sup>57</sup> SCC 14.24.520(2).

It is impractical or impossible to measure and track all these functions and values directly—especially water quality parameters—across the substantial geographic scope of the work plan. The work plan therefore makes the assumption (as the standard CAO does), that vegetated riparian buffers provide these functions and values. The work plan defines the amount of shrub and forest buffer as a proxy for all the FWHCA functions and values.

After work plan approval, the County will establish baseline measurements based on its aerial photography from March-April 2011.<sup>58</sup> Baselines will be measured for each stream basin at the standard buffer distance for each stream type. The resulting measurements would be reflected in a table similar to that shown below.

**Riparian Buffer Widths and Characteristics (acres of Plantings, Shrub, and Forest)**

Sub-Basin	Type S within 200 ft			Type F within 150 ft			Type Ns and Np within 50 ft		
	P	S	F	P	S	F	P	S	F
Samish	110	103	312	40	66	451	3	8	64
Lower Skagit	42	69	330	9	17	48	0	4	7
Fisher Carpenter	1	0	0	0	1	57	0	0	2
Nookachamps	19	62	151	2	38	270	0	4	32
Middle Skagit	34	72	1,458	75	212	825	0	16	36
Upper Skagit	6	15	159	17	20	193	0	0	7
Sauk	2	5	63	8	25	109	0	1	3

The buffer measurements will include forest land cover and shrub land cover, but not grass. Forest land cover is preferred, but the work plan recognizes that shrub land cover provides important functions and eventually develops into forest land cover. While grass can provide runoff filtration, this work plan does not attempt to count grass as intact riparian buffer, because of measurement difficulties and limited enforcement ability to prevent conversion of grass filter strips to agricultural use. Where we know new plantings are present, we will track those metrics separately.

### FOCUS ON BUFFER WIDTHS AND CHARACTERISTICS

In order for VSP to be successful, metrics must be linked to identifiable problems and identifiable remedial actions. This work plan focuses on buffer widths and characteristics, which is the prescription used by standard critical areas ordinances for development, both because riparian buffers provide riparian habitat and because they improve water quality in adjacent streams.

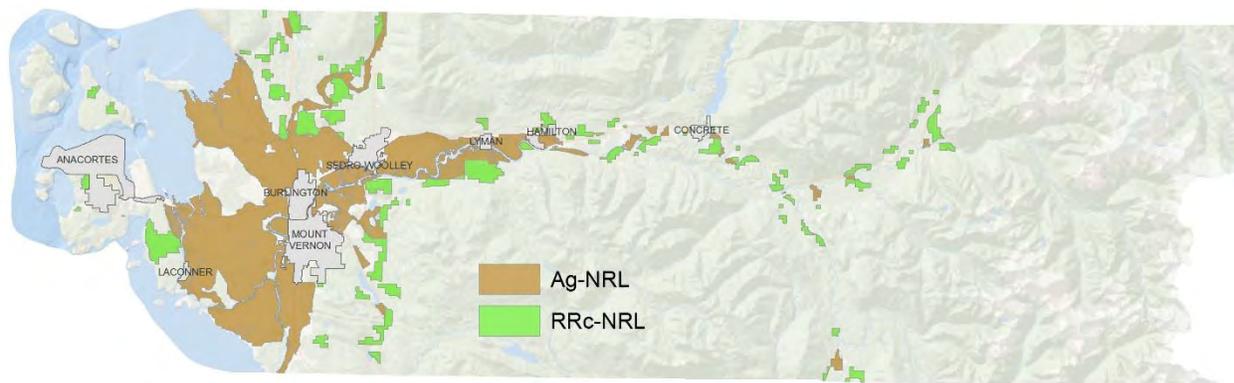
<sup>58</sup> The VSP legislation at RCW 36.70A.710(7)(b) prescribes a baseline date of July 22, 2011, but Skagit County’s aerial photography from 2011 was taken in March and April. Skagit County expects no significant discrepancy between the two dates.

The work plan does not attempt to include water quality parameters in the definition of protection. Skagit County’s experience with both its ag-CAO water quality monitoring program and the Clean Samish Initiative has demonstrated it is very difficult to conclusively demonstrate that water quality trends in any specific agricultural area are driven by agricultural activities and not residential septic, other non-agricultural activities, or wildlife.

## Applicability

### GEOGRAPHIC SCOPE

Although the County enrolled the entirety of unincorporated Skagit County and all of its watersheds in the Voluntary Stewardship Program,<sup>59</sup> Skagit County’s VSP Work Plan applies only to lands zoned Agricultural–Natural Resource Land and Rural Resource–Natural Resource Land. The map below shows the County’s Ag-NRL and RRc-NRL zones:



Within those two zones, Skagit County has a special set of rules (known as the “ag-CAO”) that allows “ongoing agriculture” to continue operation without adding critical areas buffers where they do not already exist. In all other zones, Skagit County will rely on its standard CAO to protect critical areas, which provides no special rules for agriculture. The table below summarizes how the County will achieve protection of critical areas throughout the County:

Activity	Ag-NRL and RRc-NRL zones	All Other Zones
ongoing agriculture	Ag-CAO with VSP Work Plan	standard CAO
all other activities	standard CAO	standard CAO

The County’s standard CAO is based on best-available science and meets or exceeds the standards articulated in the NOAA NMFS Interim Buffer Matrix. The table below shows the County’s required

<sup>59</sup> Skagit County Ordinance O20110013 (December 19, 2011).

standard buffer distances for different stream types, alongside the equivalent widths required by the Interim NOAA Buffer Matrix.<sup>60</sup> The old numeric DNR water type codes are provided for easy reference.

DNR Water Type	Old Type	Brief Description <sup>61</sup>	Skagit Standard CAO Buffer <sup>62</sup>	Interim NOAA Buffer Matrix Minimum Width
Shorelines (S)	1	Streams and waterbodies that are designated “shorelines of the state” as defined in RCW 90.58.030.	200 ft	100 ft
Fish (F)	2 or 3	Streams and waterbodies that are known to be used by fish, or meet the physical criteria to be potentially used by fish. Fish streams may or may not have flowing water all year; they may be perennial or seasonal.	150 ft if > 5 ft wide 100 ft if ≤ 5 ft wide	100 ft
Non-Fish Perennial (Np)	4	Streams that have flow year round and may have spatially intermittent dry reaches downstream of perennial flow. Type Np streams do not meet the physical criteria of a Type F stream. This also includes streams that have been proven not to contain fish.	50 ft	50 ft
Non-Fish Seasonal (Ns)	5	Streams that do not have surface flow during at least some portion of the year, and do not meet the physical criteria of a Type F stream.	50 ft	35 ft

The VSP statute clearly allows for a County to use mandatory development regulations alongside the voluntary programs prescribed by the County’s VSP work plan. RCW 36.70A.720(1)(h) provides that the County should “incorporate into the work plan any existing development regulations relied upon to achieve the goals and benchmarks for protection.”

### WATER TYPES

Fish and Wildlife Habitat Conservation Areas are defined in SCC 14.04.020. The work plan’s definition of protection applies to all the listed habitat areas except:

- isolated, artificial watercourses that have no channelized surface hydraulic connection or no piped hydraulic connection between the artificial watercourse and any natural or modified natural watercourse or any salt water;<sup>63</sup>
- artificial constructs such as drainage ditches within the boundaries of, and maintained by, an irrigation district.<sup>64</sup> For the purpose of VSP, “maintained by” means periodic conveyance

<sup>60</sup> As expressed in Table L-1 in the Department of Ecology’s 2015 funding guidelines, available at <https://fortress.wa.gov/ecy/publications/documents/1310041.pdf>.

<sup>61</sup> The descriptions of each water type are based on the definitions in WAC 222-16-030.

<sup>62</sup> SCC 14.24.530(1)(c).

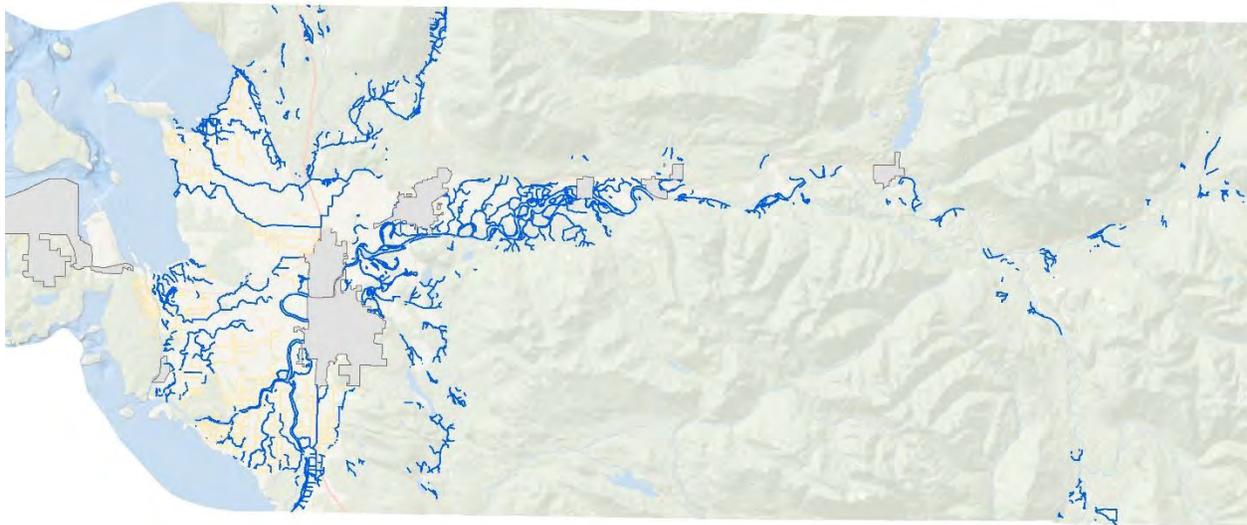
<sup>63</sup> SCC 14.24.120(2)(a).

<sup>64</sup> RCW 36.70A.030(5).

improvements, and the exemption only applies to the portion of the ditch within the boundary of the irrigation district.

SCC 14.04.020 defines “artificial watercourse” to mean “ditches and other water conveyance systems, not constructed from natural watercourses, which are artificially constructed and actively maintained for irrigation and drainage. Artificial watercourses include lateral field ditches used to drain farmland where the ditch did not replace a natural watercourse.”

Given these constraints (zoning, water types, and artificial watercourses), the watercourses below will be subject to VSP.



Artificial watercourses for the Skagit Delta were based on the Artificial Watercourse (yellow) classification used in the map in Figure 2-2 of the [Skagit Delta Tidegate and Fish Initiative \(TFI\) agreement](#). The TFI map was based on Skagit County hydrology data so the location information matches our current data.

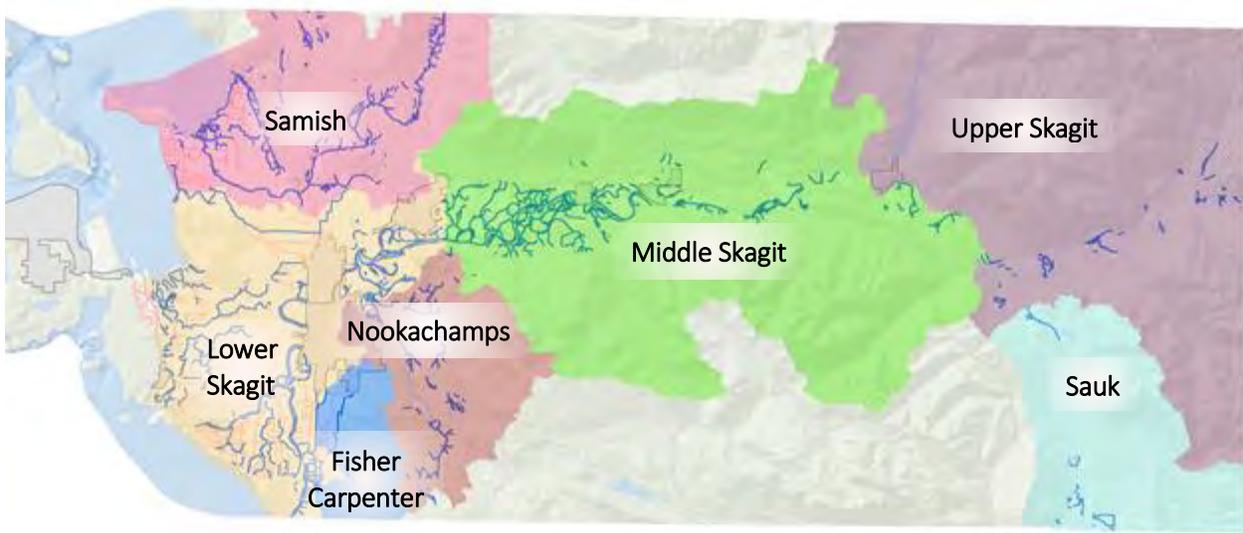
Skagit County has been maintaining its own hydrology data since 2002. This data originated from Department of Natural Resources but Skagit County needed a way to update the information in a timely manner for salmon-related projects. The data used in this work plan is the most current version of this data. In the last year, the County has partnered with Ecology to create a single unified hydrology dataset called the National Hydrology Dataset (NHD). At the time of this writing, Ecology has integrated most of the County’s hydrology data updates into the NHD. The County’s goal for VSP is to switch to the NHD hydro data before work plan implementation begins, however the NHD data does not currently include DNR stream type classifications, making it an imperfect substitute for the County’s own datasets.

### **WATERSHED BASINS**

For the purpose of defining and monitoring the baseline and benchmarks, the County’s watersheds are divided into the following discrete sub-basins based on natural breaks in topography and zoning:

- Samish
- Fisher Carpenter
- Upper Skagit

- Lower Skagit
- Nookachamps
- Middle Skagit
- Sauk



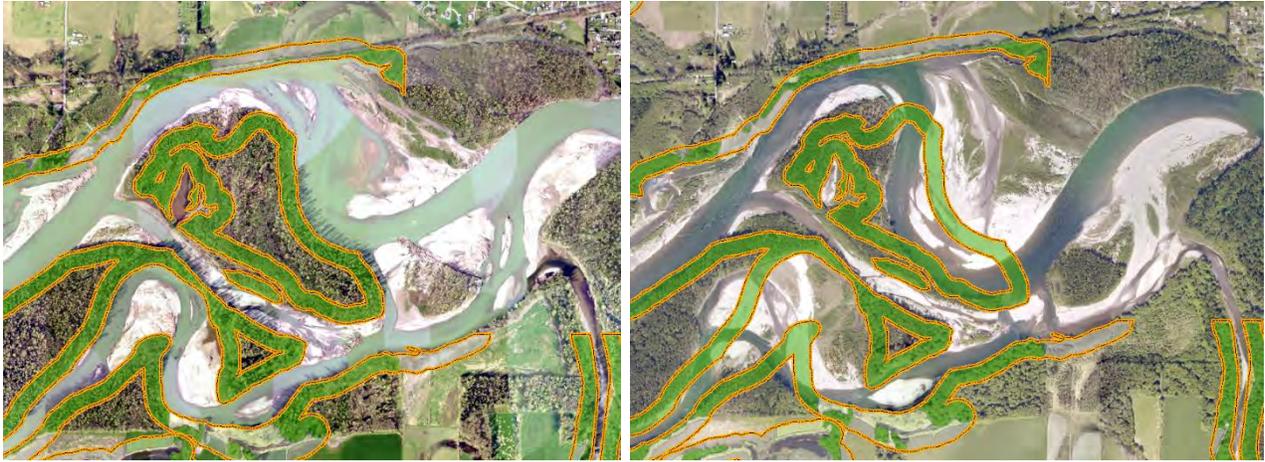
### Exceptions

Some losses of riparian vegetation within the study area are excusable, and sometimes beneficial. The work plan attempts to identify those situations upfront and determine how to address them in the definition of protection.

