

Voluntary Stewardship Program

Ryan Walters

Assistant Director
Skagit County Planning & Development Services



Informal Presentation to State VSP Technical Panel
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County Core VSP Staff Team

- Ryan Walters, JD, Assistant Planning Director
- Mike See, Public Works Water Resources Section Mgr
- Kara Symonds, Public Works Watershed Planner
- Josh Greenberg, PhD, GISP, Senior GIS Analyst
- Dan Berentson, Public Works Director

Background

- Growth Management Act: 1990
- **Goals:** protect the environment, conserve **fish and wildlife** habitat; special consideration for anadromous fisheries
- **Goals:** maintain and enhance natural-resource based industries, and protect productive **agricultural lands** from conversion to other uses
- **Specific directive:** “to assure [sic] the conservation of agricultural, forest, and mineral resource lands”
- **Specific directive:** “shall adopt development regulations that protect critical areas”

Critical Areas

- wetlands
- areas with a critical recharging effect on aquifers used for potable water
- frequently flooded areas
- geologically hazardous areas
- **fish and wildlife habitat conservation areas**

Why buffer streams?

1. Temperature moderation
2. Sediment and pollutant filtration
3. Litter fall and nutrient input
4. Bank stabilization
5. Erosion control
6. Shading
7. Large woody debris and instream habitat

Impact of Buffers on Ag

“A mandatory buffer requirement would be a huge financial burden to Skagit County farmers. For example, 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.**”

Ag-CAO History

1996: Ordinance 16156: Agriculture exempt

1998: Ordinance 16851: Voluntary measures

1999: Ordinance 17596: 3 buffer choices

2000: Ordinance 18069: Larger buffer option

2003: Ordinance O20030020: No Harm and Watercourse Protection Measures

2004: Ordinance O20040011: Require enforcement of Watercourse Protection Measures

2005-2007: Litigation to Supreme Court

2007: Legislature imposes timeout on critical areas updates

2008-2011: Participated in Ruckelshaus process

2011: Enrolled in VSP

2012: Growth Board case dismissed based on VSP enrollment

Skagit County's "No Harm" Standard

Not cause harm or degradation to the **existing functions and values of fish and wildlife habitat conservation areas** in and adjacent to **watercourses**, and **additionally:**

“No Harm” Standard (cont’d)

- Meet the state water quality standards;
 - Meet the requirements of any total maximum daily load studies established by the Department of Ecology;
 - Meet all applicable requirements of the state hydraulics code and rules;
 - Meet specific watercourse protection measures.
-
- Applies only to “ongoing agriculture” – which means ag cannot move into uncleared areas

Supreme Court Decision, 2007

Swinomish v. Growth Management Hearings Board

- County has right to balance GMA goals for protection of agriculture and critical areas
- County has obligation to “protect” not “enhance” critical areas
- County must monitor to ensure critical areas are not degraded, and adapt if degradation occurs

Timeout!

- Legislature declared a timeout in 2007
- Sent the issue to a four-year process through the Ruckelshaus Center
- **Result: The Voluntary Stewardship Program**
 - “an alternative
 - to protecting critical areas
 - in areas used for agricultural activities
 - through development regulations”

Recent Steps

- 2011: Skagit County enrolled in VSP
- 2012-2013: waited for funding
- 2014: County decides to proceed without funding, appoints Watershed Group
- 2015-2016: Work plan development

Who is the Watershed Group?

- community volunteers + agency/tech folks
- coordinated by the Natural Resources Division of the Public Works Department
- advisory to the Director of Public Works

