



Voluntary Stewardship Program Lincoln County Work Group



Presented by

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November 15, 2016

Agenda

- Re-cap and Follow-up from Prior Work Group Meeting
 - Confirm VSP Checklist as Tool
- Review Existing Work and Plans
- Conservation Practices Implemented since 2011
- Introduction to Goals, Benchmarks, and Measurements
- Discuss Implementation and Outreach
- Next Steps

Re-cap

September Work Group Meeting

9/1 Workgroup Meeting Re-cap

- Need to have clear definition on how public lands are incorporated into the plan
- Work Plan
 - Do not want a strict management plan, focus more on the end result
 - Plan will mainly act to provide guidance and facilitate tracking of conservation practices
- Create conservation practices definitions that are not as strict as NRCS guidelines
- Try to incorporate local market viability into the agricultural viability section
- Need to confirm VSP Checklist as a tool for the Work Plan

VSP Checklist – Chelan County Example

A. Agriculture Intersecting with Geologically Hazardous Areas

Definition of Geologically Hazardous Areas: Areas susceptible to erosion, sliding, earthquake, or other geological events, where development is not suitable due to public health or safety concerns. (based on RCW 36.70A, WAC 365-190)

VSP Agriculture Viability Aims

- Protect agricultural activities from geologic hazards such as erosion and landslides.

VSP Geologic Hazard Goals:

- Avoid increases in erosion.
- Avoid steep slopes or help to stabilize steep slopes where practical.
- Manage risk of landslides.
- Avoid compaction of soil.
- Avoid disturbing top and toe of steep slopes and landslide hazard areas.
- Avoid irrigating unstable slopes.

| Conservation Practice Examples | | I do this | I'm interested in this | Not Applicable |
|---|---------|--------------------------|--------------------------|--------------------------|
| | NRCS # | | | |
| 5. Access road: Locate and build to control or reduce erosion | 560 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Conservation cover: to provide permanent vegetative cover to reduce soil erosion and sedimentation, improve soil quality, etc. | 327 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Cover crop: Plant crops between rows of trees, vines, or other row crops for cover and conservation. Cover crops include grasses, legumes, and forbs for seasonal cover and other conservation purposes. | 340 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. FireWise: wildfire protection plans to maintain cover/reduce soil loss | See CCD | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Forest stand improvement | 666 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Heavy use area protection to stabilize ground surface | 561 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Mulching to control erosion and conserve soil moisture | 484 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Prescribed grazing to reduce erosion and manage fuel loads | 528 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Tree/shrub establishment for long-term erosion control and water quality improvement | 612 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. My ideas to meet objective: | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

VSP Checklist – Chelan County Example

Tree/Shrub Establishment



Tree and shrub planting after 3 - 4 seasons of growth

Source: NRCS Wenatchee Field Office

Replanting after a Fire



Source: NRCS Wenatchee Field Office

Cover Crop



Planting a cover crop between tree rows of forbs and grasses for beneficial pollinators and bugs and erosion control

