

# Voluntary Stewardship Program Lincoln County Work Group



Presented by Ben Floyd and Vivian Erickson December 13, 2016

### Agenda

- Welcome and Meeting Purpose
- Recap from Prior Work Group Meeting
- Conceptual Overview of Work Plan
  - Introduction
  - Regional Setting
  - Baseline and Existing Conditions
  - Protection and Enhancement Strategies
  - Goals and Measureable Benchmarks
  - Implementation
- Outreach
- Next Steps

Re-cap

# November Work Group Meeting

### 11/15 Workgroup Meeting Re-cap

- Rename checklist = VSP Self-Assessment Checklist
- Example conservation practices matrix
  - Updated to include NRCS practices implemented since 2011
  - Updated to include additional practices identified by Work Group
- Monitoring
  - Discussed relying on existing monitoring programs for VSP
  - Follow-up in progress with WDFW on habitat related mapping and programs
- VSP roles and responsibilities list
  - Add private businesses
- Outreach
  - Discussed developing a 1-page handout for public outreach when draft
     Work Plan is available for review

Volume One

# Conceptual Overview of Work Plan

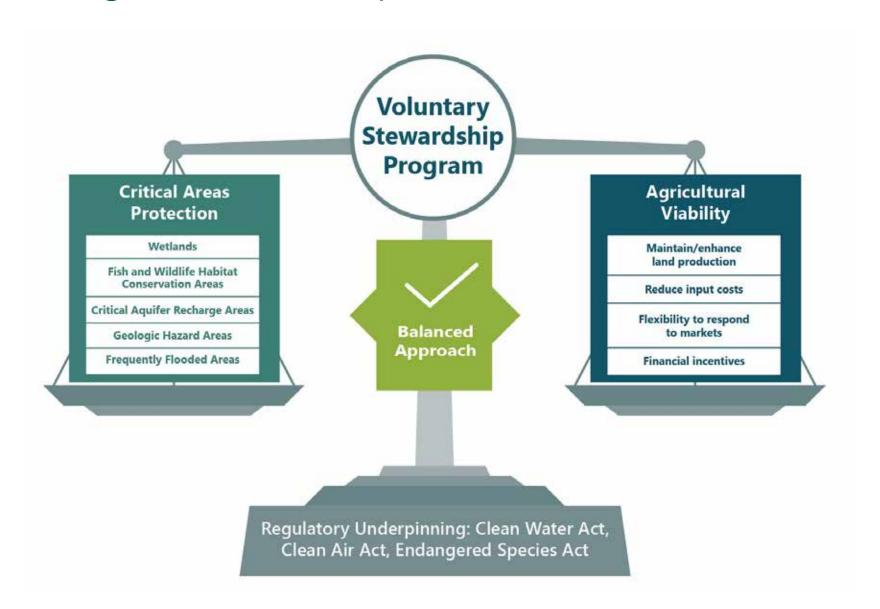


### Section 1: Introduction

- Introduce VSP Background
  - Discuss main purpose and goals in relation to the Growth Management Act
- Summarize the Work Plan elements
  - Outline consistency with requirements under RCW 36.70A.720
- Roles and Responsibilities for Work Plan Development
  - Define state, local, and individual roles and responsibilities
- Brief FAQs section
  - How will I know CAs are on my land? What will I have to do if I have CAs? Is participation anonymous? Is it really voluntary?
     How does the private sector fit in? and others
  - Suggestions for additional questions?



### Background and Purpose

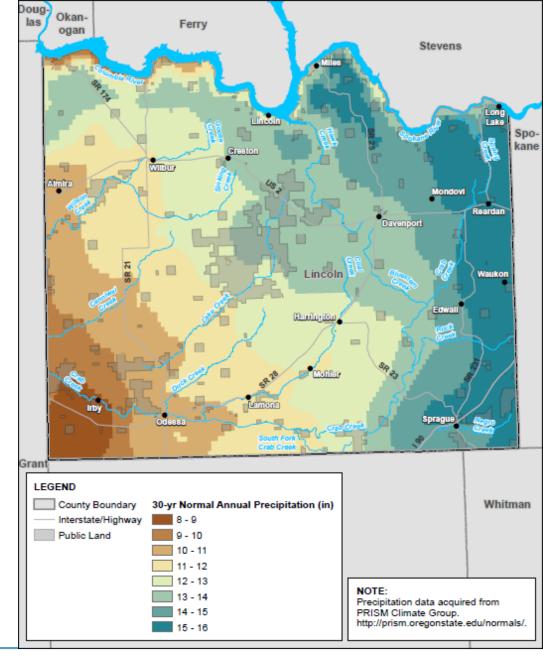


### Section 2

# Regional Setting

### County Profile

- Unincorporated ag lands make up most of County
- Precipitation ranges from 8" of annual precipitation (southwest) to 16" (northeast)
- Mainly well drained soils characterized by loess in uplands and loess over basalt on plateaus



