Walla Walla County
Voluntary Stewardship Program

Draft Work Plan
June 2017

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List of Acronyms

ac-ft/yr	Acre-feet per year
ARC-CO	Agriculture Loss Coverage-County
BMPs	Best Management Practices
CAO	Critical Areas Ordinance
cfs	Cubic feet per second
County	Walla Walla County
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
DNR	Washington State Department of Natural Resources
Ecology	Washington State Department of Ecology
EQIP	Environmental Quality Incentives Program
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FSA	Farm Services Agency
GMA	Growth Management Act
LDP	Loan Deficiency Payment
NAP	Noninsured Crop Disaster Assistance Program
NFIP	National Flood Insurance Program
NRCS	Natural Resources Conservation Service
RCW	Revised Code of Washington
SCC	Washington State Conservation Commission
TAP	Tree Assistance Program
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VSP	Voluntary Stewardship Program
WAC	Washington Adiminstrative Code
WDFW	Washington Department of Fish and Wildlife
WRIA	Water Resource Inventory Area
WSDA	Washington State Department of Agriculture
WWCCD	Walla Walla County Conservation District
WWWMP	Walla Walla Water Management Partnership

Executive Summary

This Work Plan outlines the Walla Walla County Voluntary Stewardship Program's (VSP) strategy to protect critical areas where agricultural activities are conducted while maintaining and improving the long-term viability of agriculture in the County and reducing the conversion of farmland to other uses (Revised Code of Washington [RCW] 36.70A.700 (2a)). This Work Plan will "foster a spirit of cooperation and partnership among county, tribal, environmental, and agricultural interests to better assure the program success" and "maximize voluntary incentive programs to encourage good riparian and ecosystem stewardship as an alternative to historic approaches used to protect critical areas" (RCW 36.70A.700 (2e and 2b)).

The VSP is intended to give local land users a strong say in developing a plan that respects critical areas while maintaining the viability of agriculture in their community. The VSP is an alternative to the Critical Areas Ordinance (CAO) requirements in the Growth Management Act (GMA). The differences between these two alternatives are:

- Under VSP, priority is given to protecting both critical areas and the viability of agriculture, while GMA focuses only on protecting critical areas.
- VSP is a voluntary process to protect critical areas and maintain the viability of agriculture, while GMA is a regulatory system.

Walla Walla County opted into the VSP process in 2012, and in 2015, the legislature began funding VSP for the entire state. The Walla Walla County Board of Commissioners contracted to have the WWCCD direct the program. Under the VSP process, a local Work Group guides the development of the County Work Plan. The Walla Walla County Work Group has representatives from the agricultural community, tribal and environmental representatives, and other stakeholders.

This Work Plan includes a list of the critical areas subject to VSP, benchmarks/goals for the County, and an outreach plan. The process is guided by the Washington State Conservation Commission (SCC) with assistance from the Washington State Department of Ecology (Ecology), the Washington State Department of Agriculture (WSDA), the Washington State Department of Fish and Wildlife (WDFW), and the Washington Farm Bureau. More information on the VSP process can be found at the SCC website http://scc.wa.gov/vsp/.

In Walla Walla County, five types of critical areas are subject to VSP:

1. Fish and Wildlife Habitat Conservation Areas
2. Wetlands
3. Frequently Flooded Areas
4. Critical Aquifer Recharge Areas
5. Geologically Hazardous Areas
    a. Water Susceptibility of Erosion
    b. Wind Susceptibility of Erosion
    c. Landslides/Steep Slopes
    d. Seismic/Liquefaction

Only those critical areas that intersect with agricultural activities are addressed under VSP.

Section 1.0 - Introduction

1.1 Background

The GMA was adopted by the Washington State Legislature in 1990. The GMA provides for citizens, communities, local governments, and the private sector to cooperate and coordinate in comprehensive land use planning. The GMA requires county and local governments to adopt development regulations that protect critical areas.

Previously, agricultural activities were exempt from GMA regulations, but in 2005 and again in 2007, the Washington State Supreme Court ruled that agricultural activities could no longer be exempt (Court Nos. 31283-2-II and 76339-9). Agricultural communities, tribes, environmental groups, and government agencies worked with the William D. Ruckelshaus Center to protect critical areas and promote agriculture as laid out in Senate Bill 5248 (The William D. Ruckelshaus Center, 2010). In 2011, the VSP was signed into law and is regulated pursuant to RCW 36.70A.700. Washington State's VSP provides an alternative approach for counties to address the state's GMA requirements.

The VSP is a voluntary process intended to give local land users a strong say in developing a plan that protects critical areas overlapped by agricultural activities. The VSP works under the assumption that complex environmental problems can be solved through voluntary cooperation rather than regulatory mandates (The William D. Ruckelshaus Center, 2010).

After the County opted in and the legislature funded the program in 2015, the County contracted with the WWCCD to direct the program. WWCCD coordinated the formation of the Walla Walla VSP Work Group responsible for developing the Work Plan.

1.2 Work Plan Development – Roles and Responsibilities

RCW 36.70A.705 identifies roles and responsibilities for state agencies, counties, and VSP work groups. Table 1-1 identifies these roles and responsibilities as they apply to the Work Plan development.

TABLE 1-1
VSP Roles and Responsibilities for Plan Development

Agencies	Roles and Responsibilities
State Agencies	
SCC	Administers VSP statewide; approves/rejects locally developed plans
VSP Technical Panel	Provides technical guidance, reviews draft Work Plans, makes recommendation to SCC on whether to approve or reject the Work Plan
VSP State Advisory Committee	Works with SCC to revise rejected Work Plans
Local Agencies	
Walla Walla County	Administers VSP funding and grants for Work Plan development
Work Group	Develops the Work Plan for SCC approval
WWCCD	Manages and facilitates the VSP process and provides technical information to support Work Plan development
Agriculture Producers	
Farmers/Ranchers/Producers	Provide input on the draft Work Plan development

The WWCCD invited representatives of tribal governments; federal, state, and local agencies; environmental groups; water basin planning units; and agricultural groups (RCW 36.70A.700 (2e)) to form the Work Group.

The Work Group includes voting members, coordinating entities, and technical staff. These groups are summarized below. Implementation roles and responsibilities for the Work Plan are further described in Section 4.

Voting Members

- Agricultural community members (irrigation, livestock, dryland, and orchard)
- Tri-State Steelheaders
- Blue Mountain Land Trust
- Kooskooskie Commons
- CTUIR

Coordinating Entities and Technical Staff

- WDFW
- Walla Walla County
- WWCCD
- Anderson Perry & Associates, Inc.

Additional resources and guidance for this Work Plan were derived from:

- SCC website – http://scc.wa.gov/vsp/
- *A Framework for Stewardship: Final Report on the Work of the Agriculture and Critical Areas Committee* (The William D. Ruckelshaus Center, 2010)
- RCW 36.70A – Growth Management – Planning by Selected Counties and Cities
- RCW 36.70A.705 - Voluntary Stewardship Program Established – Administered by Commission – Agency Participation
- Walla Walla County Critical Areas Ordinance, *Best Available Science Review Final Draft* (HDR, 2008)
- Walla Walla County Code of Ordinances 18.08
- *Draft Voluntary Stewardship Program Work Plan* (Thurston County, 2015)
- *Draft Voluntary Stewardship Program White Paper: Agriculture, Critical Areas & Protection Alternatives* (BERK Consulting, 2014)
- Ecology
- WSDA
- Washington Farm Bureau
- WWCCD VSP website

1.3 Purpose

Figure 1-1
Balanced Approach of Critical Areas Protection and Agricultural Viability

Courtesy of Grant County VSP Work Plan

The purpose of this Work Plan is to outline Walla Walla County's strategy to "protect and enhance critical areas within the area where agricultural activities are conducted, while maintaining and improving the long-term viability of agriculture in the [County] and reducing the conversion of farmland to other uses" (RCW 36.70A.700 (2a)). This Work Plan is intended to "foster a spirit of cooperation and partnership among county, tribal, environmental, and agricultural interests to better assure the program success" and "maximize voluntary incentive programs to encourage good riparian and

ecosystem stewardship as an alternative to historic approaches used to protect critical areas" (RCW 36.70A.700 (2e and 2b)).

The Work Plan is intended to fulfill the state requirements outlined under RCW 36.70A.720(1)(a-l), which includes 12 specific Work Plan elements that must be addressed. This Work Plan addresses these elements, including the following major components:

- Evaluate existing information and resource conditions.
- Establish protection and enhancement goals and measurable benchmarks for critical areas while maintaining agricultural viability.
- Establish participation goals by agricultural producers to meet measurable benchmarks.
- Provide a framework for monitoring and reporting.
- Facilitate landowner participation and outreach.

What is Agriculture Viability?

The WSDA, VSP, and SCC Office of Farmland Preservation have provided suggestions to define "maintaining and improving the long-term viability of agriculture," but directed that the definition be defined locally. The definition selected by the Walla Walla County VSP Work Group is:

The ability of farmers and ranchers to maintain an economically successful agricultural business, keep the land in agriculture long-term, and sustain the land so it will remain productive into the future.

1.4 Work Plan Approval

The Work Group is responsible for developing and administering the Work Plan on an ongoing basis throughout implementation and monitoring. The Work Group is also responsible for designating technical assistance providers, identifying outreach and implementation approaches, setting goals and benchmarks, establishing a monitoring plan, regular reporting, and adaptive management toward the plan goals. The Work Group must submit the Work Plan to the Director of the SCC and Technical Panel for approval. The Technical Panel will apply the following statutory test to approve the VSP Work Plan (RCW 36.70A.725):

> *"… at the end of ten years after receipt of funding, the work plan, in conjunction with other existing plans and regulations, will protect critical areas while maintaining and enhancing the viability of agriculture in the watershed."*

If the Technical Panel determines the proposed Work Plan meets the above test, it will recommend approval of the Work Plan. If the proposed Work Plan is found to not meet the requirements, the Technical Panel will identify the reasons for its determination and advise the Work Group of the

reasons for disapproval. The Work Group may then modify and resubmit the Work Plan for review and approval. The Work Plan must be approved within 3 years after receipt of funding if the above test is met, as determined through the VSP Work Plan approval process (RCW 36.70A.725).

If a Work Plan is not approved within 3 years of initial funding, or if plan goals and benchmarks are not met after adaptive management efforts, the County maintains the responsibility for protecting critical areas under GMA via the standard regulatory approaches (RCW 36.70A.710).To receive approval, the Work Plan must protect critical areas in a way that maintains agricultural viability (RCW 36.70A.725). For the purposes of VSP, activities or methods that protect critical areas must also be neutral to or benefit farm operations, such as reducing input costs or reducing soil erosion. Further, the VSP will not require an agricultural producer to discontinue agricultural activities that legally existed before July 22, 2011 (RCW 36.70A.702).

1.5 Regulatory Measures

VSP statutes do not grant counties or state agencies any additional regulatory authority to protect critical areas on lands used for agricultural activities (RCW 36.70A.702). To promote producer participation and productive discussion among Work Group members, VSP statutes prohibit, with narrow exceptions, county promulgation of new critical area regulations related to agricultural activities during the VSP process (RCW 36.70A.130(8)(a)).

With regard to conservation programs, the VSP is not to be administered in a manner that prevents operator eligibility for environmental incentives (RCW 36.70A.702). VSP participants with conservation contracts (e.g., Conservation Reserve Enhancement Program [CREP], Conservation Reserve Program [CRP], Conservation Stewardship Program [CSP], etc.) are not required by VSP to continue their voluntary measures after contract expiration (RCW 36.70A.760). Finally, the VSP statutes do not require participation from agricultural operators (RCW 36.70A.705). VSP participation is voluntary. Agricultural operators volunteering to participate may withdraw from the VSP program at any time (RCW 36.70A.702).

Section 2.0 - Walla Walla County Profile and Baseline Conditions

2.1 Walla Walla County Overview

Walla Walla County is located in southeastern Washington. The following excerpt from *Walla Walla County Comprehensive Plan Update 2007 and 2009* (Stalzer and Associates et al., 2007) provides an overview of the County.

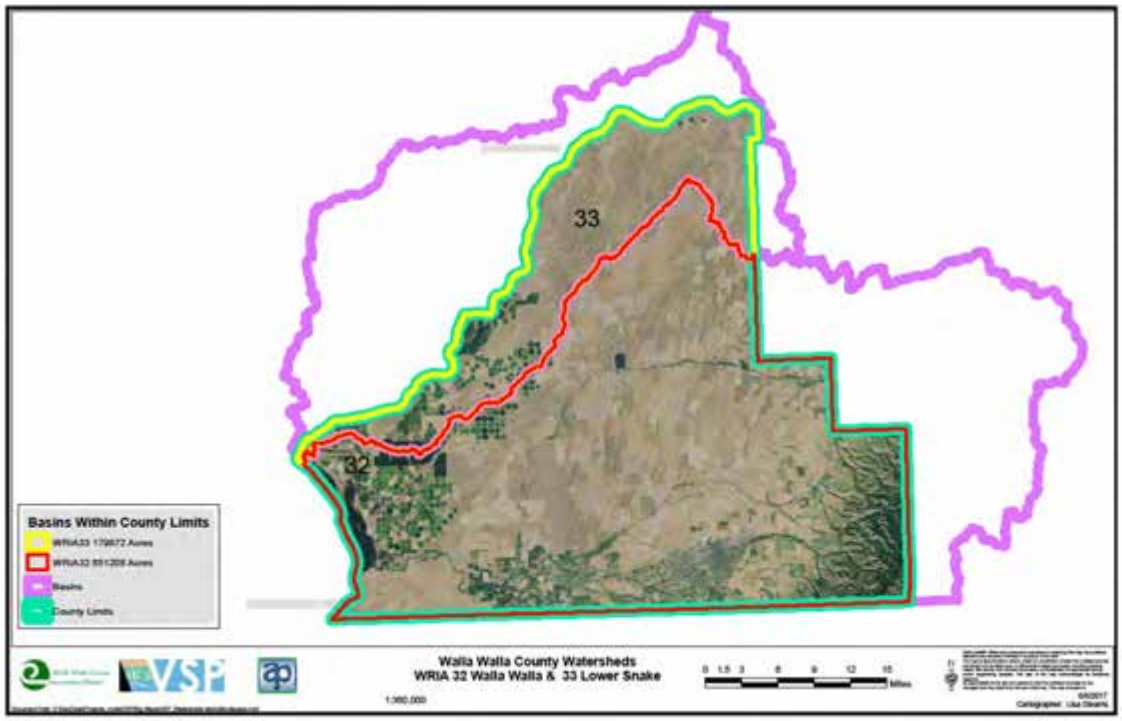
> *"According to the U.S. Census Bureau, Walla Walla County has a total area of 1,299 square miles, of which 1,270 square miles (97.8 percent) are land and 29 square miles (2.2 percent) are water. Approximately 90 percent of the basin is privately owned, approximately 9 percent is managed by federal/state agencies, and the remaining portions are located within the aboriginal title lands of the Confederated Tribes of the Umatilla Indian Reservation...*
>
> *The majority of the County is part of the Walla Walla River basin. The Walla Walla River flows into the Columbia River near Wallula. The Walla Walla River basin (and the County) is located between the physiographic regions of the Blue Mountains and the Columbia River Plateau.*
>
> *Native Americans (Umatilla, Walla Walla, and Cayuse Tribes) were the first people in recorded history to live in Walla Walla County. Lewis and Clark explored the area between 1804 and 1806. Missionary settlements were established around 1836. The City of Walla Walla was settled in 1859 and became the County Seat on November 7, 1859. The County and its cities contain numerous historic and cultural resources that reflect the unique heritage of this area."*

2.1.1 Watersheds

There are two watersheds within Walla Walla County. The County watersheds include portions of the Walla Walla Water Resource Inventory Area (WRIA) 32 and the Lower Snake WRIA 33 (see Figure 2-1). The watersheds cross several county and state boundaries.

In each watershed, significant environmental features include riparian areas supporting wildlife and salmonid resources and extensive forest and shrub-steppe resources. The Work Group acknowledges the limitations of addressing some components within the watersheds that may be beyond the political boundaries of Walla Walla County. Instead, this Work Plan focuses on attainable actions within Walla Walla County.

FIGURE 2-1
Walla Walla County VSP Watersheds
(Walla Walla WRIA 32 and Lower Snake WRIA 33)



2.1.2 Soils and Terrain

The soils in Walla Walla County are predominantly silty loam derived from either loess or flood deposits from glacial Lake Missoula. A sandy loam is located in the west center portion of the County know as Eureka Flats. These loam soils overlay a series of alluvial channels and gravel deposits that comprise the shallow aquifer. These alluvial deposits are underlain by multiple layers of basalt flood deposits. The deep basalt aquifer is found between the basalt flood layer of permeable interflow zones formed at the top and bottom of the basalt flood layers.

The southeast portion of the County is situated at the foothills of the Blue Mountains. The topography across the majority of the County consists of rolling hills bisected by the Touchet and Walla Walla Rivers that drain west to the confluence of the Snake and Columbia Rivers.

2.1.3 Precipitation and Water Resources

Rainfall in Walla Walla County ranges between 8 inches per year in the western corner near Burbank up to 44 inches in the foothills of the Blue Mountains. Precipitation contributes to the shallow alluvial aquifer through surface flow.

In general, the upper portions of the Walla Walla River basin (including the Touchet River, Coppei Creek, Dry Creek, Mill Creek, and numerous other smaller creeks) flow from steep, narrow, well-defined mountainous canyons. Many of the lower reaches of the creeks and rivers are inset in narrow, steep-sided, shallow canyons formed in easily erodible soils. The shallow canyons are inset into wide floodplains bounded on either side by gently rolling hills or steep-walled bluffs. The mouth of the Walla Walla River is at about 340 feet above mean sea level near Wallula Junction.