Source: NRCS Wenatchee Field Office

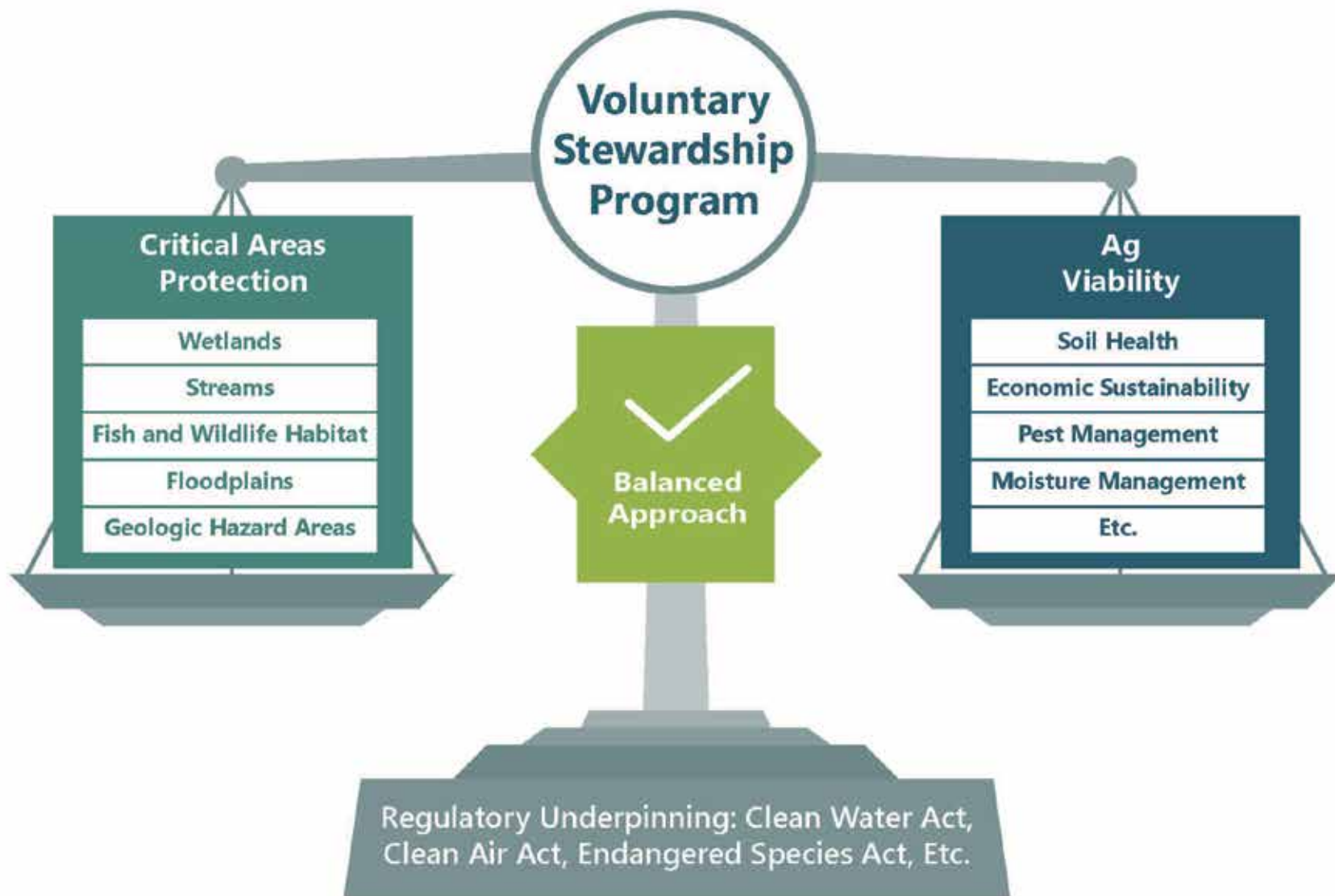
Review and Incorporate Existing Data and Plans

Existing Data and Plans

RCW 36.70A.720 (1)(a) – Review and incorporate applicable water quality, watershed management, farmland protection, and species recovery data and plans

- Watershed Assessments/Plans (WRIAs 43, 53, 54, and 34)
- Columbia River Salmon Recovery Plan
- Groundwater Management Plans
- Total Maximum Daily Loads (TMDLs)
- Natural Resource Conservation Service programs
- See Handout for additional details

Conservation Practices



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 VSP Checklist

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

Practices Implemented under CSP (2011 – 2016)

- Conservation Stewardship Program (CSP) provides support for maintaining and enhancing practices that have been implemented

| Conservation Practice | Count | Acres | Land use | | | |
|------------------------------|-------|---------|----------|-----------|----------|-------|
| | | | Dryland | Irrigated | Wildlife | Range |
| CSP | | | | | | |
| Enhanced Pest Management | 90 | 104,119 | x | x | x | x |
| Cropland | 275 | 57,361 | | | | |
| Enhanced Nutrient Management | 45 | 29,455 | x | x | | |
| Range and Pasture Management | 74 | 14,959 | | | | |
| Enhanced Grazing Management | 41 | 5,912 | | | | |

Mulch Till Example

Description: Managing the amount, orientation and distribution of crop residue on the soil while limiting soil-disturbing activities where the field surface is tilled prior to planting.

- 82 practices/projects in place (2011-2016)
- 49,830 acres

| Applicability | Ag Viability Protection | Critical Area Functions Protection |
|-----------------------|---|---|
| Irrigated, Dryland | <ul style="list-style-type: none">• Soil Health• Prevention of soil loss• Moisture management• Yield and fertility | <ul style="list-style-type: none">• Hydrology• Habitat• Water quality• Soil conservation |

Nutrient Management Example

Description: Managing the amount, source, and application of nutrients to minimize risk to surface and groundwater.