#### **BUFFER LOSS FROM ACTIVITIES OTHER THAN AGRICULTURE**

Some losses of riparian vegetation will not be due to agricultural activities. When those losses occur, if the cause of the loss is some external factor not related to agricultural activities or over which the County has no control, we will excuse the loss from the determination of whether the County is achieving protection.

Protection is not affected when the amount of buffer decreases as a result of an identifiable event not caused by agricultural activities. Natural channel migration of the Skagit River can be sudden and dramatic. In the images below, the river moved substantially from 2007 to 2015, requiring changes in the expected buffer mapping. The Town of Lyman is shown in the upper right.



2007

2015

Several other types of events also result in excusable buffer decreases. For example:

- Natural progression and loss of trees due to age or disease;
- Bank sloughing or mass wasting may wipe out trees along streams;
- Flooding due to beaver dams or other natural channel migration may wipe out buffer, and may result in newly exposed stream banks without vegetative cover on the opposite side of the migrated channel;
- Hazard tree removal consistent with the existing critical areas ordinance, SCC 14.24.130;
- Some logging activities, even in stream buffers, are permitted by Forest Practice Rules;
- Cultivation and harvest of any forest products or forest crop, consistent with the existing Agricultural-Natural Resource Lands Zoning Code, SCC 14.16.400 (2)(I).

Any time our monitoring program identifies illegal clearing of riparian vegetation, we will remedy the violation through our existing code enforcement process. When the clearing is not associated with agricultural activities, that code enforcement process will take place independent of this work plan.

#### **BUFFER LOSS DUE TO AGRICULTURE BUT WITH REPLANTING**

Where riparian vegetation is lost due to agricultural activity but the loss is identified and replanting is accomplished, that buffer loss will not count against the protection acreages. The County will record those areas, as well as any additional restored areas, as new plantings rather than trees or shrubs and continue to categorize those areas as new plantings until such time as they would normally be counted as shrub or tree cover. Replanting must occur consistent with the County existing Critical Areas Ordinance, SCC 14.24.540 (3), which requires replanting with native vegetation in the degraded portions of the remaining buffer area and shall include a 5-year monitoring and maintenance plan.

Clearing of streamside vegetation by agricultural activities is *already prohibited* by the County's existing ag-CAO, but the effect of the work plan will be to ensure that any instances of such clearing are identified and remedied.

## INVASIVE WEEDS

Another exception is allowed for clearing of invasive weeds, including Himalayan blackberry and Japanese knotweed. The County's existing standard critical areas code allows noxious weed removal in buffers under certain conditions.<sup>65</sup>

Multiple agencies are involved in high-priority efforts to clear the Skagit of knotweed, an invasive that creates monocultures that provide little to no habitat value. Because of its aggressive root system and the fact that it dies in winter, knotweed contributes to destabilization of stream banks and sloughing.

Due to limitations of our monitoring methods, knotweed is counted as shrub cover during initial monitoring analysis. To avoid creating a disincentive to removal, identified clearing of knotweed and other invasives will *not* count against the required protection acreage metrics, and new plantings to prevent reoccurrence of invasives *will* count toward the protection acreages.

## Enhancement Benchmarks

The VSP legislation defines "enhance" as "to improve the processes, structure, and functions existing, as of July 22, 2011, of ecosystems and habitats associated with critical areas."<sup>66</sup>

In setting our enhancement metrics, the County reviewed the existing work and priorities of other restoration-focused entities already operating in the watershed, as well as known targets of opportunity and "low-hanging fruit" for achievable buffer enhancement.

- The Skagit Watershed Council has focused on the area between Sedro-Woolley and Rockport through their [Middle Skagit Initiative](#).
- The Nookachamps area is free-flowing (not constrained by tide gates), a frequently flooded area, and Chinook habitat. There is less existing buffer in this area compared to other basins.
- Nookachamps, Middle Skagit, and Samish basins have fewer miles of levees and roads immediately adjacent to shorelines.
- The Samish basin is the focus of the Clean Samish Initiative, providing opportunities to leverage Clean Samish dollars for buffers for both VSP and CSI simultaneously.

## Buffer Enhancement Benchmarks

Consistent with our approach to determining functions and values in terms of acres of riparian buffer or wetland enhancement area, this work plan establishes the following enhancement benchmarks, to be achieved through voluntary, incentive-based measures. Buffer enhancements include but are not limited to protected filter strips, new planting projects, deliberately created wetlands, deliberately created estuary, and permanent protection of riparian buffers through conservation easements. We would count all enhancements within the study area; not just those created as a result of VSP.

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<sup>65</sup> SCC 14.24.530(3)(d).

<sup>66</sup> RCW 36.70A.703(4).

Sub-Basin	Stream Miles	Existing Buffer (acres)	Enhancement Benchmarks (acres)		
			2020	2025	2030
Samish	118.2	1,156	+5	+5	+5
Lower Skagit	224.4	526	+2	+2	+2
Fisher Carpenter	7.3	61	+0.5	+0.5	+0.5
Nookachamps	40.5	519	+2	+2	+2
Middle Skagit	155.1	2,727	+5	+5	+5
Upper Skagit	22.5	418	+2	+2	+2
Sauk	12.5	215	+1	+1	+1

These benchmarks are cumulative, e.g., if 10 acres of buffer is added to the Samish basin by 2020, no additional acreage is required to meet the 2025 goal. The enhancement benchmarks were drafted by assessing past enrollments into voluntary measures and best management practices over the past decade, including CREP and NRSP, within the applicable VSP areas.

The figures in the existing buffer acreage column were calculated using GIS methods. The figures in the stream miles column were also calculated using a GIS methods: A Skagit County VSP hydrology data set was created by incorporating all applicable hydrology features; spatially joined the VSP hydrology data set to the VSP watersheds data set; selected stream segments that met the "Stream" and "Perimeter" line attribute type; summarized stream length by watershed. It should also be noted that the larger water bodes have two edges of the streams.

### ENHANCEMENT BASELINE

Only enhancements gained within the area applicable to this work plan, i.e., Ag-NRL and RRc-NRL zones, may be counted toward these goals.

### METHODOLOGY & EXCEPTIONS

The methodology for protection metrics, including exceptions, will be used for calculation of enhancement metrics.

# Voluntary Measures

This section describes how Skagit County’s VSP Program intends to achieve the goals and benchmarks described earlier in the work plan. While achievement of the protection benchmarks will be ensured through enforcement of the County’s existing ag-CAO, the program will only be able to achieve the enhancement benchmarks through voluntary measures, including technical assistance, outreach, and education.

## Coordination and Outreach

Expansion of the County’s existing Natural Resource Stewardship Program (described on page 79) will be the centerpiece of the County’s voluntary measures for implementing VSP.

The Puget Sound Partnership’s work on voluntary incentive programs notes that success requires “a clearly identified and a trusted person or entity within a watershed, community, sector, or geographic area that has the energy, skills, and relationships to advance and implement the [voluntary incentive programs]. The person/entity identified needs to be able to effectively navigate the interests and perspectives of the targeted area.”<sup>67</sup>

After approval of the Work Plan, the County will dedicate 1.0 full time equivalent staffing for **VSP coordination**, which will involve implementation of the Natural Resource Stewardship Program and other related County programs, referring landowners to other programs, and serving as the primary point of contact for landowners seeking assistance managing riparian areas.

## One-Stop Shop

The County’s Natural Resource Stewardship Program may be renamed to eliminate any distinction between it and VSP itself, and reoriented toward being a “one-stop shop” for landowners to identify what programs may be helpful to habitat enhancement on their property. When no other programs are available, NRSP will implement and pay for measures directly as it has over the last several years.

While the new programs and initiatives described in this chapter will be a large part of the County’s efforts at achieving this work plan’s goals and benchmarks, promotion of existing programs will also be critical. The Puget Sound Partnership’s work on voluntary incentive programs recommends that the state create a “funding crosswalk”—a matrix of all the voluntary incentive programs with standardized descriptions and eligibility requirements that would be kept up-to-date on a central website.<sup>68</sup> Such a tool

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<sup>67</sup> “Final Technical Memorandum: Effectiveness of Voluntary Incentive Programs in WA and Potential Next Steps,” ICF International (July 10, 2014) at 19.

<sup>68</sup> “Final Technical Memorandum: Effectiveness of Voluntary Incentive Programs in WA and Potential Next Steps,” ICF International (July 10, 2014) at 16. The memorandum notes that the [WSCC Grant Calendar and Directory](#) already provides most of this information, but not in a format that is useful for human users.

would be invaluable for the work of the Voluntary Stewardship Program; if the state does not develop such a document, the County's VSP program will. Summaries of the programs that we may refer landowners to are included in "Existing Plans & Programs in the Watershed" starting on page 82.

## Outreach & Education

As part of Skagit County's broader efforts at enhancing external communication, the County hired a **Communications Coordinator** in 2016 who will devote a percentage of their time to the Voluntary Stewardship Program. The Communications Coordinator and/or VSP Coordinator will:

- design high-quality persuasive outreach materials describing the requirements of the County's ag-CAO and describing the programs and technical assistance available from the County and the Conservation District for agricultural operators;
- coordinate a direct mail campaign to potential program participants;
- ensure that buyers of agricultural property are aware of ag-CAO requirements and habitat enhancement opportunities;
- host an outreach booth at the Skagit County Fair and other related events;
- develop signage to be provided to participating farms to tout their stewardship;
- enlist the assistance of local farm associations and WSU Extension to promote VSP;
- develop a comprehensive website at [www.skagitcounty.net/vsp](http://www.skagitcounty.net/vsp) with all the outreach materials, application forms, and related materials;
- follow up surveys on effectiveness of communication.

## Reach-Scale Plans for Easement Acquisitions

There are several existing planning efforts and programs that are in place that may be leveraged for greatest benefit. Each stream reach or watershed is at a different stage of "maturity" with regards to readiness for applying implementation funds strategically and effectively. The County will review these existing planning and program efforts and develop an easement acquisition strategy, including outlining potential funding sources. The County will also utilize various sources of information to prioritize reach-scale planning efforts, such as water quality data.

Skagit County is aware of grant opportunities for this level of planning (see, e.g., Ecology's NEP Watershed Protection Grant Publication no. 15-06-023), but those that require buffer widths consistent with the NOAA/NMFS buffer table are unlikely to be usable in Skagit County.

## Financial Incentives

Monetary incentives are generally required to get agricultural operators to participate in habitat restoration programs that ask them to give up agricultural land that they could otherwise farm.

## Easements and Acquisitions

Current NRSP projects do not involve monetary compensation to landowners. The program will explore multiple options for compensation of landowners when buffers are planted. Preferences among landowners vary, and not every option may be suitable for every landowner. The program will attempt to

offer a full range of compensation opportunities, including the purchase of temporary easements for the planting areas, purchase of permanent easements, or purchase in fee simple through segmentation, a boundary line adjustment, or friendly condemnation.

### **LAND DIVISIONS FOR HABITAT ENHANCEMENT**

Existing county code at SCC 14.16.860 allows for segmenting a one-acre parcel containing an existing house in Ag-NRL or Rural Resource-NRL when a Farmland Legacy conservation easement is placed on the remainder.

The County will consider amending the subdivision code to allow for similar parcel segmentation to facilitate habitat enhancement when the segmented parcel, limited to the critical areas and their buffers, is acquired and to be used for habitat enhancement, while the remainder is subjected to a Farmland Legacy conservation easement. The County would need to work closely with any dike and/or drainage district that has access to the area to ensure continued maintenance is incorporated into the long-term plan of the area.

### **Current Use Taxation Program**

Skagit County offers special property tax treatment to qualifying natural resource property. Once enrolled, a participating property is assessed at a “current use” value, which is lower than the “highest and best use” assessment value that would otherwise apply to the property. The property tax is consequently dramatically lower for parcels enrolled in the program. This work plan proposes a change to the County’s current use open space program that would need to make its way through the normal legislative public participation process.

### **CURRENT USE OPEN SPACE**

Skagit County currently offers “open space” current use taxation to applicants without specific evaluation of their property for habitat values and features. But RCW 84.34.055 enables a county to establish a public benefit rating system, and valuation schedule for land classified as open space. The county legislative authority may direct the county planning commission to set open space priorities and to adopt, following a public hearing, an open space plan and a public benefit rating system (rating system) for the county. Properties rated higher using the system get a larger reduction in valuation (and therefore a larger tax break). In developing the rating system, the legislative authority must give priority consideration to lands used for buffers planted with or primarily containing native vegetation.<sup>69</sup>

Skagit County will consider modifying its current use open space program to add a public benefit rating system and valuation schedule that prioritizes riparian habitat and buffer enhancement over other open space properties.

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<sup>69</sup> WAC 458-30-330.

## Farmland Legacy Program

The Skagit County Farmland Legacy Program purchases conservation easements that extinguish development rights on agricultural land. The program is funded by the County's Conservation Futures tax, and leverages that money to obtain grants from entities such as the Washington State Recreation and Conservation Office and the federal Natural Resource Conservation Service. Since its inception, the Farmland Legacy Program has protected over 10,000 acres through voluntary easement purchases and by easements acquired by the County's one-acre subdivision rule.<sup>70</sup> This program helps ensure the viability of agriculture in Skagit County.



Most parcels protected by existing Farmland Legacy easements could be eligible for soil conservation programs. Landowners are encouraged to explore these opportunities. Because it is likely that future NRCS funding will require habitat enhancement, Farmland Legacy will work to ensure landowners are compensated for any such habitat enhancement to incentivize their participation. Absent that additional compensation, recent experience has shown landowners will not participate.

## Technical Assistance

The VSP legislation requires the County to “Ensure outreach and technical assistance is provided to agricultural operators in the watershed.”<sup>71</sup> This work plan designates the Skagit Conservation District as the agency to provide technical assistance to landowners for this program. Skagit County currently provides substantial funding to the Conservation District through the Clean Water Fund. A similar agreement may be established for assistance with the VSP, with required deliverables to ensure effective support of the VSP.

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<sup>70</sup> SCC 14.16.860.

<sup>71</sup> RCW 36.70A.720(1)(d).

# Regulatory Backstop

Some members of the Ruckelshaus stakeholder group insisted that VSP include a “regulatory backstop” that would take over if the voluntary measures failed to achieve their aims. This concept has two parts: establishment of a reasonable level of stewardship for landowners and agricultural operators that is required and not optional, and adaptive management that may impose regulatory restrictions when a County does not achieve its benchmarks.