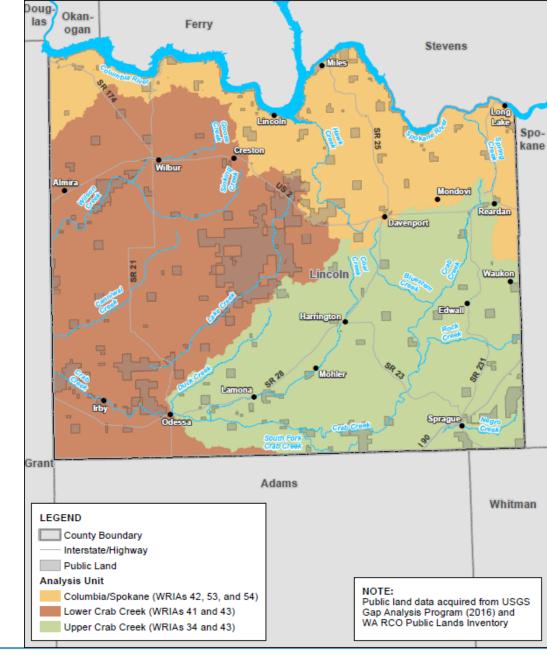
### **Analysis Units**

#### **Major Drainage Areas**

- 6 major watersheds
  - Majority within Upper Crab-Wilson watershed (WRIA 43)
  - Northern areas within Lower
     Lake Roosevelt (WRIA 53) and
     Lower Spokane (WRIA 54)

## Proposed VSP Watershed Analysis Units (3 units)

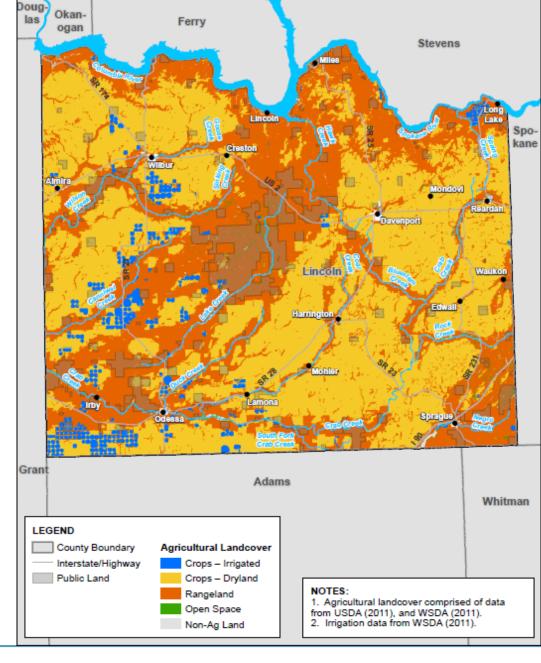
- Columbia/Spokane Rivers (WRIA 42, 53, and 54)
- Upper Crab Creek (WRIA 34 and 43)
- Lower Crab Creek (WRIA 41 and 43)





### Agricultural Land

- Agriculture is the major land use in County (87%)
- Major types of agricultural activity includes:
  - Dryland (52%)
  - Rangelands (32%)
  - Irrigated (3%)







### Agriculture in Lincoln County

- In 2012 the market value of agricultural products produced in Lincoln County was approximately \$183 million
  - 95% was crops
  - 5% was livestock
- There were approximately 900 farms, a majority are smaller producers
  - 53% of farms have sales of less than \$10,000
  - 47% of farms have sales of \$10,000 or more
- By value, grains were top commodity followed by hay and other crops





### Chapter 2: Regional Setting (cont.) – Critical Areas



**FWHCA** 



Wetlands



Geologic Hazards (Erosion)