- 49 practices/projects in place (2011-2016)
- 27,384 acres

| Applicability | Ag Viability Protection | Critical Area Functions Protection |
|-----------------------|---|---|
| Irrigated, Dryland | <ul style="list-style-type: none">• Soil Health• Yield and fertility | Water quality |

Prescribed Grazing Example

Description: This practice includes using grazing or browsing animals to manage vegetation for weed or pest control and drought management.

- 15 practices/projects in place (2011-2016)
- 13,201 acres

| Applicability | Ag Viability Protection | Critical Area Functions Protection |
|---------------|---|---|
| Rangelands | <ul style="list-style-type: none">• Prevention of soil loss• Weed management• Yield and fertility | <ul style="list-style-type: none">• Habitat• Water quality• Soil conservation |

Example Conservation Practices

- Are we missing anything?

| Agricultural Activity | Conservation Practice Examples | NRCS Code | Agricultural Viability | | | | | |
|---------------------------|---|-----------|------------------------|-------------------|---------------------|-----------------|---------------------------------|----------------------------|
| | | | Soil Health | Prevent Soil Loss | Moisture Management | Weed Management | Pollinator/Beneficial Organisms | Increased Yield/ Fertility |
| All | Brush Management | 314 | | | | | | |
| | Herbaceous Weed Control | 315 | | X | | X | | X |
| | Channel Bank Vegetation | 322 | | X | | X | X | |
| | Deep Tillage | 324 | | | | | | |
| | High Tunnel System | 325 | | | | | | |
| | Critical Area Planting | 342 | | X | | X | X | |
| | Farmstead Energy Improvements | 374 | | | | | | |
| | Sediment Basin | 350 | | X | | | | |
| | Windbreak/Shelterbelt Establishment | 380 | X | X | X | X | X | X |
| | Fuel Break | 383 | | | | | | |
| | Riparian Herbaceous Cover | 390 | | X | X | X | X | |
| | Riparian Forest Buffer | 391 | | | | X | X | |
| | Firebreak | 394 | | | | | | |
| | Stream Habitat Improvement and Management | 395 | | | X | X | X | |
| | Grassed Waterway | 412 | | X | | | | |
| | Irrigation Pipeline | 430 | | | | | | |
| | Irrigation System, Sprinkler | 442 | | | | | | |
| | Irrigation Water Management | 449 | | | | | | |
| | Land Clearing | 460 | | | | | | |
| | Access Control | 472 | X | X | | X | X | X |
| | Tree/shrub Site Preparation | 490 | | | | X | X | |
| | Obstruction Removal | 500 | | | | | | |
| | Pasture and Hay Planting | 512 | | | | | | |
| Prescribed Grazing | 528 | | | | | | | |
| Range Planting | 550 | | | | | | | |
| Access Road | 560 | | X | | | | | |
| Heavy Use Area Protection | 561 | | | | | | | |

| Agricultural Activity | Conservation Practice Examples | NRCS Code | Agricultural Viability | | | | | |
|---|--|-----------|------------------------|-------------------|---------------------|-----------------|--|----------------------------------|
| | | | Soil Health | Prevent Soil Loss | Moisture Management | Weed Management | Pollinator/ Beneficial Organisms | Increased Yield/ Fertility |
| All | Stream Crossing | 578 | | | | | | |
| | Streambank and Shoreline Protection | 580 | | X | | | X | |
| | Open Channel | 582 | | | | | | |
| | Channel Bed Stabilization | 584 | | | | X | | |
| | Structure for Water Control | 587 | | | X | | | X |
| | Nutrient Management | 590 | X | | | | | X |
| | Integrated Pest Management | 595 | X | | | X | X | |
| | Terrace | 600 | | | | | | |
| | Vegetative Barrier | 601 | | X | X | X | X | |
| | Tree/shrub establishment | 612 | | X | | | X | |
| | Restoration and Management of Rare or Declining Habitats | 643 | | | | | | |
| | Wetland Wildlife Habitat Management | 644 | X | | | X | X | |
| | Upland Wildlife Management | 645 | | X | | | X | X |
| | Constructed Wetland | 656 | | | | | | |
| | Wetland Enhancement | 659 | X | | | X | X | |
| | Tree/Shrub Pruning | 660 | | | | | | |
| | Forest Stand Improvement | 666 | | | | | | |
| | Building Enevelope Improvement | 672 | | | | | | |
| | Seasonal High Tunnel | 798 | | | | | | |
| | Other Vegetation Management | | | | x | x | X | X |
| Other (Workgroup Members please add other measures) | | | | | | | | |