2.1.4 Land Uses and Land Cover

Historic land cover was shrub-steppe with cottonwood dominated riparian areas. Colonization and agricultural development have altered the landscape. Current land use consists of dryland wheat and other grains, hay, irrigated alfalfa seed, and orchards successively from east to west. Vineyards and vegetable fields are interspersed across the south portion of the County. Irrigated lands are generally located in the south portion of the County and along Dry Creek, Mill Creek, the Touchet River, and the Walla Walla River.

2.2 Value and Extent of Agriculture in Walla Walla County

Agriculture is the most significant single industry in Walla Walla County, contributing to the area's 1,882 food processing jobs (WSDA, 2015) and 8,021 hired farm workers (U.S. Department of Agriculture [USDA], 2012).

The role of agriculture within the watersheds, including the number and acreage of farms, the economic value of crops and livestock, and the risk of the conversion of farmland was taken into account when developing this Work Plan.

Data on Walla Walla County farmlands was acquired from the 2012 USDA *Census of Agriculture* and is shown in Tables 2-1, 2-2, and 2-3. The next USDA agricultural census will take place in 2017 but will not reflect VSP efforts. There is a delay between the census and VSP implementation. If VSP Individual Stewardship Plans are developed in 2018, those efforts won't be reflected until the following 2022 USDA census. The USDA census data will be utilized as a measurement tool to determine agricultural trends in Walla Walla County.

TABLE 2-1
Walla Walla County Farm Statistics

Description	Year				
	1992	1997	2002	2007	2012
No. of Farms	745	960	890	929	943
Acres Actively Farmed	710,546	751,069	700,560	682,350	645,121
Average Farm Size (acres)	954	782	787	734	684
Median Farm Size (acres)	-	150	148	45	42

Table 2-1 indicates a decline of actively farmed acres by 9 percent over the past two decades and illustrates the declining trend in Walla Walla County agriculture. While the number of farms has increased, the median farm size has decreased. This could be attributed to segmentation of farms to smaller parcels.

TABLE 2-2
Walla Walla County Farmland Use

Description	Year (acres)				
	1992	1997	2002	2007	2012
Cropland in Farms	604,519	597,738	559,439	567,192	565,792
Harvested Cropland	335,454	342,371	316,313	282092	280,934
Irrigated Land	92,702	97,136	94,067	92,438	91,108
Orchards	6,911	8,057	12,624	12,517	12,200
Vegetables	19,490	23,385	15,957	21,126	19,619

Table 2-2 shows a general decrease in harvested cropland and an increase in orchard acres between 1992 and 2012. Orchard acres include apples, stone fruits (sweet cherries, peaches, pears, apricots, and plums) and grapes (wine, table, and juice).

TABLE 2-3
Top 2012 Walla Walla County Crops Based on Acres

Crop	Acres
Wheat	192,570
Hay	13,188
Corn	11,724
Dry Edible Beans	10,270
Potatoes	8,500
Alfalfa Seed*	8,272
Apples	7,700
Grapes	3,721
Barley	1,670

* *Walla Walla County alfalfa seed growers contribute to 25 percent of the U.S. alfalfa seed production*

Table 2-3 shows the area's top nine crops based on acreage. While not shown in Table 2-3, cattle is one of the area's top three economic commodities (following wheat and apples). In 2012, Walla Walla County had 187 cattle farms and seven dairy farms with a combined total of 57,400 cattle and calves.

In Walla Walla County, the annual market value of crops and livestock was $437 million (USDA, 2012), and the 2013 food processing industry gross sales totaled $1.1 billion (WSDA, 2015).

2.3 Critical Areas

2.3.1 Critical Areas Definition

Critical areas perform key functions that enhance the environment (e.g., water quality and fish and wildlife habitat) and provide protections from hazards (e.g., flood, erosion, or landslide hazards). Critical area definitions used in this Work Plan are pursuant to Walla Walla County Code Chapter 18.08; as originally designated by Washington Administrative Code (WAC) 365-190-080.

Historic flooding in Walla Walla County (1949). Photo courtesy of USDA NRCS archives. Used with permission.

In Walla Walla County, five types of critical areas are subject to VSP:

- Fish and Wildlife Habitat Conservation Areas (Habitat)
- Wetlands
- Frequently Flooded Areas (FFA)
- Critical Aquifer Recharge Areas (CARA)
- Geologically Hazardous Areas (GHA)
  - Water Susceptibility of Erosion
  - Wind Susceptibility of Erosion
  - Landslides/Steep Slopes
  - Seismic/Liquefaction

Only those critical areas that intersect with agricultural activities are addressed under VSP.

Wetland

2.3.2 Critical Areas Functions and Values

VSP programs are required to set goals and benchmarks to protect and enhance critical area functions and values (RCW 36.70A.720).These functions and values can be summarized into four major categories:

1. Water quality
2. Hydrology
3. Soil health
4. Fish and wildlife habitat

Each critical area provides one or more of these functions and values, which are summarized in Table 2-4. The relationship between critical areas and the four functions and values is discussed further in Section 4. VSP goals and benchmarks to protect critical areas are focused on protecting these functions and values (see Section 5 for Goals and Benchmarks). For Walla Walla County, each critical area has its own function and value, as discussed in Section 4.

TABLE 2-4
Critical Area Functions

Critical Area	Function			
	Water Quality	Hydrology	Soil Health	Habitat
Fish and Wildlife Habitat Conservation Areas	•	•	•	•
Wetlands	•	•		•
Frequently Flooded Areas	•	•	•	•
Critical Aquifer Recharge Areas	•	•	•	•
Geologically Hazardous Areas	•	•	•	•

2.4 Baseline

The effective date of the VSP legislation is July 22, 2011. This is also the date chosen by the legislature as the applicable baseline for accomplishing the following items (RCW 36.70A.703):

- Protecting critical area functions and values
- Providing incentive-based voluntary enhancements to critical areas functions and values
- Maintaining and enhancing the viability of agriculture in the County

To successfully meet these criteria, the County must protect critical area functions and values as they existed on July 22, 2011. The 2011 baseline sets the conditions from which the County will measure progress in implementing the Work Plan and meeting measurable benchmarks (see Section 5). This Section establishes critical areas and their intersection with agriculture as they existed in the County as of 2011.

2.4.1 Baseline Establishment

To establish a baseline, an inventory of agriculture and critical area resources needed to be conducted; however, funding for inventories was not available. Therefore, other information for baseline conditions was utilized to establish the baseline, such as the data sources presented below and the use of existing programs to maintain and enhance farmland in Walla Walla County.

2.4.2 Baseline Intersection between Critical Areas and Agriculture Lands

The overlap between critical areas and agricultural lands generally accounts for only a small percentage of the total agricultural land in the County, with the exception of Geological Hazardous Areas. This overlap does not mean those critical area intersection acres are protected. Rather, this is a starting point for agricultural influence. A more detailed description of the intersection between critical areas and agriculture land is described in Section 4.

Table 2-5 provides the approximate acreage of each critical area, the overlap of critical areas and agricultural lands, and the percentage of agricultural lands intersecting with each critical area throughout Walla Walla County. This information provides the baseline for which the VSP's overall success will be measured.

TABLE 2-5
Intersection of Critical Areas and Agricultural Lands

Critical Area	Total Critical Areas in Walla Walla County[1]		Total Intersection of Agriculture and Critical Area	
	(acres)[2]	(%)	(acres)[2]	(%)
1. Fish and Wildlife Habitat	319,981	38.5	300,381	36.1
2. Wetlands	71,081	8.5	1,647	0.2
3. Frequently Flooded Areas: 100-year Zones A, AE, and AO	37,375	4.5	17,478	2.1
4. Critical Aquifer Recharge Areas:				
a. Gravel Aquifer[3]	94,362	11.4	79,241	9.5
b. Zone 1: High Vulnerability	58,007	6.98	55,053	6.6
5. Geologically Hazardous Areas				
a. Water Susceptibility of Erosion (moderate to very high)	753,553	90.6	737,482	88.7
b. Wind Susceptibility of Erosion (moderate to very high)	780,670	93.9	751,961	90.4
c. Seismic/Liquefaction	190,644	22.9	162,733	19.6
d. Landslides/Steep Slopes	177,111	21.3	176,996	21.29

[1] – *Municipalities (Cities of Walla Walla and College Place) are not included.*

[2] – *Rounded to the nearest whole acre.*

[3] – *Total gravel aquifer area is 132,191 acres and includes agricultural lands and portions of Walla Walla County, municipalities (Cities of Walla Walla and College Place), and Oregon. Agricultural lands cover 60 percent of the gravel aquifer.*

While VSP includes participation of small-scale, non-commercial agricultural producers; these numerous small holdings are not included in Table 2-5, as the information is unavailable.

2.4.3 Agriculture Viability Baseline

Agriculture is widely recognized as the foundation of Walla Walla County's economic base. Agricultural viability in the County includes regional and individual farm elements. The Walla Walla County VSP Work Group has defined Agriculture Viability as "The ability of farmers and ranchers to maintain an economically successful agricultural business, keep the land in agriculture long-term, and sustain the land so it will remain productive into the future." Table 2-1 shows the most current farm statistics for Walla Walla County.

Agricultural viability rests primarily on the productivity of the land and the ability of the operator to balance input costs with sales and market pressures. Walla Walla County has a large variety of agricultural products and practices, and there is not one universal agricultural viability concern. The primary obstacles to agricultural viability include:

- Urban encroachment from zoning changes and real estate development
- Segmentation of larger farms into smaller parcels
- Decreasing commodity prices
- Increasing production costs (weed control, fertilizer, water, etc.)
- Lack of community understanding of agriculture
- Inadequate succession planning
- Lack of water, water over-allocated, and declining water tables
- Herbicide/insecticide resistance of weeds and insects
- Increased regulation
- Shipping disruptions

While there are many obstacles to agriculture viability, this Work Plan emphasizes implementing stewardship and conservation measures through a systematic approach that maximizes dual benefits of protecting and enhancing critical areas while enhancing agricultural viability. These systems are a suite of farming practices, applied by crop type, that target multiple agricultural viability concerns, including water, nutrient, pest, and residue management. In combination, practices that maximize benefits and synergies through a systematic approach are expected to have the most benefit for critical areas and agricultural viability.

Another important aspect of agricultural viability is the importance of operating and maintaining existing stewardship practices to achieve long-term benefits and minimize recidivism, or practices that are discontinued over time. The continued operation of existing stewardship practices will be a key component of VSP implementation. New technology is another area that can be explored by agricultural producers to improve the operation of existing stewardship practices and systems or establish new ones. As described in this Work Plan, stewardship practices have the potential to benefit multiple resources, including agricultural practices and critical areas.

Section 3.0 - Protection and Enhancement Strategies

3.1 Utilizing Stewardship Activities to Support VSP

Many stewardship practices have been adopted within the County that benefit critical areas as well as maintain agricultural viability. Table 3-1 (see Section 3.2) summarizes some examples of practices that have been applied by agricultural producers in the County under the Natural Resources Conservation Service (NRCS) and (Farm Services Agency) FSA programs. This table helps illustrate the types of practices that have been or can be implemented to protect critical areas. As noted in the table, these examples also help support agricultural viability.

Farming practices focused on effective conservation can also help protect critical areas. Some examples include:

- Application of irrigation efficiency/water management practices
- Implement nutrient and pest management practices
- Set aside a buffer area
- Adopt low-disturbance tillage

The WWCCD is available to provide technical guidance in identifying farming practices that promote agricultural viability, protect critical areas, and further the goals of this Work Plan.

An Individual Conservation Planning Worksheet (see Appendix A) was developed to assist agricultural producers and the WWCCD in determining how the VSP can apply to individual operations. Section 3.3 below provides a more comprehensive "toolbox" of practices that have been or could be implemented by agricultural producers within the County.

3.2 Participation and Stewardship Activities

Agricultural producers play a major role in the stewardship and management of private lands and resources within Walla Walla County. Agricultural producers are continually improving agricultural practices, applying new science and technology, and implementing stewardship practices that reduce agricultural impacts on critical areas, as well as maintaining or increasing the viability of the agricultural economy. In Walla Walla County, agricultural producers have adopted a variety of practices to address many of the major resource concerns within the County, including practices to improve irrigation water management, habitats, and soil quality and to reduce soil erosion. This section introduces the connection between stewardship practices and critical area functions and values. Additionally, this section discusses the stewardship strategies and practices that have been implemented since 2011.

Since 2011, agricultural producers have implemented practices that provide protections and enhancements to critical areas and promote agricultural viability through private efforts and projects funded by federal, state, and local governments. One of the key purposes of the VSP and this Work Plan is to leverage existing resources by relying on existing local planning efforts, existing private-sector activities, and government programs to achieve Work Plan goals (RCW36.70A.700(2)(d)).

Table 3-1 exhibits restoration and conservation actions implemented prior to July 22, 2011 and from July 22, 2011 to December 31, 2016 that have likely protected or enhanced critical areas and improved agricultural viability over baseline conditions. These actions were compiled from the Recreation and Conservation Office Salmon Recovery Board Habitat Work Schedule (http://hws.ekosystem.us/) and known completed projects by WDFW, WWCCD, and other agencies. Table 3-1 does not provide an exhaustive list, as not all restoration and protection activities undertaken in Walla Walla County are listed in the Habitat Work Schedule data system. These documented practices likely represent only a subset of all the stewardship practices that have been implemented since 2011, because many agricultural producers in the County implement practices independent of government programs. Accounting for these improvements would require extensive self-reporting and documentation processes that are not yet in place. Additionally, it should be acknowledged that there are likely some practices that have been discontinued. This list of restoration and conservation actions is given with the recognition that critical areas functions and values include conditions and processes that support the ecosystem at more than a site-specific scale.

TABLE 3-1
Restoration and Conservation Actions

NRCS Practice Code	Activity	Metric (Prior to 7/22/2011)	Metric (7/22/2011 to 12/31/2016)	Critical Area(s)
Land Acquisition and Conservation Easements				
-	Farmland protected via easements	-	200 acres	Habitat
645	Upland protected via easements, includes agriculture and habitat	-	228 acres	GHA
644/391	Riparian habitat protected via easements	-	0.85 mile	Habitat, Wetland, FFA, GHA
Irrigation and Streamflow Enhancement				
430	Conversion of open ditch to piped system	25.84 miles	15.27 miles	Habitat, CARA, GHA
646/118	Water rights placed in trust	9.74	9.27 cfs	Habitat, CARA, GHA
118	Local water plans created	3	2	Habitat, CARA, GHA
646/574	Shallow aquifer recharge	Oregon only	300 ac-ft/yr	Habitat, CARA, GHA
587	Meters installed	>382	87	Habitat, CARA, GHA
Fish Passage Improvement				
348	Barriers removed	7	12	FFA, GHA
396	Fish screens installed	>343	48	Habitat
Riparian Enhancement				
342/391	Riparian forest buffer planted	3,174 acres	239.8 acres	All
342/391	Riparian forest buffer replanted/ maintained	-	691.62 acres	All
393	Grass filter strip	-	17.87 acres	All
657+	Wetland buffer	-	21.74 acres	All
Floodplain Restoration/Fish and Wildlife Habitat				
395/580	Engineered logjam placement	8	4	Habitat, FFA, CARA, GHA
395/580	Log with rootwad placement	18	6	Habitat, FFA, CARA, GHA
395/584	Secondary channels reconnected	-	1,000 linear feet	Habitat, FFA, CARA, GHA
342	Floodplain planted	2.9	1.2 acres	Habitat, FFA, CARA
395	Riparian streambank improved	1,780 linear feet	4,740 linear feet	Habitat, FF
645	Upstream habitat opened	188 miles	10.44 miles	Habitat
578	Stream crossing (bridge or hardened crossing)	-	2	Habitat
649	Barn owl boxes installed	-	41	Habitat

The implementation of conservation practices can result in changes to baseline conditions of critical areas at a site or watershed scale. The conservation practices implemented since July 22, 2011 demonstrate progress of conservation and restoration actions and critical areas protection strategies in Walla Walla County. Since 2011, a total of 23 types of activities and/or 18 NRCS conservation practice codes were implemented in Walla Walla County.

These results illustrate implementation of some of the watershed plan strategies that have implicit protection and enhancement objectives. Land acquisition and conservation easements represent protection of critical areas, while restoration and enhancement actions improve the quality of critical area functions and values. These actions are not limited to areas with agricultural activities, although VSP is specific to activities related to agriculture.

In the future, the Work Group should track conservation and restoration actions based on the intersection of critical areas with agricultural activities. The stewardship activities listed in Table 3-2 are examples of measurable actions that demonstrate protection of critical areas and farmland in Walla Walla County and can be included and monitored in VSP Individual Stewardship Plans.

NRCS practice codes can be used to catalog and quantify actions taken since July 22, 2011 that support the goals of VSP. Both NRCS and WWCCD track activities by conservation practice, but they are required to maintain confidentiality of detailed information. Conservation plans provide an example of agricultural producer's efforts to install conservation practices. These conservation plans can be provided with permission of the participating landowners.

Table 3-2 summarizes the type of stewardship activities that can be included in VSP Individual Stewardship Plans and that promote enhancement of critical areas and long-term maintenance and improvement of agriculture in Walla Walla County.