The VSP legislation provides that the work plan must:

*Incorporate ... any existing development regulations relied upon to achieve the goals and benchmarks for protection;*<sup>72</sup>

and provides that the County may adopt further development regulations for agricultural activities if provided by the work plan:

*(b) A county that has made the election under RCW 36.70A.710(1) may only adopt or amend development regulations to protect critical areas as they specifically apply to agricultural activities in a participating watershed if:*

*(i) A work plan has been approved for that watershed in accordance with RCW 36.70A.725;*

*(ii) The local watershed group for that watershed has requested the county to adopt or amend development regulations as part of a work plan developed under RCW 36.70A.720;*<sup>73</sup>

## Skagit County’s Ag-CAO

Unlike many other counties that completely exempt agriculture from their critical areas regulations, Skagit County’s existing Critical Areas Ordinance for Ongoing Agriculture already imposes restrictions on agriculture that will help the County achieve our protection benchmarks. The VSP statute clearly allows for a County to use mandatory development regulations alongside the voluntary programs prescribed by the County’s VSP work plan. RCW 36.70A.720(1)(h) provides that the County should “incorporate into the work plan any existing development regulations relied upon to achieve the goals and benchmarks for protection.”

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<sup>72</sup> RCW 36.70A.720(h).

<sup>73</sup> RCW 36.70A.130(8).

## Prohibition on Riparian Clearing

### EXISTING RULES

Skagit County's critical areas code requires administrative review of all land use activities within critical areas and their buffers, with some exceptions. One such exception is for:

*Existing activities defined as ongoing agriculture on designated agricultural land, including related development and activities which do not result in expansion into a critical area or its buffer and which do not result in significant adverse impacts to a critical area or its buffer; provided, that such activities comply with the provisions of SCC 14.24.120.<sup>74</sup>*

The effect of this provision is that agriculture does not have to stop farming adjacent to critical areas, but if they do stop farming and plant riparian buffers, those buffers cannot be later removed. Agriculture also has to comply with the requirements of SCC 14.24.120 (the "ag-CAO").

### PROPOSED CHANGE

Current Skagit County Code 14.24.120(3)(a) describes the County's "no harm or degradation standard" that all ongoing agricultural activities must meet. Among other things, this standard specifies that agriculture show "No evidence of significant degradation to the existing fish habitat characteristics of the watercourse from those characteristics identified in the baseline inventory described in Resolution No. R20040211 that can be directly attributed to the agricultural activities that are described in this Section."

Resolution R20040211 is the resolution setting up the County's existing water quality and salmon habitat monitoring programs. As described on page 75, those programs were not actually oriented toward establishing a useful countywide baseline, and were not useful for identifying individual activities that degraded fish habitat.

The County will propose to delete the reference to those programs and replace the sentence with a clearer standard:

*(v) No degradation of riparian habitat within the standard critical area buffer widths. Any in-water work, and any clearing of shrubs or trees other than noxious weeds with suitable replanting, within the standard critical area buffer widths is prohibited without critical areas review and approval.*

Because riparian clearing is already prohibited under the existing CAO, this is not a new substantive rule, simply a clearer expression of it.

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<sup>74</sup> SCC 14.24.070(2).

## Watercourse Protection Measures

### EXISTING RULES

Skagit County's existing ag-CAO uses mandatory "watercourse protection measures" (bright-line rules designed to protect streams and wildlife habitat from pollution, runoff, and degradation)<sup>75</sup> to ensure a minimum level of stewardship and protection of critical areas functions and values in areas of ongoing agricultural activity.

#### *Livestock*

- **Keep livestock out of the water.** Livestock access to watercourses must be limited to only the amount of time necessary for watering or crossing. Watering facilities or access must be constructed consistent with NRCS standards. NRCS does not allow water gaps on impaired streams.
- **Keep waste or sediment out of the water.** You must conduct your livestock or dairy operations without contributing waste or sediment in violation of state water quality standards.
- **Keep your pasture vegetated.** Maintain enough cover sufficient to avoid contributing sediment to watercourses. Avoid overgrazing near waterways.

#### *Nutrients and Farm Chemicals*

- **Keep manure out of the water.** You may not put manure anywhere it is likely to be carried into a watercourse. Between October 31 and March 1, you may not spread manure within 50 feet of a watercourse, or anywhere on bare ground (unless permitted by a dairy nutrient management plan or other limited conditions).
- **Keep nutrient levels appropriate.** Don't over apply nutrients, so that the amount that passes through the soil below where they are used by plants is minimized.
- Apply chemicals consistent with all label requirements.

#### *Soil Erosion and Sediment Control*

- Design roads and structures to avoid contributing sediment.
- Keep agricultural equipment from causing bank sloughing or other failures. Don't operate equipment too close to the watercourse.
- Wherever possible, construct V-ditching only to drain into watercourses that don't contain fish. Always avoid contributing excess amounts of sediment to the watercourse.

#### *Agricultural Drainage Infrastructure*

- **Conduct regular maintenance between June 15 and October 31.** This work window is best for fish. Some exceptions may apply.

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<sup>75</sup> See SCC 14.24.120(4).

- **Keep excavation spoils away from the bank.** Prevent bank failures and ensure drainage from spoils won't contribute sediment.
- **Ensure mowing doesn't disturb soil or sediments.** Ensure that the cut vegetation does not block water flow.

## Other Relevant Laws and Codes

Skagit County Code contains other regulations that prohibit water quality degradation. The County will use other provisions as necessary to prevent pollution.

### Illicit Discharge Code

SCC Chapter 16.32 prohibits discharges of anything other than stormwater into the county stormwater system, which includes all roadside ditches and stormwater facilities as well as natural systems such as streams and creeks. Violators can be cited with a civil infraction or by an administrative order to abate a public nuisance. This code provision has some, but limited, applicability to VSP because the code exempts "discharges from agricultural activities that are compliant with SCC 14.24.120" (the Ag-CAO).<sup>76</sup>

### Water Quality Regulations/Ecology Potential to Pollute

The Department of Ecology has authority under the Water Pollution Control Act, RCW Chapter 90.48, to control water pollution or activities that create a substantial potential to pollute.<sup>77</sup> The Supreme Court of Washington State upheld this authority in *Lemire v. Department of Ecology and the Pollution Control Hearings Board*, No. 87703-3, Decided August 2013. Skagit County must refer to Ecology all complaints that are based on water quality data and an allegation of a violation of state water quality standards, as provided for in the County's enforcement code.<sup>78</sup>

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<sup>76</sup> SCC 16.32.030(4)(a).

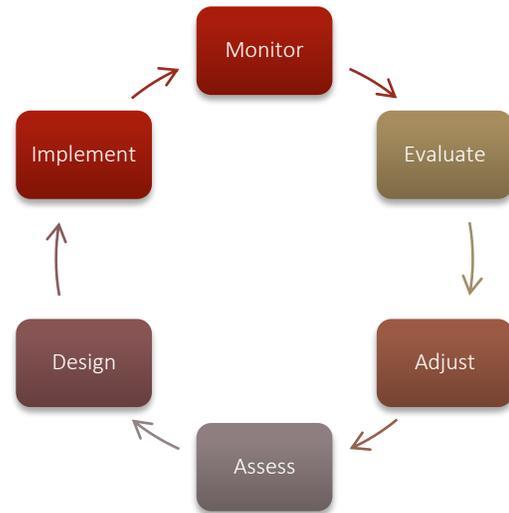
<sup>77</sup> RCW 90.48.120.

<sup>78</sup> SCC 14.44.285(2).

# Monitoring, Reporting, & Adaptive Management

The success of this work plan depends on having a high quality, structured, and iterative system for monitoring successes and failures and, based on evidence, data, and analysis, developing and implementing process improvements to achieve our goals and benchmarks.

The County has the beginnings of a monitoring and adaptive management program as part of its existing critical areas ordinance. But because the County never adopted a baseline or developed appropriate benchmarks and triggers, the County’s existing ag-CAO monitoring program is not GMA-compliant and the County will not be relying on it for the purpose of VSP.



## Monitoring

The VSP legislation requires the County to “establish baseline monitoring” for:

- (i) Participation activities and implementation of the voluntary stewardship plans and projects; (ii) stewardship activities; and*
- (iii) the effects on critical areas and agriculture relevant to the protection and enhancement benchmarks developed for the watershed; <sup>79</sup>*

The County’s existing Salmon Habitat and Water Quality Monitoring Programs established for the ag-CAO under resolutions R20030210 and R20040211 will be replaced. Water quality monitoring will continue as part of the Clean Samish Initiative and other programs, but not as directed by the Ag-Critical Areas Ordinance.

<sup>79</sup> RCW 36.70A.720(1)(i).

## Participation Metrics

To track progress toward the work plan's **participation goals**, the County will maintain a master database of all participation metrics and require reporting of participation metrics in all service provider contracts (e.g., with Skagit Conservation District).

In addition, if easements are established under this program, those easements will be monitored on an annual basis. The County's Farmland Legacy Program has an existing monitoring protocol where an inspector visits protected properties annually. Any easements established under VSP will be added to the annual monitoring program to ensure compliance with easement conditions.

## Environmental Metrics

To ensure Skagit County protects existing riparian vegetation (our **protection benchmarks**) and makes progress toward additional riparian vegetation (our **enhancement benchmarks**) Skagit County will measure riparian buffer widths and character using aerial photography and GIS tools. The intent of the work plan is to ensure that the metrics do not fall below the baseline levels established from 2011 aerial photography. At specified intervals, the County will then measure change from the baseline using updated aerial photography and report those changes in a similar table.

## METHODOLOGY

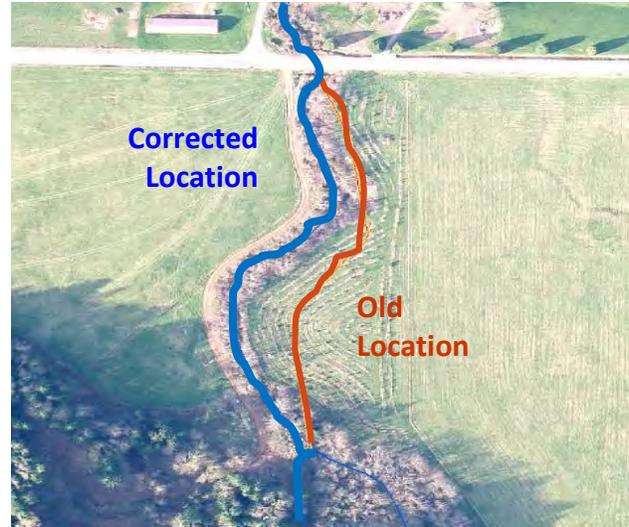
Skagit County's GIS Department ("Skagit GIS") performed an initial survey of riparian areas using aerial photography in 2008.<sup>80</sup> This work plan proposes to adopt the 2008 study approach to perform the monitoring required for VSP. This section describes the proposed methodology for the analysis, building on the 2008 structure.

*Aerial photography.* Skagit County has contracted with Pictometry International for aerial photos of the County since 2007. Flying over Skagit County with a set of digital cameras positioned around the airplane, Pictometry took photographs in both a straight-down orientation as well as at a 40-degree angle. The photos are georegistered using a combination of an airborne Global Positioning System (GPS), an Inertial Measurement Unit (IMU), and a digital elevation model of the earth's surface. The resulting orthophotos are one-foot color; the oblique photos have variable resolution but are invaluable for determining land use and land class information.

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<sup>80</sup> Joshua Greenberg and Sean Carson, "Mapping Riparian Land Use within Agricultural Zones: A Case Study in Skagit County" (research paper, Skagit County, 2010).

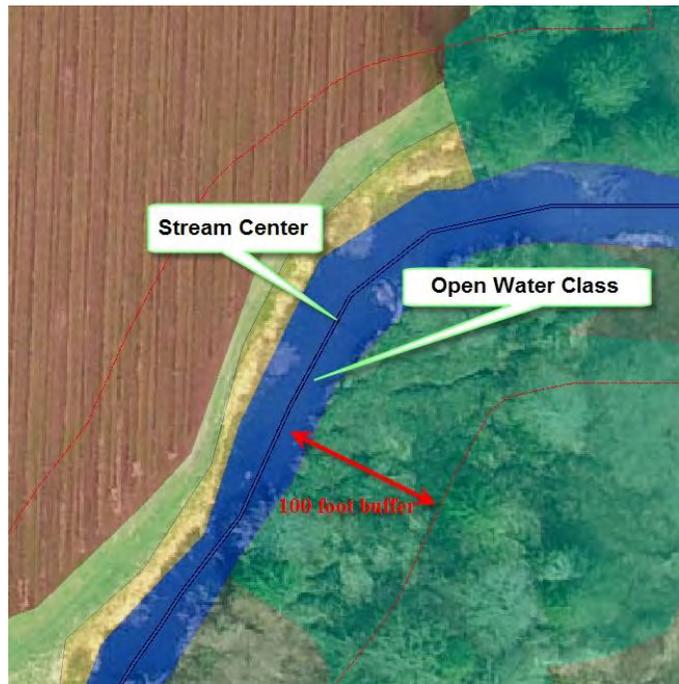
*Hydrology update.* The Washington State Department of Natural Resources (DNR) provided the original hydrology data for the 2008 study, which outlined watercourse locations in the study area. The DNR’s watercourse locations, however, did not match Skagit County’s 2007 aerial photography of the study area. Skagit GIS corrected the existing hydrological data to realign misrepresented stream locations.



In the graphic, the red line or old location, represents the location of a watercourse as provided by the Washington State Department of Natural Resources (DNR). The blue line, or corrected location, depicts the actual location of the watercourse as provided by the aerial photography.

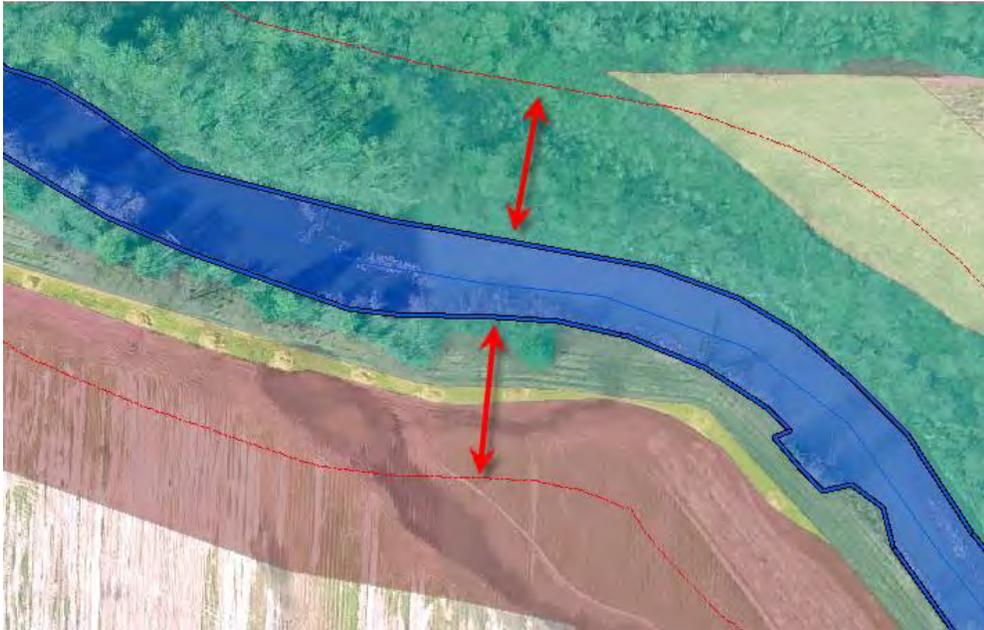
Skagit GIS used data from the Skagit River System Cooperative (SRSC), a non-profit research agency of the local Sauk-Suiattle and Swinomish Indian Tribes, to update DNR’s watercourse types. The typing used for this study, therefore, was the best available and most up-to-date data.