Introduction to Goals, Benchmarks, and Measurements

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

Goals

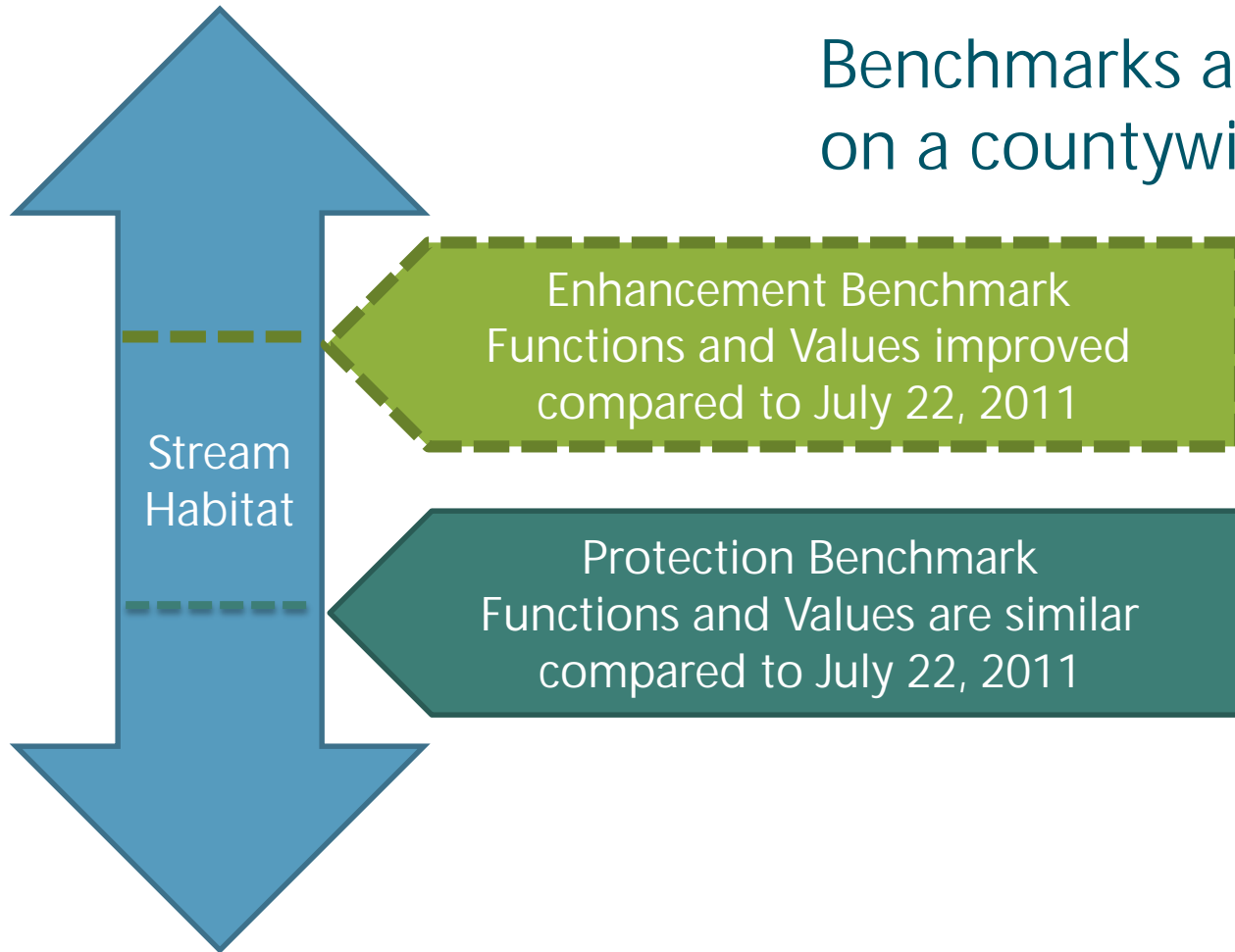
- The work plan includes both **protection and enhancement goals** and benchmarks
- Protection goals must be met through VSP
 - Current VSP funding provides for protection of critical areas
- Enhancement goals are not required to be met through VSP
 - Counties can enhance if additional funds become available for incentives