TABLE 3-2
Stewardship Activities by NRCS Practice Code (July 22, 2011 to December 31, 2016)

NRCS Practice Code	Conservation Practice	Count of Annual Contracts	Approximate No. of Operators	NRCS Contracted Acres	Additional Acres
122	Agricultural energy management plan - headquarters criteria	1	1	17	-
124	Agriculture energy management plan, landscape	1	1	4,834.6	-
314	Brush management	1	1	30	-
106	Conservation activity plan – forest management plan	1	1	23	-
327	Conservation cover	31	7	662.7	17.87
328	Conservation crop rotation	7	2	287.2	-
340	Cover crop	5	2	203.2	-
342	Critical area planting	2	2	1,706.1	-
382	Fence	3	1	24.7	-
386	Field border	4	1	953.6	-
393	Filter strip	1	1	527	-

TABLE 3-2 (cont.)
Stewardship Activities by NRCS Practice Code (July 22, 2011 to December 31, 2016)

NRCS Practice Code	Conservation Practice	Count of Annual Contracts	Approximate No. of Operators	NRCS Contracted Acres	Additional Acres
512	Forage and biomass planting	4	1	24.7	-
315	Herbaceous weed control	2	1	30	-
595	Integrated pest management	236	14	6,796	-
430	Irrigation pipeline	15	5	955.3	-
442	Irrigation system, sprinkler	16	4	924.3	-
449	Irrigation water management*	96	10	1,027.8	-
590	Nutrient management	170	15	6,804.8	-
533	Pumping plant	22	4	152	-
550	Range planting	7	1	30	-
329	Residue and tillage management, no-till/strip till/direct seed	35	6	3,320.8	-
345	Residue and tillage management, reduced till (mulch till)	5	1	953.6	-
645	Upland wildlife habitat management	39	4	1,021.1	-
734	Vegetative barrier	7	1	527	-
380	Windbreak/shelterbelt establishment	2	1	24.7	-
391	Riparian forest buffer	-	-	-	239.8
391re	Riparian forest buffer	-	-		691.6
657	Wetlands restored	-	-	-	21.74
580	Streambank protection	-	-	-	-
584	Channel Stabilization	-	-	-	-

* *Cumulative acres are not calculated since many conservation practices overlap. Cumulative acres would result in counting acreages multiple times.*

The number and type of USDA FSA contracts as of 2015 are shown in Table 3-3.

TABLE 3-3
USDA FSA Contracts as of 2015

NRCS Practice Code	Conservation Practice	Contracts	Acres
327	General CRP*	601	137,742
327/342/391	Continuous CRP including Highly Erodible Land Initiative	~120	~9,000
391	CREP	~140	~3000

** The number of contracts (601) and acres (137,742) includes CRP, continuous CRP (HEL), and CREP*

3.3 Voluntary Incentive Programs

Conservation of environmentally critical areas can be combined with the maintenance and enhancement of agricultural operations through the implementation of voluntary incentive programs. Agricultural producers participate in numerous voluntary programs that may contribute to the protection or enhancement of critical areas. These programs are predominantly government programs.

Agricultural producers may choose to implement conservation practices without financial assistance from government cost share programs. These contributions are just as valued and important as government contracts.

Programs are dynamic and influenced by changing state and federal regulations, industry norms, market conditions, and local priorities. Some existing voluntary incentive programs that are currently available to private landowners include, but are not limited to:

USDA NRCS Financial Assistance Programs – Provide technical and financial assistance to implement conservation practices for sustainable natural resources management. These voluntary programs address natural resources concerns, help save energy, promote agricultural stewardship, and improve environmental quality. Programs include:

- Environmental Quality Incentive Program (EQIP) – Helps agricultural producers address a specific natural resources need utilizing tools such as a Conservation Activity Plan to identify conservation practices and deliver environmental benefits, including improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, and improved wildlife habitat.
- Conservation Stewardship Program (CSP) – Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns. Participants earn CSP payments for conservation performance (the higher the performance, the higher the payment).
- Agricultural Conservation Easement Programs – Provides financial and technical assistance to help conserve agricultural and wetlands and their related benefits. Under the Agricultural Land Easements component, NRCS helps tribes, state, and local governments and non governmental organizations protect working agricultural lands and limit non-agricultural uses of the land.

More info on USDA NRCS Financial Assistance Programs is available at http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/.

USDA FSA Financial Assistance Programs – Provide financial assistance to support agricultural commodities. Programs include:

- Conservation Reserve Program (CRP) – Pays a yearly rental payment in exchange for farmers removing environmentally sensitive land from agricultural production and planting species that will improve environmental quality.
- Conservation Reserve Enhancement Program (CREP) – An offshoot of CRP, targets high priority conservation issues identified by government and non-governmental organizations. Farmland that falls under these conservation issues is removed from production in exchange for annual rental payments. In Walla Walla County, CREP may be installed on eligible streams with documented Endangered Species Act (ESA) listed salmonid presence.
- Agriculture Loss Coverage-County (ARC-CO) – Provides revenue loss coverage at the county level. ARC-CO payments are issued when the actual county crop revenue of a covered commodity is less than the ARC-CO guarantee for the covered commodity.
- Price Loss Coverage – Issues payments when the effective price of a covered commodity is less than the respective reference price for that commodity. The effective price equals the higher of the market year average price or the national average loan rate for the covered commodity.
- For a commodity to be eligible for a marketing assistance loan or a loan deficiency payment (LDP), the producer must have beneficial interest in the commodity in addition to other eligibility requirements.
- Noninsured Crop Disaster Assistance Program (NAP) – Provides financial assistance to producers of non-insurable crops when low yields, loss of inventory, or prevented planting occur due to natural disasters. FSA in Walla Walla County has limited assistance to fruit or vegetable producers through the NAP.
- Tree Assistance Program (TAP) – Provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees, bushes, and vines damaged by natural disasters. FSA in Walla Walla County has limited assistance to fruit or vegetable producers through the TAP.

Other programs include Commodity Operations through Warehouse Services, Disaster Assistance Programs, Price Support using LDP and posted county price. More information on USDA FSA Financial Assistance programs is available at https://www.fsa.usda.gov/programs-and-services/index.

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U.S. Fish and Wildlife Service (USFWS) - Programs include:

- Safe Harbor Agreements – Property owners voluntarily agree to actions that contribute to the recovery of species protected by the ESA. In exchange, USFWS gives assurances that additional or different management activities will not be required without the landowner's consent. The property owner receives an Enhancement of Survival Permit when the Safe Harbor Agreement is finalized. More information on Safe Harbor Agreements is available at http://www.fws.gov/endangered/landowners/safe-harbor-agreements.html.
- Candidate Conservation Agreements – Working with USFWS, participants voluntarily identify threats to species that are candidates for ESA protection and design and implement conservation measures so that listing may not be necessary.
- Partners for Fish and Wildlife Program – Locally-based field biologists work one-on-one with partners to plan, implement, and monitor projects that focus on restoring habitat for migratory birds, anadromous fish, and declining plant and animal species. The program provides financial and technical assistance to private landowners, tribes, and other conservation partners. Partners for Fish and Wildlife Program field staff help landowners find other sources of funding and help them through any necessary environmental permitting. Cooperators sign an agreement to retain restoration projects for at least 10 years, but they otherwise retain full control of their land. More information on the Partners for Fish and Wildlife Program is available at http://www.fws.gov/partners/aboutus.html.
- Conservation Banks – Property owners can obtain credits for permanently protecting their land and managing it for threatened, endangered, candidates for listing, or otherwise at-risk species. They can sell these credits to developers who need to mitigate for adverse impacts to these rare and protected species. If landowners need to develop portions of their lands, they may be able to mitigate the impacts to endangered species by purchasing credits from a Conservation Bank. These banks consolidate conservation efforts on large conservation preserves and manage the resources in perpetuity. More information on Conservation Banks is available at http://www.fws.gov/endangered/landowners/conservation-banking.html.

3.4 Organizational Lead

The WWCCD will lead the program participation efforts with support by WSDA, WDFW, Ecology, NRCS, USFWS, FSA, stakeholders, and others, with their respective programs. Technical assistance occurs in a variety of ways, including developing Individual Stewardship Plans, providing advice on the use of specific practices, and sharing information at forums, meetings, and other venues where conservation practices are highlighted for environmental and economic benefits. Walla Walla County has a host of conservation groups that can provide assistance. WWCCD will prepare biennial work plans that identify the following:

- VSP outreach activities
- Technical assistance and conservation practices implementation
- Monitoring of critical area functions and values.

Section 6 identifies potential VSP outreach strategies, opportunities, and forums.

Section 4.0 - Individual Critical Areas Goals

4.1 Approach to Establishing Critical Area Goals

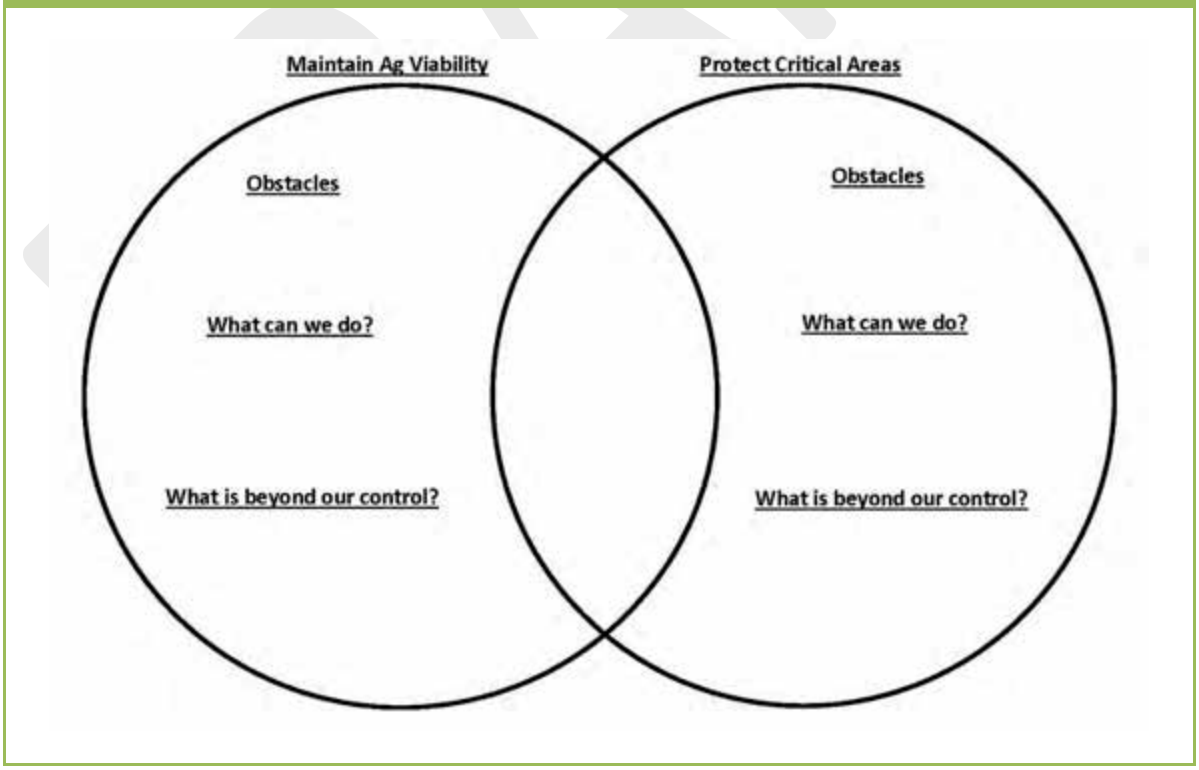
State law requires VSP Work Plans to include goals and benchmarks for protecting and enhancing critical areas. Pursuant to RCW 36.70A.715, individual goals for protecting critical areas are provided below. In developing these goals, the Work Group considered:

- Obstacles to agricultural viability
- Environmental factors beyond the control of producers
- Proposed conservation measures

Critical area definitions used in this Work Plan are pursuant to Walla Walla County Code Chapter 18.08; as originally designated by WAC 365-190-080.

The Work Group used Venn diagrams (see Figure 4-1) to illustrate the obstacles of maintaining agriculture and protecting critical areas, what can be accomplished, and what is outside VSP control. Through this method, the Work Group identified goals and action items for each critical area.

FIGURE 4-1
Example of Venn Diagram Used to Generate Work Group Input on Critical Areas



4.2 Overarching Critical Area Goals

Because all the critical areas are integrated, when using the Venn diagram to determine the goals and potential action items for the individual critical areas, the Work Group discovered that many of the proposed goals and action items would benefit all or multiple critical areas.

The Work Group identified the following overarching goals that would benefit all of the critical areas:

- Educate the community at large regarding the benefits that agricultural activities have on existing critical areas (i.e., farm ground benefits versus development)
- Coordinate with the County's Planning Department regarding zoning, annexations, and rural development
- Improve mapping of critical areas
- Implementing best management practices (BMPs) for water conservation (irrigation efficiencies, local water plans)
- Increase edge of field buffers, wind breaks, and/or grade control structures
- Increase vegetation or residue cover on soils
- Increase awareness of conservation easements as an agricultural tool
- Increase information exchange about new technology/research

4.3 Individual Critical Area Goals

VSP programs are required to set goals and benchmarks to protect and enhance critical area functions and values (RCW 36.70A.720). This section provides a brief overview of each critical area and its functions and values, and outlines the intersection of agriculture and the critical areas. The obstacles to protecting critical areas and maintaining agricultural viability, the factors beyond our control, and plausible action items are also discussed. Finally, the Work Group's specific goals for each critical area are presented.

4.3.1 Fish and Wildlife Habitat Conservation Areas

Overview

Fish and wildlife habitat conservation areas are areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created, as designated by WAC 365-190-130. These areas are guided by the State's Priority Habitats and Species list and include:

- Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association

- Habitats of local importance, including but not limited to:
  - Areas designated as priority habitat by WDFW
  - Areas that provide important habitat for neotropical migratory songbirds
  - Areas that provide important habitat for wintering birds of prey
  - Areas that provide unique habitats within Walla Walla County
- Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas to mitigate impacts to ponds
- Waters of the State, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington
- Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity
- State natural area preserves and natural resources conservation areas designated by the Washington State Department of Natural Resources (DNR)
- Land essential for preserving connections between habitat blocks and open spaces.

Walla Walla County's wildlife (terrestrial) habitat is shown on Figure CA-1 included in Section 7. Fish habitat within Walla Walla County is not currently mapped.

Intersection of Agriculture and Fish and Wildlife Habitat

Walla Walla County's original landscape was mostly grasslands, with considerable shrub-steppe lands. Today there is relatively little shrub-steppe and practically no native short-grassed prairie lands due to changes in agricultural practices and urban sprawl (see Figure CA-1). Conservation programs such as the Federal Agricultural CRP have directly benefited wildlife by providing habitat. Additionally, streams, rivers, and wetlands in the County provide habitat for birds and small animals.

The following was excerpted from *Walla Walla County Comprehensive Plan Update 2007 and 2009* (Stalzer and Associates et al., 2007):

> *"The two primary habitat types in the County are agricultural/pasture and shrub-steppe. The Washington State Department of Fish and Wildlife (WDFW) lists shrub-steppe as a Priority Habitat under its Priority Habitats and Species program due to its high habitat value and because of the unique assemblages of plant and wildlife species that is associated with it. Shrub-steppe habitat was historically dominant in the County; however, much of it has been converted to the agricultural habitat type, which now dominates the central portion of the County. Evergreen forest dominated by Douglas fir and Grand fir occurs in the higher elevations near the Blue Mountains, and a riparian vegetation community dominated by cottonwood, white alder, willow, and various shrubs occurs along streams and rivers throughout the Walla Walla River basin. The conversion from shrub-steppe to agriculture has affected the lowland riparian vegetation in some areas, resulting in the drastic reduction or complete elimination of native shrubs and grasses.*

Many of the native sagebrush and bunchgrasses have been replaced with lesser quality rabbit brush, cheat grass, yellow star thistle and other undesirable grasses and broadleaf weeds.

Wildlife habitat, dictated primarily by vegetation condition and the occurrence and proportion of vegetation types, is of relatively high quality in the upper reaches of the main rivers and tributaries (Walla Walla River, Touchet River, and Mill Creek). The mountain and foothill forests and associated habitats provide the essential life requisites for large mammals such as elk, mule and white tailed deer, black bear, coyote, mountain lion, and bobcat. Furbearers such as beaver, river otter, mink, and raccoon are common. Ruffed grouse, woodpeckers, a variety aquatic species, hummingbirds, and dozens of other songbirds inhabit the upper drainages.

Habitat complexity and quality in the lowland valleys is influenced by the presence of highly cultivated agricultural lands and remnant riparian strips and pockets. Wildlife species that currently live in these habitats include white tailed and mule deer, ring necked pheasant, quail, mourning dove, and a variety of raptors, songbirds, and small mammals.

The Walla Walla River and the Touchet River are reported to have historically supported Chinook, coho, and chum salmon, though their presence was confined to the lower stream reaches. Currently, the watershed supports bull trout and steelhead, which are considered threatened species under the Federal Endangered Species Act, as well as mountain whitefish. (HDR/EES 2005)."

According to WDFW staff in an email to Renee Hadley with WWCCD dated June 7, 2017, in 2015 and 2016, the south fork of the Walla Walla River, Mill Creek, north Touchet River, and Wolf Fork had Spring Chinook out plants as part of a CTUIR program. Fall Chinook was observed in the lower Walla Walla and Touchet Rivers.