*Measuring buffer distances.* The hydrological dataset used for the study did not contain shape data for bodies of water less than 40 feet wide. Such bodies of water are represented only by a thin centerline; Skagit GIS drew the buffer area from this centerline.



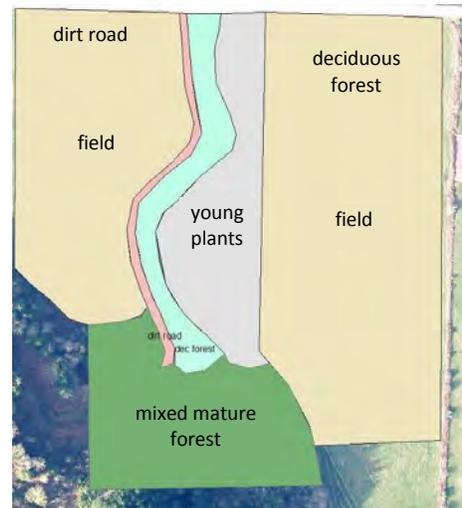
For example, here is a body of open water less than 40 feet wide where the buffer is drawn from the centerline of the stream.

Conversely, on streams greater than 40 feet wide, the buffer is drawn from the perimeter of the provided stream shape and the underlying water is classified as “open water”:



*Classification of riparian areas.* For the 2008 study, using the aerial photography, the project team categorized the land cover types within 200-feet of each stream in the study area. Map designations distinguished between young plants, mixed mature forests, deciduous forests, and other vegetation and ground cover classifications such as roads and structures. For VSP, categories will include new plantings, shrub, and forest. The measured buffer width will be based on the stream type classification.

There are two main methods used for performing a land cover or land use classification analysis: heads-up digitizing and automatic classification. Skagit GIS used heads-up digitizing for the purpose of the 2008 study and proposes to do the same for the VSP analysis. Heads-up digitizing is the oldest method and requires one person to evaluate photos and draw lines around the boundaries of different land use classifications. The accuracy of this approach depends on the quality of the photos and the skill of the digitizer.



Automatic classification is a newer technique that uses a computer to analyze images and determine classifications, or at least the boundaries of the study areas. This method is often faster and more systematic and is therefore easier to repeat. Computer-derived classification is more common with lower-resolution satellite images; however, newly developed software programs and techniques assist in classifying higher-resolution data.

*Identification of loss areas.* The County's photography supplier, Pictometry, has developed an automated system that is capable of generating a three-dimensional model of a landscape from the aerial photography. Pattern recognition algorithms compare images to create matching points, which are then identified in 3D space and compared to convert the image into a model.

After the software generates the model, the user can quickly search for areas of change. For example:



**left: 2013 aerial photography of forest cover before clearing**  
**right: 3D model of same area based on 2015 photography; brown identifies lower height, indicating clearing**

Skagit County will make use of this technology as it becomes commercially available to rapidly detect all areas of change within the study area, identify the reason for the change, and then take code enforcement action if appropriate to correct any violations.

*Identification of planting areas.* Skagit County will map all relevant riparian planting projects on an accessible GIS layer, including CREP and NRSP projects. The Skagit Watershed Council has discussed creating a similar geodatabase containing restoration project basic descriptions of size, location, date, management authority, planting approach, existing financial resources, remaining maintenance needs, and estimates of unmet effort/cost. If that project is far enough along, the County may seek to utilize the Watershed Council's data instead of maintaining its own.

## **GROUND TRUTHING**

GIS will perform site visits to several randomly selected sites with different land cover characteristics within the study area to ensure that their analysis based on the aerial photography matches the conditions visible on the ground. GIS will also use other data layers, such as LiDAR, when available, to help confirm any use of automated aerial photography analysis.

## Timelines for Reporting and Review

The VSP legislation requires the County to report on VSP implementation progress at various intervals. The County will make all such reports available on the County VSP webpage at [www.skagitcounty.net/vsp](http://www.skagitcounty.net/vsp).

### Two-Year Evaluation

Skagit County receives updated aerial photography every two years in odd-numbered years. Flights are March-April, depending on weather, and the County receives the photography in June-July. The statute requires the watershed group to:

*(1) (j) Conduct periodic evaluations, institute adaptive management, and provide a written report of the status of plans and accomplishments to the county and to the [Conservation Commission] within sixty days after the end of each biennium;*<sup>81</sup>

By the end of August of each odd-numbered year, the County will develop perform an automated analysis of riparian habitat within the study area. The focus of the analysis will be on detecting egregious violations of the Critical Areas Ordinance that should be corrected before the end of the four-year reporting period. The County's two-year evaluation will include:

- a summary of the automated land-cover analysis;
- a table of participation metrics;
- a summary of other notable work plan accomplishments.

### Five-Year Report

In two places, the statute requires comprehensive program reviews at least every five years:

*(2)(b)(i) Not later than five years after the receipt of funding for a participating watershed, the watershed group must report to the director [of the Conservation Commission] and the county on whether it has met the work plan's protection and enhancement goals and benchmarks.*

*(2)(c)(i) Not later than ten years after receipt of funding for a participating watershed, and every five years thereafter, the watershed group must report to the director and the county on whether it has met the protection and enhancement goals and benchmarks of the work plan.*<sup>82</sup>

Because the County obtains aerial photography every two years, the County will perform a comprehensive land cover analysis for the purposes of VSP reporting every four years. Based on the most-recent land cover analysis, the five-year report will include:

- a complete listing of all instances of riparian vegetation loss;

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<sup>81</sup> RCW 36.70A.720.

<sup>82</sup> RCW 36.70A.720.

- a complete description of all instances of excusable riparian vegetation loss;
- a complete description of all enforcement action intended to remedy any unexcused riparian vegetation loss;
- updated tables, consistent with the table design in this work plan, for buffer benchmark values.

The County will also make the raw data for the monitoring analysis available on the website as a GIS layer. The underlying photography is made available on the free iMap tool on the County website. Several other local agencies, such as the Skagit River System Cooperative, Swinomish Tribe, and Upper Skagit Tribe, are partners in the County’s purchase of the aerial photography, and have complete access to the raw imagery.

## Reporting Schedule

Based on receipt of funding in 2016, the County expects to report on the following schedule. This schedule will be updated based on Work Plan review times with the Washington State Conservation Commission.

Date	Report Due
August 30, 2017	Two-Year Evaluation
August 30, 2019	Two-Year Evaluation
August 30, 2021	Five-Year Report (including Two-Year Evaluation)
August 30, 2023	Two-Year Evaluation
August 30, 2025	Two-Year Evaluation
August 30, 2026	Five-Year Report
August 30, 2027	Two-Year Evaluation

## Adaptive Management

### Consequences for Failure

The VSP legislation provides for consequences if the County fails to achieve the required benchmarks. At five years after receipt of funding, and every five years afterward:

- if **protection** is not being achieved, the County must propose an adaptive management plan to achieve the unmet goals and benchmarks.<sup>83</sup> The adaptive management plan must be approved by the director of the Conservation Commission; if the director does not approve the adaptive management plan, the director may extend the deadline for the County to achieve the benchmarks by six months.<sup>84</sup> If the deadline is not extended, or if the County still fails to achieve

<sup>83</sup> RCW 36.70A.720(2)(b)(iii).

<sup>84</sup> RCW 36.70A.730(2).

protection, the County must revise its work plan and get approval from the Department of Commerce, or exit the Voluntary Stewardship Program and adopt revised critical areas regulations to ensure protection.<sup>85</sup>

- if **enhancement** is not being achieved, the County must determine what additional voluntary actions are needed to meet the benchmarks, identify the funding necessary to implement these actions, and implement these actions when funding is provided.<sup>86</sup>

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<sup>85</sup> RCW 36.70A.735.

<sup>86</sup> RCW 36.70A.720(2)(b)(iv).

# Viability of Agriculture

## Maintain and Enhance the Long-Term Viability of Agriculture

The VSP statute states that it is the intent of VSP to promote plans to protect and enhance critical areas within the area where agricultural activities are conducted, **while maintaining the long-term viability of agriculture** in the State of Washington and reducing the conversion of farmland to other uses.<sup>87</sup>

There are numerous consistent themes shared by the local agricultural community and broader farmland preservation interests that offer ways in which Skagit County, through the Voluntary Stewardship Program, can review, monitor, and assist in maintaining the long-term viability of agriculture. These components include:

### Regulatory Certainty

VSP's greatest benefit to agriculture is avoiding the specter of mandatory buffers on agricultural land. The County's Environmental Impact Statement on its 2003 ag-Critical Areas Ordinance found that requiring mandatory 75-foot buffers on ongoing agricultural lands located on Type 1 – 3 streams and 25-foot buffers on Types 4 – 5 streams would take 3,142 acres out of production, with an estimated cost (lost market value of land and buffer maintenance cost) of between \$6,789,293 and \$12,824,714 (2003 dollars).<sup>88</sup> Even if active planting of buffers were not required, farmers would constantly be fighting blackberry vines and many other invasive plants if the land by the streams were just abandoned from agricultural uses.

### Land Use Regulation/Zoning

Land Use and Zoning regulations are typically cited as the most important factor having an impact on farmland preservation. Skagit County benefits from a 40 acre minimum lot size in Ag-NRL zoning; this lot size should be maintained and supported into the future. In addition, the purpose of the County's Ag-NRL Zoning Code is to provide land for continued farming activities, conserve agricultural land, and reaffirm agricultural use, activities, and operations as the primary use of the district. The restrictive nature of this code should be preserved.

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<sup>87</sup> RCW 36.70A.720(1) and .735(1)(a) requires only maintaining, not enhancing, the viability of agriculture, but RCW 36.70A.725 provides that the state technical panel will assess this work plan to determine if it “will protect critical areas while maintaining and enhancing the viability of agriculture in the watershed.”

<sup>88</sup> Final Programmatic Environmental Impact Statement on Development of a Critical Areas Ordinance for Application to Designated Agricultural Natural Resource Lands (Ag-NRL) and Rural Resource Natural Resource Lands (RRc-NRL) engaged in ongoing agricultural activity (June 12, 2003), at 22-23, 33.

## Water Resources

Two imperative water related resources are necessary for the long-term viability of agriculture in Skagit County: the operation and maintenance of drainage infrastructure and access to water for irrigation. The County should continue to support the efforts of landowners and dike, drainage, and/or irrigation districts in obtaining necessary permits and authorities to maintain drainage infrastructure and to have water available for irrigation.

## Purchase of Development Rights Program

Development rights are a landowner's right to build houses and structures on their property under current zoning and planning policies. One of the most common and powerful tools to protect farmland is to purchase development rights off these properties<sup>89</sup>. Skagit County has a robust purchase of development rights program in the Farmland Legacy Program. The County should continue support for the Farmland Legacy Program to remove large numbers of development rights from farmland. This has the added benefit of removing potential homes from the floodplain. The County should also support the continued use of the Conservation Futures Fund as a dedicated funding source for the Farmland Legacy Program.

## Current Use Tax Incentive for Agricultural Land

The Open Space Taxation Action, enacted in 1970, allows property owners to have their open space, farm and agricultural, and timber lands valued at their current use rather than at their highest and best use.<sup>90</sup> While this VSP Work Plan suggests a potential path forward to amend the Current Use - Open Space classification program in Skagit County, the County should support the use of the Current Use - Farm and Agricultural Land tax incentive as it exists. This provides a direct financial return to participating farmers for the simple act of continuing to farm, and it is desirable to provide this benefit to as much of the farm community as possible.

## Flexible Conservation Measures

Flexibility in the voluntary installation of conservation measures, such as riparian buffers, was a consistent theme throughout the production of this Work Plan. A flexible buffer installation program, for example, would allow for various buffer widths, site-specific selection of plants best suited for adjacent crops, and allow for continued maintenance access to levees, dikes, and drainage infrastructure.

## Economic Development

Finally, the County can maintain and enhance the long-term viability of agriculture by continuing to assist farmers in the complex laws and regulations encountered when proposing new farm related infrastructure requiring County level review. In addition, the County can support farming through economic development authorities, such as marketing, access to markets, commercial kitchens, and other infrastructure.

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<sup>89</sup> *Losing Ground: Farmland Protection in the Puget Sound Region*, American Farmland Trust, 2012

<sup>90</sup> [http://dor.wa.gov/docs/pubs/prop\\_tax/openspace.pdf](http://dor.wa.gov/docs/pubs/prop_tax/openspace.pdf)

## Reporting

The U.S. Department of Agriculture, the Washington State Department of Agriculture, and Washington State University - Mount Vernon Cooperative Extension monitor the land in production in Skagit County. The USDA's National Agricultural Statistics Service conducts a Census of Agriculture every five years. The Washington State Department of Agriculture does annual detailed field level mapping of all agricultural activities in Skagit County that exceed 0.5 acres.

As part of the VSP reporting, the County will review and monitor the farmland protection strategies outlined in this report in addition to the statistics produced by agricultural censuses. This information will be summarized and incorporated into the two-year evaluations and five-year VSP reporting schedule. This information will be distributed with farmland interests in the basin, including, but not limited to, the Board of County Commissioners, the Skagit County Conservation Futures Advisory Committee, the Skagit County Agricultural Advisory Board, the Western Washington Agricultural Association, Washington State University – Mount Vernon Cooperative Extension, and Skagitonians to Preserve Farmland.

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# Appendix 1. Resolution Initiating County Participation in the Voluntary Stewardship Program

SKAGIT COUNTY  
Resolution # R20140287  
Page 1 of 5

## **A Resolution Initiating County Participation in the State Voluntary Stewardship Program to Protect and Enhance Critical Areas Where Agricultural Activities are Conducted**

**Whereas** the Washington State Legislature, through Engrossed Substitute House Bill 1886 (2011), created a Voluntary Stewardship Program (“VSP”) for protection of critical areas in areas of agricultural activities while safeguarding Skagit County’s agricultural industry from litigation and excessive regulatory burden;

**Whereas** the Skagit River produces a third of Puget Sound’s fresh water and is home to a third of its threatened wild Chinook salmon;

**Whereas** Skagit County is committed to protecting and restoring salmon runs on the Skagit;

**Whereas** Skagit County contains nearly 70,000 acres of prime farmland and a vibrant agricultural industry;

**Whereas**, over the course of the past fifteen years, Skagit County has incurred more than \$5 million in legal costs defending Skagit Valley’s agricultural economy against lawsuits over critical areas;

**Whereas** ESHB 1886 made enrollment in the VSP “an alternative to protecting critical areas in areas used for agricultural activities through development regulations”;

**Whereas**, on December 19, 2011, the Board of County Commissioners adopted Ordinance O20110013, electing to enroll the entirety of unincorporated Skagit County, and all of its watersheds, in VSP;

**Whereas**, in the same action, the Board of County Commissioners nominated the Samish and Skagit watersheds for consideration by the State Conservation Commission as priority watersheds;

**Whereas** the state was expected to provide funding for counties enrolled in VSP in the amount of \$150,000 in the first year and \$125,000 in succeeding years, but has not yet done so;

**Whereas** the County has invested millions of dollars in substantial efforts to clean up the Samish watershed, preserve riparian buffers, improve fish passage, and restore habitat;

**Whereas** the County has substantial interests in resolving the agriculture/critical areas conflict, in protecting and enhancing critical areas, and in maintaining and enhancing the viability of agriculture;

**Whereas** state law requires the County to appoint a “watershed group” to develop the County’s work plan for Voluntary Stewardship Program implementation;

**Whereas**, per RCW 36.70A.715(2), the County must confer with tribes and interested stakeholders before establishing the watershed group and has done so by requesting comment on this resolution;

**Now Therefore Be It Resolved by the Board of County Commissioners that:**

Section 1. Required acknowledgements and designations.

