

# STEWARDSHIP CHECKLIST

## Promoting Agriculture Viability and Protecting Critical Areas

### WHAT IS THE VOLUNTARY STEWARDSHIP PROGRAM (VSP)?

The Voluntary Stewardship Program (VSP) is an optional, incentive-based approach to protecting critical areas while promoting agriculture. The VSP is allowed under the Growth Management Act (RCW 36.70A.700-760) as an alternative to traditional approaches to critical areas protection, such as “no touch” buffers. Chelan County is one of 28 counties that has “opted in” to VSP.

In order to establish the program, a watershed work plan is required and must “protect critical areas while maintaining the viability of agriculture in the watershed” and “must include goals and benchmarks for the protection and enhancement of critical areas.” (RCW 36.70A.720 (1)) While protection of critical areas is required, enhancement is voluntary and incentive-based (see definitions on page 2). The VSP Work Plan must also “maintain and enhance” agricultural viability to receive approval (RCW 36.70A.720, -725). The work plan must be approved by the Washington State Conservation Commission Director and the Departments of Fish and Wildlife, Ecology, and Agriculture.

This checklist serves as an individual stewardship plan referenced in the VSP law to help each farmer contribute to the goals and benchmarks of the Chelan County VSP work plan.

The Conservation Commission Director must approve the Work Plan within 3 years of funding (January 2017) or the county must comply with the non-VSP (regulatory) critical area protection requirements of the Growth Management Act. The watershed work group in Chelan County is working on a draft plan intends to submit it by winter 2016 to the Conservation Commission.

### WHAT ARE CRITICAL AREAS? WHAT DOES PROTECTION MEAN?

Critical areas include (1) fish and wildlife habitat conservation areas, (2) wetlands, (3) frequently flooded areas, (4) geologically hazardous areas, and (5) critical aquifer recharge areas used for potable water. “Protect” or “protecting” means to prevent the degradation of functions and values existing as of July 22, 2011 – the date the law was established. (RCW 36.70A.030 and 36.70A.703)

### HOW CAN MY PARTICIPATION IMPROVE THE VIABILITY OF AGRICULTURE?

This checklist is intended to encourage agricultural producers to undertake voluntary practices to promote agricultural business prosperity while protecting critical areas. Enhancement of critical areas is an option. Implementing the conservation and protection practices suggested in this checklist offer benefits not only for the environment, but also for producers. Some of these benefits to agriculture could include:

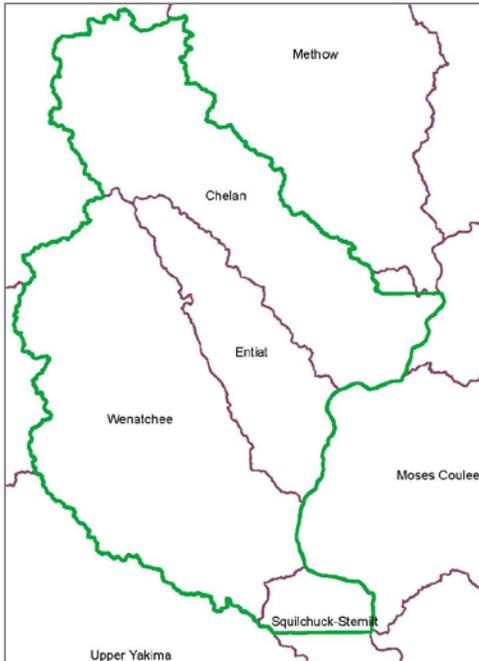
- Work together with other farmers to promote volunteerism versus additional regulatory controls. This means more certainty and fewer regulations.
- Create a baseline for your farm and farming in Chelan County.
- Document advances and changes that have already occurred.
- Conserve, improve, and increase efficient use of natural resources to support greater yields and produce quality.
- Promote a positive image of agriculture to the larger community.
- Enhance marketability of agricultural products.

**Voluntary Stewardship Work Plan Agricultural Viability Aims:** Avoid unnecessary local critical area regulations due to the prevalence of conservation practices undertaken to improve agricultural viability and promote environmental stewardship.

*Disclaimer: Every operation is unique and requires a site-specific assessment of: 1) Whether there is a need to implement conservation practices, and 2) Whether conservation practices are in fact appropriate to a site. Not all the information needed to implement these measures is contained in this checklist. Please see technical assistance providers for more guidance as well as funding opportunities.*

## STEP 1: GENERAL LOCATION INFORMATION

### Provide Location Information



1. What basin is your agricultural property located within?
  - a. Chelan
  - b. Entiat
  - c. Wenatchee
  - d. Squilchuck-Stemilt

2. Identify potential critical areas intersecting with agriculture:

**Instructions:** Use online tools to review critical area and agriculture maps: [County website or link to VSP-specific maps]. Visually review potential critical areas on or near your property, such as ponds, streams, wetlands, steep slopes, etc.