**CARA** 



**FFA** 

Section 3

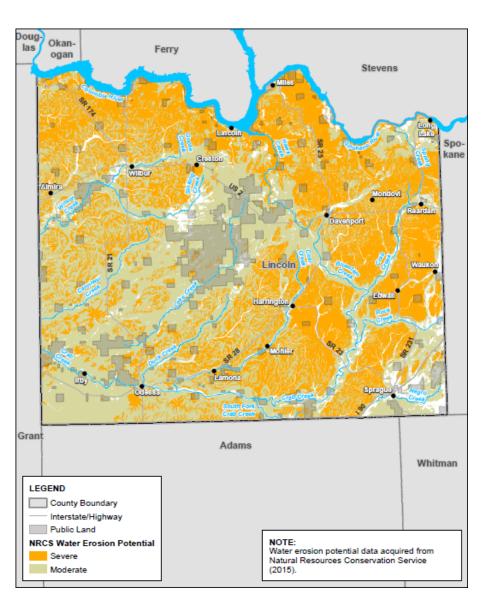
## Baseline and Existing Conditions

### Critical Areas Intersection with Agriculture

- Critical areas occur mostly on agricultural lands
- Smaller intersects with agriculture:
  - Wetlands
  - Critical aquifer recharge areas
  - Frequently flooded areas
- Larger intersects with agriculture:
  - Wind and water erosion potential
  - Fish and wildlife habitat conservation areas
- Protecting critical areas on agricultural lands is crucial to protecting critical areas functions and values
- Conservation practices only need to be implemented on a small portion of agricultural lands to protect and enhance those functions and values

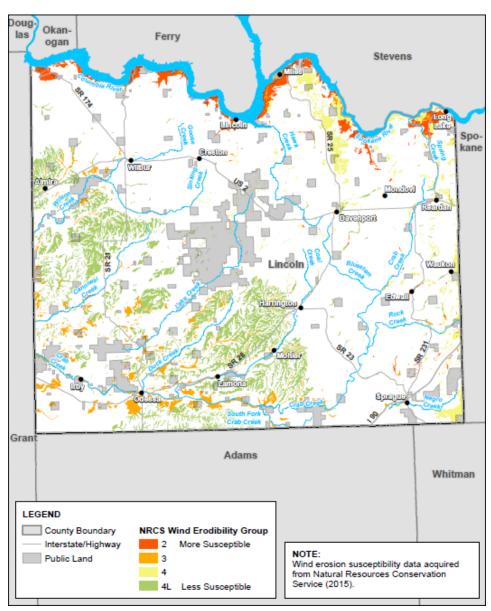
### Geo Hazards Example - Water Erosion Potential

- 44% of agricultural lands have severe water erosion potential
- Almost all water erosion potential land (99%) occurs on agricultural land
- Water erosion potential is found in all three agricultural types but mostly in Dryland



### Geo Hazards Example - Wind Erosion Potential

- 41% of agricultural lands have wind erosion potential
- Almost all wind erosion potential land (97%) occurs on agricultural land
- Wind erosion potential is mostly found in Dryland and Rangeland



### Critical Area Functions and Values

	Water Quality	Hydrology	Soil Health	Habitat
Wetlands				
Fish and Wildlife Habitat Conservation Areas				
Critical Aquifer Recharge Areas				
Geologically Hazardous Areas (Erosion)				
Frequently Flooded Areas				

### Agricultural Viability – Regional Perspective

The ability of a region to sustain agricultural economy and production over time

Concept	Detail		
Stable and secure agricultural land	Land conversion		
base	Stable water rights		
Infrastructure and services	Utilities/irrigation		
illiastructure and services	Market access/transportation		
Support for best farm management	Economically viable solutions		
practices	Balanced approach		
Education, training, and succession	Apprenticeships/training		
planning	Interconnectivity with end users		
Walaaming business anvironment	Stable regulatory environment		
Welcoming business environment	Partnership based environmental protection		
	Changing livestock and commodity prices can		
Market Trands/Mighility	effect the number of producers that support		
Market Trends/Viability	economy		
	Value added measures to make products more marketable		
	Higherapie		

### Agricultural Viability – Farm Perspective

The ability of a farm to meet financial obligations and make profit

Concept	Detail		
	Energy (power, fuels)		
Reduce Input Costs	Chemicals/fertilizers		
	Labor		
	Soil health		
Maintain/Enhance Land Production Capacity	Water systems and moisture management		
Wantanii Emance Lana i reduction capacity	Nutrient management		
	Promoting/adopting new technology		
	Changing land in production		
Floribility to Despond to Market Conditions	Individual schedule for implementing		
Flexibility to Respond to Market Conditions	conservation practices		
	Cropping choices		
Incentives	Payment for measures		
litelitives	Tax breaks		
Managed Farmland Conversion	Urban development (limited)		
Ivianaged Farmiand Conversion	Maintain resource lands		
"No Curprises" Degulatory Environment	Federal - CWA, CAA, ESA, etc.		
"No Surprises" Regulatory Environment	State and Local Permitting		
Protect Private Property Rights	Recognize and respect rights		
Environmental Variation	Rainfall, temperature, etc. affects activities		