- 1.1. Consistent with RCW 36.70A.715(1)(a), the Public Works Director is instructed to acknowledge "receipt of funds" to the State Conservation Commission.
- 1.2. Per RCW 36.70A.715(1)(b) and (4), the County designates itself to coordinate the watershed group and administer funds for each enrolled watershed.
- 1.3. The Board of Commissioners designates and instructs the Director of Public Works to lead implementation of the County's Voluntary Stewardship Program.

Section 2. Watershed group established.

- 2.1. The watershed group will be coordinated by the Natural Resources Division of the Public Works Department and is advisory to the Director of Public Works.
- 2.2. The primary duty of the watershed group is to assist in development of the work plan described in Section 4.

Section 3. Watershed group membership.

- 3.1. By subsequent resolution, the Board of County Commissioners will appoint interested stakeholders and members of the public to the watershed group.
- 3.2. Consistent with RCW 36.70A.715(3), which requires that the watershed group "include broad representation of key watershed stakeholders and, at a minimum, representatives of agricultural and environmental groups and tribes that agree to participate," the County desires community volunteers for the watershed group that each have:
  - (a) experience or expertise in the watershed;
  - (b) multiple interests and demonstrated ability to be open-minded, think creatively, and bring a broad-based perspective;
  - (c) demonstrated ability to work well with others, voice one's own opinion, listen to other views, and work toward common agreement; and
  - (d) commitment to the success of the program and the time necessary to see the process through to completion.
- 3.3. The County will circulate a call for letters of interest for membership in the watershed group and accept responses through Monday, October 13.
- 3.4. Per RCW 36.70A.715(1)(b), the County will appoint members of a watershed group within 60 days of acknowledgement of receipt of funds.

Section 4. Work plan.

- 4.1. Per RCW 36.70A.725(3)(b), the overarching objective of the work plan is to “protect critical areas while maintaining and enhancing the viability of agriculture in the watershed.”
- 4.2. Consistent with RCW 36.70A.720, the watershed group must accomplish the following in developing the work plan:
  - (a) Review and incorporate applicable water quality, watershed management, farmland protection, and species recovery data and plans;
  - (b) Seek input from tribes, agencies, and stakeholders;
  - (c) Develop goals for participation by agricultural operators conducting commercial and noncommercial agricultural activities in the watershed necessary to meet the protection and enhancement benchmarks of the work plan;
  - (d) Ensure outreach and technical assistance is provided to agricultural operators in the watershed;
  - (e) Create measurable benchmarks that, within ten years after the receipt of funding, are designed to result in (i) the protection of critical area functions and values and (ii) the enhancement of critical area functions and values through voluntary, incentive-based measures;
  - (f) Designate the entity or entities that will provide technical assistance;
  - (g) Work with the entity providing technical assistance to ensure that individual stewardship plans contribute to the goals and benchmarks of the work plan;
  - (h) Incorporate into the work plan any existing development regulations relied upon to achieve the goals and benchmarks for protection;
  - (i) Establish baseline monitoring for: (i) Participation activities and implementation of the voluntary stewardship plans and projects; (ii) stewardship activities; and (iii) the effects on critical areas and agriculture relevant to the protection and enhancement benchmarks developed for the watershed.
- 4.3. Per RCW 36.70A.725, the County must have its work plan approved by the director of the State Conservation Commission within three years of receipt of funding.
- 4.4. To provide adequate time for review by the Board of County Commissioners and review by the state technical panel, and to speed implementation of the Voluntary Stewardship Program, the Public Works Department should work with the watershed group to complete the work plan for recommendation to the Board of Commissioners within one year of the date of this resolution.

Witness Our Hands and the Official Seal of Our Office this 16 day of September, 2014.

**Board of County Commissioners  
Skagit County, Washington**

*Ron Wesen*

Ron Wesen, Chair

*Kenneth A. Dahlstedt*

Kenneth A. Dahlstedt, Commissioner

*Sharon D. Dillon*

Sharon D. Dillon, Commissioner



ATTEST:

*Linda Hanuman*  
Clerk of the Board

RECOMMENDED:

*Dan Berentson*  
Dan Berentson, Director  
Public Works Department

APPROVED AS TO FORM:

*Ryan Walters*  
Ryan Walters, Civil Deputy  
Skagit County Prosecutor's Office



**Skagit County Prosecuting Attorney**  
**Richard A. Weyrich**

*extra copy*

CRIMINAL DIVISION		CIVIL DIVISION	FAMILY SUPPORT DIVISION
CHIEF CRIMINAL DEPUTY ROSEMARY KAHOLOKULA	CRIMINAL DEPUTIES KAREN L. PINNELL MELISSA W. SULLIVAN RUSSELL BROWN MELANIE SPANGENBERG HALEY SEBENS	CHIEF CIVIL DEPUTY WILLIAM W. HONEA	CHIEF DEPUTY KURT E. HEFFERLINE
SENIOR CRIMINAL DEPUTIES ERIK PEDERSEN TRISHA D. JOHNSON EDWIN N. NORTON SLOAN G. JOHNSON PAUL W. NIELSEN	OFFICE ADMINISTRATOR VICKIE MAUREN	CIVIL DEPUTIES ARNE O. DENNY, SR. DEPUTY MELINDA B. MILLER, SR. DEPUTY STEPHEN R. FALLQUIST JILL DVORKIN RYAN WALTERS	SENIOR DEPUTY GWEN L. HALLIDAY

**Memorandum**

To: Board of County Commissioners  
 From: Ryan Walters, Civil Deputy Prosecuting Attorney  
 Date: September 11, 2014  
 Re: Voluntary Stewardship Program Startup Resolution

At your August 8 meeting, the Board indicated its support for moving forward with initiation of the Voluntary Stewardship Program for protection of critical areas in areas of agricultural activities.

Consistent with the statute’s requirement that we confer with tribes and interested stakeholders before establishing the watershed group, we circulated the draft resolution to various interests. We received comments supporting the resolution from the Ag Advisory Board, the Samish Tribe, and the 3FI Oversight Team. We also received comments from the Swinomish Tribe. All the comments are available on the VSP website at [www.skagitcounty.net/vsp](http://www.skagitcounty.net/vsp).

Staff recommends that you adopt the resolution, after which Public Works will start the process of advertising for letters of interest in participating in the Watershed Group through Monday, October 13.

**Process Timeline**

Statutory Deadline	Item
✓ January 22, 2012	Enroll in Voluntary Stewardship Program
▶ before adopting resolution starting VSP program	County solicits comments from interested stakeholders
▶ before designating group	County solicits letters of interest for local Watershed Group
w/n 60 days of receipt of funding	County designates Watershed Group
as necessary to obtain approval w/n 3 years of receipt of funding	Watershed Group meets to develop work plan
ASAP in order to obtain approval w/n 3 years of receipt of funding	County submits work plan to State Conservation Commission
w/n 45 days of receipt by SCC	State Technical Panel reviews work plan
w/n 3 years of receipt of funding	Receive work plan approval from Conservation Commission

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## Appendix 2. Relevant Definitions from Skagit County's CAO

**Anadromous fish.** Fish that spawn and rear in freshwater and mature in the marine environment.

### **Fish and wildlife habitat conservation areas.**

- (1) Areas with which endangered, threatened, and sensitive species have a primary association;
- (2) Habitats and species of local importance that have been designated by the County at the time of application;
- (3) All public and private tidelands suitable for shellfish harvest;
- (4) Kelp and eelgrass beds, herring and smelt spawning areas;
- (5) Naturally occurring ponds under 20 acres with submerged aquatic beds that provide fish or wildlife habitat;
- (6) Waters of the State as defined by WAC 222-16-030;
- (7) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
- (8) Areas with which anadromous fish species have a primary association;
- (9) State Natural Area Preserves and Natural Resource Conservation Areas;
- (10) Other aquatic resource areas;
- (11) State priority habitats and areas associated with State priority species as defined in WAC 365-190-080; and
- (12) Areas of rare plant species and high quality ecosystems as identified by the Washington State Department of Natural Resources through the Natural Heritage Program in Chapter 79.70 RCW.

**Natural watercourse:** any stream in existence prior to settlement that originated from a natural source. An example of a natural watercourse is a stream that originates in the foothills, flows through agricultural and/or urban land, and empties into a salt water bay or another watercourse.

**Artificial watercourse:** ditches and other water conveyance systems, not constructed from natural watercourses, which are artificially constructed and actively maintained for irrigation and drainage. Artificial watercourses include lateral field ditches used to drain farmland where the ditch did not replace a natural watercourse.

**Modified natural watercourse:** that segment of a natural stream that has been modified and is maintained by diking and drainage districts, and where such modification activity was done as a permitted activity

that has undergone environmental review (SEPA and/or NEPA), and is in compliance with all necessary permits in effect at the time of its approval.

**Ongoing agriculture:** the continuation of any existing agricultural activity on Agricultural—Natural Resource lands or Rural Resource—Natural Resource lands, including crop rotations; provided, however, that for lands in RRc-NRL that are subject to the provisions of SCC 14.24.120, any property owner who applies for and receives CaRD approval under SCC 14.18.300 through 14.18.330 shall, at the time of CaRD approval, automatically be subject to the buffer requirements of SCC 14.24.530 and shall no longer be subject to the provisions of SCC 14.24.120. Activities undertaken for the first time after May 13, 1996, the date Skagit County adopted Ordinance 16156, the Critical Areas Ordinance, do not constitute “ongoing agriculture”; provided, that any lands that were fallow on May 13, 1996, but had been in agricultural production within 5 years prior to May 13, 1996, shall be considered “ongoing agriculture” for purposes of this definition. Activities that bring an area into agricultural use are not considered ongoing agriculture. In addition, in order for parcels of land under 20 acres to qualify under this definition, they must meet the criteria of RCW 84.34.020(2)(b) and (c).

## Appendix 3. Existing Ag-Critical Areas Ordinance

SCC 14.24.120 Ongoing Agriculture.

(1) Purpose and Intent. The purpose of this Section is to address 2 mandates under the Growth Management Act (GMA): (a) to protect the existing functions and values of fish and wildlife habitat conservation areas (FWHCAs) in and adjacent to natural, modified natural, and artificial watercourses as defined in SCC 14.04.020 (collectively “watercourses”), and (b) to conserve and protect agricultural lands of long-term commercial significance, specifically those lands in ongoing agricultural activity as defined by SCC 14.04.020 that are located adjacent to these watercourses.

(a) For purposes of this Section, “existing functions and values” means the following:

- (i) Water quality standards identified in Chapter 173-201A WAC, including the provisions that account for natural or baseline conditions.
- (ii) The existing presence or absence of large woody debris within the watercourse.
- (iii) The existing riparian buffer characteristics and width, including but not limited to the existing amount of shade provided by the existing riparian buffer.
- (iv) The existing channel morphology.

(b) Because many of the areas that are the subject of this Section are located in the Skagit and Samish River deltas or floodplains, where substantial diking and drainage infrastructure have been constructed and where various diking and drainage districts have lawful obligations to maintain agricultural and other drainage functions and infrastructure as established in RCW Titles 85 and 86, this Section also must accommodate those ongoing diking, drainage, and flood control functions.

(c) It is the goal of Skagit County to administer the provisions of this Section consistent with local, State, and Federal programs, statutes and regulations to protect the health, welfare, and safety of the community, to accommodate continued operation and maintenance of the diking, drainage, and flood control infrastructure and to protect agriculture, natural resources, natural resource industries, and fish and wildlife habitat conservation areas in and adjacent to watercourses. This Section is intended, to the maximum extent possible, to rely on and coordinate with but not substitute for or duplicate other State and Federal programs, statutes, and regulations that address agricultural activities in a manner that protects water quality and fish habitat. This Section is intended to supplement those existing State and Federal programs, statutes, and regulations only in those areas where the County has determined existing programs do not fully address GMA requirements to protect FWHCAs in and adjacent to watercourses and to conserve agricultural lands of long-term commercial significance.

(d) Skagit County hereby elects to enroll the entirety of unincorporated Skagit County, and all its watersheds, in the Voluntary Stewardship Program established by Engrossed Substitute House Bill 1886 (2011). Skagit County intends the Voluntary Stewardship Program, in conjunction with the provisions of this Section and Chapter, to protect critical areas in areas of agricultural activity.

(2) Applicability. Except as may otherwise be required by ESHB 1933, Chapter 321, Laws of 2003, for agricultural lands located within the jurisdiction of the Shoreline Management Act, Chapter 90.58 RCW, this Section shall apply to the following:

(a) As defined in SCC 14.04.020, all ongoing agriculture (including operation and maintenance of agricultural drainage infrastructure) which is located within 200 feet from a watercourse, or any ongoing agriculture (including operations and maintenance of agricultural drainage infrastructure) that adversely impacts the existing functions and values of a watercourse, is subject to the requirements of this Section. Isolated, artificial watercourses that have no channelized surface hydraulic connection or no piped hydraulic connection between the artificial watercourse and any natural or modified natural watercourse or any salt water shall not be subject to the requirements of this Section. Drainage tile used to convey groundwater shall not be considered a piped hydraulic connection.

(b) The provisions of this Section shall not be interpreted to permit expansion of ongoing agriculture (including agricultural drainage infrastructure) into areas that did not meet the definition of ongoing agriculture on May 13, 1996, including lands that were fallow on that date but had been in agricultural production within 5 years prior to that date, unless such expansion can comply with all of the requirements for critical areas protection found in this Chapter, including but not limited to the requirement to adhere to the standard critical areas buffers and setbacks.

(c) In this Section, the term “best management practices (BMPs)” refers to one or all definitions of that term in SCC 14.04.020, depending on which definition is relevant within the context used.

(d) Agricultural operations that do not meet the definition of ongoing agriculture are required to comply with the other provisions of this Chapter.

(3) No Harm or Degradation Standard.

(a) All ongoing agricultural activities must be conducted so as not to cause harm or degradation to the existing functions and values of FWHCAs in and adjacent to watercourses (the “no harm or degradation” standard). For purposes of this Section, the phrase “no harm or degradation” means the following:

(i) Meeting the State water pollution control laws; and

(ii) Meeting the requirements of any total maximum daily load (TMDL) water quality improvement projects established by the Department of Ecology (ECY) pursuant to Chapter 90.48 RCW; and

(iii) Meeting all applicable requirements of Chapter 77.55 RCW (Hydraulics Code) and Chapter 220-110 WAC (Hydraulics Code Rules); and

(iv) Meeting the specific watercourse protection measures for ongoing agriculture specified in Subsection (4) of this Section; and

(v) No evidence of significant degradation to the existing fish habitat characteristics of the watercourse from those characteristics identified in the baseline inventory described in Resolution No. R20040211 that can be directly attributed to the agricultural activities that are described in this Section.

(b) The references to Chapters 77.55 and 90.48 RCW and Chapters 173-201A and 220-110 WAC contained in this Subsection shall not be interpreted to replace ECY and the Washington Department of Fish and Wildlife (WDFW) authority to implement and enforce these State programs with County responsibility to do so, but rather are intended to provide County input and a supplemental County involvement as needed to implement the County's GMA obligations under this Section.

(c) Reserved.

