



August 2023
Garfield County Voluntary Stewardship Program

2-Year Status Report – 3rd Report to WSCC





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Prepared for Garfield County and the
Washington State Conservation Commission

Prepared by Pomeroy Conservation District
and Garfield County VSP Work Group

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ABBREVIATIONS

BDA	Beaver Dam Analogs
CARA	Critical Aquifer Recharge Areas
ESA	Endangered Species Act
FFA	Frequently Flooded Areas
FSA	Farm Service Agency
FWH	Fish and Wildlife Habitat
GHA	Geologically Hazardous Areas
NRCS	Natural Resources Conservation Service
PALS	Post Assisted Log Structures
PCD	Pomeroy Conservation District
RCW	Revised Code of Washington
SRFB	Salmon Recovery Funding Board
USDA	US Department of Agriculture
VSP	Voluntary Stewardship Program
WAU	Watershed Analysis Unit
WDFW	Washington Department of Fish and Wildlife
WET	Wetlands
Work Group	Garfield County Voluntary Stewardship Work Group
Work Plan	Garfield County Voluntary Stewardship Work Plan
WSCC	Washington State Conservation Commission
WSDA	Washington State Department of Agriculture
WSU	Washington State University
Priority Habitat Species	<u>Upland Game Birds</u> – Chukar, Pheasant, Quail and Hungarian Partridge; <u>Upland Big Game</u> – Mule Deer; <u>Song Birds</u> ; <u>Raptors & Summer Run Steelhead</u>

1 Introduction

Garfield County VSP 2-Year Status Report for (FY) 2021-2023 is a written report on the status and accomplishments of the Garfield County Voluntary Stewardship Program (VSP) Work Plan; which was approved June 2018. The Garfield County VSP Work Group believes that implementation of the Work Plan is **on task** and **on track** to accomplish goals and objectives that were identified to protect and restore critical areas while maintaining the viability of agriculture in Garfield County. The Statewide Technical Panel members **all agreed** that Garfield VSP is meeting its county VSP work plan goals and benchmarks in its five year report, submitted November 30, 2020.

1.1 2-Year Status Report Development

This 2-Year Status Report was developed by the Pomeroy Conservation District (PCD) under direction of the VSP Work Group. There are stewardship strategies that have not yet been fully realized and have been only completed for a few months up to a few years and it takes time for trees to grow or actions to realize their full benefit to the resource. To date actions implemented with cost-share funding have not been double counted since multiple funding sources are possible. With that being said; there has been voluntary participation by local landowners to protect and/or enhance critical areas while maintaining the viability of agriculture. This report will capture practices identified in Work Plan, completed with cost-share funding and full farm stewardship in an Action Map to show their benefits not only to critical areas but also maintaining the viability of agriculture. The 5 Year Report used our Action Map to gather self-funded stewardship actions at the farm level for a clearer picture of farm scale actions and critical areas protection with functions and values for identified enhancement goals.

1.2 Requirements

The 2-Year Status Report includes detailed information intended to fulfill the state requirements outlined under the Revised Code of Washington (RCW) 36.70A.720(1)(j) and to provide a periodic evaluation of the effectiveness and accomplishments of Garfield County's VSP Work Plan in meeting the purpose and intent of VSP (RCW 36.70A700(2)). This report is prepared for sharing with Garfield County, the Washington State Conservation Commission (WSCC), partnering agencies, and the public. This report addresses the following VSP requirements:

- Provide a summary of actions and accomplishments made by the Work Group in meeting the VSP goals
- Report on the progress towards meeting the goals identified in the Work Plan as measured in accordance with the plan
- Institute adaptive management including assessment of monitoring data and proposed plan updates
- Provide a written report of the status of the Work Plan including a statement on achievement of the Protection and Enhancement Benchmarks specifically

2 Summary of Actions and Accomplishments

This is a summary of all the voluntary stewardship activities occurring on private lands with cost-share funding and voluntary information received from farmers and ranchers. The VSP Work Group, PCD, Natural Resource Conservation Service (NRCS), Farm Service Agency (FSA), Washington State Department of Fish and Wildlife (WDFW) and private landowners have completed projects that support VSP implementation and monitoring. Currently, no new county regulations, plans or programs will be addressed in the 2-Year Status Report. See Table 1. Stewardship actions and progress towards goals and objectives on page 5.