Watershed Group

Advisory Panel

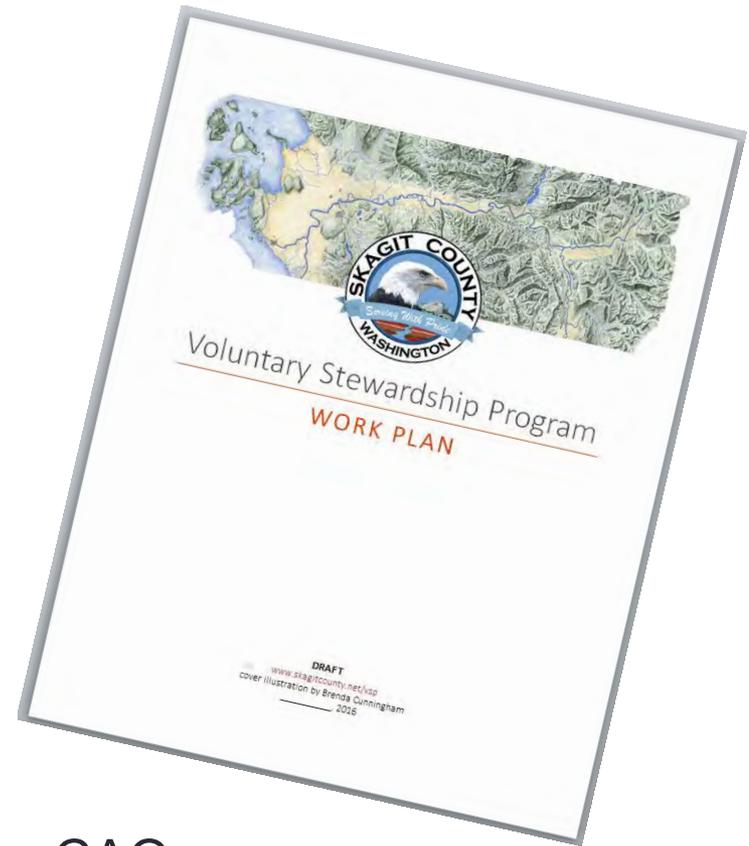
- John Anderson
- Jodi Bluhm
- Ann Childs
- Tyler Clark
- Bill Dewey
- Oscar Graham
- Oscar Lagerlund
- David Olson
- Kenny Johnson
- Jeff Schwab
- Jason Vander Kooy
- John Wolden

Technical Panel

- Daryl Hamburg
Dike District 17
- Carolyn Kelly
Skagit Conservation District
- Kris Knight*
The Nature Conservancy
- Allen Rozema
Skagitonians to Preserve Farmland
- Larry Wasserman*
Swinomish Indian Tribal Community

Work Plan Outline

- Background
 - County context
 - How did we get here?
- Goals and Benchmarks
 - Protection benchmarks
 - Enhancement benchmarks
- Voluntary Measures
- Regulatory Backstop
 - Combination of existing CAO and ag-CAO
 - Plus voluntary measures
- Monitoring and Adaptive Management
- Enhancing Viability of Agriculture