Types of potential critical areas on, or near, property:

- a. fish and wildlife habitat conservation areas
- b. wetlands
- c. frequently flooded areas
- d. geologically hazardous areas
- e. critical aquifer recharge areas (wellheads)

*Note:* Checking one or more critical areas that may *potentially* be located on or adjacent to the property does not constitute an official determination of such a feature. It is helpful in filling out the rest of the checklist.

### Consider Other Programs that Protect Critical Areas

3. Identify participation in producer programs that address environmental quality (e.g. nutrient management, integrated pest management, spray buffers, etc.).
  - a. Global Gap [Good Agricultural Practices]: <http://www.scsglobalservices.com/globalgap-certification>
  - b. Safe Quality Food Institute: <http://www.sqfi.com/>
  - c. PrimusLabs GAP: <http://www.primuslabs.com/services/standardgap.aspx>
  - d. Harmonized GAP: <http://www.scsglobalservices.com/harmonized-gap-audit>
  - e. Salmon Safe: <http://www.salmonsafe.org/>
  - f. Other: \_\_\_\_\_
4. Federal and state laws regarding the use and storage of pesticides and standards for water quality continue to apply.

### Consult Technical Providers

Contact Technical Advisors to advise you or in order to apply for funding to establish conservation practices.

**Lead Technical Assistance Provider:** Cascadia Conservation District <http://cascadiacd.org/>

**Supporting Technical Assistance Providers:**

USDA Natural Resources Conservation Service <http://www.usda.gov/wps/portal/usda/usdahome>

Washington State University Extension <http://county.wsu.edu/chelan-douglas/agriculture/Pages/default.aspx>

Chelan County Natural Resources Department <http://www2.co.chelan.wa.us/nr> (VSP Program Administration)

#### VSP Definitions (RCW 36.70A.703)

**Protection means:** preventing the degradation of functions and values existing as of July 22, 2011.

**Enhance means:** improving the processes, structure, and functions existing, as of July 22, 2011, of ecosystems and habitats associated with critical areas.

*Protection is required. Enhancement is voluntary. Direct enhancement would include net increases in critical areas, such as riparian vegetation planted along waterbodies. Indirect enhancement may include onsite conservation practices that have offsite benefits such as onsite water conservation practices assisting with stream flow offsite.*

## STEP 2: IDEAS FOR VOLUNTARY PRACTICES TO ENHANCE AGRICULTURE VIABILITY AND PROTECT CRITICAL AREAS

For each type of critical area, there are a series of conservation practices that could help achieve critical area protection, voluntary enhancement, and correspondingly achieve agricultural viability. Some conservation practices can help protect more than one type of critical area.

### 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"/> |

**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

**B. Agriculture Intersecting with Fish and Wildlife Habitat Areas**

**Definition of Fish and Wildlife Habitat Conservation Areas:** Land and waters managed to maintain populations of fish and wildlife species in suitable habitats within their natural geographic distribution over the long term within connected habitat blocks and open spaces. **Includes:**

- Ranges and habitat elements where federal and state listed endangered, threatened and sensitive species have a primary association
- Lakes, rivers, ponds, streams, inland waters, and underground waters

**Does not include** (when no salmonids are present): Artificial features such as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches maintained by a port district or an irrigation district or company (based on RCW 36.70A, WAC 365-190)

**VSP Fish and Wildlife Habitat Goals**

- Protect fish and wildlife populations and their associated habitats.
- Promote voluntary restoration and enhancement of fish and wildlife populations and their associated habitats.

**VSP Agriculture Viability Aims:**

- Protect orchards and vineyards from wildlife and pest damage.
- Promote economical water, soil, pest, and nutrient management that maximizes produce quality.