2.1 Outreach

The Garfield County VSP website was developed as well as a Brochure, Story Map and an Action Map that can be viewed at www.GarfieldCountyVSP.com. Brochures were handed out, annual meetings attended and presentations on Garfield VSP were given to the following: Pomeroy Grain Growers, Pomeroy Famers Day, Garfield County Weed Board and Pomeroy Cattlemen’s meetings with a total of 120 landowners attending. Individual landowner meetings were conducted, and the Action Map was filled out, showing voluntary stewardship occurring. PCD initiated 56 individual stewardship plans. Garfield County VSP funding funded 38 projects that were identified in Work Plan for the protection and restoration of critical areas. Continued outreach is important, and the Work Group has identified attending local annual meetings and giving presentations on VSP as well as individual landowner meetings to gauge support in voluntarily filling out the Action Map and individual stewardship plans for whole farm stewardship strategies and actions consistent with Work Plan. Additionally, both NRCS and FSA have outreach and cost-share programs, projects that are consistent with goals and objectives of VSP will be documented and reported. WDFW has a “Private Working Lands and Habitat Program” with outreach and projects designed to improve habitat for upland game birds and wildlife. NRCS, WDFW and PCD funded and completed projects are included in this report. COVID 19 restrictions still resulted in fewer one-on-one meetings with producers which has unavoidably limited outreach potentials over the past 2 years.

2.2 Implementation

Stewardship actions identified in the Work Plan were voluntarily implemented with 50 PCD, 83 NRCS and 12 WDFW projects. Projects consisted of, instream habitat for steelhead in Alpowa, Pataha and Tumulum Creek watersheds, riparian streambank protection for reducing sedimentation in Alpowa Creek. Upland best management practices and wildlife projects in Garfield County watersheds to reduce sedimentation and restore upland grass stands through direct seed, precision agriculture, mulching, rangeland weed spraying, and water systems for wildlife and domestic animals. Voluntary incentive programs with diverse funding sources have been used for upland, riparian, and instream habitat restoration and protection, resulting in ridge-top-to-ridge-top stewardship activities for critical area protections. PCD’s actions were completed with cost-share programs and funding from Ecology, WSCC, and the Salmon Recovery Funding Board (SRFB). NRCS program funding came from the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP).

2.3 Monitoring

The monitoring of diverse critical areas within Garfield County, in most instances, is not fully funded. Department of Ecology monitors stream flow on Alpowa, Deadman and Pataha Creek, while WDFW completes adult enumeration and spawning ground surveys for Endangered Species Act (ESA) listed steelhead on Alpowa and Pataha creeks. Most of the monitoring completed by Pomeroy CD consists of before and after pictures and final reports for funding sources for implementation projects. NRCS and FSA have spot checks for practices implemented with conservation funding. Project data is entered into a management spreadsheet and Garfield County VSP developed an Action Map which voluntarily captures stewardship activities that protect and restore critical areas identified in the Work Plan. Having a more robust monitoring protocol has been discussed. Most of the critical areas are easily seen from county or state roads, allowing for spot checks and documentation of critical habitat, especially wetlands. This technique keeps monitoring costs low and allows funding for project implementation protecting or restoring critical areas, resulting in more acres voluntarily protected. Currently we are following WSU's methodology for monitoring the protection and enhancement of critical area functions and values on agriculture lands using remote sensing technologies. Voluntary stewardship actions are being collected both from whole farms and also through cost-share programs with PCD, NRCS/FSA and WDFW. Participation monitoring (landowners, stewardship activities of BMP's identified in Work Plan, education and outreach with tours and individual stewardship checklists – Action Map) and effectiveness monitoring were identified to help gauge VSP success within Garfield County. Tracking of previous and ongoing stewardship actions will be further discussed with an analysis of critical area functions and values in the 5-Year Review. Aerial imagery and remote sensing will be used in some form with regard to wetlands and riparian areas documenting any changes in land cover, and the amount and type of vegetation between different years. The 5-Year Report will document the effects on critical areas with associated stewardship action implementation that is occurring throughout the County.

2.4 Adaptive Management

One update in Work Plan to include an additional stewardship practice by the Work Group.

2.5 Reporting

Telling "The Story of Voluntary Stewardship Activities" for agriculture and protecting and restoring critical areas on private land while maintaining the viability of agriculture is important. Garfield County's cornerstone is family-owned farms and ranches. Maintaining this way of life while balancing agriculture economics alongside protecting critical environments is imperative. Private property rights are very important to locals and VSP allows for confidential reporting and monitoring of voluntary stewardship actions that maintain agricultural activities and critical areas. Voluntary stewardship activities are providing both protection and restoration for critical areas within Garfield County; having the ability to track, report, and monitor will show overall trends are improving with local funding for stewardship actions. The Garfield VSP Action Map has both a private and public section. Most voluntary participants have made their stewardship public.

3 Progress Toward the Goals and Objectives

Identifying Stewardship Actions implemented since 2011 on benefits to specific critical area objectives in the Work Plan. Additionally, partnerships (CD, NRCS, FSA, WDFW, & landowners) that are important for Garfield County in funding, implementing, tracking, or monitoring stewardship all provided valuable implementation information with cost-share programs.