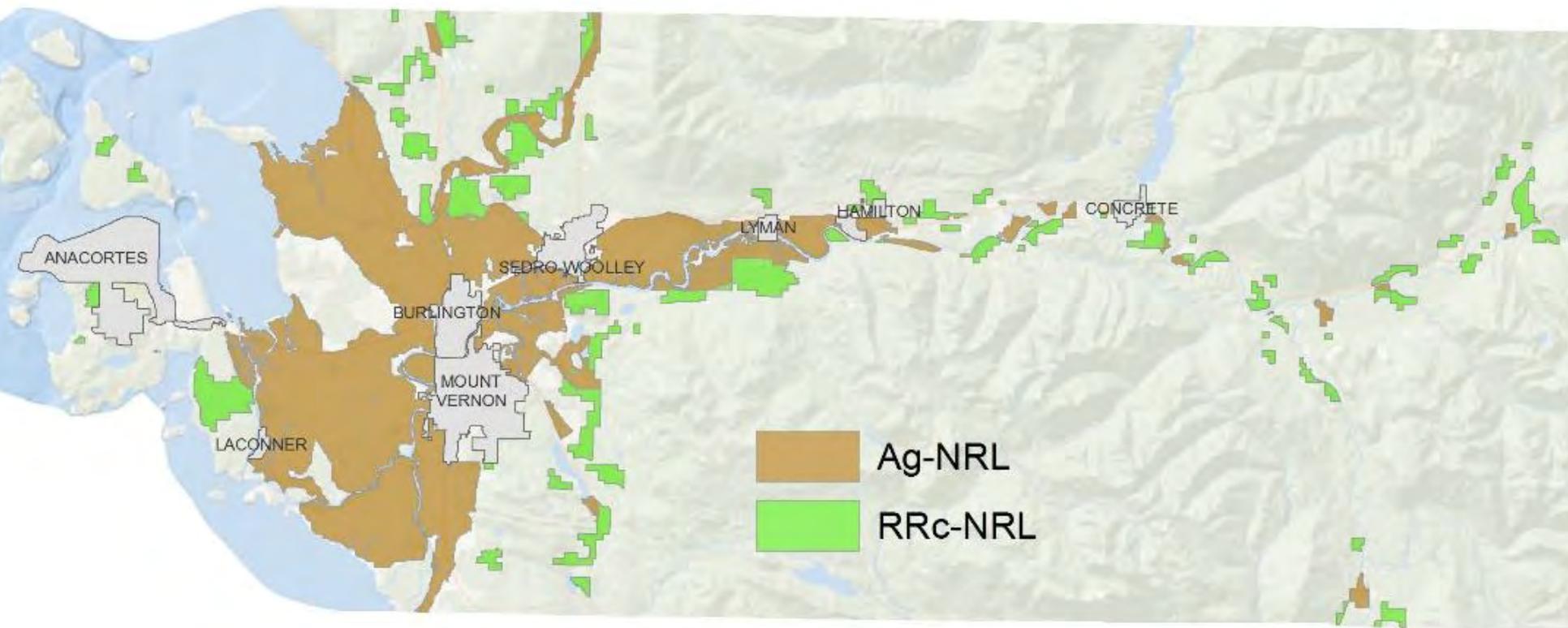
Defining Protection

- in Ag and Rural Resource zoning
 - ongoing agriculture may continue
 - but may not cut down any trees or shrubs
 - within the standard riparian buffer widths
-
- all streams are reviewed
 - per state law, drainage ditches maintained by an irrigation district are excluded

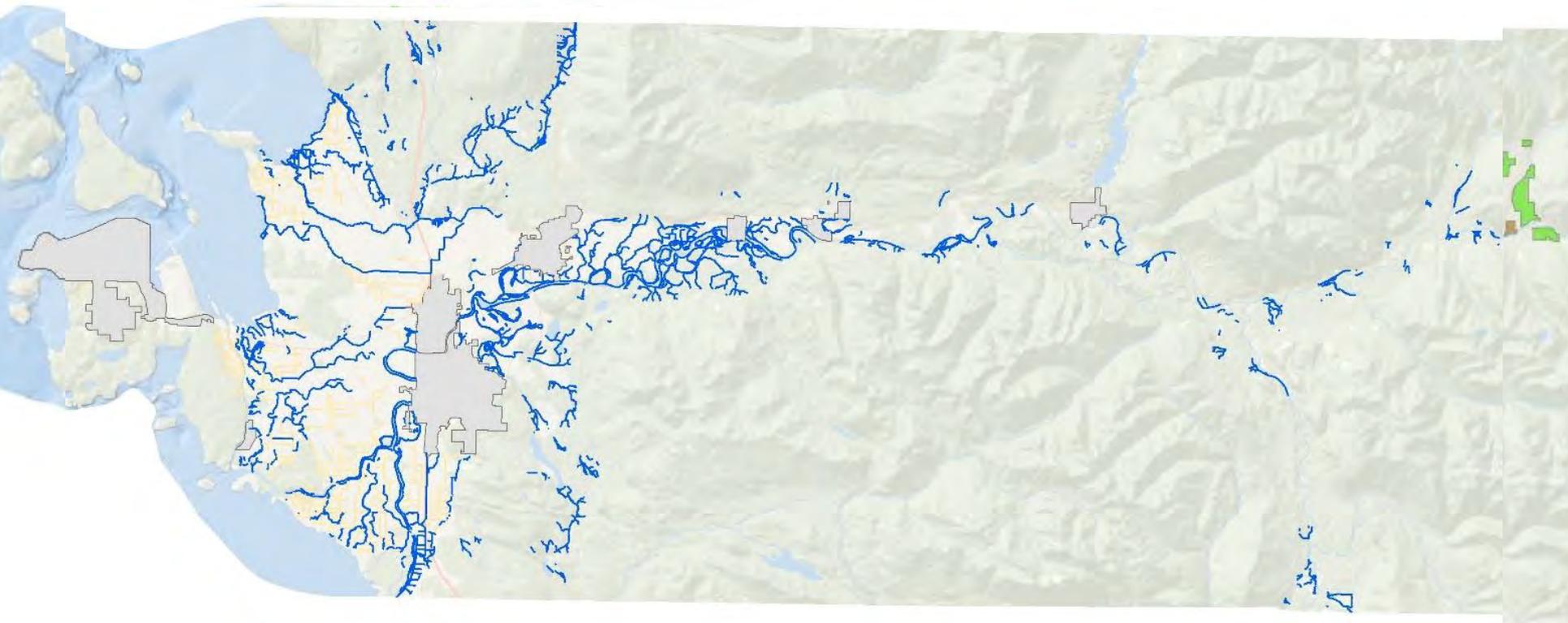
Standard Riparian Buffer Widths

DNR Water Type	Old Type	Brief Description ^{60F}	Skagit Standard CAO Buffer ^{61F}	NOAA Buffer
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