Obstacles

Funding of restoration projects, invasive weed population growth and expansion, equipment mobility, and lack of education are common limitations for conserving fish and wildlife habitat. The amount of shrub-steppe habitat is limiting and fragmented. Existing agricultural equipment may be an obstacle for habitat areas. For example, the length of a spray boom and/or turn radius may not reach steep or difficult to access ground, leading to weed management concerns. Urbanization and lack of habitat as a priority is a concern. A developer may convert agricultural ground to residential lots using the prescribed buffers in the building or shoreline regulations. This type of development included clearing and grading activities and may have little regard for clearing the areas with existing habitat function.

While the mapped wildlife corridors generally correlate with regulated shorelines as stated in the Shoreline Master Program, a significant number of streams are present that offer habitat benefits

but are not included on the habitat map. Additionally, the County's CAO does not include a map of fish habitat areas. This leads to ambiguous assumptions and difficulty establishing fact-based information needed for funding pursuits.

Habitat enhancements have consequences. For example, chemical management of weeds may be detrimental to pollinators or wildlife, but leaving weeds unchecked may have an even greater effect on habitat areas. Leaving higher straw or untilled ground may increase rodent populations that are a food source for critical area bird species, but may also cause excess damage to crops.

Factors beyond Our Control

While instream structures can add habitat features, these activities can lead to bank erosion on streams and rivers. This includes levees, dikes, and bank armoring that can cut off access to floodplains and reduce energy dissipation, resulting in accelerated flow, and subsequent downstream erosion. Establishing effective habitat areas in locations where the species may no longer reside may be difficult.

Action Items

The VSP can encourage and offer technical assistance regarding BMPs such as low tillage methods, limiting ground disturbance, and leaving straw. Habitat enhancement activities may include leaving portions of standing grain, installing bird or hibernaculum (sleeping) boxes, adding brush species to waste ground or outground, establishing and leaving edge of field buffers or strips, and leaving portions of ground adjacent to existing habitat as no-chemical spray zones. Planting rabbitbrush or sagebrush in with a CRP grassland mix in the outer corner of pivot irrigation land or in or older CRP stands (outside of contract) can create shrub-steppe vegetation.

Goals

- Improve wildlife habitat by maintaining edges of field buffers/strips.
- Increase education to community at large regarding the benefits agricultural activities have on existing critical areas (farm ground benefits versus development).
- Identify and prioritize fish passage barriers.
- Coordinate with Walla Walla County Planning Department regarding zoning, annexations, and rural development.

Summary

The key elements for fish and wildlife habitat conservation areas discussed during the Work Group brainstorming session are summarized in Table 4-1.

TABLE 4-1 Fish and Wildlife Habitat Conservation Areas	
Maintain Agricultural Viability	**Protect Critical Areas**
What are obstacles we face?	
• Cost of improvements • Maintaining broadleaf habitat • Noxious weed management • Equipment access and spraying limitations due to topography, habitat, etc. • Sedimentation and erosion • Unwanted/nuisance species • Water rights trumped by the instream flow rule	• Cost of improvements • Maintaining broadleaf habitat • Invasive species • Location of existing habitat • Shrub-steppe is fragmented and nearly gone (limited sagebrush plantings) • Urbanization/encroachment – planning/zoning revisions
What is beyond our control?	
• Water flow intensity • Land use practices upstream • New species moving to the area	• Weather/nature • Land use practices upstream • New species moving to the area
What can we do?	
• Clarify mapping designations • Highlight missing data/priority habitat • Develop incentives (many incentives currently in place focus on installing, but not maintaining, improvements) • Install BMPs • Improve conditions upstream to impact critical areas downstream • Inventory farming practices that provide/enhance habitat • Identify and prioritize solutions to barriers inhibiting migration • Improve locations of high-traffic areas in relation to critical species (i.e., decrease roadkill) • Develop mechanisms to protect water in trusts • Increase efficiency of data sets (i.e., USDA census) • Protect/improve stream shading to reduce water temperatures • Implement conservation easements • Increase public awareness via education/outreach • Develop programs geared toward small agricultural producers	

4.3.2 Wetlands

Overview

Wetlands are defined as areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions (WAC 365-190-090). Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities,

wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local governments shall use the Washington State Wetland Identification and Delineation Manual, as amended.

Wetlands are categorized into Category I, II, III, or IV based on the categorization procedures in the Washington State Wetland Rating System for Eastern Washington, as amended (Hruby, 2004). Wetlands are regulated by Section 404 of the Clean Water Act and protected under Executive Order 11900.

Walla Walla County's wetland habitat is shown on Figure CA-2 included in Section 7.

Intersection of Agriculture and Wetlands

Within Walla Walla County, much of the pre-settlement habitat has been altered, and little original habitat exists (see Figure CA-2). There are few undisturbed streams and wetlands. A large portion of the wetlands in the County, particularly those of higher quality, are in State or federal ownership and management.

Wetlands are identified by the National Wetland Inventory Maps and by on-site observation. Riparian habitat is identified on the WDFW Priority Habitat Maps.

Obstacles

In many places, distinguishing between manmade and natural wetlands can be complicated. Did a farmer place a farm pond in the location of a wetland, or did a wetland develop because of the existence of a farm pond? Since most artificial (manmade) wetlands are not considered critical areas, this ambiguity between manmade and natural wetlands has led to inaccurate wetland maps.

Farming near wetlands can be problematic due to the difficulties of operating on/near wet ground and the increase in noxious weeds. This can result in decreased agricultural yields near wetlands and their associated buffers. Additionally, since wetlands and their buffers are low-yield crop producing areas, managing these lands may be a low priority for farmers and ranchers.

Factors beyond Our Control

Wetlands are delineated by three factors: soil type, presence of specific hydrophilic vegetation, and near saturated conditions (water source). These are generally predetermined by nature and outside the limits of agricultural influence. Additionally, wetlands in Walla Walla County are generally small in size, adjacent to riparian areas, and may be mapped inaccurately.

Action Items

Educating the public, including farmers and ranchers, on the values of wetlands is instrumental in protecting these critical areas. Increased awareness of the incentives for wetland enhancement will encourage landowner participation in such programs and lead to the protection and enhancement of wetlands. While the three wetland factors are generally

predetermined by nature, encouraging landowners to simulate two out of the three factors can provide some of the benefits to the environment that naturally occurring wetlands provide. Maintaining wetland buffers and implementing voluntary wetland buffers on agricultural land will continue to protect the function and values of existing wetlands. The VSP could also assist the County in establishing a local wetland inventory to accurately depict the locations of wetlands as they are identified.

Goals

- Increase education and awareness of the benefits of wetlands. Emphasizing wetlands enhancement and protection can address most critical areas with one practice.
- Develop management alternatives for farming saturated field depressions, whether incentives for wetland protection or alternative cropping management.
- Improve accuracy of current wetland inventory.
- Include cropping history in Individual Stewardship Plans to verify historical use.

Summary

The key elements for wetlands discussed during the Work Group brainstorming session are summarized in Table 4-2.

TABLE 4-2
Wetlands

Maintain Agricultural Viability	Protect Critical Areas
What are obstacles that we face?	
• Obtaining cropping history • Operating on/near wet ground • Controlling noxious weeds • Cost of improvements	• Agricultural lands excluded from GMA's wetland protection • Lack of water source mapping available • Distinguishing between natural and manmade wetlands • Limited/inaccurate wetland mapping • Size (some wetlands are extremely small)
What is beyond our control?	
• Soil type • Location of water source • Presence/type of vegetation	• Location of water source • Presence/type of vegetation
What can we do?	

• Increase irrigation efficiency
• Local water plans
• Conservation easements
• Create/restore/protect wetland buffers
• Shallow aquifer recharge projects
• Incentive programs
  - Educational
  - Funding (federal and non-profit)
  - Marketing	

4.3.3 Frequently Flooded Areas

Overview

Frequently flooded areas are lands in the floodplain subject to a 1 percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance, and attenuation functions, as determined in accordance with WAC 365-190-110. This includes streams, rivers, lakes, wetlands, and areas where high groundwater ponds on the ground surface.

Frequently flooded areas perform important hydrologic functions, but may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency (FEMA) and the National Flood Insurance Program (NFIP).

Walla Walla County's frequently flooded areas shown on Figure CA-3 included in Section 7.

Intersection of Agriculture and Frequently Flooded Areas

Walla Walla County has flood hazard areas that can provide a challenge for the protection of life and property (see Figure CA-3). The County has addressed flood hazard areas through its zoning code (Walla Walla County Code Chapter 18.08).

Historic flooding in Walla Walla County (1949). Photo courtesy of USDA NRCS archives. Used with permission.

Walla Walla County is concerned about public safety in flood hazard areas, and therefore makes flood risk information available to the public. Flood risk information alerts prospective buyers that a property is in an area of special flood hazard and that those who occupy the areas of special flood hazard assume responsibility for their actions. To help alleviate the potential financial hardship associated with living in a flood hazard area, the County administers a FEMA-approved flood program that enables citizens to be eligible for flood insurance.

Walla Walla County's main waterways are:

- Columbia River (forms entire western boundary of the County)
- Snake River (forms entire northern boundary of the County)
- Walla Walla River (tributary of the Columbia River)
- Touchet River (including Coppei Creek, tributary of the Walla Walla River)
- Dry Creek (tributary of the Walla Walla River)
- Mill Creek (including Blue Creek, tributary of the Walla Walla River)
- Miscellaneous small creeks (some partially regulated by the U.S. Army Corps of Engineers [USACE] Mill Creek Project)

Obstacles

Flood events are increasing in frequency. A flood event with a volume that was previously classified as an 80-year flood event or greater has occurred in the past century on a frequency of every 30 years (1931, 1964, and 1996). These events mainly occur as warm Chinook winds contribute to the rapid melting of snow. The tributaries in the basin do not have the capacity to manage rapid flows, and significant stream bank erosion, loss of woody debris, and lateral channel movement occurs. In past decades, landowners would place cars along the stream banks to buttress flows, prevent erosion, and manage high flows such as floods. This was commonly known as "Detroit riprap". Unfortunately, this resulted in car debris polluting streams and floodplains. Significant efforts have been made to remove this car debris from streams and floodplains.

Farmers now know that restoring stream and floodplain function helps with flood control and management. Stream restoration activities can improve the flood capacity; however, obtaining permits for these activities can be time consuming (between 6 months to 2 years). Additionally, the scale of flood events versus the scale of mitigation activities is unproportioned. A 100-year flood event would likely affect the majority of the population in Walla Walla County. While individual restoration and levee setback projects can make a difference for smaller scale flood events, mitigating for a 100-year flood event in Walla Walla County would require efforts on a whole watershed scale.

The flood mapping in Walla Walla County includes FEMA maps from 1983, 2002, and various individual map amendments as shown on the FEMA Flood Map Service Center website. These maps may not clearly identify natural flood terraces, and may not show the development adjacent to streams (and floodways) that has occurred since 1983. Updating FEMA mapping requires time and funding.

Factors beyond Our Control

Weather, snow pack levels, rapid melt events, and actions outside local political boundaries are outside the realm of influence by farmers and ranchers. Additional factors that affect agriculture include damage to infrastructure. Damage to transportation routes and limited municipal resources may cause delays to agricultural operations.

Action Items

Increased public awareness of the benefits and hazards of frequently flooded areas is key. Just like the changes away from Detroit riprap to bioengineered restoration practices, land managers learn over time. Encouraging levee setbacks and increasing floodplains and riparian buffers can reduce damage caused by flood events.

Implementing mitigation activities associated with Mill Creek will also help protect frequently flooded areas while maintaining agricultural viability. The Mill Creek flume was constructed by the USACE as a response to the 1931 flood. This flood control structure is located within the City of Walla Walla and is nearing the end of its structural lifespan. The *DRAFT Lower Mill Creek Habitat and Passage Assessment and Strategic Action Plan* (Tetra Tech, 2016) suggests flood mitigation measures to address the Mill Creek flume and adjacent areas. Additional feasibility studies are needed to determine which mitigation activities will provide the most benefit. The

Washington State Department of Transportation's *Floodplain Mapping in Washington State: Current Status, Alternatives for Improvement, and Recommendations* (September 2001) also offers suggestions for floodplain management.

Goals

- Increase the use of flood planning tools regarding development and alterations within the floodplain.
- Increase public awareness of the potential for floods and flooding in Walla Walla County.
- Increase stream and floodplain restoration projects as an effort to increase flood event resilience.

Summary

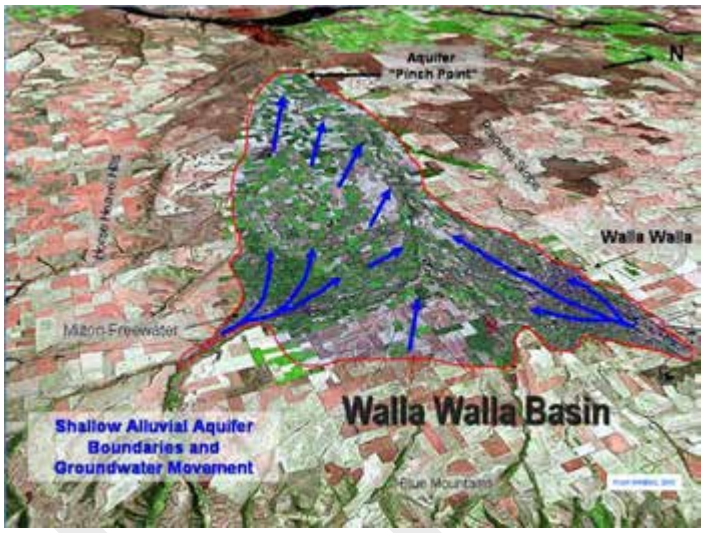
The key elements for frequently flooded areas discussed during the Work Group brainstorming session are summarized in Table 4-3.

TABLE 4-3
Frequently Flooded Areas

Maintain Agricultural Viability	Protect Critical Areas
What are obstacles that we face?	
• Cost of improvements • Regulations/permits	• Encroachment
What is beyond our control?	
• Anything outside local political boundaries • Seasonal snow pack • Chinook winds/weather • River moving and cutting into riverbank	
What can we do?	
• Instream habitat and channel improvements • Floodplain enhancements • Beaver dam analogues • Environmental studies • Buffers	

4.3.4 Critical Aquifer Recharge Areas

Overview



Critical aquifer recharge areas are areas designated by WAC 365-190-080 as areas that have a critical recharging effect on aquifers used for potable water, as defined by WAC 365-190-100; including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the drinkability of the water, or is susceptible to reduced recharge. Walla Walla County aquifers and aquifer recharge areas are recognized as finite resources with development limits. Groundwater quality needs to be protected from adverse impacts as surface water contributes to groundwater within the aquifer.

Walla Walla County critical aquifer recharge areas are shown on Figures CA-4a and CA-4b included in Section 7.

Intersection of Agriculture and Critical Aquifer Recharge Areas

As detailed in the *Walla Walla County Comprehensive Plan Update 2007 and 2009* (Stalzer and Associates et al., 2007):

> *"The County is underlain by two subsurface aquifers, which supply approximately 60% of total water rights in the Walla Walla River basin. A deep basalt aquifer, covering approximately 2,500 square miles, lies beneath a smaller and shallower gravel aquifer, which covers approximately 190 square miles. While the basalt aquifer underlies the entire river basin, the gravel aquifer is located in the basin's central lowlands, near the City of Walla Walla (HDR/EES 2005).*
>
> *The gravel aquifer, which is hydraulically connected to the overlying surface streams, readily receives recharge from these surface flows. Due to its porous nature, the gravel aquifer is susceptible to contamination from surface pollutants, such as agricultural chemicals or leaking septic systems. While the gravel aquifer is used almost exclusively for agriculture, most wells into the basalt aquifer are located southeast of the City of Walla Walla and are used primarily to supply municipal and industrial uses (HDR/EES 2005)".*

Walla Walla County critical aquifer recharge areas refer to the shallow, gravel aquifer, not the deeper basalt aquifer. Recent developments indicate declining water levels in the basalt aquifer. As basalt aquifer water levels decline, demand will increase, resulting in additional water diversions from either surface water or the shallow aquifer.

Obstacles

Groundwater levels are declining. Recent years have experienced reduced snow pack levels, which in turn reduces surface flow and subsequent shallow aquifer recharge. This leads to increased demand for resources. The area is over-allocated with respect to water use and availability. Many area farmers and ranchers have water rights they are unable to use because the water is unavailable (either the water level has dropped in the aquifer, or the surface water is so low that use is restricted). The Walla Walla watershed is closed to new surface diversion, and there are waiting lists for new wells. Some new activities such as single-family development and small industrial use are considered exempt and are allowed to withdraw from the shallow aquifer under certain conditions. These new withdrawals are outside of agricultural influence, but impact agricultural use.

Water conservation efforts can be inhibited by the current "use it or lose it" relinquishment clause in the Washington Water Law (RCW 90.14.180). Water rights may be relinquished if the water right is not used within 5 years. While there are exceptions to this clause, public perception can hinder water conservation.

Factors beyond Our Control

Weather, snow pack levels, the amount of surface flow, and withdrawal from the shallow aquifer across local political borders are beyond local control. Both Oregon and Washington residents share the shallow aquifer. Less than 60 percent of the gravel aquifer is located under agricultural lands within Walla Walla County. The remaining area is located in Oregon and in cities in Walla Walla County. Efforts to discuss joint management with both Oregon and Washington regulatory water agencies may occur in the near future, but until this time of joint management, Walla Walla County residents are responsible for conserving and using water wisely.