Table 1 provides a summary of Management Actions with associated stewardship that is either a (D) Direct or (I) Indirect benefit to the associated Critical Areas. 5 Critical Areas: Wetlands (WET), Fish & Wildlife Habitat (FWH), Critical Aquifer Recharge Area (CARA), Geologically Hazardous Area (GHA) and Frequently Flooded Areas (FFA). Pomeroy CD, NRCS and WDFW project cost-share data was used to document whether or not **2021 Objectives from the Work Plan** are being met with Voluntary Stewardship Actions.

Actual acres enrolled in voluntary stewardship cost-share programs does not capture self-funded acres are included in table 1 on page 5. Acreage enrolled in programs is verified through cost-share payments associated with completion. In Section 6 the VSP Action Map demonstration shows the gathering of whole farm/ranch information that will be presenting during the 5-Year Report and it includes self-funded stewardship and is a better representation of what is occurring on landscape. The VSP Action Map documents total amount of Stewardship Actions listed below on a whole farm/ranch and ensuring we are not double reporting acres in Section 6. The Action Map will be used to show the full extent of voluntary stewardship that is occurring throughout Garfield County. Table 1 shows that in almost all areas Garfield County is **Exceeding Goals** for Management Actions **for 2026** listed in the Garfield County VSP Work Plan with program funding from PCD, NRCS/FSA and WDFW. Since 2011, the PCD has worked with 50 different landowners on 86 projects identified in the Work Plan. During the same timeframe, the NRCS has worked with approximately 85 similar projects and WDFW 12 projects. For the 2-Year Status Report we are doing our best to not double report acres, since some projects received funding from multiple entities on the same acreage.

Table 1 is a conservative estimate with acres/feet/number of management actions to ensure reporting of projects that meet definitions of management actions and not double reporting metrics that have multiple funding sources. With that being said, monitoring and reporting is showing that critical areas within Garfield County can be protected with voluntary stewardship by landowners.

Having the ability to work with more local landowners after the 2023 harvest will allow for continued stewardship information in Action Map. Local landowners are understanding the value of reporting on a whole farm, the stewardship that is occurring to protect and restore critical areas...while maintaining the viability of agriculture. Landowners have commented on the importance of informing the public of the stewardship occurring on a voluntary basis. VSP cost-share programs in Garfield County have great participation. From 2019 – 2023 there have been 93 VSP projects totaling \$775,462, with 49% or \$383,613 from landowners and 51% or \$391,849 paid by VSP. Cost-Share was capped at \$5,000 so the 49% is not the total out-of-pocket costs to participating producers.

Table 1

Stewardship actions and progress towards goals and objectives (CS).

Management Action	Stewardship Actions	Critical Areas Effected (D) = Direct (I) = Indirect	Number of Proj.	Acres/Feet/Number	2026 Objectives from Work Plan	Progress
Residue and Tillage	No-Till/Direct Seed/2-Pass Systems	(I) – WET, FWH, GHA	33	22,819 ac	5,200 ac (protected) 19,400 ac (enhanced)	Exceeded Goals
Pest	Pest Management	(I) – WET, FWH, CARA, GHA	23	28,057 ac	5,200 ac (protected) 16,600 ac (enhanced)	Exceeded Goals
Nutrient	Nutrient Management	(I) – WET, FWH, CARA	16	17,352 ac	5,200 ac (protected) 16,600 ac (enhanced)	Exceeded Goals
Water	System, Irrigation	(I) – WET, FWH, GHA	1	1 ac	1 ac (protected) 6 ac (enhanced)	On Target
Livestock	Prescribed Grazing	(I) – WET, FWH, GHA, FFA	7	11,470 ac	1,000 ac (protected) 5,150 ac (enhanced)	Exceeded Goals
	Range Planting	(I) – WET, FWH, GHA, FFA	2	600 ac	200 ac (protected) 2,500 ac (enhanced)	On Target
	Watering Facilities	(I) – WET, FWH, GHA, FFA	12	24	5 facility (protected) 20 facility (enhanced)	Exceeded Goals
	Water Wells	(I) – WET, FWH, GHA, FFA	2	4	3 facility (protected) 20 facility (enhanced)	On Target
	Fence	(I) – WET, FWH, GHA, FFA	16	43,919 ft	15,000 ft (protected) 30,000 ft (enhanced)	Exceeded Goals
Soil	Pasture/Hayland Planting	(I) – WET, FWH, GHA	3	2,506.5 ac	30 ac (protected) 150 ac (enhanced)	Exceeded Goals
	Cover Crop	(I) – WET, FWH, GHA	6	217 ac	80 ac (protected) 600 ac (enhanced)	Exceeding Goals
Habitat	Conservation Cover	(D) – WET, FWH, GHA, FFA	9	633 ac	50 ac (protected) 800 ac (enhanced)	Exceeded Goals
	Critical Area Planting	(D) – WET, FWH, GHA, FFA	2	3 ac	20 ac (protected) 401 ac (enhanced)	On Target
	Herbaceous Weed Control	(D) – WET, FWH, GHA, FFA	22	3,461 ac	100 ac (protected) 500 ac (enhanced)	Exceeded Goals
	Tree & Shrub Establishment	(D) – WET, FWH, GHA, FFA	7	75.3 ac	400 ac (protected) 1,500 ac (enhanced)	Exceeded Goals
	Wetland Wildlife* Habitat	(D) - WET, FWH, GHA, FFA	0	0	3 ac (protected) 6 ac ((enhanced)	Behind Goals
	Upland Wildlife Management	(D) - WET, FWH, GHA, FFA	10	601.1 ac	200 ac (protected) 600 (enhanced)	Exceeded Goals
	Access Control	(D) - WET, FWH, GHA, FFA	2	417.6 ac	6 ac (protected) 20 ac (enhanced)	Exceeded Goals
	Stream Habitat Improvement	(D) – WET, FWH, GHA, FFA	5	907	300 str (protected) 800 str (enhanced)	Exceeded Goals
	Streambank Protection	(D) – WET, FWH, GHA, FFA	5	16,488 ft	4,640 ft (protected) 18,840 ft (enhanced)	Exceeded Goals