Geographic Scope



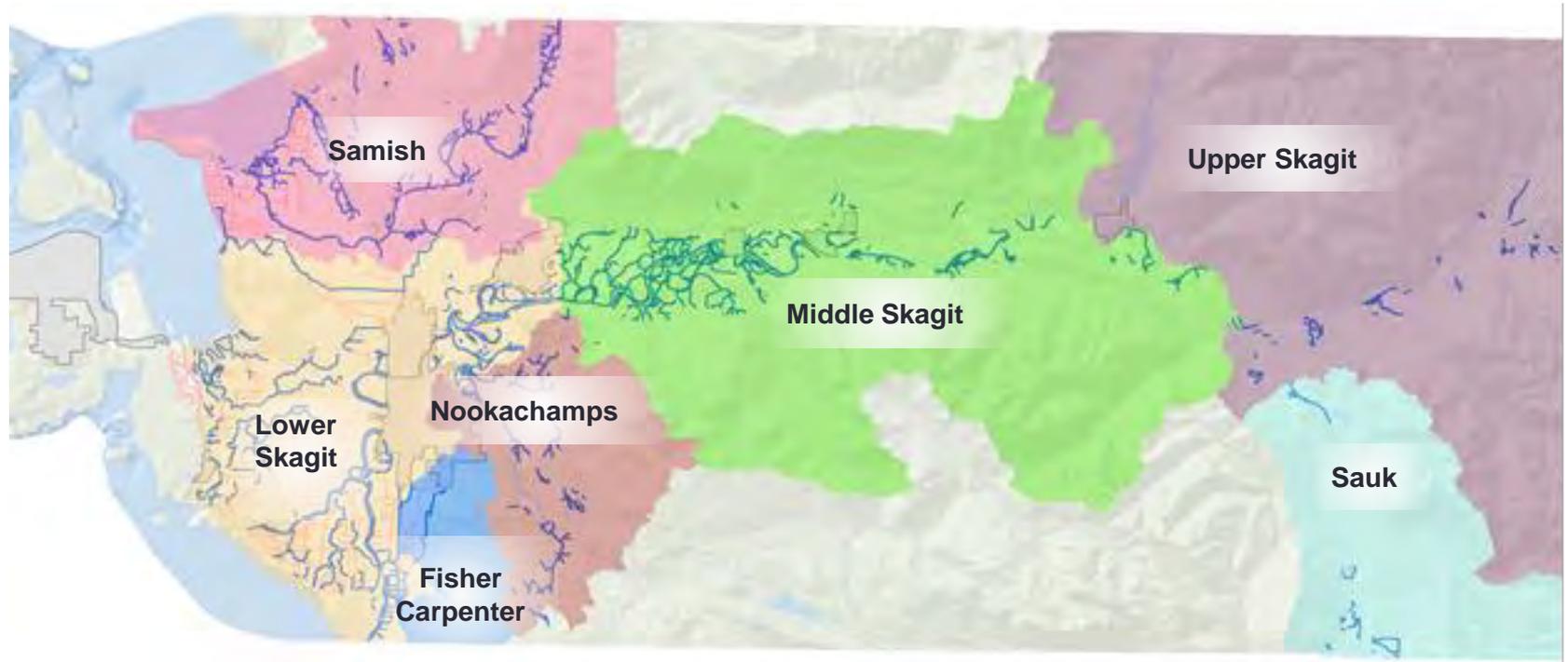
Effective Scope, by Watercourse



Effective Scope, by Zone

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

Watershed Basins



Protection Benchmarks

Sub-Basin	Riparian Buffer Widths and Characteristics (acres of Plantings, Shrub, and Forest)								
	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	51	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	1,455	15	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