| Conservation Practice Examples   |          | I'm                      |                          |                          |
|--|----------|--------------------------|--------------------------|--------------------------|
|  |          | I do this                | interested in this       | Not Applicable           |
| <b>WILDLIFE HABITAT</b>  |          |                          |                          |                          |
|  | NRCS #   |                          |                          |                          |
| 15. Access control to exclude animals, people, vehicles, and/or equipment from an area           | 472      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Brush management to manage or remove plants that are invasive or noxious                     | 314      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Conservation cover to provide permanent vegetative cover                                     | 327      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Forest stand improvement practices that improve wildlife habitat                             | 666      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Fence: browsing animal management or wildlife movement management                            | 382      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Hedgerows that provide food, cover, and corridors for wildlife or improve water quality      | 422      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. Structures for wildlife: Raptor and bat nesting box for predator patrol                      | 649      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. Riparian herbaceous cover or Riparian forest buffer  | 390, 391 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. Tree/shrub establishment: for forest products, habitat, energy conservation, erosion control | 612      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Upland wildlife habitat management   | 645      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Watering facility for wildlife   | 614      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Wildlife and pollinator habitat planting   | 734      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. My ideas to meet the goal:   |          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Raptor Pole with Nesting Box**



Source: NRCS Wenatchee Field Office

**Livestock Holding, Exclusion Fence**



Tillicum Creek Fence Project, Mad River drainage, Entiat. Source: Habitat Work Schedule

**Wildlife and Pollinator Habitat Planting**



in an orchard and long side a field road  
Source: NRCS Wenatchee Field Office

| Conservation Practice Examples  | NRCS #   | I do this                | I'm interested in this   | Not Applicable           |
|---|----------|--------------------------|--------------------------|--------------------------|
|   |          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>FISH HABITAT</b>   |          |                          |                          |                          |
| 28. Access road: position away from water bodies and water courses                              | 560      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. Conservation cover  | 327      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30. Irrigation canal or lateral*  | 320      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 31. Irrigation pipeline*  | 430      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 32. Irrigation system, microirrigation*   | 441      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 33. Irrigation water management*  | 449      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. Prescribed grazing  | 528      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. Riparian herbaceous cover or Riparian forest buffer   | 390, 391 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 36. Seasonal high tunnel system for crops (soil moisture)                                       | 798      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. Sprinkler system  | 442      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. Streambank and shoreline protection   | 580      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. Tree/shrub establishment for forest products, habitat, energy conservation, erosion control | 612      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. My idea to meet the goal:   |          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

\*Note: Irrigation practices such as micro irrigation may or may not be appropriate depending on crop/plants irrigated, water quality, design/location, etc. Consider whether water use appears to be reasonable and beneficial.

**Micro-irrigation**



Soveredi

**Installation of Solid Set from Hand Lines**



Source: NRCS Wenatchee Field Office

**Seasonal High Tunnel**



Seasonal High Tunnel with the sides rolled up during hot summer days. Mulching to hold in heat and moisture and reduce weeds.

Source: NRCS Wenatchee Field Office

**Riparian Restoration & Wildlife Exclusion**



On property with pear and apple orchard, Installed native plants, an irrigation system and herbivory protection (exclusion fencing)

Source: Chelan County Natural Resources Department

**Riparian Restoration**



Cascadia Conservation District worked with eight landowners to improve riparian habitat and reduce water temperature exceedances.

Source: Cascadia Conservation District

### C. Agriculture Intersecting with Wetlands

**Definition of Wetlands:** Areas that are inundated or saturated by surface water or groundwater supporting a prevalence of vegetation adapted for life in saturated soil conditions.

**Includes**

- Swamps, marshes, bogs, and similar areas

**Excludes** Artificial wetlands per WAC 365-190-030(22)

Seek information about **Prior Converted Cropland** for wetlands cleared, drained or manipulated prior to December 23, 1985.

**VSP Critical Area Protection Goals**

- Protect the ecological and environmental functions of wetlands and protect the public health, safety and welfare benefits provided by wetlands by preventing loss of wetlands.
- Where practical, encourage voluntary enhancing or restoring wetland functions and values.

**Possible Conservation Practice Examples**

41. Wetland Creation
42. Wetland Enhancement
43. Wetland Restoration
44. Wetland Wildlife Habitat Management
45. My idea to meet the goal:

NRCS#

|     | I do this                | I'm interested in this   | Not Applicable           |
|-----|--------------------------|--------------------------|--------------------------|
| 658 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 659 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 657 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 644 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



- Agricultural Lands
- Rangelands (Approximate)
- Rivers and Streams
- Waterbodies
- Wetlands
- One Hundred Year Floodplain
- Roads
- Parcels
- City Limits

Chelan County VSP Agricultural and Critical Area Mapping: Wetlands and Floodplain in Stemilt Squilchuck Basin

### D. Agriculture Intersecting with Frequently Flooded Areas

**Definition of Frequently Flooded Areas:** Lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. **Includes** Streams, rivers, lakes, wetlands, and areas where high groundwater forms ponds on the ground surface (based on RCW 36.70A, WAC 365-190)

**VSP Agriculture Viability Aims**

- Avoid water contamination, damage to crops, loss of livestock, increased susceptibility of livestock to disease, and damaged farm machinery due to flooding.