* Recently there has not been any wetland wildlife habitat projects completed in Garfield County. To participate in NRCS programs, farmers are prohibited from altering wetlands, as federal programs protect wetlands. 201 acres of wetlands in the County are visible from most roads for spot checks.

3.1 Agricultural Viability

Agricultural viability in the county includes regional and individual farm goals. These are defined, respectively, as the county’s ability to sustain agricultural production over time and an individual farm’s ability to meet financial obligations and make a profit. Agricultural viability at the regional level is the support system that helps individual farms succeed. This system also helps to mitigate potential threats and supports local producers in their operations and ability to take advantage of business opportunities. Table 2 includes specific goals and accomplishments toward maintaining agricultural viability at the county level.

**Table 2
Agricultural Viability – County Level**

County Goals	Accomplishments
Maintain stable and secure agricultural land base	On-going and dependent on local conditions and environment
	Alternative energy has become a secondary source of income within county
Maintain infrastructure and services	PCD, NRCS, FSA, etc. are identifying funding for best management projects
	Providing infrastructure and services is important and continued funding is key
Provide support for best farm management practices	PCD worked voluntarily with at least 40 landowners on at least 10 different
	Stewardship actions listed in Work Plan
Provide education, training, and succession planning	Hosted annual meeting (1), Presented at grower meetings (3)
	VSP presentation to ~120 landowners, website, Action Map & brochures
Provide a welcoming business environment	Support and partnerships on meetings, tours and projects
	Local producers support businesses
Private Property rights	Private property rights are important to the Work Group

At the farm level, agricultural viability rests mostly on the productivity of the land and the ability of the operator to balance input costs with sales and market pressures. The Work Plan emphasizes implementing stewardship and conservation measures through a systematic approach that maximizes the dual benefits of protecting and enhancing critical areas while enhancing agricultural viability. These systems include a suite of farming practices applied by crop type, that target multiple agricultural viability concerns; including water, soil health, nutrient, and pest 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. Currently there are no immediate threats to agriculture viably at the County level. Wind farms and potential future solar farms may compete with agriculture. Table 3 includes specific goals and accomplishments toward maintaining agricultural viability at the farm level. Working with landowners to fill out the VSP Action Map will help identify future programs or cost share that will help off-set out-of-pocket expenses for landowners and protect or enhance critical areas.

Table 3
Agricultural Viability – Farm Goals

Concept	Detail	Accomplishments and Commonly Implemented Strategies
Reduce inputs	Energy (power, fuels)	Precision Ag with GPS guidance system for No-Till/Direct Seed
	Chemicals	Cost-share using these practices to reduce all 3 input costs
	Labor	Variable rates for seed and chemical with less overlap and trips
Maintain or enhance land production capacity	Soil health	Precision Ag, Mulching & Rangeland weed control
	Water systems and moisture management	Cover crops are used with some irrigation and switching from wheel roll/handlines to pivots
	Nutrient management	Precision Ag, Soil Testing and Tissue Samples
	New technologies	Presentations at PCD Annual and Grower Group Meetings
Maintain flexibility to respond to market conditions	Changing land in production	Continued information and education, has not been a problem to date in Garfield County – windmill farms are new form of revenue
	Individual schedule for implementing farming practices	VSP Action Map works with producers on whole farm scale and stewardship strategies for protecting and/or restoring critical areas.
	Cropping choices	Alternative crops and markets are challenges, on-going
Provide incentives	Payment for measures	Strong support with PCD, NRCS, FSA and funding sources
	Tax breaks	On-going worked with 43 landowners on cost-share
Farmland conversion	Urban development	On-going information and education, not much urban development
	Maintaining resource Lands	WDFW and USFS have land in headwaters, need to be good neighbors
Provide a “no surprises” regulatory environment	Clean Water Act, Clean Air Act, Endangered Species Act, and others	Gaining better understanding of regulatory requirements and have partnerships that are gaining trust and credibility, but more work needed to help maintain agriculture while protecting resources
	County permitting (drainage and other requirements)	Garfield County is a partner in all stewardship activities on private lands and the permitting process is streamlined
Protect private property rights	Recognizing and respecting rights	On-going with information and education needed to gain trust
Provide resiliency to environmental variation	Rainfall, temperature, and other environmental factors can affect agricultural production and activities	Locals have been keeping environmental data that is housed with PCD
Maintain lifestyle	Maintain agricultural way of life	Priority in Garfield County, providing for the opportunity for farms to be passed to the next generation is important.