Protection is **Not** Water Quality Monitoring

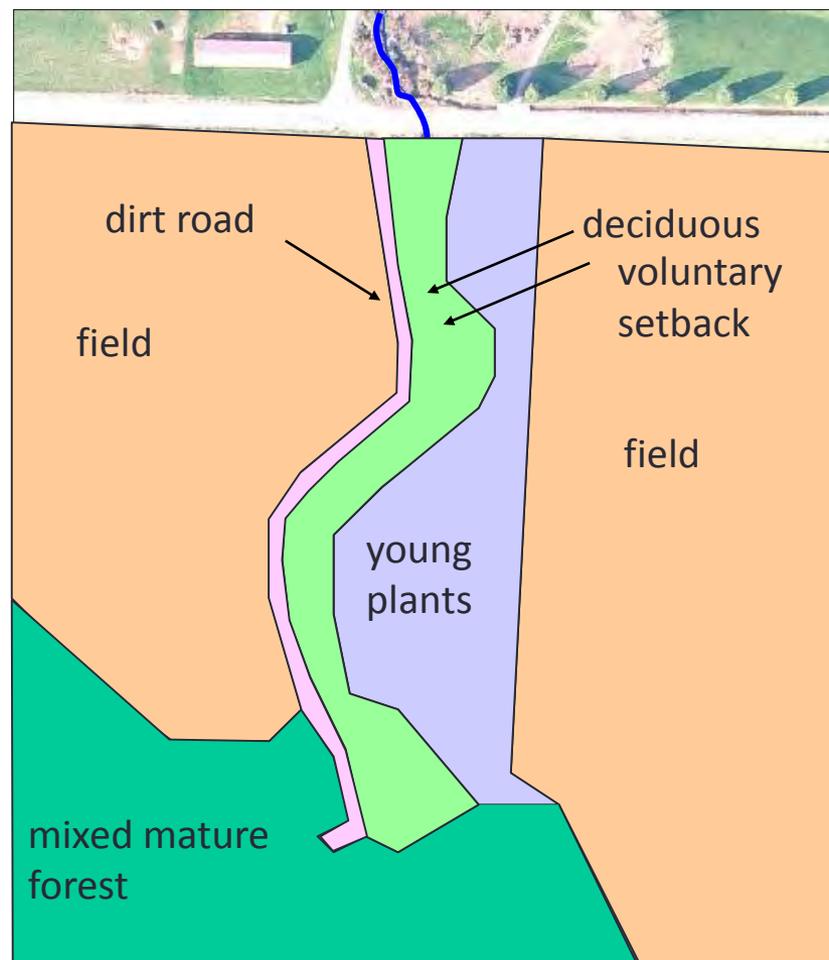


Monitoring Using Aerial Photography

- Pilot in 2008
 - Mapped everything but the Delta
 - Evaluated 300 ft from 424 miles of stream
 - 1030 hours to complete
 - 3 staff members
 - 16,090 acres digitized
- Found analysis based on aerial photography to be much more accurate than analysis based on satellite imagery
- Results at www.skagitcounty.net/riparianmapping

Monitoring Using Aerial Photography

- **Step One**
Hydro Data Correction
- **Step Two**
Identify Riparian Areas
- **Step Three**
Identify Existing Protected Areas