Action Items

Shallow aquifer recharge projects are a potential activity to enhance critical aquifer recharge areas. These generally involve diverting surface flows during times of high volume (i.e., winter and spring) and allowing that flow to infiltrate into the ground in a pond or surface reservoir. Many components must be considered including permits, water quality testing, the cost of water quality testing, and water rights. Water quality tests are needed to verify the surface waters have a similar geochemistry to the shallow aquifer. While many shallow aquifer recharge projects have been completed in the Walla Walla Basin and near or within the critical aquifer recharge area, most of these projects are on the Oregon side. The main hindrances for Washington are related to the cost and quantity of water quality testing required by Ecology. While agricultural users can install aquifer recharge projects, the time, cost, and regulations are significant factors to consider.

Local water plans can be used by farmers to identify possible methods for efficiency upgrades or alternative management. Instream restoration projects specifically channel improvements such as beaver analog dams, side channel connectivity, and pooling can increase shallow aquifer recharge through hyporheic exchange. These activities would have the greatest effect in areas where the stream channel has become incised or has migrated to a point where the floodplain is cut off from flow use. Many of these areas have been identified and prioritized by area plans and

documents including the *Walla Walla Subbasin Plan* (Walla Walla County, 2004) and the *Snake River Salmon Recovery Plan for SE Washington* (Snake River Salmon Recovery Board, 2011).

Goals

- Reduce consumable water use across the basin by encouraging Xeroscaping, domestic conservation (low-flow showerheads, toilets, etc.) and reuse (gray water systems).
- Develop one Local Water Plan prior to March 2021.
- Continue to allow flexibility of timing to convert from surface water to wells on existing systems.
- Improve irrigation efficiency.
- Increase habitat restoration projects that disperse river energy and allow for more infiltration (i.e., beaver dam analogues, large woody debris, logjams, etc.).
- Support shallow aquifer recharge projects.

Summary

The key elements for critical aquifer recharge areas discussed during the Work Group brainstorming session are summarized in Table 4-4.

TABLE 4-4
Critical Aquifer Recharge Areas

Maintain Agricultural Viability	Protect Critical Areas
What are obstacles that we face?	
• Water is declining (3 to 8 feet a year) • Cost of water quality testing for a recharge project • Not having enough water to pump • Transfer of water rights • Cost of improvements • Regulations	• Single-family homes are exempt (with other restrictions) • Increased housing means more wells pulling from the aquifer
What is beyond our control?	
• Anything outside our political boundaries • Seasonal snow pack	
What can we do?	
• Local water plans • Upland storage • Shallow aquifer recharge projects • Instream habitat and channel improvements • Beaver analogue dams • Environmental studies • Conversion of irrigated land to dryland agriculture • Increase irrigation efficiency • Change regulations	

4.3.5 Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. These are areas not suited to development consistent with public health, safety, or environmental standards because of their susceptibility to geological events as designated by WAC 365-190-120. Types of geologically hazardous areas in Walla Walla County include areas with erosion, landslide, and seismic hazards. These areas are divided into the following four subsections.

Erosion in Walla Walla County from fire suppression efforts. Photo courtesy of WWCCD.

a. Water Susceptibility of Erosion (see Figure CA-5a in Section 7)
b. Wind Susceptibility of Erosion (see Figure CA-5b in Section 7)
c. Landslides/Steep Slopes (see Figure CA-5c in Section 7)
d. Seismic/Liquefaction (see Figure CA-5d in Section 7)

4.3.5.1 Water and Wind Susceptibility of Erosion

Intersection of Agriculture and Water and Wind Susceptibility of Erosion Areas

Water and wind susceptibility of erosion are the largest critical areas with over 94 percent of the County mapped as susceptible to water and wind erosion (see Figures CA-5a and CA-5b).

The potential for erosion from wind and water varies depending on the physical properties of individual soils including clay content, particle size/shape, and deposition. Percent of cover and topography also play a role in wind erosion.

USDA NRCS archives. Used with permission.

Obstacles

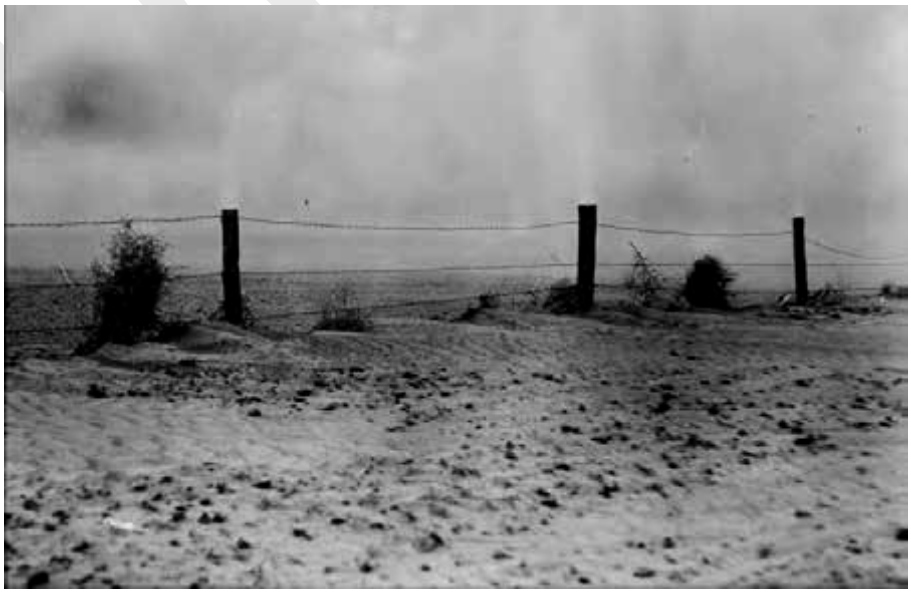
The most significant obstacles that producers face with water and wind susceptibility areas are soil type, weather, cost, historic practices, and jurisdictional boundaries.

Changing farming practices to conservation measures can be cost inhibitive. For example, a used direct seed drill attachment can cost $80,000, and new, no-till equipment can cost more than $500,000.

Existing programs provide cost-share assistance to farmers; however, some programs offer little assistance to specific agricultural producers (e.g., USDA FSA offers little assistance to vegetable and tree fruit farmers in Walla Walla County). USDA NRCS EQIP programs offer a wide range of services, but can be restrictive and may require multiple years before providing funding assistance. Some restrictions on government programs are more than some agricultural producers are willing to sacrifice.

Historic actions by non-agricultural agencies have resulted in unforeseen consequences outside the influence of the agricultural community, such as the excavation in Dry Creek in the 1930's that resulted in breaking though the hard pan. The hard pan layer had been acting as a barrier to bed incision, but, after the excavation, the bed of the creek rapidly incised 10's of feet before reaching equilibrium. This excess erosion was unforeseen. Another example of unforeseen environmental impacts is when agencies maintaining roads cut into the road banks as part of ditch maintenance, making road cuts steeper and more susceptible to additional erosion. Agencies working with good intentions may not realize until years later that their efforts were more detrimental than helpful.

The Walla Walla Basin crosses two states and four counties. Area farmers are limited by the amount of water coming into the basin at County and state lines, and by the amount of water being used by adjacent municipalities. Farmers can be good stewards regarding water use, but are unable to create more than what they receive. DNR is proposing prescribed burns for 2017. This can restrict agricultural burn permits, which may result in increased weeds or residue management issues.



USDA NRCS archives. Used with permission.

Factors beyond Our Control

Weather patterns, soil types, highly erodible lands, depth to bedrock, and historic conservation and agriculture practices are factors that affect lands susceptible to wind and water erosion. Activities and regulations outside the political boundaries of Walla Walla County also play a role such as controlled agricultural burning in Oregon that reduces air quality in Walla Walla County and can lead to restricted burning.

Action Items

Encourage producers to work toward maintaining agriculture and protecting critical areas through the CRP, conservation easements, and BMPs:

- CRP – The CRP is highly effective at maintaining vegetative cover and preventing erosion in Highly Erodible Lands. Walla Walla County is at the cap for CRP acres (25 percent of the County's cropland acres). This cap limitation means new land cannot be placed in a CRP contract. Not all acres that drop out of CRP are placed back in agricultural production. Measuring conservation practice effectiveness by contracted acres is inaccurate. The Walla Walla VSP technical staff suggests working with WSDA to obtain accurate aerial imagery for land cover mapping. This will help establish a baseline.
- Conservation Easements – Conservation easements can aid in protecting critical areas by purchasing the development rights or conserving the land in perpetuity.
- BMPs – BMPs for addressing water and wind susceptibility erosion include residue management reduced tillage/strip till, grade control structures, edge of field buffers or wind row strips, crop selection, and burn management. Adjustments in agricultural burn management may include burning select strips overcome by weeds or choosing not to burn even if high residue is present.

Increasing producer awareness about government incentives and cost share programs such as CREP and windbreaks will also help protect critical areas.

Goals

- Increase vegetative cover to protect critical areas from soil loss due to water or wind susceptibility of erosion.
- Develop land cover mapping system by 2022 to include CRP land taken out of contract that is left as vegetative cover.

Summary

The key elements for the geologic hazard area of soil erosion from wind and/or water discussed during the Work Group brainstorming session are summarized in Table 4-5.

TABLE 4-5 Geologic Hazard Area of Soil Erosion from Wind or Water	
Maintain Agricultural Viability	**Protect Critical Areas**
What are obstacles that we face?	
• No till/cost involved with direct seed • Air quality • Wind breaks • Noxious weeds • Cost	• Weather • Cost • Quick snow melt - affects streams, causes drought, puts stress on the water table • Municipality understanding • Past actions - still healing
What is beyond our control?	
• Highly erodible land • Soil type • Bedrock • Seasonal access • Weather patterns • Falling yield	• Weather patterns • Natural disasters • Some areas being more problematic than others • Anything happening outside our political boundaries such as air quality, water quality, and water use • Air quality - DNR prescribed burns • Continuation of existing funding programs
What can we do?	
• Government incentive/cost share • CREP • Windbreaks • Manage residue/maintain organic residue • Information sharing and education - new technology and research • Crop selection on soils (annual and perennial) • Soil testing • Reduced till • Strip till • Control amount of burning to improve air quality	• Soil testing • Conservation easements • Grade control structures • Irrigation efficiency/local water plans • Edge of field buffers - have roots and protect from the rain, are beneficial to some critical areas • Floodplains by design - grant through Ecology

4.3.5.2 Landslides/Steep Slopes

Steep slopes in Walla Walla County are predominantly intact basalt outcrops, especially along the Snake River. Contributing to their erodibility is the fact that in some of the foothill areas there are shallow topsoil deposits with sparse vegetation overlying basalt bedrock. Agricultural activities on steep slopes are limited to rangeland grazing activities.

Goal

Individual Stewardship Plans will address steep slopes by encouraging adoption of the BMPs for pasture and rangeland management.

4.3.5.3 Seismic/Liquefaction

Liquefaction occurs when seismic activity shakes saturated silty-sand soils resulting in the soils behaving as a liquid. Three components are needed for liquefaction to occur: seismic faults, silty sand soil types, and relatively high groundwater levels. Soil types and presence of seismic faults are beyond the producer's control, but agricultural activities can impact groundwater levels. Dewatering the groundwater table would reduce the risk of liquefaction, but would negatively impact fish and wildlife habitat critical areas and critical aquifer recharge areas.

Goal

Individual Stewardship Plans will address liquefaction by encouraging adoption of BMPs for irrigation water resources management.

4.4 Goals Summary

Table 4-6 summarizes the different actions identified by the Work Group. These goals should be considered ideal. VSP participants will be educated on these goals and select which ones are appropriate for their lands. Some goals are idealistic and unable to quantify or monitor at this time. A condensed list of goals that can be monitored is included in Section 5.3.

TABLE 4-6
Goals Summary

Section	Goal No.	Description	Concern
2	AV-1	Work with City/County planning regarding ag zoning and limiting segmentation of large ag parcels	Median farm size is declining
2	AV-2	Increase awareness in the community regarding the benefit of agriculture	Acres of actively farmed ground have decreased
2	AV-3	Increase awareness of alternative crops and/or diversified production and incentive programs to encourage innovation	Decreasing commodity prices
2	AV-4	Increase awareness and develop additional incentive programs to reduce production costs through efficiency (e.g., weed-seeker technology, variable rate seeder/fertilizer, efficiency nozzles etc.)	Increasing production costs (weed control, fertilizer, water)
2	AV-5	Provide technical assistance in dealing with weed resistance	Weed resistance especially as it impacts low-tillage practices
2	AV-6	Inform growers groups when regulatory agencies seek public input on planned changes	Increased regulation
2	AV-7	Coordinate and inform ag communities of the issues surrounding succession, specifically, who will take responsibility to manage the farm	Inadequate succession planning
2 and 4	AV-7 and All CA	Increase water conservation BMPs (irrigation efficiency, local water plans, aquifer recharge projects)	Lack of water, water over-allocated, and declining water tables
4	All CA	Increase edge of field buffers, wind breaks, and/or grade control structures	
4	All CA	Increase vegetation or residue cover on soils	Erosion
4	All CA	Increase awareness of conservation easements as an agricultural tool	
4	All CA	Increase information exchange about new technology/research	
4	Habitat-1	Improve wildlife habitat by maintaining riparian or edge of field buffers.	
4	Habitat-2	Increase education to community at large regarding benefits agricultural activities have on existing critical areas (farm ground benefits vs. development)	
4	Habitat-3	Identify and prioritize fish passage barriers on agricultural lands	
4	Habitat-4	Coordinate with Walla Walla County Planning Department regarding zoning, annexations, and rural development	
4	Wetlands-1	Increase education and awareness of the benefits of wetlands. Emphasizing wetlands enhancement and protection can address most critical areas with one practice	

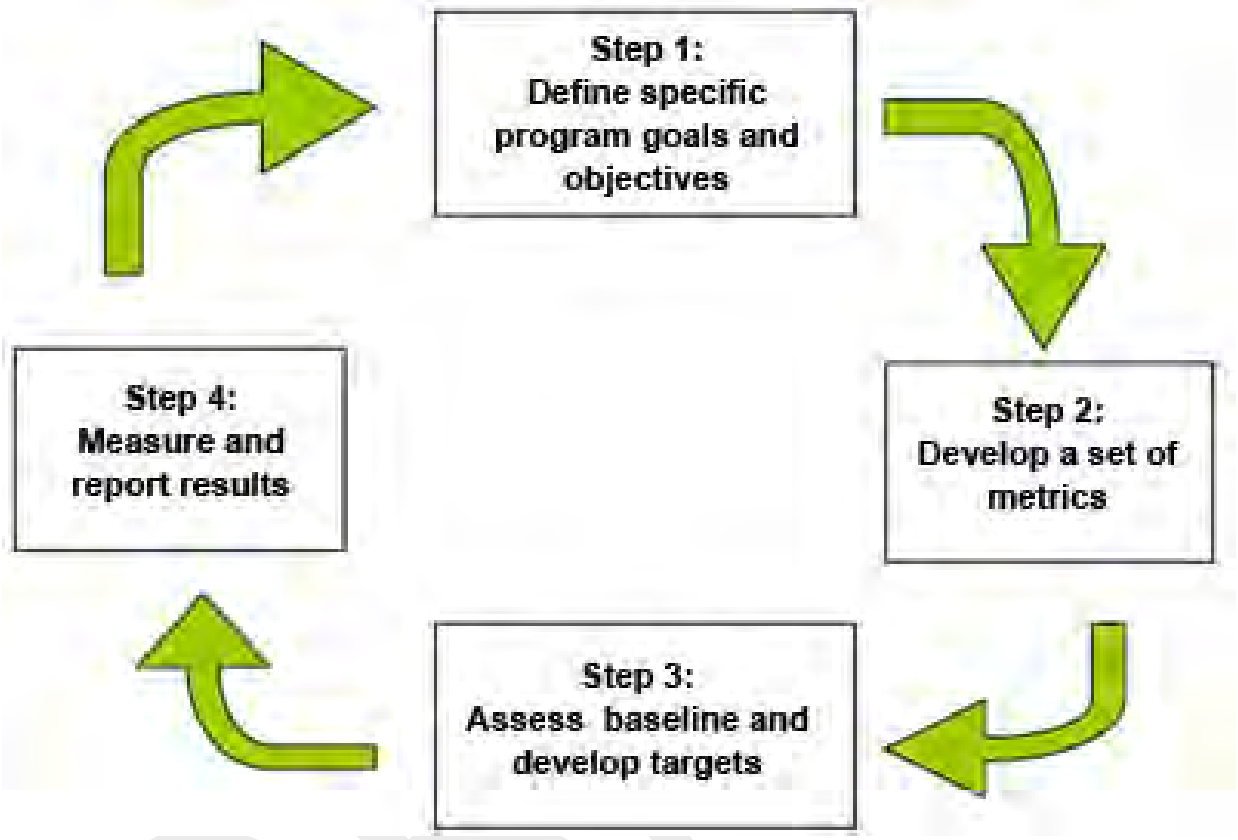
TABLE 4-6 (cont.)
Goals Summary

Section	Goal No.	Description	Concern
4	Wetlands-2	Develop management alternatives for farming saturated field depressions, whether incentives for wetland protection or alternative cropping management	Wet areas are difficult to farm but may not meet criteria for wetlands and thus be ineligible for most incentive programs
4	Wetlands-3	Improve accuracy of current wetland inventory	Current maps show outdated information that was not fully ground truthed; wetland delineation makes wetlands eligible for incentive programs
4	Wetlands-4	Include cropping history in Individual Stewardship Plans to verify historical use	Protects wetlands from new ag-related activities (not allowed under VSP) and protects existing practices that are not restricted under VSP
4	FFA-1	Increase the use of flood planning tools regarding development and alterations within the floodplain.	Floodplain mapping is dated and may be inaccurate
4	FFA-2	Increase public awareness of the potential for floods and flooding in Walla Walla County	
4	FFA-3	Increase stream and floodplain restoration projects as an effort to increase flood event resilience	
4	CARA-1	Reduce consumable water use across the basin by encouraging Xeriscaping, domestic conservation (low-flow showerheads, toilets, etc.) and reuse (gray water systems)	These may not necessarily be ag-related but may impact critical areas within ag parcels and ag communities
4	CARA-2	Develop one Local Water Plan prior to March 2021.	
4	CARA-3	Continue to allow flexibility of timing to convert from surface water to wells on existing systems	
4	CARA-4	Improve irrigation efficiency	
4	CARA-5	Increase habitat restoration projects that disperse river energy and allow for more infiltration (i.e., beaver dam analogues, large woody debris, logjams, etc.)	Moderating river flows improves infiltration
4	CARA-6	Support shallow aquifer recharge projects	Difficult to implement but valued, could seek innovative small projects