Another important aspect of agricultural viability is the importance of operating and maintaining existing stewardship practices and systems to achieve long-term benefits and minimize the number of practices that are discontinued over time. The continued operation of existing stewardship practices and systems will be a key component of VSP implementation. Having

secured and stable funding sources (esp. VSP) will allow for continued participation in voluntary cost-share programs. New technology is another area that can be explored by agricultural producers to improve the operation of existing conservation practices and systems or establish new ones. As described in the Work Plan, stewardship practices have the potential to benefit multiple resources, including agricultural viability and critical areas. Having the ability to monitor and report on the function and value associated with critical area enhancement will allow for continued support from funding sources and also private landowners who are implementing stewardship actions.

4 Assessment, Monitoring and Adaptive Management

The Garfield County Work Group manages the Implementation Phase and administered a cost-share program for stewardship actions identified in the Work Plan. This resulted in 23 projects that addressed critical areas, habitat types and helped producers with cost share to off-set project costs meeting agriculture viability goals. Participation and investment in the VSP program, resulted in increased reporting through the Action Map, demonstrating stewardship actions that protect or enhance critical areas while maintaining the viability of agriculture.

4.1 Assessment

The Work Plan is **on track** to meet producer participation goals and benchmarks. In terms of specific stewardship action, the Work Plan is **on track** to meet performance objectives. Stewardship actions are being implemented across all watersheds and for most critical areas. Critical Aquifer Recharge Areas, which consists of 140 acres within the County, has not benefited directly from current stewardship actions. We are working with an interactive map to gain valuable information on the farm scale for stewardship actions identified in the Work Plan and critical area protection information that will be reported at the watershed scale with no landowner personal information.

4.2 Monitoring Participation

Private landowner participation within Garfield County has always been very high with both Federal and State funding sources. FSA and NRCS estimate that over 70% of the farms within Garfield County participate in farm programs. The number of practices implemented since 2016 (83 NRCS, 75 PCD and 12 WDFW) that are identified in the 2-Year Status Report support this participation information. Table 4, Producer Participation Status page 9, has the benchmarks from the Work Plan and where we are currently with participation benchmarks. Stewardship Action participation shows some discontinuation of CREP and CRP, due to changes in payments and lower rental rates for CREP and reduction in the cap for Garfield County and complete sign-ups for CRP. Individual cost-share programs for residue and tillage management and other stewardship actions have little to no discontinuation of practices to date and this can be seen in Table 6 page 11. The 5 Year Report will show producer and project implementation participation benchmarks and status.

Table 4**Producer Participation Status**

Participation Benchmark	Performance Metric	2-Year Status
Active Participation	Cost-Share Programs – VSP cost-share from 2019 - 2023 51% from VSP and 49% landowners	93 VSP Projects completed \$391,849 from VSP and \$383,614 from landowners
Meetings, Tours and Social Media	3 or more tours, 8 or more meetings, 8 or more articles	3 watershed tours with landowners, 4 grower meetings, 3 articles
Technical Assistance and Outreach Provided	On-Going	PCD – 43 landowners with 47 projects NRCS – 83 projects, WDFW 12 projects

4.3 Monitoring Indicators

Specific environmental variables regarding VSP goals and benchmarks that were identified in the Work Plan that has been documented during the 2-Year Status Report include Soil Health and Fish and Wildlife Habitat. Promoting Soil Health conservation within the county with a number of stewardship plans and acres of stewardship completed to ensure no net loss of suitable agriculture soil. Table 1 demonstrates stewardship actions and acres completed with a comparison to protection and enhancement benchmarks for both soil health and fish and wildlife habitat. Preserving and enhancing native habitat areas for Fish and Wildlife was identified and information on instream structures and feet of streambank protection was included in Table 1.