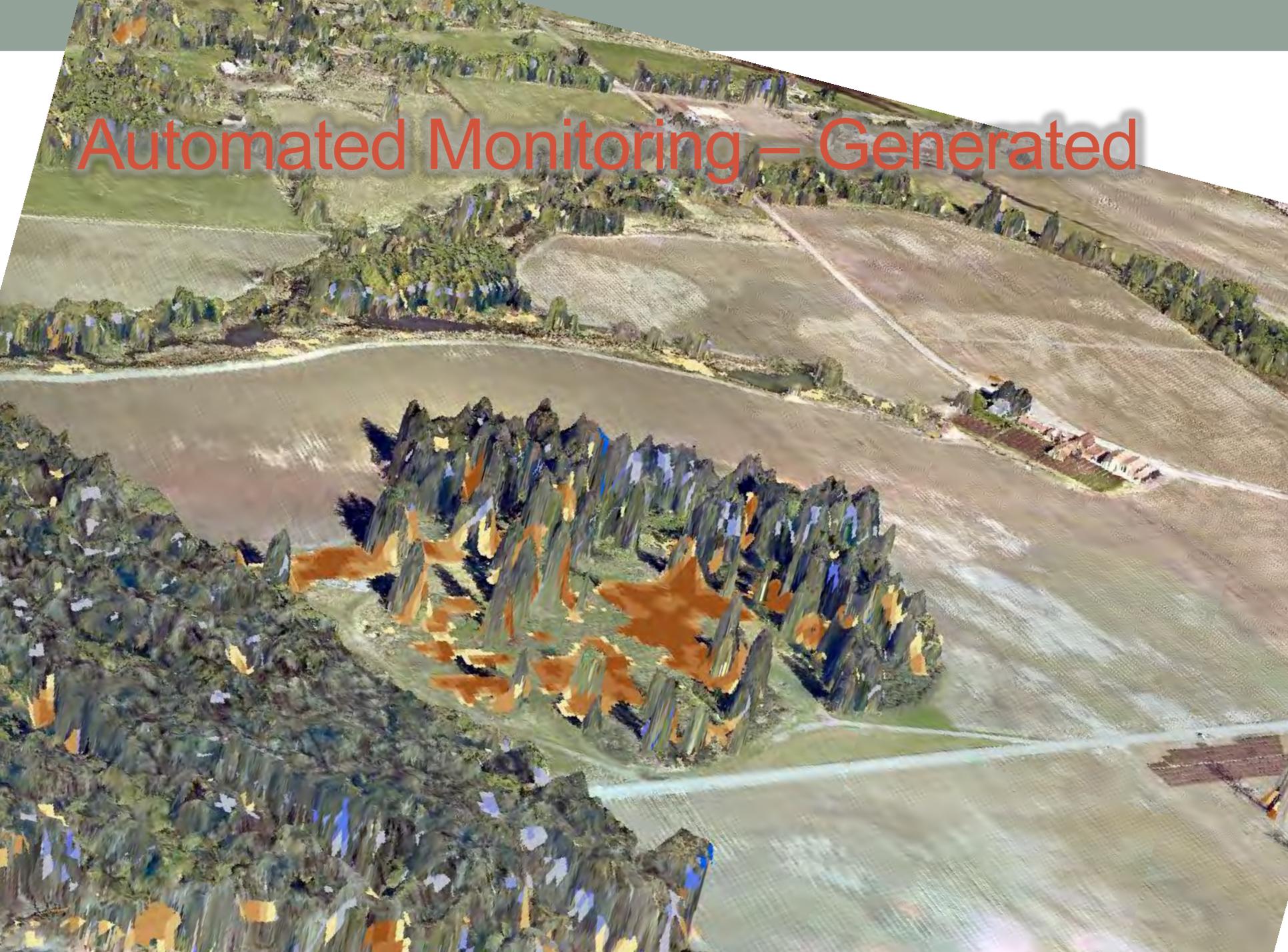
Exceptions

- Buffer loss from activities other than agriculture
 - 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 CAO;
 - 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).
- Buffer loss due to agriculture but with replanting after enforcement
- Invasive weeds removal

Automated Monitoring – 2015 image



Automated Monitoring – Generated



Automated Monitoring – 2015 image



Automated Monitoring – 2013 image



Another Example

2013



2015



Enhancement Benchmarks

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	577	+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

Voluntary Measures

- Coordination and Outreach
 - One-Stop Shop
- Natural Resources Stewardship Program
- Reach-Scale Plans for Easement Acquisitions
- Financial Incentives
 - Easements and Acquisitions
 - Land divisions for habitat enhancement
 - Current Use Taxation Program
- Technical Assistance Provider: Skagit CD

Regulatory Backstop

- RCW 36.70A.720(h): work plan must *“Incorporate ... any existing development regulations relied upon to achieve the goals and benchmarks for protection;”*
- RCW 36.70A.130(8):
 - *(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;*

Skagit County's Ag-CAO

- Prohibition on riparian clearing
- Watercourse Protection Measures
 - Keep livestock out of the water
 - Keep waste or sediment out of the water
 - Keep manure out of the water
 - Apply nutrients at agronomic rates
 - Drainage maintenance
 - Window (June 15 - October 31)
 - Keep excavation spoils away from the bank
 - Ensure mowing doesn't disturb soil or sediments



Summary

- Protection
 - Defined based on our experience
 - Metrics that are measurable
 - Metrics that we can affect
- Monitoring
 - Aligned to the metrics
 - Cost-effective
- Regulatory backstop
 - Pre-existing, not new
 - Allowed by the VSP statute
 - Baseline level of stewardship; helps achieve protection
- More info www.skagitcounty.net/vsp