### Section 4

# Protection and Enhancement Strategies

# Top 10 NRCS Practices Applied by projects and acres (2011 – 2016)

- These practices are indicators to main concerns in County
  - Water quality, soil conservation, and soil health
- These practices will be highlighted in the Self-assessment Checklist

Conservation Practice	Count	Acres	Land use		
Programs - EQIP - WHIP			Dryland	Irrigated	Range
Agricultural Energy Management Plan	78	155,056	Χ	Χ	
Residue And Tillage Management – Mulch					
Till	82	49,830	Χ	X	Χ
Integrated Pest Management	62	36,540	Χ	Χ	Χ
Nutrient Management	49	27,384	Χ	Χ	
Pumping Plant	37	26,942		Χ	
Irrigation Water Management	18	19,736		Χ	
Fence	19	19,185			Χ
Watering Facility	22	14,900			Χ
Prescribed Grazing	15	13,201			Χ
Livestock Pipeline	15	12,141			Χ

### **Conservation Practices**

Example	Example Ag Description		Critical Areas Function				Agricultural	
Practice Type	Description	Water Quality	Hydrology	Soil Health	Habitat	Viability		
Residue and Tillage Management	Dryland Rangeland	Managing crop and plant residue and limit soil disturbance (e.g. no- or reduced-till, direct seed, and mulch tillage)					<ul><li>Soil quality and conservation</li><li>Weed management</li><li>Increased yield and fertility</li></ul>	
Integrated Pest Management	Dryland Rangeland	Managing pesticide use to reduce runoff					<ul><li>Soil quality</li><li>Weed management</li><li>Pollinator/beneficial organisms</li></ul>	
Nutrient Management	Dryland	Managing application of nutrients to minimize loss to runoff					<ul><li>Soil quality</li><li>Increased yield and fertility</li><li>Reduced input costs</li></ul>	
Range Watering	Rangeland	Managing watering for livestock (e.g., pipelines, wells, and pumping plants)					<ul><li>Soil conservation</li><li>Increased yield and fertility</li></ul>	
Prescribed Grazing	Rangeland	Managing grazing and vegetation harvest to improve plant communities and manage weeds					<ul><li>Soil quality and conservation</li><li>Weed management</li><li>Increased yield and fertility</li></ul>	

### Crop Rotation Example

- Description: Managing land to grow a sequence of various crops on the same piece of land
- Typical rotations in Lincoln County:
  - Annual cropping
  - 2-year rotations in west part of County
  - Up to 3-year rotations in central and east parts of County

Applicability	Critical Area Functions Protection	Ag Viability Protection
Irrigated, Dryland	<ul><li>Hydrology</li><li>Habitat</li><li>Water quality</li><li>Soil conservation</li></ul>	<ul> <li>Soil health</li> <li>Weed management</li> <li>Beneficial pollinators</li> <li>Moisture management</li> <li>Yield and fertility</li> </ul>

### Section 5

### Goals and Benchmarks

### Goals and Benchmarks

RCW 36.70A.720 (1) – Work plan must include goals and benchmarks for the protection and enhancement of critical areas.

- (e) create measurable benchmarks that, within 10 years are designed to result in
  - (1) the protection for critical areas functions and values
  - (2) the enhancement of critical areas functions and values through voluntary, incentive-based measures
- **Protect** = Prevent the degradation of functions and values existing July 22, 2011
- **Enhance** = Improve the critical areas processes, structure, and functions of ecosystems and habitats existing July 22, 2011



### Benchmarks and Monitoring Indicators

Goal: Protect or enhance surface water quality		
Participation Benchmark	<ul> <li>Acres managed using techniques that limit water erosion of soil, or erosion due to unrestricted access of livestock</li> <li>Acres managed under chemical and nutrient input controls</li> <li>Miles of stream protected by riparian management and/ or filter strips</li> </ul>	
Monitoring Indicators	Use of ongoing water quality monitoring from various agencies including the Washington State Department of Ecology	