An update on the current status of Indicators for Garfield County is listed below in Table 5. Full evaluation of all monitoring indicators will be completed in the 5-Year Report with functions and values associated with critical areas. Current participation with stewardship actions continuing0.... will show that soil and habitat functions and values are improving. Future reports will include information that will track improvements in both water quality and hydrology. Aerial imagery is being researched to see if riparian habitat can be evaluated in the County.

Table 5**Indicator Source Summary**

Critical Area Function	Indicator Source (examples)	Data Period	Findings
Water Quality	Category 2 through 5 303(d) listings; well-monitoring data	2020-2022	On Target
Hydrology	Ecology stream flow gauge monitoring	2020-2022	On Target
Soil	U.S. Department of Agriculture Natural Resources Inventory monitoring	2020-2022	On Target
Habitat	Aerial imagery; WDFW Priority Habitats and Species data; GIS evaluation; ground truthing	2020-2022	On Target

4.4 Adaptive Management

Garfield VSP has resulted in landowners being invested in voluntary stewardship. "Telling the Story" of how voluntary stewardship can and has been protecting and restoring critical areas is exciting. There are no new challenges to implement stewardship strategies (except for continued VSP funding) as interest and enthusiasm remains high. Twenty-three producers signed up for 50% cost-share for projects identified in the Work Plan to protect and restore critical areas with VSP funding. Wetland wildlife habitat management is the only stewardship action that currently has no interest. There are numerous protection actions for wetlands and the 201 acres identified as wetlands is a very small, but important percentage of agricultural lands. Outreach and education as well as monitoring of the 201 acres will be used to help protect wetlands.

Stewardship strategies and actions identified in the Work Plan are being implemented and there is no need to add any practices. VSP cost-share program was very successful, with 50% of project cost coming from the cooperators, which helps with agriculture viability. Critical area functions and values are being evaluated for the 5 Year Report with no issues to report. Currently, no adaptive management measures with assessment or monitoring are identified for Garfield County VSP.

4.5 Spirit of Cooperation

VSP implementation within Garfield County has brought new funding for completing cost-share programs that protect and/or restore critical areas identified in Work Plan. With increased funding the PCD and Work Group have fostered cooperation and partnerships within Garfield County, landowners, WDFW and Nez Perce Tribe. VSP has also allowed the PCD to work closely with the Department of Agriculture and have benefited from some of the programs that they oversee. With the Endangered Species Act and having listed summer steelhead in most of the watersheds within Garfield County, stewardship strategies to protect and restore instream fish habitat has little benefit for local agriculture producers. Since 2013, local landowners have been working with PCD to protect and restore critical habitat for steelhead in Alpowa, Pataha, and Deadman Creeks. Having the ability to work on private lands for the benefit of steelhead proves that agriculture is dedicated to conserving fish habitat and the ESA-listed species within Garfield County watersheds.

5 Status of the Garfield County VSP Work Plan

The Garfield County VSP Work Plan is **on target** to meet the identified measurable benchmarks in 2026. The 5 Year Report will showcase the outcomes of an intensive effort to reach landowners and report on whole farm/ranch activities as they related to the Work Plan. Support for voluntarily reporting and VSP is gaining momentum in Garfield County. We look forward to continue showcasing all the great stewardship strategies and actions that are occurring. There are no immediate threats to agriculture viability since voluntary stewardship actions are occurring both with cost-share funding and self-funded stewardship strategies. There is strong landowner participation and stewardship action reporting.

5.1 Measurable Benchmarks

Using the Washington State Department of Agriculture and US Department of Agriculture Census of Agriculture for Garfield County, table 6 captures data prior to 2011, and 2017/2019 acres with an emphasis on progress towards benchmark and restoration goals identified in Table 1. This shows stewardship actions with federal and state cost-share and acreages enrolled in programs and expands on what is in the Work Plan for 2019 acres.

Connecting conservation practices with specific benchmark goals based on the Conservation Practice Physical Effect (CPPE) Scores for each practice developed by USDA. Stewardship strategies and actions identified in the Work Plan and have been identified to benefit specific goals for protecting and/or enhancing critical areas values and functions.

Measuring historic enrollment data within for specific conservation practice to develop an average annual enrollment for stewardship practices. Work with private landowners to get an idea of how many acres are enrolled in stewardship actions outside of federal and state cost-share programs (what and how much is being self-funded – or voluntary stewardship occurring with out-of-pocket funding from landowners). Gain trust and credibility that information shared on stewardship actions and strategies will be reported on the county or watershed scale and all landowner information will remain private.