TABLE 4-6 (cont.)
Goals Summary

Section	Goal No.	Description	Concern
4	GHA-1	Increase vegetative cover to protect critical areas from soil loss due to water or wind susceptibility to erosion	
4	GHA-2	Develop land cover mapping system by 2022 to include CRP land taken out of contract that is left as vegetative cover	Acres taken out of CRP program may remain as grasslands; we need to be sure our plan does not rely on NRCS statistics alone. A CREP buffer may remain even if it is no longer enrolled.
4	GHA-3	Individual Stewardship Plans will address steep slopes by encouraging adoption of the BMPs for pasture and rangeland management	
4	GHA-4	Individual Stewardship Plans will address liquefaction by encouraging adoption of BMPs for irrigation water resources management	

Section 5.0 - Measurable Benchmarks and Adaptive Management



5.1 Benchmarks

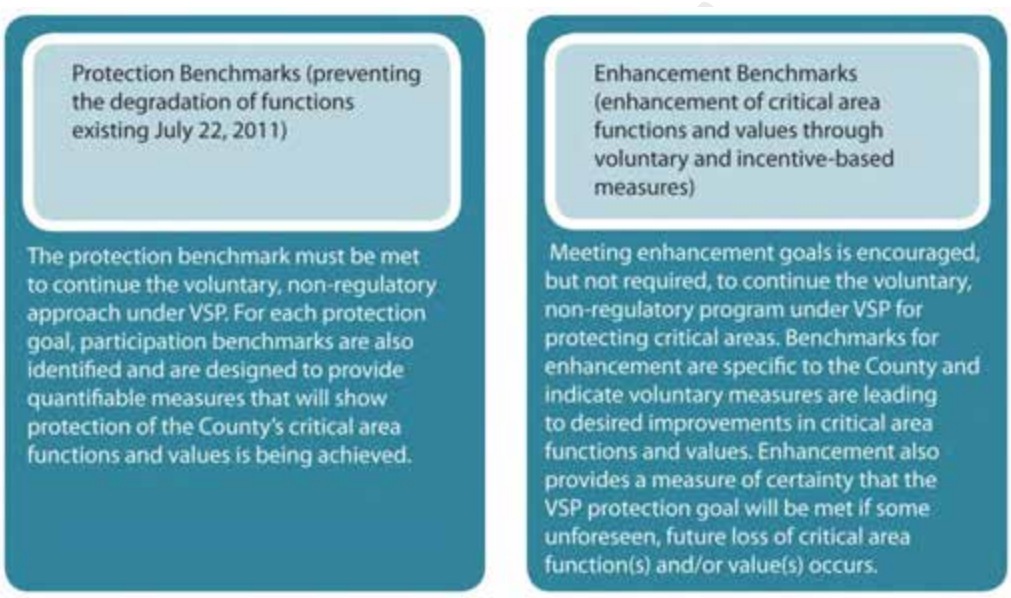
VSP statutes require the Work Group to "create measurable benchmarks that, within ten years after the receipt of funding, are designed to result in (i) the protection of critical area functions and values and (ii) the enhancement of critical area functions and values through voluntary, incentive-based measures" (RCW 36.70A.720 (1)(e)). July 22, 2011 (effective date of the VSP legislation) is the statutory date for identifying the applicable baseline for Walla Walla County requirements related to protecting a particular critical area, and for maintaining and enhancing agricultural viability. This is also the date from which the County will measure progress in implementing the Work Plan's measurable benchmarks.

5.2 Measurable Benchmarks

Measurable benchmarks can help track performance of the protection and enhancement of critical areas and their associated functions and values. Ideally, a monitoring program with associated measurable benchmarks of physical parameters would be established to track effects on agricultural lands, but limited resources make such an approach impractical. Therefore, an alternative approach to measurable benchmarks needed to be considered to evaluate and track the VSP's performance in achieving goals.

Work Plan benchmarks are focused on measuring and tracking producer participation in implementing key conservation practices identified by the Work Group as having a clear benefit to one or more critical area functions and values. Benchmarks are measured (or tracked) implementations of various conservation practices and associated stewardship of agricultural lands. Over time, the implementation of these conservation practices will be used to demonstrate that the Walla Walla County VSP is achieving the protection goals or the protection and enhancement goals.

This Work Plan includes two benchmarks based directly on the text in RCW 36.70A.720 (1)(e): Protection and Enhancement.



Several steps were used to establish protection and enhancement benchmark quantities for conservation practice enrollment, including reviewing existing data and protection, quantifying conservation practice benefits to critical area functions and values, and applying these functional indicators to conservation practice quantities. Existing sources for funding conservation practices were also considered in establishing the enhancement goal.

5.3 Indicators

Indicators are specific measurable metrics that can be used to understand long-term trends indicating if specific functions and values are being protected as suggested by existing data programs in place in Walla Walla County. Even if participation benchmarks for protection and enhancement are achieved, indicators provide another point of reference in verifying performance of conservation practice efforts on one or more critical area functions. Indicators include specific, measurable environmental attributes such as the temperature of a stream or the water quality of an aquifer.

Indicator data may be used to identify long-term trends and better understand whether conditions are improving or degrading. Indicators will be reviewed approximately every 5 years to identify if long-term trends are clear. If there is an indicator of a loss or gain in function, an analysis of the effects of agricultural activities can be made using NRCS's Conservation Practice Physical Effects matrix and field observations. The individual critical areas goals as they relate to monitoring are shown in Table 5-1.

TABLE 5-1
Individual Critical Areas Goals

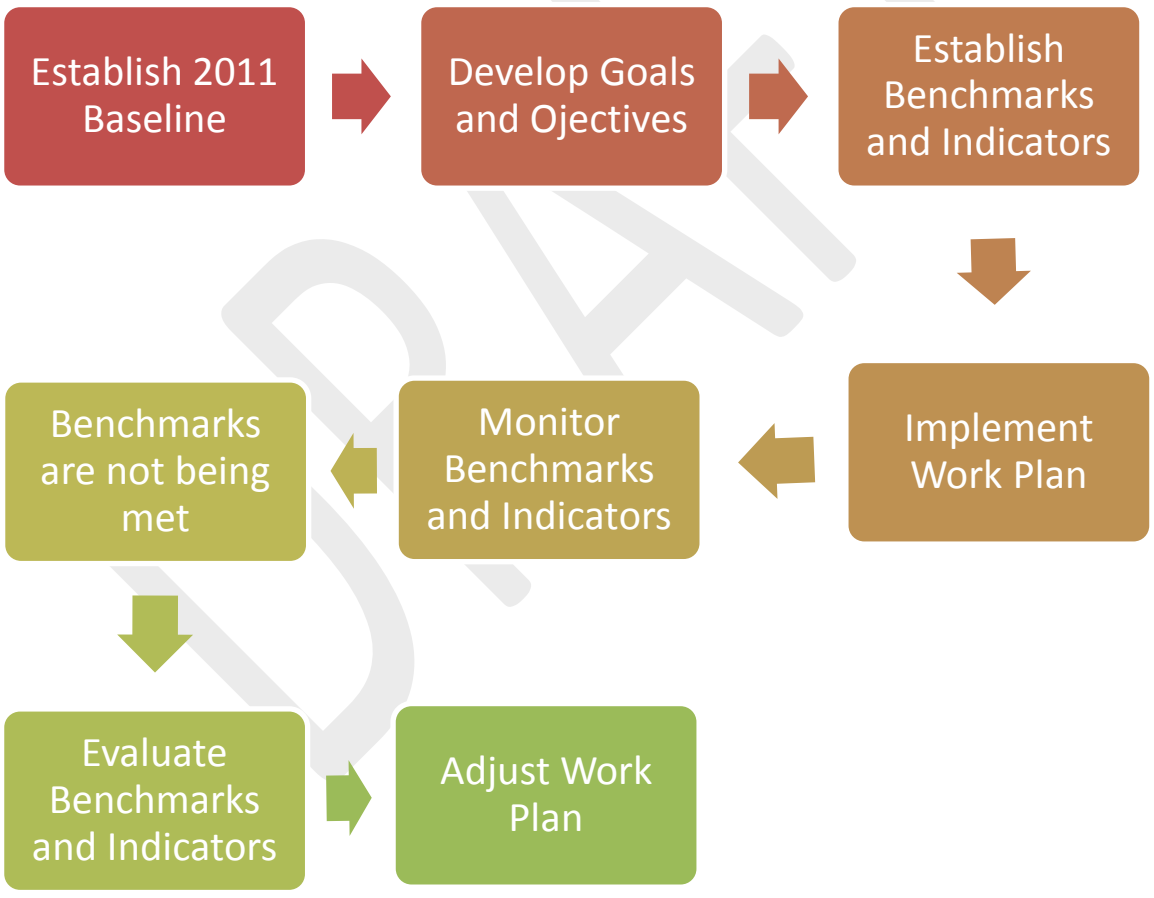
Critical Area	Monitoring Goal (Broad Outcome)	Objective (Measurable Step)	Benchmark (How to Obtain Measurable Step)	Monitoring Method	Adaptive Management Action Threshold	Adaptive Management Action	Who Monitors	When	Party Responsible for Action
All	Increase awareness of critical areas (benefits and hazards)	Inform the public regarding the benefits of critical areas	Provide individual or group information sessions to 30 farmers, ranchers, and community members per year; refer 10% of interested farmers/ranchers to agencies for financial assistance	Record numbers of people reached sessions provided	No public information sessions provided	Revert to regulatory measures	WWCCD, area agencies, and participating landowners	Annually	WWCCD
Habitat	Maintain existing 2011 wildlife habitat	Protect: Maintain riparian buffers/strips	No decrease in the number of acres of riparian buffers/strips betweeen 2011 and 2021	Measure contracted acres of CREP, field verify stream using aerial imagery, survey property owners with riparian buffers/strips to encourage VSP participation	Acres of riparian buffers/strips decrease by 10% compared to July 2011 (3,174 riparian forest acres)	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD, NRCS, and FSA	Once every 5 years	WWCCD and participating landowners
		Protect: Maintain existing fish passage	No net increase in fish passage barriers in the watershed	Verify effectiveness by sampling fish screens in place as of 2011	Number of fish passage barriers increases by 3, or number of effective fish screens decreases by 10% compared to July 2011 (343 fish screens)	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD and WDFW	Periodically (minimum once every 5 years)	WWCCD
Wetlands	No net loss of wetlands	Protect: Create inventory of wetlands and prioritize Enhance: Restore wetlands or establish buffers	Develop wetland inventory	Inventory 10% of County annually	Reassess budget and staffing constraints and prioritization	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD	Once every 5 years	WWCCD and participating landowners
FFA	Increase flood event resilience	Enhance: Increase use in flood planning tools regarding development	Communicate with WWCCD regarding zoning changes and development within floodplains	Increase number stream and floodplain restoration projects	N/A - No adaptive management for enhancement suggestions	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD and area agencies	Once every 5 years	Area agencies and participating landowners
CARA	Limit aquifer level decline related to agricultural use	Protect: a) Reduce use of consumable water sources and/or b) Maintain local water plan	Maintain instream flow rules and continue metered irrigation use	Maintain number of metered diversions, verify effectiveness of existing metered irrigation use	Number of effective flow meters decreases by 5% compared to July 2011 (382 screens)	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD and Ecology	Once every 5 years	WWCCD and participating landowners
		Enhance: Maintain existing aquifer recharge projects and promote irrigation efficiency BMPs	Number of acre feet in shallow aquifer recharge site/year	Maintain use of SAR	N/A - No adaptive management for enhancement suggestions	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWWMP, Ecology, and area agencies	Once every 5 years	Area agencies, and participating landowners
GHA - Wind and Water Erosion	Protect critical areas from soil loss	Protect: Maintain existing vegetative cover (currently CRP acres Enhance: Increase vegetative cover	Provide soil health awareness, cover crop/conservation cover use, or alternative incentives for maintaining CRP ground	Develop and monitor % of land cover	This critical area does not have regulatory management in the County CAO. No adaptive management is suggested.	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD, NRCS, and FSA	Once every 5 years	WWCCD and participating landowners
	Map land cover by 2022	Determine areas that lack cover and are susceptible to wind or water erosion	% of vegetative land cover does not decrease from baseline* to 2026	Sample areas using aerial imagery and field surveys	Decrease in vegetative land cover by 15% from baseline* to 2026.	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD	Once every 5 years	WWCCD and participating landowners
GHA - Landslides/ Steep Slopes	Reduce landslide potential assoc. with managing rangeland	Enhance: Adoption of BMPs for pasture and rangeland management	Maintain vegetation on steep slopes	# of pasture/rangeland management plans developed	N/A - No adaptive management for enhancement suggestions	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD and NRCS	Once every 5 years	WWCCD and participating landowners
GHA - Seismic/ Liquefaction	Increase awareness of liquefaction potential	Enhance: Adopt BMPs for irrigation water management	Maintain BMPs for water use and expand liquefaction awareness by 20 people annually	Record numbers of people reached and of BMPs improved, or acres, or cfs.	N/A - No adaptive management for enhancement suggestions	Public outreach and review/ revise initial goal, objective, benchmark, and metric	WWCCD	Once every 5 years	WWCCD and participating landowners

** This baseline date is currently unknown, as the existing maps are inadequate for determining vegetative land cover. Part of this goal is to develop a mapping process.*

5.4 Adaptive Management Plan

In addition to creating goals and measurable benchmarks, RCW 36.70A.720(1) requires periodic evaluations of benchmarks and institution of adaptive management. If the Work Group determines protection goals and benchmarks are being met, then continued implementation of the Work Plan can be carried out by WWCCD as described in RCW 36.70A.720(2). However, if it is determined the protection goals and benchmarks have not been met, the Work Group must submit and implement an Adaptive Management Plan to remain under VSP. If it is determined that the enhancement goals and benchmarks have not been met, the Work Group must determine which additional voluntary actions are needed to meet them, identify the necessary funding mechanisms, and implement the actions when funding is provided. The adaptive management system for the Walla Walla County VSP consists of the following eight key sequential elements, as illustrated in Figure 5-1.

FIGURE 5-1
Adaptive Management System



5.5 Implementation of VSP Individual Stewardship Plans or Farm Plans

Several types of farm plans are used throughout Walla Walla County. These include, but are not limited, to Conservation Stewardship Plans, Comprehensive Nutrient Management Plans, and Local Water Plans. These plans may be used for VSP provided critical areas are identified and addressed. The NRCS Conservation Planning Worksheet has been adapted for VSP participants with no existing plan. This four-page checklist has a section to list recommended BMPs. VSP coordinating staff and certified conservation planners can work with landowners to identify which site-specific BMPs would be appropriate for their operation. NRCS Site Specific Practice Effect Worksheet and Conservation Practice Physical Effects sheets will be used to quantify benefits to BMPs with regard to soil quality, water quality, plant condition, air quality, fish and wildlife habitat, livestock production, or energy use.

Farmers and ranchers in Walla Walla are aware of VSP development and several have indicated they are ready to sign up and comply with critical area protection. Additional outreach will occur to ensure protection of critical areas.

5.6 Reporting

The WWCCD will compile biennial and 5-year progress reports for the Walla Walla Board of County Commissioners and SCC. These reports will tally participants, conservation practices, and effectiveness of VSP.

Section 6.0 - Community Outreach and Participation

One of the main purposes of the VSP process is to allow members of the public to provide information and seek an active role in protecting critical areas and maintaining agricultural viability. The WWCCD was appointed by the Walla Walla County Board of County Commissioners to serve as a conduit between the VSP Work Group, the SCC, the County, and the general public. This section outlines the WWCCD's efforts to communicate with and obtain input from area agencies and the general public regarding the VSP process.

6.1 Work Group Meetings

The first step in establishing a Work Group partnership was to share information regarding existing concerns and conditions. Area stakeholders and agriculture representatives were actively invited. The CTUIR, WDFW, Tri-Statesteelheaders, Kookkooskie Commons, Walla Walla Watershed Management Partnership, and others were invited, along with agriculture producers, seeking representatives from dryland, ranching, orchard and irrigated ag producers. Committee meetings were scheduled and held from March 2016 through _____. These meetings served to facilitate the sharing of information and gather local knowledge to lay the groundwork for the County's VSP.

The WWCCD facilitated the meetings, which were attended by the Work Group members and area agencies who expressed an interest in participating. WWCCD staff attended the meetings to provide the group with regular updates on the progress of the document and gather any additional information needed to complete the plan. VSP Work Group meeting minutes are included on the WWCCD VSP website.

Purpose

- Educate County growers and stakeholders about the opportunity to develop a VSP to protect critical areas and maintain agricultural viability.
- Improve and refine County VSP Work Plan based on feedback from County growers and stakeholders.
- Educate County residents of the VSP Work Plan process and the importance of maintaining agricultural viability.