(d) An owner or operator is responsible only for those conditions caused by agricultural activities conducted by the owner or operator and is not responsible for conditions that do not meet the requirements of this Subsection resulting from the actions of others or from natural conditions not related to the agricultural operations. In those situations where the County is presented with data showing a violation of a State water quality standard at a particular location, but where the County cannot identify any condition or practice existing or occurring at a particular agricultural operation that is causing the violation, the County shall refer the information regarding the State water quality violation to ECY and shall follow other procedures described in SCC 14.44.085. Conditions resulting from unusual weather events (such as a storm in excess of 25-year, 24-hour storm), or other exceptional circumstances that are not the product of obvious neglect are not the responsibility of the owner or operator, but shall be subject to the requirements for emergency actions described in SCC 14.24.070(1).

(4) Required Watercourse Protection Measures for Ongoing Agriculture. Unless the emergency provisions of SCC 14.24.070(1) apply, the following watercourse protection measures are required:

(a) Livestock and Dairy Management. Livestock and dairy operations must not contribute any wastes or sediments into a natural or modified natural watercourse in violation of adopted State water pollution control laws.

(i) Livestock access to watercourses must be managed consistent with this Subsection. Access to a watercourse for livestock watering and/or stream crossings must be limited to only the amount of time necessary for watering and/or crossing a watercourse. Livestock watering facilities or access must be constructed consistent with applicable NRCS conservation practice standards, and must not be constructed to provide access to agricultural land that does not meet the definition of ongoing agriculture unless that agricultural land and the crossing can meet all requirements of Chapter 14.24 SCC.

(ii) Dairy operations must comply with the requirements of Chapter 90.64 RCW (Dairy Nutrient Management Act).

(iii) Livestock pasture must be managed so as to maintain vegetative cover sufficient to avoid contributing sediments to a watercourse in violation of State water pollution control laws.

(iv) Any existing or new livestock confinement or concentration of livestock areas that is located upgradient from a watercourse which results in bare ground (such as around a watering trough) must be constructed and maintained to prevent sediment and/or nutrient runoff contaminants from reaching a watercourse in violation of State water pollution control laws.

(b) Nutrient and Farm Chemical Management.

(i) The owner or operator must not place manure in a watercourse or in a location where such wastes are likely to be carried into a watercourse by any means. Spreading of manure within 50 feet of any watercourse, and spreading of liquid manure on bare ground, is prohibited from October 31st to March 1st; unless otherwise permitted pursuant to:

(A) An approved and implemented dairy nutrient management plan (DNMP) as prescribed by Chapter 90.64 RCW; or

(B) A farm plan prepared or approved by the Conservation District.

(ii) Agricultural operators may not apply crop nutrients other than at agronomic rates recommended for that particular crop.

(iii) Farm chemicals may only be applied consistent with all requirements stated on the chemical container labels and all applicable Federal and State laws and regulations, such as Chapter 15.58 RCW (Pesticide Control Act), Chapter 17.21 RCW (Pesticide Application Act), and 7 USC 136 et seq. (Federal Insecticide, Fungicide, and Rodenticide Act).

(c) Soil Erosion and Sediment Control Management.

(i) Roads used for ongoing agricultural activities must be designed such that road surfaces, fill, and associated structures are constructed and maintained to avoid contributing sediment to watercourses.

(ii) Agricultural equipment operation must not cause watercourse bank sloughing or other failure due to operation too close to the top of the bank.

(iii) Watercourse construction and maintenance must meet the requirements for drainage operation and maintenance described under Subsection (4)(d) of this Section.

(iv) V-ditching must not be constructed to drain into a watercourse that contains salmonids, unless the topography of the field is such that the only alternative to drain the field by gravity is to drain the V-ditch into a watercourse that does contain salmonids. When draining a V-ditch into a watercourse that does contain salmonids, appropriate BMPs should be used to avoid contributing excess amounts of sediment to the watercourse. For the purpose of determining whether a watercourse contains salmonids, the County will use salmonid distribution based on the "limiting factors analysis" data compiled by the Washington State Conservation Commission.

(d) Operation and Maintenance of Public and Private Agricultural Drainage Infrastructure. The following practices apply to any watercourse that is part of drainage infrastructure, except those practices performed pursuant to a fully-executed Drainage-Fish Initiative or Tidegate-Fish Initiative agreement:

(i) Regularly scheduled agricultural drainage infrastructure maintenance that includes dredging or removal of accumulated sediments in any watercourse shall be conducted between June 15th and October 31st. If an approved hydraulics project permit provides for a different work window, those requirements control. If presence of fall or over-winter crops prevents regularly scheduled maintenance during this time period, then the maintenance may be conducted outside this work window; provided, that the person or entity proposing to conduct the maintenance outside the work window can demonstrate that the presence of crops prevents maintenance within the work window and provided the maintenance is conducted using best management practices to minimize sediment or other impacts to water quality.

(A) Owners or operators shall consult with districts conducting drainage maintenance to schedule their crop rotations for crops that may still be in the field after October 31st so that, to the maximum extent possible, such drainage maintenance can occur in a year when the fall crops are not being raised in the field adjacent to the drainage infrastructure scheduled for drainage maintenance.

(ii) Unless there is no feasible alternative, regularly scheduled maintenance that includes dredging or removal of accumulated sediments in any watercourse should be conducted at those times when there is no or minimal water flow in the watercourse being maintained to minimize potential for distributing sediments to salmonid-bearing waters.

(iii) Excavation spoils must be placed so as not to cause bank failures and so that drainage from such spoils will not contribute sediment to the watercourse.

(iv) Mowing or cutting of vegetation located within a watercourse that is part of drainage infrastructure may be conducted at any time; provided, that the cutting is above the ground surface within the channel and in a manner that does not disturb the soil or sediments; and provided, that the cut vegetation does not block water flow. Watercourse bank vegetation shall be preserved or allowed to reestablish as soon as practicable after drainage construction and maintenance are completed to stabilize earthen ditch banks.

(v) Districts subject to this Section, operating pursuant to authority in RCW Title 85 or 86, which are conducting drainage activities shall complete and submit a drainage maintenance checklist to the County by June 1st of each year. The checklist shall describe the intent of the district to comply with the drainage maintenance requirements of Subsection (4)(d) of this Section. The districts may seek assistance from NRCS, SCD and/or the County in completing the checklist or addressing the requirements of this Subsection. The checklist shall be available from Skagit County Planning and Development Services, mailed to any entity conducting drainage activities, and shall be submitted to Planning

and Development Services when completed. The districts may submit modifications to the information in the checklist, if circumstances affecting district maintenance change after the initial submittal.

(A) The County shall send a written notice to any district not submitting this completed checklist by June 1st of each year, stating that the County has not received the required checklist and that the district is not authorized to conduct drainage maintenance activity until the district has submitted the completed checklist evidencing intent to comply with this Subsection.

(B) Subsequent commencement of drainage maintenance work without submitting a completed checklist shall be subject to enforcement pursuant to Chapter 14.44 SCC.

(vi) Immediate measures necessary to drain fields inundated by an unanticipated flooding event or failure of the agricultural drainage infrastructure shall be subject to the requirements for emergency repair described in SCC 14.24.070(1).

(5) Recognition for Agricultural Owners and Operators Who Have Implemented Extra Watercourse Protection Measures. This Subsection intends to recognize the extra watercourse protection measures for ongoing agriculture taken by landowners or operators who have implemented an approved dairy nutrient management plan (DNMP) or resource management system plan (RMS plan) (including, but not limited to, CREP) from SCD or NRCS.

(a) Those portions of land upon which owners or operators have sought and implemented an approved DNMP or an RMS plan consistent with the conservation practices and management standards that meet the FOTG quality criteria for each natural resource (soil, water, animals, plants and air) are entitled to a presumption of compliance with the “no harm or degradation” standards described in Subsection (3) of this Section. The RMS plan or DNMP must include within the planning unit any watercourses located on the property, as well as all upland areas within the owner’s control that could potentially adversely impact the watercourse and/or associated fish habitat.

(b) Such presumption of compliance may be rebutted and enforcement commenced as described in SCC 14.44.085 if the County obtains credible evidence that the agricultural operation is not meeting the no harm or degradation standards of Subsection (3) of this Section. To be entitled to this presumption, the owner or operator shall provide the County with documented evidence of implementation of those elements of the approved plan that are relevant to the resource impact at issue at the time a Request for Investigation (RFI) is presented to the County under SCC 14.44.010.

(6) Enforcement. The Department is directed to enforce the requirements of this Subsection, including the mandatory watercourse protection measures, as described in SCC 14.44.085.

## Appendix 4. Existing Plans & Programs in the Watershed

The VSP legislation requires the Watershed Group to:

*...review and incorporate applicable water quality, watershed management, farmland protection, and species recovery data and plans.<sup>91</sup>*

As part of developing this work plan, the Watershed Group received presentations or documentation on each of the plans and programs summarized below, loosely organized into four categories:

- Habitat and Salmon Recovery Plans
- Existing County Monitoring Programs
- Existing County Restoration and Enhancement Programs
- External Programs

### Habitat and Salmon Recovery Plans

#### ECOLOGY TMDL PLANS

<http://www.ecy.wa.gov/programs/wq/tmdl/tmdlstrategy.html>

In Water Resources Inventory Area 3 (Lower Skagit-Samish), The Washington State Department of Ecology lists the following Total Maximum Daily Loads: Campbell Lake for Total Phosphorus (EPA Approved), Erie Lake for Total Phosphorus (EPA Approved), Lake Ketchum for Total Phosphorus (Under Development), Padilla Bay for Fecal Coliform (Under Development), Samish Watershed for Fecal Coliform (EPA Approved/Implementation Plan), Skagit Basin for Fecal Coliform (EPA Approved/Implementation Plan) and Temperature (EPA Approved).

#### PUGET SOUND SALMON RECOVERY PLAN

[www.psp.wa.gov/SR\\_map.php](http://www.psp.wa.gov/SR_map.php)

The Puget Sound Partnership has compiled a regional chapter (Volume I) and fourteen watershed-specific chapters and a nearshore chapter (Volume II) into the Puget Sound Salmon Recovery Plan. The Skagit Chinook Recovery Plan chapter was drafted in 2005 with the objective of “providing a detailed pathway by which Skagit Chinook populations can recover to sustained numbers that meet recovery goals established, by agreement, between fisheries co-managers.”<sup>92</sup>

The Skagit plan (a) defines recovery goals, (b) identifies factors limiting Chinook production, and (c) proposes possible actions to achieve the recovery goals.

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<sup>91</sup> RCW 36.70A.720(1)(a).

<sup>92</sup> Forward, *Skagit Chinook Recovery Plan* (2005).

The limiting factors identified in the Skagit plan relevant to VSP include (2) degraded riparian zones, (5) sedimentation and mass wasting, (7) high water temperatures, and (13) illegal habitat destruction and degradation. Floodplains have been identified in the Skagit plan as “especially important for freshwater rearing” of Chinook. Much of the habitat provided by floodplains has been degraded or eliminated by dikes and other hydromodifications that “limit lateral migration and formation of backwaters and off-channel habitat.”

The recovery action relevant to VSP is habitat protection and restoration. The relevant elements of that action include (7.4) water and sediment quality and sediment transport, (7.5) stream channel complexity, and (7.6) riparian areas and wetlands.

Recommendations listed in the Skagit Recovery Plan relevant to VSP include:

- Identify and implement measure necessary to meet water quality standards in Chinook stream listed on the 303(d) list.
- Increase funding for water quality improvement grants
- Acquire floodplain parcels for conservation and/or restoration through willing sellers.
- Develop long-term funding sources for the purchase of land or easements in order to reduce the loss of channel complexity caused by human activities.
- Monitoring should consist of quantitative measurements of physical changes associated with land use practices.

WDFW and others are also working on a steelhead recovery plan that may be adopted during 2016.

#### **LIMITING FACTORS ANALYSIS FOR WRIA 3 AND 4**

[http://www.pugetsoundnearshore.org/supporting\\_documents/WRIA\\_3and4\\_SkagitLFA.pdf](http://www.pugetsoundnearshore.org/supporting_documents/WRIA_3and4_SkagitLFA.pdf)

The Washington State Conservation Commission's Salmon and Steelhead Habitat Limiting Factors Water Resources Inventory Areas 3 and 4, the Skagit and Samish Basins, provides a consolidation of existing habitat information and rates various categories of habitat conditions. The habitat conditions are outlined in the following areas: The Skagit Basin, including the Nearshore Environment, WRIA 3 Estuaries, Lower Skagit Sub-Basin, Upper Skagit Sub-Basin, Sauk Sub-Basin, Baker Sub-Basin, and the Samish River Basin. The report assesses estuaries and nearshore areas for the following conditions: hydromodifications, water quality/sediment contamination, wetland/habitat loss, boat ramps, slips, and piers, and riparian instream habitat. The report assesses freshwater limiting factors by areas for the following conditions: fish passage, floodplain conditions, sediment: gravel quantity, sediment: gravel quality, road density, streambed stability, current Instream LWD (quantity), riparian, water quality, and water quantity. The regions were then rated by conditions into poor, fair, and good categories.

#### **PUGET SOUND PARTNERSHIP ACTION AGENDA**

The Puget Sound Partnership is a state agency serving as the backbone organization for Puget Sound recovery. The Partnership coordinates the efforts of citizens, governments, tribes, scientist, businesses and nonprofits to set priorities, implement a regional recovery plan, and ensure accountability for results.

More locally, the Partnership also serves as a Regional Recovery Organization to coordinate Puget Sound partners around salmon recovery efforts and convenes a number of other state priority workgroups that impact Puget Sound recovery.

The Puget Sound Partnership's actions are guided by the Action Agenda. In the 2014/2015 Action Agenda for Puget Sound, three regional priorities are emphasized:

- Prevent pollution from urban stormwater runoff
- Protect and restore habitat
- Restore and re-open shellfish beds

The most relevant Action Agenda priority to the Voluntary Stewardship Program is the goal of protecting and restoring habitat. Restoring damaged shorelines and protecting salmon habitat along the many rivers and streams that flow into Puget Sound is necessary to save salmon. The following sections of the Action Agenda support the goals of the Voluntary Stewardship Program.

#### *Land Development*

- A1. Focus Land Development Away from Ecologically Important and Sensitive Areas
  - A.1.2.1 Land use planning barriers, best management practices, and example
  - A1.3 Improve, strengthen, and streamline implementation and enforcement of laws, plans, regulations, and permits consistent with protection and recovery targets
- A2. Protect and Restore Upland, Freshwater, and Riparian Ecosystems
  - A2.1 Protect and conserve ecologically important lands at risk of conversion
  - A2.2 Implement and maintain priority freshwater and terrestrial restoration projects
- A3. Protect and Steward Ecologically Sensitive Rural and Resource Lands
  - A3.1 Use integrated market-based programs, incentives, and ecosystem markets to steward and conserve private forest and agricultural lands
  - A3.2 Retain economically viable working forests and farms

#### *Floodplains*

- A5. Protect and Restore Floodplain Function
  - A5.3 Protect and maintain intact and functional floodplains

#### **PRIORITY HABITATS AND SPECIES (PHS) PROGRAM**

[wdfw.wa.gov/publications/00165/wdfw00165.pdf](http://wdfw.wa.gov/publications/00165/wdfw00165.pdf)

The Washington State Department of Fish and Wildlife's Priority Habitats and Species (PHS) program, maintains a list of species and habitats that, due to their population status, historical and cultural importance, or overall sensitivity, are considered priorities for management and conservation. At the time of this writing, 20 habitat types, 155 vertebrate species, 41 invertebrate species, and 11 species groups were on the PHS list.