Table 6
FSA/NRCS and PCD Stewardship Actions Prior to 2011 and 2017 and 2019 Implementation

Stewardship	2011	2017	2019
FSA Cropped Acres	168,102 ac	178,984 ac	194,612
Wheat and Barley Acres	78,750 ac	139,134 ac	134,225
Fallow Acres	43,000 ac	79,000 ac	58,234
CRP Acres	48,000 ac	31,000 ac	31,446
CREP Acres	1,352 ac	1,287 ac	1,287 ac
No-Till/Direct Seed/2-Pass	69,595 ac	82,199 ac	89,081.4 ac
Grasses/Legumes	24,500 ac	29,804 ac	94,420
Grazing Management	55,234 ac	65,995 ac	66,705.7 ac
Instream Habitat Structures	0 str	556 str	1,056 str
Streambank Protection	0 ft	8,188 ft	16,488 ft

Stewardship actions completed in Table 1 and highlighted actions in Table 6, protection and enhancement of critical areas, except Critical Aquifer Recharge Areas within Garfield County, has occurred. In the 5-Year Report, we will document critical area functions and values. Currently, VSP seems to balance protection and enhancement goals while maintaining the viability of agriculture. New outreach tools developed during the biennium include an interactive Action Map that allows landowners to see critical area layers on a map and answer questions on which stewardship strategies actions they are utilizing on private property. This helps VSP succeed in meeting benchmarks and reporting progress, we will highlight this below in section 6 Voluntary Stewardship Program Success.

5.2 Highlights

Landowners in Garfield County implemented stewardship strategies that are identified in the Work Plan that protect or restore critical areas while maintaining the viability of agriculture, as identified in Table 7 here are the most common actions implemented. Cost-share with funding source paying at least 50% of the cost associated with the practice except for stream habitat improvements are paid at 100%, which helps with agriculture viability. Alpowa Creek, on three different landowners' sites, we installed 1,200 Post Assisted Log Structures (PALS) and on Pataha Creek on 2 landowners' sites, we installed 63 Beaver Dam Analogs (BDA's) and 86 PALS with Salmon Recovery Funding Board and Ecology funding for a total of 1,056 instream structures.

Table 7
Stewardship Implementation

Stewardship Actions	Number of Projects	2011 - 2023 Quantity Figures
No-Till/Direct Seed/2-Pass	33	22,819 acres
Prescribed Grazing	7	11,470 acres
Riparian Fencing	16	43,919 feet
Watering Facilities	12	24 tanks for domestic livestock and/or wildlife
Stream Habitat Improvements	7	1,025 PALS – Alpowa; 63 BDA's and 86 PALS - Pataha

- Continue implementing Work Plan as approved in 2018
- No suggested adaptive management measures through the next biennium

6 Voluntary Stewardship Program Successes

Garfield County VSP developed the Action Map to help gather more stewardship information and be more interactive than the Stewardship Checklist, the initial step for on-farm planning and Stream Habitat Improvements. We are using the interactive map to gather stewardship strategies and actions from landowners who are interested in filling out the online form. Stewardship action questions in the Action Map are directly from the Work Plan page 36, Table 3.5 Protection Benchmarks and Enhancement Goals.

The Action Map allows landowners to either make their information private or public, designates a place to describe stewardship strategies, lets landowners upload pictures of their projects, as well as let us know if they are interested in more information on actions that are currently not occurring on their farm or ranch. As of August 19, 2019, 32 pins have been placed with 153 stewardship actions from the Work Plan documented, but only a few actions are feeding into the 2-Year Status Report at this time. Landowner support for "Telling the Story" of how agriculture can voluntarily protect critical areas is important and gaining traction. See pictures and descriptions below on the Garfield VSP Action Map photos or go to:

<https://garfieldcountyvsp.mapseed.org/8.30/46.38856/-117.55455>

garfieldcountyvsp.mapseed.org/page/about

GARFIELD COUNTY
Voluntary Stewardship Program

ABOUT | VSP ASSISTANCE | DASHBOARD

SIGN IN

SHARE YOUR STEWARDSHIP

×

**Welcome Garfield County
Voluntary Stewards!**

GET STARTED

Garfield County Voluntary Stewardship Program (VSP) provides an innovative approach for reporting the protection of critical areas on agriculture lands that enhance our environment through voluntary measures, while promoting agriculture viability. VSP voluntarily collects previous and on-going stewardship data from all interested landowners, which helps document VSP participation and the importance of agriculture viability.

Visit www.garfieldcountyvsp.com for more information

Help promote Garfield County agriculture by sharing stewardship strategies!

VSP success relies on voluntary participation by landowners!

Garfield VSP Action Map (above). Landowners click on SHARE YOUR STEWARDSHIP in the upper left-hand corner. Each Red Pin is an individual landowner form that was filled out voluntarily. From the Work Plan we have identified the Stewardship Actions that protect or enhance critical areas and when a landowner survey is completed pins that landowners make public are displayed on the Action Map. Below is the only information that is displayed when clicking on a Red Pin.