### Goals and Benchmarks

Goal: Preserve and enhance existing native habitat areas, increase habitat areas at the farm-scale		
Protection Objective	No decrease of habitat areas or quality of habitat	
Enhancement Objective	Restoration of existing habitat areas and/or creation of new habitat areas	



### Goals and Benchmarks

# Goal: Preserve and enhance existing native habitat areas, increase habitat areas at the farm-scale

<b>Participation</b>
Benchmark

- Acres managed using techniques that limit soil compaction or trampling of habitat
- Acres managing water to prevent unintentional conversion of shrub steppe habitat
- Acres of restored habitat
- Acres of created habitat
- Number of installed habitat structures

## Monitoring Indicators

Use of habitat survey and monitoring data such as Priority Habitat and Species, and USDA National Resources Inventory mapping.

### Other Goals and Benchmarks

- Protect or enhance groundwater quality
- Protect or enhance natural hydrologic storage capacity, with special emphasis on areas supporting wetlands or within frequently flooded area
- Preserve available surface and ground water within County
- Promote soil conservation within County
- Preserve and enhance soil health and fertility within County
- Preserve and enhance existing native habitat areas
- Preserve and enhance fish habitat in fish bearing streams of the County

### Example Protection Measures Tracking Form

Measures that	2011 (acres enrolled)	2016 (acres enrolled)	2021 (acres enrolled)	2026 (acres enrolled)
Limit water & livestock erosion	10,000	At least 2,000	At least 2,000	At least 2,000
Manage chemical and nutrient inputs	25,000	At least 5,000	At least 5,000	At least 5,000
Limit soil compaction & habitat trampling	5,000	At least 1,000	At least 1,000	At least 1,000
Restore habitatetc.	500	At least 100	At least 100	At least 100
Disenrollment assumption (may update % over time)	20%			

All enrollment above these levels = Enhancement

# Chapter 6 Implementation

### Implementation Framework

- Expected to continue largely through established programs and organizations
- Work Plan implementation responsibilities include:
  - agricultural producer participation and outreach
  - technical assistance
  - program performance tracking and reporting
  - adaptive management
- Reporting timeline
  - 2 years: Report on progress
  - 5 years: Performance Review
- Proposed implementation lead: Lincoln CD
  - Conservation District would coordinate implementation with private industry and local, state, and federal agencies

### Integrated with Existing Programs and Plans

- Groundwater Management Plans
- Environmental Quality Incentives Program (EQIP)
- Conservation Stewardship Program (CSP)
- Wetland Reserve Program (WRP)
- Conservation Reserve Program (CRP)
- Private Lands Conservation Program (WDFW-led)
- Private sector
- Others

#### Regulatory Environment Other Rules and Regulations Still Apply Voluntary Stewardship Program Floodplain Development • FEMA Floodplain Permits Local, State, and Federal Permits Growth Alternative approach Management Discharges to waterbodies to critical areas Act NPDES Compliance protection where critical areas are Impacts to Waterbodies/Wetlands Clean Water Act Section 404 concerned • Endangered Species Act Compliance Local, State, and Federal Permits

Note: The above list does not provide a comprehensive list of all rules and regulations that may apply to agricultural activities within or adjacent to critical areas

### Outreach

### Outreach During Plan Development

- Industry meetings
- Other meetings where producers already meet (monthly coffee hours)
- E-mail announcements or postcard notifications
  - Rely on WSU existing email list to local growers
  - Others?
- Articles in the Capitol Press
- 1-page VSP FAQs/Summary of Work Plan

### Outreach During Plan Implementation

Venue	Description
Meetings	Private industry-led meetings Others?
Media	<ul> <li>CD website and newsletters</li> <li>Lincoln County website</li> <li>WSCC news and announcement webpage</li> <li>Articles, announcements, and advertisements with local newspapers</li> <li>E-mail distribution lists</li> <li>Others?</li> </ul>
Others	<ul> <li>Informational booths and displays at fairs and agricultural conventions</li> <li>Individual outreach</li> <li>VSP Self-assessment Checklist</li> </ul>

## Round Table and Next Steps

### Upcoming Activities and Meetings/Topics

- January (no meeting)
  - Anchor QEA prepares draft plan
  - Draft plan distributed to Work Group before meeting
- Upcoming Work Group Meetings (2017)
  - February 21, 2:00 to 4:00 Discuss/refine draft plan
  - March 7, 2:00 to 4:00 Discuss/refine draft plan
- Issue updated draft plan by April 2017