Outcomes

- Attract and support a sufficient number of growers and stakeholders to develop a VSP.
- Develop a VSP that:
  - Complies with legislation
  - Has been refined from widespread grower and stakeholder input
  - Provides an understanding of critical area conditions
  - Outlines how agricultural practices can and do protect critical areas
- Share the critical role of agriculture to maintain both critical areas and viable agricultural economy as they contribute to County well-being
- Provide the County with a plan based on local needs and restrictions.

6.2 Outreach Methods

Several avenues were used to share the VSP process including the creation of a website, newsletters, and newspaper articles. These outreach materials and announcements listed the intents and dates of the VSP meetings, opportunities to be locally involved, and local contacts for more information. Further attempts to communicate with citizens and

cooperators included sending email messages and speaking at neighborhood agricultural meetings. A summary of the County's VSP outreach activities is shown in Table 6-1.

TABLE 6-1
VSP Outreach Activities

Task	Who	When	Details	Date Completed
VSP Work Plan				
Assemble Work Group	WWCCD and County Commissioners	March 2016	Invite farmers, ranchers, tribes, community development, environmental agencies, and related groups to join; establish meeting schedule and tasks	May 2016
Work Group Meetings	WWCCD	Monthly	Record meeting minutes and publish monthly	Ongoing
VSP Website	WWCCD	Monthly	Maintain VSP website with resource links, minutes, and meeting notices	Ongoing
Community Awareness (provide updates on the VSP process and the impacts to agriculture)				
Newsletter Article	WWCCD	Quarterly	Distributed to 925 agencies, schools, farmers, and ranchers	Spring 2016 Summer 2016 Winter 2017
County Commissioner Updates	WWCCD	Semi-Annually		June 2016 and November 2016
County Planning Commission	WWCCD	As Requested		December 2016
Newspaper Articles	WWCCD	As Requested	Article in *The Times* (City of Waitsburg)	February 2, 2017
Public Forum Meeting	WWCCD	TBD (near June 2017)	Open house for community and agricultural groups	TBD
Community Group Emails	WWCCD	Ongoing	Meet with the presidents of area community groups and ask them to share via email to groups participants	Ongoing
Community Groups Presentations	WWCCD	Ongoing	WWCCD annual meeting (45 people) Farmer-to-farmer mini-sessions (30 people – (Sudbury 7, Waitsburg 9, Clyde 7, Walla Walla 4, and Prescott 3)	January 25, 2017 and February 15 to 22, 2017
Contact Lists				
Maintain Mailing and Email Lists	WWCCD	Ongoing	Maintain mailing (725) and email (200) lists of schools, agencies, farmers, and ranchers	Ongoing

6.3 Public Meetings

Public meetings were scheduled during the development phase of the planning process to share information on the plan, obtain input on the details of the VSP, and discuss potential mitigation treatments. Periodic press releases were submitted to the various print and online news outlets that serve Walla Walla County (included in Appendix B). The meetings were conducted to provide updates and new information and to obtain feedback from attendees. The focus of the meetings was to share

information about current VSP Work Group activities regarding plan development, landowner responsibilities, and ways to be involved in the process. VSP Fact Sheets and information were distributed explaining programs. Attendees were asked to provide comments and suggestions for VSP adoption. The schedule of the public meetings is shown in Table 6-2.

TABLE 6-2
VSP Meetings Schedule

Topic	Location	Date
First meeting – WSDA presentation overview of VSP, WWCCD framework for mapping	WWCCD Conference Room	April 5, 2016
General discussion of VSP development statewide and Walla Walla County VSP meeting guidelines/policies	WWCCD Conference Room	May 2, 2016
General discussion of VSP development statewide	WWCCD Conference Room	June 7, 2016
General discussion of VSP development statewide, status of mapping for Walla Walla County, consultant direction	WWCCD Conference Room	July 5, 2016
Tribal context – CTUIR presentation on River Vision and First Foods	WWCCD Conference Room	September 6, 2016
Agricultural context	WWCCD Conference Room	October 4, 2016
Discussion regarding the direction of the Work Plan – Framework and background content	WWCCD Conference Room	November 1, 2016
Critical area discussion – Geologically hazardous areas	WWCCD Conference Room	December 2, 2016
Critical area discussion – Critical aquifer recharge areas and frequently flooded areas	WWCCD Conference Room	January 3, 2017
Critical area discussion – Wetlands	WWCCD Conference Room	February 7, 2017
Critical area discussion – Fish and wildlife habitat conservation areas	WWCCD Conference Room	March 7, 2017
Monitoring plan	WWCCD Conference Room	April 4, 2017
Monitoring plan	WWCCD Conference Room	May 2, 2017
Next Steps	WWCCD Conference Room	June 6, 2017

Turnout for the public meetings was limited. The public meetings were attended by ____ Work Group members and _____ members of the general public.

As observed and discussed in many forums, the majority of the population does not engage in committee meetings or community participation. Public participation has been waning, particularly throughout the past decade. Meetings were attended by board members, related staff, requested presenters, and a few community visitors (usually regulars). Very seldom did these meetings have public participants. The challenge is to reach the general population, not just the usual circle.

6.4 Documented Review Process

The opportunity to review and comment on this plan has been provided to the Work Group members, as well as the members of the general public, through a number of avenues.

During the regularly scheduled meetings, the Work Group and other attendees discussed findings, reviewed mapping and analysis, and provided written comments/recommendations on draft sections of the document.

The first draft of the document was presented to the Work Group in March 2017 for review. The committee was given 2 months to provide comments.

6.5 Public Comment Period

A public comment period was conducted from June 20 to July 8, 2017 to allow members of the public an opportunity to view a draft of the Walla Walla County VSP Work Plan and submit comments or other input to the committee for consideration. A press release was submitted to the local newspapers on June ___, 2017 announcing the comment period, the locations of the plan for review, and instructions on how to submit comments (included in Appendix B). Hardcopy drafts were printed and made available at Walla Walla County public libraries, and an electronic version of the plan was made available online at http://www.wwccd.net/programs/voluntary-stewardship-program. There were no comments received during this timeframe.

6.6 Continued Public Involvement

Walla Walla County is dedicated to involving the public directly in review and updates of the VSP. The Walla Walla County Commissioners, working through the WWCCD, are responsible for periodic reviews and updates of the VSP Work Plan. Copies of the VSP Work Plan will be catalogued and kept at both the WWCCD and Walla Walla County Community Development offices. The Work Plan includes the address and phone number for the WWCCD, which is responsible for keeping track of public comments on the Work Plan.

A public meeting will be held as part of each evaluation, or when deemed necessary by the Work Group. The meetings will provide the public a forum at which they can express concerns, opinions, or ideas about the plan. The WWCCD will be responsible for publicizing the public meetings and maintaining public involvement through the webpage and various print and online media outlets.

6.7 Summary

Several attempts were made to reach out and obtain local public involvement. The highest response came from the local policy regulation organizations. They provided valuable information both general and specific to meeting the needs of the VSP goals.

Public members were less responsive to participation requests. As observed and discussed in many forums, public participation is waning in Walla Walla County. While the public input that was received was beneficial, the number of public members who made comments was few.

Consideration on how to use other educational opportunities within communities may prove valuable. This could provide interaction from both agricultural producers and local community members in a joint effort to meet the VSP goals. Stakeholders must be responsible for supporting communication, informing, and joining in the formal and informal communication networks across organizations.

6.8 Frequently Asked Questions

Question: Are there critical areas in my County?

Answer: Yes. Five main critical areas with four sub-areas:

1. Fish and Wildlife Habitat Conservation Areas
2. Wetlands
3. Frequently Flooded Areas
4. Critical Aquifer Recharge Areas
5. Geologically Hazardous Areas
    a. Water Susceptibility of Erosion
    b. Wind Susceptibility of Erosion
    c. Landslides/Steep Slopes
    d. Seismic/Liquefaction

Question: What process is used to determine where critical areas are located?

Answer: Critical areas were classified and mapped during the Walla Walla County update to the Comprehensive Plan in 2008.

Question: Who is responsible for determining if there is a critical area?

Answer: Walla Walla County Community Development is responsible for determining critical areas according to the Walla Walla County Code 18.08.

Question: Will I know if there are critical areas on my land?

Answer: The WWCCD can check with the critical area code and maps to identify if critical areas are present on your land and help you understand what each critical area means for your property. Given that wind erosion covers 94 percent of Walla Walla County, your property likely has at least one critical area present.

Question: Will I know if there are critical areas on my land?

Answer: The WWCCD can check with the critical area code and maps to identify if critical areas are present on your land and help you understand what each critical area means for your property. Given that wind erosion covers 94 percent of Walla Walla County, your property likely has at least one critical area present.

Question: If there is a critical area on my land, what is my responsibility?

Answer: As a whole County, we are responsible for protecting the current conditions of critical areas. As an individual farmer or rancher, you can do your part by identifying which critical areas are located on your property, ascertaining the current conditions of each critical area, and monitoring those critical areas over time. Cost-share incentive programs are available to help enhance the functions of critical areas, if you choose to participate.

Question: Does VSP protect me from other regulation?

Answer: VSP is an alternative for critical area regulation and enforcement. If VSP is successful in our County, the rigid regulatory GMA and CAO will not be applied to this County or your farm. However, other regulations such as water quality (Ecology) and building codes (Walla Walla County) will still apply. VSP conservation practices can reduce the impacts agriculture has on water quality, but Ecology has the final say on regulation and enforcement.

Question: What do I have to do to protect critical areas?

Answer: Farming and conservation practices vary depending on which critical areas are located on your property. Maintaining cover on soil, conserving water use, and keeping buffers adjacent to streams are practices that can protect many critical areas. Specific practices for your site can be suggested by completing an Individual Stewardship Plan.

1

Section 7.0 - Maps of Zoned Agriculture and Critical Area Intersections

The following figures are included in this section:

- Figure CA-1 Walla Walla County Terrestrial Habitat
- Figure CA-2 Walla Walla County Wetlands
- Figure CA-3 Walla Walla County Frequently Flooded Areas
- Figure CA-4a Walla Walla County Critical Aquifer Recharge Area: Gravel Aquifer and Zone I High Vulnerability
- Figure CA-4b Walla Walla County Critical Aquifer Recharge Area: Travel Time
- Figure CA-5a Walla Walla County Water Erosion Potential
- Figure CA-5b Walla Walla County Wind Erosion Potential
- Figure CA-5c Walla Walla County Steep Slope/Landslide Hazards
- Figure CA-5d Walla Walla County Liquefaction Potential

Section 8.0 - Definitions

The Walla Walla County VSP utilizes the following definitions pursuant to the Walla Walla County Code of Ordinances 18.08.020, unless otherwise cited.

Adaptive Management – Relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An Adaptive Management Program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty.

Agricultural Land – Those specific land areas on which agriculture activities are conducted (RCW 90.58).

Agricultural Products – Includes, but is not limited to, horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within 20 years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products (RCW 90.58).

Agricultural Uses – Agricultural activities including farming, horticulture, silviculture, irrigation delivery systems, drainage systems, ranching and grazing of animals, and pest and weed control. This includes set-aside land, lands lying idle under government programs, and changes between agricultural activities.

Aquifer – A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Aquifer Recharge Areas – Areas that, due to the presence of certain soils, geology, and surface water, act to recharge groundwater by percolation.

Best Available Science – Current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through WAC 365-195-925. Sources of Best Available Science are included in Walla Walla County's *Best Available Science Review* document (HDR, 2008).

Best Management Practices (BMPs) – Conservation practices or systems of practices and management measures that:

- Control soil loss and reduce water quality degradation caused by high constructions of nutrients, animal waste, toxics, and sediment
- Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of wetlands
- Protect trees and vegetation designated to be retained during and following site construction
- Provide standards for proper use of chemical herbicides within critical areas

Buffer or Buffer Zone – An area contiguous to and protecting a critical habitat that is required for the continued maintenance, functioning, and/or structural stability of a critical area.

Conservation Easement – A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.

Critical Aquifer Recharge Area – Areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

Critical Areas – Areas including any of the following areas or ecosystem, as defined in RCW 36.70A.030

- Fish and wildlife habitat conservation areas
- Wetlands
- Frequently flooded areas
- Critical aquifer recharge areas
- Geologically hazardous areas

Critical Species – All animal and plant species listed by the state or federal government as threatened or endangered.

Cumulative Effects – The combined, incremental effects of human activity on critical areas functions and values. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis and changes to policies and permitting decisions.

Development — Any activity upon the land consisting of construction or alteration of structures, earth movement, dredging, dumping, grading, filling, mining, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulk heading, clearing of vegetation, or other land disturbance. Development includes the storage or use of equipment or materials inconsistent with the existing use. Development also includes approvals issued by the Walla Walla County that binds land to specific patterns of use, including but not limited to, subdivisions, short subdivisions, conditional use permits, and binding site plans. Development activity does not include the following activities:

- Interior building improvements
- Exterior structure maintenance activities, including painting and roofing
- Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning, and weeding

- Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning), wells, individual utility service connections, and individual cemetery plots in established and approved cemeteries.

Endangered Species – Any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

Enhance or Enhancement – To improve the processes, structure, and functions existing (as of July 22, 2011) ecosystems and habitats associated with critical areas (RCW 36.70A.703).

Erosion – The process whereby wind, rain, water, and other natural agents mobilize and transport particles.

Extreme Slope Hazard Areas – Areas with pre-development slope greater than 45 percent.

Fish and Wildlife Habitat Conservation Areas – Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created, as designated by WAC 365-190-080(5). These areas are guided by the State's Priority Habitats and Species List and include:

- Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association
- Habitats of local importance, including, but not limited, to areas designated as priority habitat by WDFW, areas that provide important habitat for neotropical migratory songbirds, areas that provide important habitat for wintering birds of prey, and areas that provide unique habitats
- Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas to mitigate impacts to ponds
- Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of Washington State
- Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity
- State natural area preserves and natural resources conservation areas designated by DNR
- Land essential for preserving connections between habitat blocks and open spaces

Fish Habitat – Habitat used by fish at any life stage at any time of the year, including off-channel habitat.

Floodplain – The total land area adjoining a river, stream, watercourse, or lake subject to inundation by the base flood.

Floodway – The channel of a river or other watercourse and the adjacent land area that must be reserved to discharge the base flood without cumulatively increasing the surface water elevation more than 1 foot. Also known as the **Zero Rise Floodway**.

Frequently Flooded Areas – Lands in the floodplain subject to a 1 percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance, and attenuation functions, as determined in accordance with WAC 365-190-080(3). Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of FEMA and the NFIP.

Functions and Values – The beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave attenuation, protection from hazards, historical and archaeological and aesthetic value protection, and recreation. These beneficial roles are not listed in order of priority.

Geologically Hazardous Areas – Areas that may not be suited to development consistent with public health, safety, or environmental standards because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include erosion, landslide, seismic, mine, and volcanic hazards.

Groundwater – Water in a saturated zone or stratum beneath the surface of land or a surface waterbody.

Growth Management Act (GMA) — See RCW 36.70A and RCW 36.70B, as amended.

Habitat – The place or environment where a plant or animal naturally occurs.

Habitat Conservation Areas – Areas designated as fish and wildlife habitat conservation areas.

Habitats of Local Importance – Areas including a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long-term. These might include areas of high relative density, breeding habitat, winter range, and movement corridors or habitats that are of limited availability or high vulnerability to alterations such as cliffs, talus, and wetlands (WAC 365-190-030).

Hazard Areas – Areas designated as frequently flooded areas or geologically hazardous areas due to their potential for erosion, landslide, seismic activity, extreme slopes, or other geological conditions.

Minerals – Materials including gravel, sand, and valuable metallic substances (RCW 36.70A.030(11) and WAC 365-190-030(12)).

- Mitigation – Avoiding, minimizing, or compensating for adverse critical areas impacts. Mitigation, in the following order of preference, is shown below. Mitigation for individual actions may include a combination of the following measures.

- Avoiding the impact altogether by not taking a certain action or parts of an action

- Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps such as project redesign, relocation, or timing to avoid or reduce impacts

- Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the project's initiation

- Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods

- Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action

- Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat or critical areas by replacing, enhancing, or providing substitute resources or environments

- Monitoring the hazard or other required mitigation and taking remedial action when necessary

Monitoring – Evaluating the impacts of development proposals on the biological, hydrological, and geological elements of such systems and assessing the performance of required mitigation measures throughout the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features, and includes gathering baseline data.

Ordinary High Water Mark – That mark which is found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil or vegetation has a character distinct from that of the abutting upland.

Priority Habitat – Habitat type or elements with unique or significant value to one or more species as classified by the WDFW. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element (WAC 173-26-020(34)).

Protect or Protecting – To prevent the degradation of functions and values existing as of July 22, 2011 (RCW 36.70A.703).

Recharge – The process involved in the absorption and addition of water to groundwater.

Repair or Maintenance – An activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

Restoration – Measures taken to restore an altered or damaged natural feature including:

- Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration

- Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

River – See Watercourse.

Seismic Hazard Areas – Areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, soil liquefaction, or surface faulting including:

- Areas subject to surface faulting during a seismic event
- Areas with underlying deposits indicative of a risk of liquefaction during a seismic event, including those areas mapped as "moderate", "moderate to high", and "high" by DNR
- Areas subject to slope failure during a seismic event
- Areas that are at risk of mass wasting due to seismic forces

Shorelines – All of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shore lands, together with the lands underlying them, except:

- Shorelines of statewide significance
- Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cfs or less and the wetlands associated with such upstream segments
- Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes

Special Flood Hazard Areas – The land in the floodplain within an area subject to a 1 percent or greater chance of flooding in any given year. Designations of special flood hazard areas on flood insurance map(s) always include the letters A or V.