Benefit of Meeting Enhancement Goals

- Enhancement benchmarks **do not** need to be met to comply with critical areas protection requirements
 - Protection goals met = compliant program
- Establishing and meeting enhancement benchmarks helps:
 - Document ecological lift
 - Buffer baseline conditions from unforeseen events (e.g., fire)
 - Helps assess County-wide protection of critical areas functions and values

Measurable Benchmarks

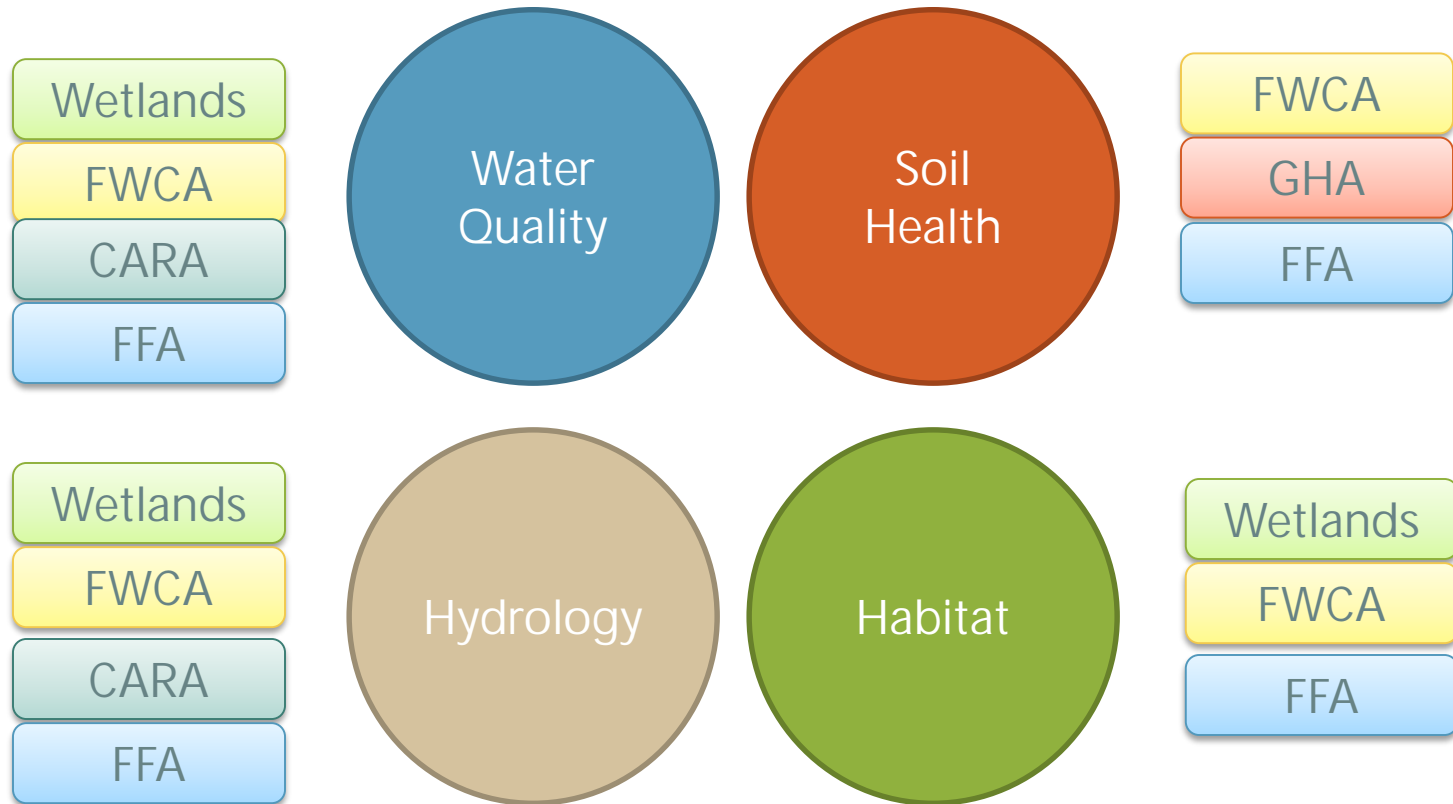
Benchmarks are evaluated on a countywide basis



Monitoring and Benchmarks



Critical Area Functions and Values



Participation Benchmarks

- Link implementation of conservation practices to critical areas functions and values