WDFW maintains an [online database and mapping program](#) that allows users to identify PHS habitats and species in a given area. WDFW also maintains the [SalmonScape](#) application that displays and reports a wide range of data related to salmon distribution, status, and habitats. The SalmonScape data sources include stream specific fish and habitat data, and information about stock status and recovery evaluations.

### **SKAGIT COUNTY SALMON ACTION RESOLUTION**

[www.skagitcounty.net/salmonstrategy](http://www.skagitcounty.net/salmonstrategy)

In 2007, the Skagit County Commissioners approved [Resolution R20070499](#), directing County departments to proactively pursue salmon recovery efforts. The County utilizes the Puget Sound Salmon Recovery Plan to procure grants and prioritize projects. In addition, the resolution calls for the County to collaborate with other local agencies including Skagit Fisheries Enhancement Group, Skagit Conservation District, Western Washington Agricultural Association, Skagit Land Trust, local tribes, resource agencies, and others whenever possible to achieve these objectives.

### **SKAGIT COUNTY HABITAT IMPROVEMENT PLAN**

[www.skagitcounty.net/publicworkswaterresources/documents/habitat%20improvement%20plan.pdf](http://www.skagitcounty.net/publicworkswaterresources/documents/habitat%20improvement%20plan.pdf)

In 2012, the Public Works Department Natural Resource Division drafted the HIP to prioritize and budget for upcoming projects and reiterate the importance of salmon habitat restoration. The plan has four goals: restore streamside riparian land; enhance fish passage under County roads; coordinate drainage and flood damage reduction with restoration efforts; and participate as an active member in Puget Sound clean up and restoration efforts. The HIP includes a six-year project matrix.

### **SKAGIT WATERSHED COUNCIL STRATEGIC APPROACH**

The focus of the Skagit Watershed Council is voluntary habitat restoration and protection. The Council was formed to provide leadership, technical expertise, and coordination of a forum for informed discussion and decision-making with regard to salmon habitat restoration and protection.

One of the Council's key responsibilities is to act as the lead entity for salmon recovery in the Skagit & Samish Watersheds. In this role, the Council performs a variety of administrative and planning functions, as detailed in RCW 77.85 and HB4296 (Salmon Recovery). This includes the ranking and evaluation of proposed salmon habitat restoration projects for possible funding from the State Salmon Recovery Funding Board (SRFB). The Council's philosophy is to examine the entire watershed rather than on a project-by-project basis. The Council's actions are guided by the Skagit Chinook Recovery Plan and the Council's 2010 Strategic Approach.

In addition to the responsibility as the Skagit and Samish Watershed Lead Entity, the Council is currently developing the Skagit River Riparian Habitat Stewardship and Restoration Strategy, which it intends to replace the 1998 Riparian Protection and Restoration Strategy. The strategy will be collaboratively developed to build operational support for restoring and stewarding riparian lands in ways that achieve the greatest ecological benefit with the most efficient use of resources, and incorporates planning,

assessment, and coordination. This project will work across all Chinook habitat riparian areas adjacent to main stem, side channel, off-channel, and tributary habitats of the Skagit River.

## Existing County Monitoring Programs

Skagit County's critical areas monitoring program, defined in [Resolution R20040211](#), consists of two sub-programs:

- the [Water Quality Monitoring Program](#), intended to determine water quality conditions and trends in agricultural-area streams; and
- the [Salmon Habitat Monitoring Program](#), intended to measure physical stream conditions important to salmon habitat.

The objectives of both programs are to establish a baseline of current conditions, analyze trends in those conditions over time, and provide a means to differentiate between trends in conditions in lands subject to the ag-CAO versus other lands under Skagit County jurisdiction. Both programs have accumulated years of data and issued annual reports that are available from the program webpages.

### WATER QUALITY MONITORING PROGRAM

<http://www.skagitcounty.net/Departments/PublicWorksSurfaceWaterManagement/WQ.htm>

The County's water quality monitoring program consists of 40 sites throughout western Skagit County, located both within and outside of areas subject to the County's ag-CAO. Sites located within the agricultural zones are designed to determine the status and trends of water quality within those zones, while sites outside of the agricultural zones are in place to determine if trends seen in the agricultural zones are also present outside of those zones.

Since October 2003, each sampling site is visited every two weeks. Parameters measured include dissolved oxygen, temperature, pH, turbidity, conductivity, and salinity. Samples are also obtained for laboratory analysis of fecal coliform bacteria (each visit) and nutrients (quarterly). Water quality data is maintained on spreadsheets and routinely examined for evidence of water quality problems. An annual report is prepared which includes data summaries, graphs of important parameters, and statistical analysis for trends in water quality.

In 2007, Skagit County conducted a scheduled three-year review of its Critical Areas Monitoring and Adaptive Management Program, including contracting with the Washington Water Research Center at WSU to obtain an [independent scientific review of the water quality monitoring program](#). WSU found "the monitoring program to be very effective as a trend monitoring program to assess water quality conditions within the County," and made several recommendations for future avenues of work that could strengthen the program.

While the original intent of the program was monitoring in support of the ag-CAO, data has also been used to locate pollution sources, focus restoration activities, and provide evidence of water quality improvements in locations where restoration and pollution abatement has improved riparian and aquatic conditions. After monitoring revealed excessive fecal coliform levels in the Samish River, subsequent

sampling revealed a pattern of widespread severe fecal coliform contamination throughout the Samish Bay watershed, and led to the formation of the County's [Clean Samish Initiative](#). The program's water quality data has been critical to success of that initiative.

### **SALMON HABITAT MONITORING PROGRAM**

The companion program to the County's water quality monitoring program, the Salmon Habitat Monitoring Program surveys physical channel and in-stream habitat conditions to document, quantify, and track salmon habitat conditions in the Skagit and Samish Watersheds.

The study design was built on the Environmental Protection Agency's Environmental Monitoring and Assessment Program (EMAP), which suggested a minimum of 60 stream reaches to be sampled on a five-year cycle and that 20 of the original 60 stream reaches be sampled annually. A variety of factors contributed to incomplete sampling over the course of the study. The 2004 survey was not totally completed until 2005, and only 40 reaches were sampled (16 Ag-NRL; 24 non-ag); the 2006, 2007, and 2008 surveys sampled 16, 15 and 18 reaches respectively (8, 8, 9 Ag-NRL; 8, 7, 9 non-ag). Because 2009 was the fifth year of the study, in addition to the 20 annual sites, another 40 randomly selected reaches were established for sampling. Nineteen of the 20 annual sites were sampled (permission was not granted by the new owners of the Ag-NRL zoned Friday Creek site) and 39 of the intended 40 new reaches were sampled (with one non-ag site missing). The program was suspended in 2014 as part of the County's reexamination of the usefulness of using EMAP to address short-term land use changes and policies.

## **Existing County Restoration and Enhancement Programs**

### **CLEAN WATER PROGRAM**

[www.skagitcounty.net/cleanwater](http://www.skagitcounty.net/cleanwater)

[www.skagitcounty.net/departments/publicworkscleanwater/history.htm](http://www.skagitcounty.net/departments/publicworkscleanwater/history.htm)

In 1995, due to poor water quality closing parts of Samish Bay to shellfish harvesting, the County created a shellfish protection district pursuant to RCW Chapter 90.72. The district currently generates \$1.3 million of annual revenue from the per-parcel assessment that is used for capacity funding of the County's clean water efforts.

The district was able to assist in cleaning up failing sewage systems and as a result, parts of the Samish Bay were reopened to shellfish harvest. Despite the improved water quality in the bay, continued monitoring suggested that fecal coliform pollution existed in the Samish Basin and elsewhere in the County. In 2005, the County created the Clean Water Program to address non-point source pollution in the County, with a special emphasis on reducing fecal coliform pollution. CWP currently funds a myriad of projects within the County, all focused on getting and keeping Skagit County water bodies clean and safe for residents.

In 2010, the CWP obtained nearly a million dollars in grant funding from the State Department of Health via the National Estuary Program to take steps in reducing fecal coliform pollution to shellfish growing areas. The National Estuary Program was established to identify, restore, and protect estuaries by

engaging local communities in the process. The program focuses not just on improving water quality in an estuary, but on maintaining the integrity of the whole system. The County's current grant dedicates nearly \$60,000 to be used towards agriculturally focused BMP projects in the Samish and Padilla Bay watersheds. Those projects can include things like fencing, riparian restoration, and structural BMPs (such as manure storage areas and off-channel watering facilities).

### **CLEAN SAMISH INITIATIVE**

[www.skagitcounty.net/csi](http://www.skagitcounty.net/csi)

In 2009, Skagit County partnered with the Department of Ecology, Department of Health, Department of Agriculture, Skagit Conservation District, Skagit Conservation Education Alliance, Samish Tribe, Western Washington Agricultural Association, Washington State Dairy Federation, Environmental Protection Agency, and Taylor Shellfish, among others, in an effort to reduce Samish Basin pollution in the short and long-term. The CSI program has included a substantial public outreach effort, procuring, and providing funding for restoration and management practices on properties with the potential to pollute, and increased monitoring of water quality in an effort to determine sources of nonpoint source pollution.

*Funding.* In 2010, the EPA awarded Skagit County a \$960,000 water quality improvement grant. In 2011, Skagit County's Clean Water fund contributed \$150,000 with an additional \$320,659 from an EPA grant. Skagit County is continuing to fund the CSI with Clean Water Program dollars and grants as available. This program is ongoing.

*Methods.* CSI is a "Pollution Identification and Correction" (PIC) program, adapted from Kitsap County, that concentrates water quality sampling measures to locate likely sources of pollution. In affected parts of the basin, sampling is followed up with landowner contact to determine if septic system or manure management problems are leading to the pollution. Public Works, Ecology, and WSDA staff conduct water quality sampling and work with Public Health and Planning and Development Services staff to identify specific locations of pollution sources. Public Health, Public Works, Planning, Ecology and WSDA staff also conduct voluntary site visits with willing landowners. If Skagit County finds potential sources or conditions of fecal coliform bacteria pollution, the inspectors refer landowners to appropriate resource agencies with programs designed to eliminate the pollution. Enforcement of County or State regulations occurs only when landowners with demonstrated pollution problems do not cooperate voluntarily.

Water quality monitoring is the core of any PIC program. Traditionally, sampling sites are identified near the confluence of streams and are monitored on a regular basis. Where high levels of pollutants are found, source identification sampling (sometimes referred to as "bracket sampling") occurs upstream to identify an area where the pollution is coming from. Staff then follow up with site visits to property owners in the focus area to identify the source of pollution, then work with property owners to correct any problems that are found. Water that is polluted with fecal bacteria has been our primary concern, however PIC methods can be used for nutrients, sediment, temperature and other pollutants. Skagit County's PIC Program has been operating since 2010 and has been successful in reducing levels of fecal coliform bacteria in the Samish Bay watershed.

Some pollutants are easier to track than others, and determining the source of the pollutant can sometimes be difficult. Some pollutants such as pesticides have their source only in human activities, while others like bacteria and nitrogen may come from human activities or natural sources. Bacteria in water are particularly variable, fluctuating frequently so that two samples taken one after another occasionally have very different results. As such, tracking bacterial pollution often requires several samples through time in order to identify a pattern.

Additional factors that may limit the success of a PIC program are:

- Cost of lab analysis of water quality samples
- Availability of staff to perform water quality sampling and property inspections
- Willingness of property owners to allow staff to access their property for inspections
- Cost to property owners to fix problems

*Accomplishments.* As of spring 2015, the Clean Samish Initiative has:

- Provided technical assistance to over 90 livestock landowners
- Developed 28 small farm plans, 23 non-dairy commercial nutrient management plans and updated 3 dairy nutrient management plans
- Installed over 20,000 feet of livestock exclusion fencing
- Planted over 23,000 trees in protected riparian buffers
- Conducted 17 water quality and livestock workshops engaging over 400 basin residents
- Repaired or replaced 144 residential septic systems
- Installed 10 pet waste stations and 3 portable toilets

## NATURAL RESOURCES STEWARDSHIP PROGRAM (NRSP)

[www.skagitcounty.net/nrsp](http://www.skagitcounty.net/nrsp)

In 2009, Skagit County Centennial Clean Water Grant funds to begin a riparian planting effort. Matched with funding from the County’s Clean Water Fund, the County’s Natural Resource Stewardship Program (“NRSP”) has been one of its most successful and cost-effective programs for on-the-ground habitat enhancement.

NRSP assists individual landowners with improvements to their properties that benefit water quality and salmon habitat. The program can install livestock exclusion fencing, remove invasive vegetation, replant with native vegetation, or complete other projects that will benefit water quality at no cost to the participating landowner.

NRSP accomplishments since 2009	
30	landowners assisted
22,000	trees planted
3,000	native shrubs planted
100	pieces of woody debris placed
3	livestock crossings enhanced
13,000	feet of NRCS exclusion fencing
34,813	feet of stream bank protected

*Benefits to landowners.* NRSP works with landowners to remove non-native vegetation and replace it with native vegetation. Introduced and invasive vegetation cause many issues for property owners and the environment—with no natural predators, it can overtake an area and become a monoculture that destabilizes stream banks. Bank integrity is greatly increased with a variety of species of plants, providing for various root depths and structures working to hold the bank together and reduce erosion. Many of the common non-native plants in our area are annuals that die back during the winter months, when root strength is the most important for bank stability due to the higher water velocity.



NRSP focuses on streamside plantings and livestock exclusion fencing to protect them

NRSP also provides livestock exclusion fencing. The installation of livestock fencing benefits water quality by reducing the potential of pollution, such as fecal coliform from entering the stream. When livestock are fenced away from the stream banks the banks are better able to remain stable, reducing loss of property from erosion and allowing for the riparian area to return. Exclusion fencing also helps landowners avoid compliance issues under the County's existing agricultural critical areas ordinance. Fences have to meet NRCS practice standards but are able to be modified for specific needs such as type of livestock and location.



In a few cases, NRSP has enhanced livestock crossings over streams so that animals can access all parts of a particular landowner's property without damaging the watercourses

*Benefits to habitat.* NRSP benefits water quality and juvenile salmonids by installing riparian buffers that filter run-off and potential pollutants; provide shade to the stream which reduces stream temperatures; create a source for leaf litter which benthic macroinvertebrates (the small critters living on the bottom of the stream), the main prey source for juvenile salmonids; and allows for the eventual recruitment of large woody debris which provides bank stability as well as refuge for juvenile fish during periods of high stream flow.



**NRSP has installed 100 pieces of large woody debris through landowner projects since 2009; plantings later installed on the bank help prevent erosion**

*Process.* Skagit County landowners can enroll in NRSP through Skagit County Public Works. After verifying eligibility by checking that the property is along a stream, the County will contact the landowner to set-up a site visit. At this visit the County and the landowner will discuss the landowner’s needs (e.g., bank stabilization, livestock exclusion fencing, removal of invasive vegetation, etc.) and how those needs dovetail with habitat enhancement.

The next step is to complete the restoration plan. This includes the information for project implementation and maintenance for a three-year period. Often the County will contract with an outside agency to complete this work. Most often we have worked with the Skagit Fisheries Enhancement Group (SFEG) but have also worked with EarthCorp, the Samish Indian Nation, and private contractors. The restoration plan gets added to the Temporary Conservation Easement which the landowner then signs. This agreement states that the Landowner cannot intentionally harm the project for a period of 10 years and provides specifics on what the project is and how it will be completed. County staff works very closely with the landowner to ensure that the end result is a project that benefits the property in a manner suitable to the landowner. This can be as simple as tailoring the native vegetation to meet their specific preferences, or building a fence specific to their animal’s needs.