Stream – See Watercourse.

Technical Panel – The directors or director designees of WDFW, USDA, Ecology, and SCC.

Threatened Species – Any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

Watercourse – Any portion of a channel, bed, bank, or bottom waterward of the ordinary high water mark of waters of the state including areas in which fish may spawn, reside, or pass through and tributary waters with defined beds or banks. This definition includes watercourses that flow on an intermittent basis or that fluctuate in level during the year and applies to the entire bed of such watercourse, whether or not the water is at peak level. This definition does not include irrigation ditches, canals, stormwater runoff devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

Water Resource Inventory Area (WRIA) – One of 62 watersheds in Washington State, each composed of the drainage areas of a stream or streams, as established in WAC 173-500 as it existed on January 1, 1997.

Watershed – A WRIA, salmon recovery planning area, or a subbasin as determined by a county.

Wetlands – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local government shall use the Washington State Wetland Identification and Delineation Manual, as amended.

Work Plan – A watershed Work Plan developed under the provisions of RCW 36.70A.720.

Section 9.0 - References

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APPENDIX A
Individual Conservation Planning Worksheet

INDIVIDUAL CONSERVATION PLANNING WORKSHEET

(Adapted for the Voluntary Stewardship Program in Walla Walla County)

To facilitate the development of a conservation plan for the application, please provide some basic planning information for the land being enrolled. *(Note: All information is confidential under the federal Privacy Act.)*

Applicant Information

Applicant Name (legal/full):		
Common or Business Name (if not same as above):		
Applicant is an: ☐ Individual ☐ Entity		
Mailing Address:		
Town:	State:	Zip:
County:	Phone: ( )	
Email:	Phone: ( )	

Land Being Enrolled

FSA Farm No.:		FSA Tract Nos.:	
Location:		Watershed:	
		Owner:	
		Operator:	
Type(s) of Operation:			
☐ Dryland	☐ Irrigated	☐ Vegetables	☐ Nursery/Greenhouse
☐ Horses	☐ Livestock - Beef	☐ Livestock - Dairy	☐ Livestock - Other
☐ Orchard	☐ Vineyard	☐ Other: Specify	☐ Other: Specify
The land is permanently deed restricted for agricultural use under a state, local, or non-profit program.			☐ YES ☐ NO

Critical Areas

Land contains or is adjacent to:	**Fish and Wildlife Habitat**	**Wetlands**	**Frequently Flooded Areas**	**Critical Aquifer Recharge Areas**	**Geologically Hazardous Areas**			
					Water Susceptibility of Erosion	**Wind Susceptibility of Erosion**	**Landslides/ Steep Slopes**	**Seismic/ Liquefaction**
Field:								

Farm Objectives

Natural Resource Concerns

To the best of your knowledge, the enrolled land contains or is adjacent to:	Crop fields ☐	Hay fields ☐	Pasture areas ☐	Barn yards ☐	Stream corridors ☐	Other areas ☐
Resource Issue						
Erosion problems						
Stream or water body						
Invasive plants						
Excess nutrients						
Lack of soil tilth						
Private well						
Archaeological, historical, or cultural feature						
Rare or endangered species habitat						
Other issue: Specify						

Production Information

	Crop	Hay	Pasture	Forest	Other	Total
Acres Owned						
Acres Rented						

Do you graze animals on any of the land?			☐ YES ☐ NO
Are you considering a prescribed/intensive/rotational grazing system?			☐ YES ☐ NO
If yes, would you convert cultivated cropland to managed grazing land?			☐ YES ☐ NO
Do you regularly test the soil for nutrient content?	☐ YES ☐ NO	Year of Last Test:	
Do any of the fields test high for phosphorus levels?			☐ YES ☐ NO
Is runoff, flooding, or leaching a potential problem for any of the fields?			☐ YES ☐ NO
Do you practice integrated pest management?			☐ YES ☐ NO
Do you practice any form of conservation tillage?	☐ YES ☐ NO	How many acres?	
Do you plant cover crops?	☐ YES ☐ NO	How many acres?	
Do you plan to increase your use of conservation tillage or cover crop?			☐ YES ☐ NO
Does any of your cropland extend to the edge of wetlands, streams or ponds?			☐ YES ☐ NO
If yes, what is the average buffer width between crop and water?			_____ feet
Are you interested in establishing or expanding conservation buffers to filter runoff?			☐ YES ☐ NO
Is runoff from agri-chemical storage or mixing areas draining into a wetland, stream, waterbody, surface well, or leaching into groundwater?			☐ YES ☐ NO
Do you crop any HEL fields or fields with slopes greater than 6 percent?			☐ YES ☐ NO
Are there visible signs of erosion on your land?			☐ YES ☐ NO
If yes, what is the average depth of rills or gullies?			_____ inches

Wildlife Supplement

Are you interested in wildlife conservation on your property?	☐ YES	☐ NO
Are you willing to devote all or part of some fields to developing wildlife habitat?	☐ YES	☐ NO
Are there areas (woodlands, wetlands) on which you want to enhance habitat?	☐ YES	☐ NO
Is your land near a state Wildlife Management Area; National Wildlife Refuge; or local, county, or non-governmental protected open space?	☐ YES	☐ NO
Are you receiving formal assistance from or through a partnership with another wildlife agency or organization?	☐ YES	☐ NO

Livestock Supplement

Describe the number of animals on your farm:

Type of Animal (a)	Average Number (b)	Average Weight (c)	(b) x (c)/1,000 Animal Units	No. of Days Pastured Annually

Describe your current waste management system (manure storage and application):

_____

_____

Describe your grazing system (forages and roughages used, season of use, grazing system):

_____

_____

Describe your livestock watering system: _____

Describe the typical confinement periods for your animals:

Full confinement	Animal Units:	months/year:	
Partial confinement	Animal Units:	months/year:	hours/day:

Do you provide supplemental feed on a regular basis?	☐ YES	☐ NO
Is additional land available for livestock rotation or herd management?	☐ YES	☐ NO
Do any animals have unrestricted access to a wetland, stream or water body?	☐ YES	☐ NO
Is runoff from manure storage getting into a wetland, stream or water body?	☐ YES	☐ NO
Is runoff from barnyard areas getting into a wetland, stream or water body?	☐ YES	☐ NO
Is milkhouse wastewater getting into surface water or being left untreated?	☐ YES	☐ NO
Is silage leachate draining directly into a wetland, stream or water body?	☐ YES	☐ NO

Describe the acreage available to receive manure:

Crop	Tracts/Fields	Acres Owned	Acres Rented

Irrigation Supplement

Have you irrigated the enrolled land at least 2 of the past 5 years?			☐ YES	☐ NO
Does your irrigation water come from a surface supply (pond or stream)?			☐ YES	☐ NO
Does your irrigation water come from a subsurface supply (well)? Shallow or basalt?			☐ YES	☐ NO
If yes, list diameter, depth, and yield of well	Inches	Feet	GPM	
List system type (solid set, gun, pivot, drip, flood, other)				
List pump type(s) (centrifugal, submersible, vertical turbine)				

List details on your pumps:	Pump 1	Pump 2	Pump 3	Pump 4
HP:				
Flow rate (gpm):				
Fuel used (gas, diesel, electric):				

Do you irrigate according to a water management plan?	☐ YES	☐ NO
Do you have soil or leaf monitoring sensors installed?	☐ YES	☐ NO
Do you use your system to chemigate?	☐ YES	☐ NO
Do you lose water through the system due to leakage?	☐ YES	☐ NO
Does your system meet at least an 85% uniformity of application?	☐ YES	☐ NO

Recommended Best Management Practices

_____

_____

Landowner concurrence: *This section MUST be completed for the applicant to be eligible for any permanent vegetative or structural practice on land they do not own.*

I authorize_____(operator) to install and maintain vegetative and/or structural practices on my land for conservation purposes.

_____ _____

Owner (print name) Owner Signature

_____

Date

APPLICANT'S SIGNATURE

The undersigned certify that the above information accurately represents the applicant, land, and agricultural operation associated with this application for federal farm bill conservation program(s).

_____ _____

Signature Date

_____ _____

Signature Date

APPENDIX B
Public Meeting Newspaper Article and Press Release

http://www.union-bulletin.com/news/local_governments/walla_walla_county/walla-walla-county-agriculture-program-on-track/article_f32efe5a-0f1e-11e7-a255-97d11b64b39f.html

Walla Walla County agriculture program on track

Andy Porter Mar 22, 2017

A new approach to balance the needs of farmers with protecting critical areas, such as wetlands, is going "gung-ho" in Walla Walla County, county commissioners were told Monday.

Work on getting the Voluntary Stewardship Program into place has been underway a year now, said Renee Hadley, Walla Walla County Conservation District manager, "and we're gung-ho and ready to keep going."

Created by the state Legislature in 2011, the program is intended to stem lawsuits and challenges related to agricultural activities when they intersect with lands defined as critical areas by the state's Growth Management Act.

These include frequently flooded areas, critical aquifer recharge areas, wetlands, wildlife habitat conservation areas and geologically hazardous areas, such as lands prone to erosion by wind or water.

One of the promises of the program for landowners is protection from being forced to take land out of production or establish and use practices mandated by outside agencies. It is also intended to protect counties from challenges and lawsuits over such rules as buffers between working farmlands and streams.

Last March, commissioners designated the conservation district as the lead entity for the program and Hadley outlined progress since then to develop a work plan for the county that measures up to state requirements. The county is one of 27 counties that opted to participate in the program.

Hadley told commissioners her group's deadline is in mid-October to submit a plan to the state Conservation Commission and work is ahead of schedule.

Developing a plan to protect critical areas and maintain agriculture is the first phase of the program. The second phase is implementing it and creating stewardship plans with landowners who choose to participate. The third phase is monitoring work plan progress toward goals over five to 10-year intervals.

Work on the plan has involved a group of agricultural landowners, environmental and conservation representatives, a state Department of Fish and Wildlife member and a representative from the Confederated Tribes of the Umatilla Indian Reservation.

"We've done a lot of work in the past year to make sure that this plan is pretty concise, that it's user-friendly, it is not a 300-page technical document ...." Hadley said.

One question mark hanging over the program is whether the state will continue funding it, Hadley said. Budgets proposed by Gov. Inslee and the state Senate have recommended full funding, but the House has yet to introduce its budget during the current legislative session.

If the program fails due to lack of funding, participation or failure to meet state requirements, Hadley outlined "backup plans" to county commissioners.

These include taking over the work plan developed by the conservation district, proceed under a plan previously adopted by another local government, adopt regulations certified by the state Commerce Department or work with the county Community Planning Department to develop their own alternative.

At the end of her presentation, Commissioner Jim Johnson told Hadley that through is membership in the Washington State Association of Counties, he has learned from other commissioners the program is facing problems in other counties.

"There's a general distrust of the two factions that are coming to the table ... folks that are passionate about critical areas and folks who are passionate about agriculture, and they don't have the trust factor that we have in this community," he said

But Walla Walla County is a "collaborative community," he added, and said there "is no better example of that" than what Hadley's group is doing.

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Andy Porter

Andy Porter has been with the Union-Bulletin since October 2000. His beats include Walla Walla County, city of College Place, Washington State Penitentiary, agriculture, environment as well as a wide range of general assignment topics.

The Times

News

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Cons. District Serves Local Farmers

Walla Walla County VSP Program could impact even small producers

By Dena Wood
The Times

WAITSBURG – During its Jan. 25 Annual Meeting, Walla Walla Conservation District Manager Renee Hadley spoke about the direction the district will be taking in 2017 and beyond.

Hadley said that, over the past decade or more, the district was able to install a significant number of on-ground projects involving irrigation efficiency and projects related to fish passage. The majority of those large projects have been completed.

She said the district will be shifting away from the larger efficiency projects to pursue education on soil health and groundwater.

Hadley was hired as assistant district manager in March 2016, with the intent of training to take over for Rick Jones who retired last May.

Hadley said the current shift in focus stems from a combination of leadership experience (Hadley is a geologist and Jones was a fish biologist), what has already been completed, and where funding remains available.

The nonprofit WWCCD was established in 1961 and serves to bridge the gap between local landowners and federal or state agencies. The district obtains grants to help landowners implement conservation practices and offers professional advice and cost-share when possible. The district has nine employees and is directed by a board of supervisors.

"There is a need and interest to help dryland farmers and address weed management. I am still pursuing these topics but, unfortunately, there are not a lot of grants available for those tasks. There are lots of grants available near water, but dryland doesn't qualify for most of those," Hadley said.

Annual Meeting

Hadley said between 40-50 people attended the annual meeting where they also heard updates from the Natural Resource Conservation Service and the Farm Service Agency.

The updates were followed by presentations on bees, by Dr. Steve Sheppard; herbicide resistant weeds, by Dr. Drew Lyon; and cover and companion crops for the inland northwest, by Diana Roberts.

Voluntary Stewardship Program

Attendees also received an update on the Voluntary Stewardship Program (VSP), which Hadley described as a "big topic." The VSP was developed in 2011 as an alternative to the strict Growth Management Act Critical Areas Ordinances (CAO). It sets up a system that allows local farmers and environmental agency representatives to work together to develop ways to protect critical areas.

There are two main differences between CAO's and VSP. First, under VSP, priority is given to protecting both critical areas and the viability of agriculture. Second, VSP is a voluntary process, while GMA is a regulatory system.

VSP applies only to areas where agricultural activities intersect with one of five critical areas in the county: fish and wildlife habitats, wetlands, frequently flooded areas, critical aquifer recharge areas, and geologically hazardous areas.

"Part of the program is that, unlike the CAO, with VSP, the entire county will be evaluated on how will it meets the goals it sets. It's not like the CAO, which regulates individual property owners. With VSP, local people develop the work plan, which is then approved by the state committee," said WWCCD Assistant Manager Audrey Ahmann in an interview with The Times.

"For example, speaking hypothetically, say VSP work plan specifies that 75% of our critical riparian areas will be protected with buffers, with a goal of replanting 30% of the buffer areas to native trees and shrubs. If half of the farmers set aside a buffer, and an additional 40% enroll their riparian areas in a restoration program like CREP, then the county will be in compliance with its VSP. The remaining 10% won't be subject to penalty or further regulation.

"Under CAO, the state could say that all farmers must set aside a 30 to 50 foot buffer, period. This could cause court fights and may result in farmers going out of business. To my mind, it's really interesting and will impact a lot of local farmers and ag producers, even very small ones," Ahmann added.

Participation in VSP is optional per county. In 2012, Walla Walla County opted into the program and selected WWCCD to administer VSP development on its behalf.

Hadley said WWCCD has formed a work group and hired the Anderson-Perry and Associates engineering firm to assist in developing the work plan document, which sets the goals or benchmarks for critical areas. The group has met monthly since May.

Once the work plan is finalized and approved, participating farmers will receive individual farm plans to help the county meet the benchmarks. If a majority of area farmers participate, then the goals will be met. Progress towards meeting the benchmarks will be tracked over time and if the county fails to meet the benchmarks, the county must revert to the heavy regulation and enforcement of the CAO's.

"We are at least halfway complete (with the work plan), but add and revise sections monthly. We aim to have the draft work plan ready for public comments by the end of June, but we are grateful to have public input during the whole process," Hadley said.

Local Examples

Several local farmers have benefitted from the work of the WWCCD in recent years. One example is the Smith Sediment Reduction Demonstration Project featured in the District's 2015 Annual Report. The district was able to help Waitsburg wheat farmer Glen Smith address erosion from a field-access road that was depositing sediment into Coppei Creek. The creek is an important spawning and rearing stream for threatened Mid-Columbia River steelhead.

The WWCCD engineer drew up plans and the district secured funding from the Washington State Conservation Commission and the National Fish and Wildlife Foundation. The district was then able to help Smith install an inlet structure and piping that directs run-off water to a nearby field where the sediment is filtered out.

The district estimates that the project keeps an estimated 30 to 50 tons of sediment from the creek, which results in cleaner water for fish and a stable road for Smith.

In 2013, the district began work on the multi-phase McCaw Fish Habitat Restoration Project to restore damage from the 1996 flood to the Touchet River Corridor, downstream of the City of Waitsburg's dike system. The district worked with the Jack McCaw Farm to construct two apex log jams, two large engineered log jams, six log sweeps, two secondary channels, grass seeding and stream treatment, to improve water quality and fish habitat.

Funding was provided through grants from the Recreation and Conservation Office, the state Conservation Commission, and the state Department of Ecology.

The WWCCD also helped repair flood damage to the Perry Dozier farm in 2009 and 2010. The district procured funding through the Recreation and Conservation Office to install rock barbs, root-wads, sweeper logs, and relief channels. They also treated 2,100 feet of stream bank and 2.9 acres of riparian zone, seeded 1.2 acres of grass, and installed 3.260 native plants.

"I am very proud of the projects that the district has successfully implemented over the last 20 years. The woody debris project on the McCaw reach is continued proof that the WWCCD continues to do good work for this county and fish restoration in general," said Waitsburg farmer Guy McCaw, who served on the WWCCD board for over a decade until 2012.

Interested parties can learn more about the WWCCD and the Voluntary Stewardship Program online at www.wwccd.net.

The VSP work group meets the first Tuesday of each month at 1 p.m. in the WWCCD office, located at 325 N. 13th Ave., Walla Walla. A discussion of wetlands will take place at the next meeting on Feb. 7.

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