Enhancement Benchmark

*1 to 5 years: 500 acre increase in prescribed grazing
6 to 10 years: 2,500 acres increase in prescribed grazing*

Protection Benchmark

No net change in prescribed grazing



Soil
Health

Critical Area
Functions and
Values

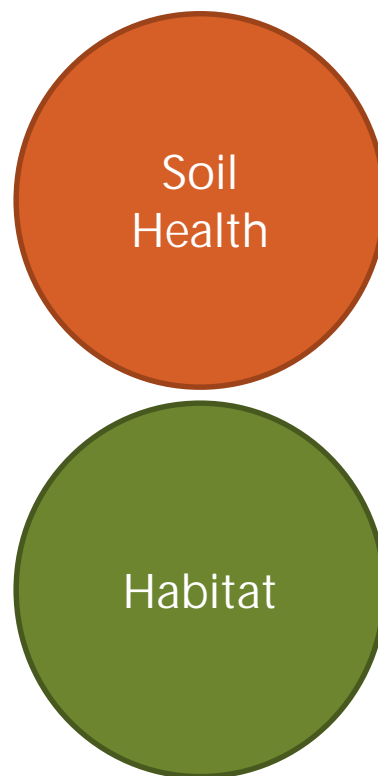


Habitat

Monitoring Benchmarks

- Directly measure critical areas functions and values through use of ongoing monitoring data

Critical Area
Functions and
Values



Enhancement Benchmark

Reduce rate of soil loss and increase fertility (NRI)

Protection Benchmark

No net increase in rate of soil loss and no reduction in fertility (NRI)

Enhancement Benchmark

Increase in Mapped PHS

Protection Benchmark

No Net Loss in Mapped PHS

Types of Measurable Benchmarks

- **Participation Benchmarks** – Report conservation practices implemented through existing programs as well as VSP specific efforts
- **Monitoring Benchmarks** – Make use of existing monitoring programs and data collection efforts

| Conservation Practice | Count | Acres | Land use | | |
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Implementation and Outreach

Roles and Responsibilities

- State – Approval and Administration
 - WSCC – Approves or rejects Work Plan
 - VSP Technical Panel - Provides technical assistance
 - VSP Statewide Advisory Committee - Revise rejected draft Work Plans
- Local – Administration and Implementation
 - Work Group – Develops Work Plan
 - Conservation District – Provide technical assistance and act as lead entity for outreach and implementation, additional technical support from others
 - County – Administers funds for plan development
- Landowners – Voluntary Stewardship Implementers

Discussion of Outreach

RCW 36.70A.720(1)(d) Ensure outreach and technical assistance is provided to agricultural operators

- Current outreach/technical support strategies - by industry, CD, NRCS, and others
- Outreach at local events and meetings
- Discussion
 - Ways to increase participation during VSP Work Plan development
 - Outreach strategies to include in VSP Work Plan

Agricultural Viability

Agricultural Viability – Macro Perspective

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

| Concept | Detail |
|--|--|
| Stable and secure agricultural land base | Land conversion |
| | Stable water rights |
| Infrastructure and services | Utilities/irrigation |
| | Market access/transportation |
| Support for best farm management practices | Economically viable solutions |
| | Balanced approach |
| Education, training, and succession planning | Apprenticeships/training |
| | Interconnectivity with end users |
| Welcoming business environment | Stable regulatory environment |
| | Partnership based environmental protection |

Agricultural Viability – Micro Perspective

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

| Concept | Detail |
|---|---|
| Reduce Input Costs | Energy (power, fuels) |
| | Chemicals |
| | Labor |
| Maintain/Enhance Land Production Capacity | Soil health |
| | Water systems and moisture management |
| | Nutrient management |
| Flexibility to Respond to Market Conditions | Changing land in production |
| | Individual schedule for implementing conservation practices |
| | Cropping choices |
| Incentives | Payment for measures |
| | Tax breaks |
| Managed Farmland Conversion | Urban development (Pullman) |
| | Maintain resource lands |
| “No Surprises” Regulatory Environment | CWA, CAA, ESA, etc. |
| | County Permitting (drainage) |
| Protect Private Property Rights | Recognize and respect rights |

Questions, Comments, and Next Steps

Upcoming Meeting Topics

- December
 - Potentially reschedule for December 13th 3:00 to 5:00
 - Conceptual Outline of Work Plan
- January- Anchor QEA prepares draft plan (no meeting)
- February to March – Discuss/refine draft plan