**VSP Critical Area Protection Objectives:**

- Avoid environmental damage due to flooding such as from loss of floodplain storage or due to agricultural chemicals.

**Possible Conservation Practice Examples**

46. Avoid permanent changes in floodplain areas such as buildings, roads, and fill. Where alteration of floodplain is necessary, follow flood hazard regulations.
47. My idea to meet the objective:

NRCS #

|  | I do this                | I'm interested in this   | Not Applicable           |
|--|--------------------------|--------------------------|--------------------------|
| See RCW 86.16<br>See Chelan County Code Ch. 3.20 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Flooding causes many impacts to agricultural production, including water contamination, damage to crops, loss of livestock, increased susceptibility of livestock to disease, flooded farm machinery, and environmental damage to and from agricultural chemicals.

~Agriculture: Natural Events and Disasters, <http://www.epa.gov/agriculture/tned.html>.

**E. Agriculture Intersecting with Critical Aquifer Recharge Areas**

**Definition of Critical Aquifer Recharge Areas:** Areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge. (based on RCW 36.70A, WAC 365-190)

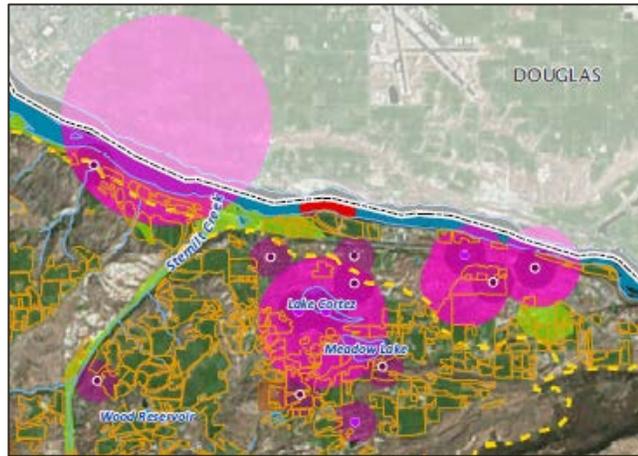
**VSP Critical Area Protection Objectives:**

- Protect water quality and water quantity in areas having a critical recharging effect on aquifers used for potable water.

**Legend**

- Agricultural Lands
- Rangelands (Approximate)
- Large Public Wells
- Small Public Wells
- Potential Wellhead Protection Zone (1,000 Ft)
- Wellhead Protection Zone (10 Year Time of Travel)
- Impacted Waterbodies (303d)
- Possible Aquifer Borders
- Surficial Alluvial Geology
- Rivers and Streams
- Waterbodies
- City Limits
- County Boundaries
- Watershed Boundaries

Mapped Critical Aquifer Recharge Areas, Portion of Squilchuck–Stemilt Basin



**Possible Conservation Practice Examples**

|   |        | I do this                | I'm interested in this   | Not Applicable           |
|---|--------|--------------------------|--------------------------|--------------------------|
|   | NRCS # |                          |                          |                          |
| 48. Water well: provide access to a groundwater supply suitable for livestock watering, fire control, wildlife, and other agricultural uses | 642    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. Groundwater testing to determine the quality of a groundwater supply  | 355    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50. My idea to meet the objective:<br>_____   |        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**STEP 3: MONITORING**

A technical assistance provider, coordinated by the Cascadia Conservation District, will contact you annually about the conservation practices installed. To assist with monitoring, you may be asked to provide additional information. You may request a field visit to obtain advice on improving the effectiveness of the conservation practices.

## IDEAS FOR AGRICULTURE VIABILITY INCENTIVES AND OUTCOMES

The VSP is designed to promote the viability of agriculture over the long term and to avoid unnecessary local critical area regulations due to the prevalence of conservation practices undertaken by willing producers. Producers may find cost-matching programs with technical providers (see contact information below).

51. What incentives could help you achieve your goals for your farm?



*Agricultural Activities, Wenatchee and Entiat Valleys*

## FOR INFORMATION & ASSISTANCE

List VSP Project Website

**Lead Technical Assistance Provider:** Cascadia Conservation District <http://cascadiacd.org/>, Name of Contact and Phone Number

Chelan County Natural Resources Department  
<http://www2.co.chelan.wa.us/nr> (VSP Program Administration)