Once the project specifics have been settled on and the Temporary Conservation Easement has been signed, implementation can begin. Often this includes the mowing of blackberries and other non-native vegetation. This vegetation is often sprayed with herbicide in an effort to reduce future growth.

Following project implementation, the project site is maintained for a three-year period. Generally this requires once or twice annually mowing the site and spot spraying to ensure there is at least an 80% survival of the original plantings.

**Cost.** NRSP typically spends up to \$35,000 per project, and in some rare cases has spent up to \$50,000 on large projects deemed to have a substantial impact to water quality and salmon habitat. The program covers the cost of all permitting, if required, project implementation, and maintenance for three years. In contrast to the NRCS Conservation Reserve Enhancement Program, participants in NRSP do not need to show historical agricultural use on their property. There is no cost to the landowner.

The total cost of the NRSP program from 2009 through August 2015 was \$901,778.39 (see table).

Funding source	Period	Expenditures	Amount
Department of Ecology (G0900062) (75%) grant award was for \$540,000 and Clean Water Program (25%)	2008-2013	Fencing, Planting, Invasive Species Control, Bank Stabilization	\$599,954.43
National Fish and Wildlife Foundation grant (2008-0053-018) for \$50,000.	2009-2010	Re-routing of creek eroding towards a dairy barn and manure storage, invasive control, planting	\$43,801.65
Department of Ecology grant (C1100185) \$76,700	2011-2012	Fencing, invasive species control, planting, livestock crossing	\$71,533.83
Department of Ecology (G1400401) (75%) and Clean Water Program (25%)	2014 – present (grant for \$375k expires 2017)	Fencing, planting, invasive species control, bank stabilization in the Samish River watershed	\$61,039.17
Clean Water Program; allows for NRSP to continue to in areas outside of the grant-funded Samish watershed	Present	Fencing, planting, invasive species control, bank stabilization in areas outside the Samish watershed	\$26,499.23 \$50,000/yr
Pollution Identification and Correction grants	2013 - present	Manure storage, fencing, and planting	\$98,950.08
<b>Total</b>			<b>\$901,778.39</b>

## Existing External Programs

Skagit County is supported by a number of robust programs to assist farmers, protect critical areas, and restore salmon habitat. The County reviewed each of the following programs as part of developing this work plan. Many of the program summaries are lifted directly from the program websites. One relevant County effort is the Farmland Legacy Program, described elsewhere in this work plan.

### AGRICULTURAL CONSERVATION EASEMENT PROGRAM

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/acep/>

The Agricultural Conservation Easement Program (formerly the Farm and Ranchland Protection Program), operated by the federal Natural Resource Conservation Service, provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. Under the Agricultural Land Easements component, NRCS helps Indian tribes, state, and local governments and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. Under the Wetlands Reserve Easements component, NRCS helps to restore, protect and enhance enrolled wetlands.

Land eligible for agricultural easements includes cropland, rangeland, grassland, pastureland, and nonindustrial private forest land. NRCS prioritizes applications that protect agricultural uses and related conservation values of the land and those that maximize the protection of contiguous acres devoted to agricultural use.

Land eligible for wetland reserve easements includes farmed or converted wetland that can be successfully and cost-effectively restored. NRCS will prioritize applications based the easement's potential for protecting and enhancing habitat for migratory birds and other wildlife.

To enroll land through agricultural land easements, NRCS enters into cooperative agreements with eligible partners, such as the County's Farmland Legacy Program. Each easement is required to have an agricultural land easement plan that promotes the long-term viability of the land.

To enroll land through wetland reserve easements, NRCS enters into purchase agreements with eligible private landowners or Indian tribes that include the right for NRCS to develop and implement a wetland reserve restoration easement plan. This plan restores, protects, and enhances the wetland's functions and values.

### **CENTENNIAL CLEAN WATER GRANT PROGRAM**

[www.ecy.wa.gov/programs/wq/funding/FundingPrograms/Centennial/Cent.html](http://www.ecy.wa.gov/programs/wq/funding/FundingPrograms/Centennial/Cent.html)

The Centennial Clean Water Grant Program (CCWGP), funded by the Washington Department of Ecology, is designed to address nonpoint source pollution. Projects to reduce nonpoint source pollution can include stream restoration and buffers, septic repairs, or other projects that can be shown to improve water quality. Centennial Grant applications that implement Ecology's TMDL cleanup plans receive special consideration. In Skagit County, there are TMDLs for fecal coliform bacteria in the lower Skagit, Samish, and Padilla Bay watersheds and for temperature in the lower Skagit tributaries. Although CCWGP is not available to the individual landowner, projects can occur on private land and interested landowners are encouraged to reach out to the town, city, county, special purpose district (such as dike or drainage district), or Tribe nearest them to apply. Skagit County has twice received CCWGP funds for its Natural Resource Stewardship Program (NRSP). This money is available for start-up programs only, so will not be available for the continuation of NRSP.

## **CONSERVATION RESERVE ENHANCEMENT PROGRAM (CREP)**

[www.skagitcd.org/crep](http://www.skagitcd.org/crep)

In Skagit County, the Skagit Conservation District administers CREP under the oversight of the United States Department of Agricultural (USDA) Farm Service Agency (FSA). Landowners are able to procure an annual rent and a sign-up bonus in exchange for enrolling “environmentally sensitive land” with a history of agricultural use or agricultural land use zoning in the program, including areas around the majority of fish-bearing streams and creeks within the County as well as some tributaries. CREP practices include riparian forest buffers, hedgerows, wetland enhancements, and grass filter strips.

Landowners contact the Skagit Conservation District to determine eligibility. If requirements are met, the landowner enters into a soil rental contract. These rental contracts can range between 10 and 15 years and are expected to be renewable as long as federal funding allows. Recent funding rates have ranged from \$298 to \$904 per acre depending on soil type. The program will cover technical assistance and provide funding for the labor and materials associated with conversion from active or historic farmland to a native vegetation buffer as well as maintenance of the plantings to ensure survival. The width of the buffer may vary from 35 feet to 180 feet. The Conservation District works with individual landowners to ensure the buffer boundary meets their needs; averaging is allowed.

## **ENVIRONMENTAL QUALITY INCENTIVE PROGRAM (EQIP)**

[www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/)  
[www.skagitcd.org/eqip](http://www.skagitcd.org/eqip)

The Skagit Conservation District also administers EQIP for USDA Natural Resources Conservation Service (NRCS). This program provides funding and technical assistance for properties engaging in forestry production and other agricultural activities that have a “natural resource concern.” Contracts for this program are up to 10 years and intended to improve soil, water, air, and other natural resources on the property. This program can fund projects that benefit fish and wildlife including pollinators, drainage water management, air quality, forest lands management, and others.

## **NATIONAL WATER QUALITY INITIATIVE (NWQI)**

[www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?cid=stelprdb1047761](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?cid=stelprdb1047761)

The National Water Quality Initiative works with farmers to improve water quality in areas with a “critical concern.” This includes projects that reduce chemical water quality properties such as nitrogen, phosphorus, and sediment and pathogen introduction from agricultural lands. This funding will provide technical assistance to landowners and can include nutrient management, erosion control, pest management, and buffers among others. In 2014, twelve priority watersheds were selected nationwide; two Washington watersheds were eligible however, both were located in Whatcom County. Priority watersheds for this program may be updated annually and therefore funding may become available to Skagit County residents at some time.

### ESTUARY AND SALMON RESTORATION PROGRAM (ESRP)

[www.rco.wa.gov/grants/esrp.shtml](http://www.rco.wa.gov/grants/esrp.shtml)

[www.pugetsoundnearshore.org/esrp/index.html](http://www.pugetsoundnearshore.org/esrp/index.html)

The Estuary and Salmon Restoration Program (ESRP) is managed by the Washington State Recreation and Conservation Office (RCO) and provides grants that facilitate protection and restoration of the nearshore throughout Puget Sound. Funding for this program comes from the State Building Construction Fund with the occasional influx of federal funding from United States Department of Fish and Wildlife and the National Oceanic and Atmospheric Administration's Community Based Restoration Program. This funding is not available to the general public but can be awarded to local agencies, Tribes, non-profits, and private institutions.

### REGIONAL CONSERVATION PARTNERSHIP PROGRAM

[www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/)

The Regional Conservation Partnership Program (RCPP) is managed by the Natural Resource Conservation Service (NRCS). Through RCPP, the NRCS and partners help producers install and maintain conservation activities in selected project areas. RCPP encourages the restoration and sustainable use of soil, water, wildlife and related natural resources on regional or watershed scales. RCPP combines the authorities of four former conservation programs—the Agricultural Water Enhancement Program, the Chesapeake Bay Watershed Program, the Cooperative Conservation Partnership Initiative, and the Great Lakes Basin Program. RCPP contracts and easement agreements are implemented through the Agricultural Conservation Easement Program (ACEP), Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP) or the Healthy Forests Reserve Program (HFRP). NRCS may also utilize the authorities under the Watershed and Flood Prevention Program, other than the Watershed Rehabilitation Program, in the designated critical conservation areas.

### SALMON-SAFE FARMS PROGRAM

[www.salmonsafe.org](http://www.salmonsafe.org)

[www.stewardshippartners.org/programs/salmon-safe-puget-sound/](http://www.stewardshippartners.org/programs/salmon-safe-puget-sound/)

As described on their website: Salmon-Safe is an independent 501(c)(3) nonprofit based in Portland founded by the [Pacific Rivers Council](#). Their mission is to transform land management practices so Pacific salmon can thrive in West Coast watersheds. Salmon-Safe offers a series of peer-reviewed certification programs linking land management practices with the protection of agricultural and urban watersheds. Whether the site is an organic farm in northern California, an orchard in the Skagit Valley, a Walla Walla vineyard, or a Seattle-area corporate campus, certification requires management practices that protects water quality and restore habitat. Salmon-Safe also is introducing innovative new programs focused on site design and development, as well as an accreditation program for pollution prevention in large-scale construction management. Nine farms in Skagit County have been certified as Salmon-Safe.



## SKAGIT DELTA FARMLAND PRESERVATION STRATEGY

[www.skagitonians.org/wp-content/uploads/3FI-Farmland-Preservation-Strategy-Final-Working-Draft.pdf](http://www.skagitonians.org/wp-content/uploads/3FI-Farmland-Preservation-Strategy-Final-Working-Draft.pdf)

The Skagit Delta Farmland Preservation Strategy was prepared by Skagitonians to Preserve Farmland and Western Washington Agricultural Association for the Farms, Fish, and Flood Initiative (“3FI”). The Farms, Fish, and Flood Initiative is a collaborative effort between SPF, WWAA, NOAA Fisheries, WDFW, SCD, Skagit County, the Nature Conservancy, and Skagit County Dike District 17. The project was funded in part by the U.S. EPA under a National Estuary Program Watershed Protection and Restoration Grant.

The plan outlines that despite the food and fiber, economic, social and ecosystem benefits the agricultural industry provides to Puget Sound and the Skagit Watershed, farmland continues to be a consumptive land base for all other land uses in Puget Sound and Skagit County:

- Puget Sound has lost 60% of its farmland since 1950
- From 2001 to 2006, while the Growth Management Act has been in effect, approximately 4,300 acres of farmland has been converted to impervious surfaces in Puget Sound.
- From 1982 to 2007 Skagit County lost 15,580 acres; approximately 18.24% of its cropland

To establish a framework for understanding the context in which farmland preservation is being undertaken in Skagit Valley, the document outlines the following agricultural statistics:

- There are approximately 89,000 acres of farmland zoned Ag-NRL in Skagit County, of which, approximately 22,000 acres is covered with impervious surfaces (roads, barns, houses, etc.) and unavailable for cultivation.
- Skagit County agriculture produces a farm gate value of approximately 300 million dollars annually.
- With approximately 12,000 acres of farmland within the Delta devoted to the potato industry, which on average has a four year rotation, there is a minimum of 48,000 acres of farmland needed just for the potato industry.
- Crops such as spinach, beets and cabbage have special isolation requirements of up to 2 miles, in addition to strict crop rotation requirements. Spinach Seed has a crop rotation requirement of up to 14 years in some cases.

The plan’s six strategies include: (1) Maintain, strengthen, and expand non-regulatory programs to permanently protect farmland; (2) Develop and implement an agricultural easement with a TFI option for Chinook habitat restoration; (3) Develop and implement approaches to address farmland loss; (4) Maintain, strengthen, and enforce County regulations to protect agriculture; (5) Manage water quality effectively to protect fish, shellfish, and agriculture; and (6) Seek state, federal or international designation for Skagit Valley as a Cultural and Natural Heritage site.

## SKAGIT FISHERIES ENHANCEMENT GROUP

[www.skagitfisheries.org](http://www.skagitfisheries.org)

Washington State has fourteen regional fisheries enhancement groups (RFEs) to engage communities and landowners in salmon recovery. In 1990, Skagit Fisheries Enhancement Group became Skagit

County's local RFEF, dedicated to engage communities in habitat restoration. Local landowners are encouraged to reach out to SFEG if they are willing to restore or enhance their property for the benefit of water quality and salmonid habitat. Skagit Fisheries Enhancement Group is always looking for places to hold volunteer planting parties or teach schoolchildren about stewardship and the watersheds in which they live.

### **SKAGIT DELTA TIDEGATES AND FISH INITIATIVE**

The Skagit Delta Tidegates and Fish Initiative (TFI) is a collaborative, multi-stakeholder process convened by Western Washington Agricultural Association in March 2006 for the purpose of identifying pathways and protocols for federal, state, and local permitting of tidegate and floodgate repair and replacement activities within the Skagit and Samish River deltas. The agreement addresses actions at tidegates and floodgate sites that are under the ownership or control of participating drainage, diking, or irrigation districts. The TFI Implementation Agreement represents a formal commitment to develop a delta-wide landscape approach to address tidegate and floodgate maintenance needs in conjunction with estuarine habitat restoration goals for recover of Endangered Species Act listed Chinook salmon. Principals of the agreement include: Western Washington Agricultural Association, representing participating districts; the National Oceanic and Atmospheric Association's National Marine Fisheries Service; the United States Fish and Wildlife Service; and the Washington State Department of Fish and Wildlife.

### **SKAGIT DRAINAGE AND FISH INITIATIVE**

The Skagit Drainage and Fish Initiative is an agreement that represents a commitment by the Washington Department of Fish and Wildlife and participating Skagit County dike, drainage, and irrigation districts to acknowledge the critical interests and needs of each party with regards to fish protection and the maintenance of drainage infrastructure within the established boundaries of participating districts. It also represents an acknowledgement by the Skagit River Systems Cooperative (SRSC), representing the Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe, of a shared need to develop and maintain effective levels of communication and cooperation in recognition of the vital roles of agriculture and natural resources in sustaining the customs, culture and economic viability of Skagit County, its citizens and the Tribes and their members.

### **STREAM TEAM**

The Stream Team is a group of volunteers enlisted to monitor water quality in a number of Skagit County streams. The program is jointly managed by the Skagit Conservation District and the Department of Ecology (via the Padilla Bay National Estuarine Research Reserve). Stream Team frequently coordinates with the County's Water Quality Monitoring Program.