GARFIELD COUNTY
Voluntary Stewardship Program

ABOUT | VSP ASSISTANCE

SHARE YOUR STEWARDSHIP

EDIT THIS POST

Someone added
0 COMMENTS
2 MONTHS AGO

SUPPORT

Twitter Facebook

8 Stewardship Actions

Ensure good stewardship of the land for future generations. Improve habitat for fish and wildlife. Enhance the productivity of the soil by reducing erosion and controlling noxious weeds. Use renewable energy to manage water for livestock and wildlife.

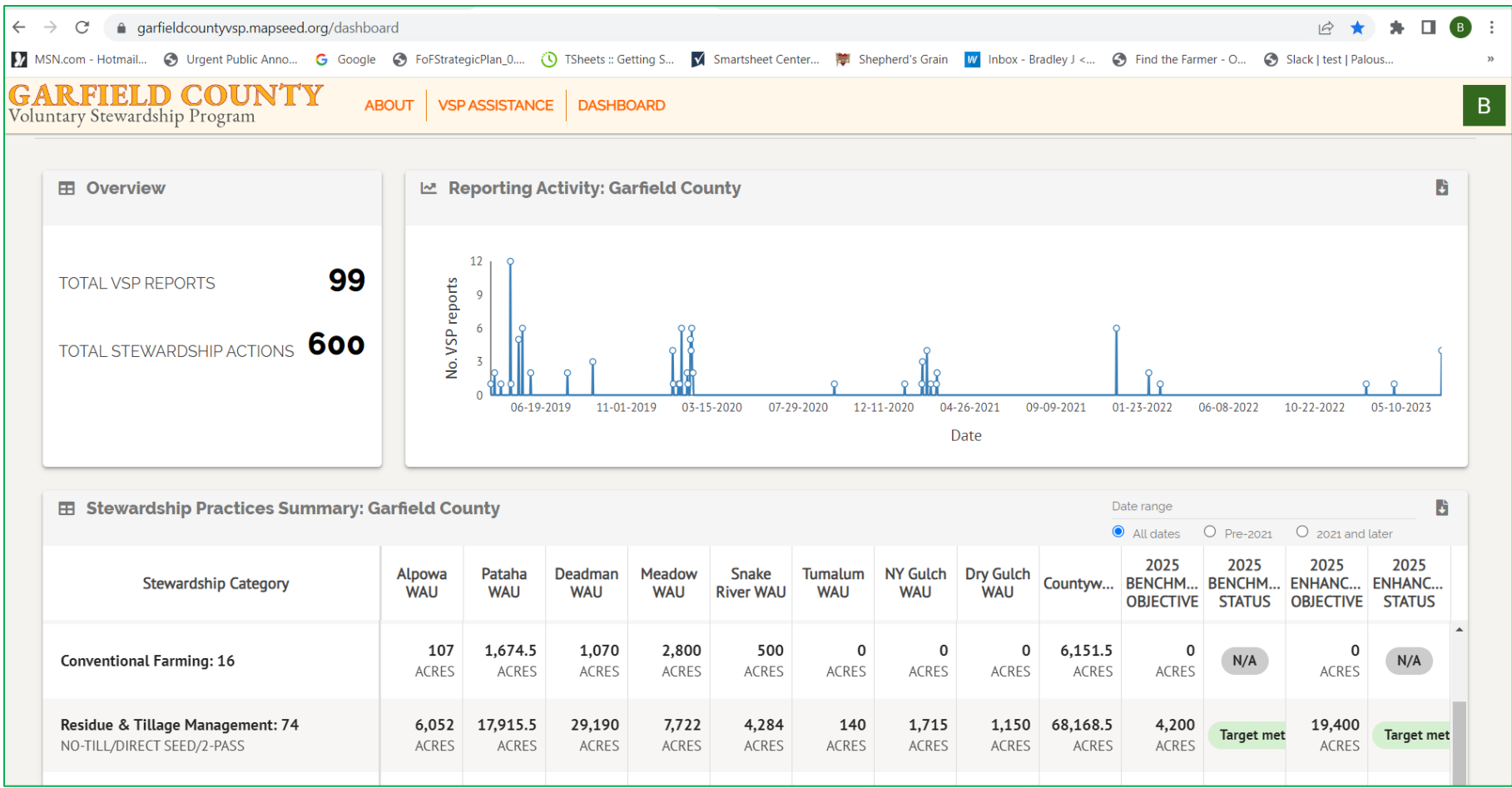
Conventional till	580 acres
Pest management	175 acres
Watering facilities	3 stock tanks
Water wells	1 wells
Fencing	6600 feet
Conservation cover	590 acres
Weed control	25 acres
Tree/shrub establishment	3 acres

0 comments

Comment

Your Name

Clicking on a Red Pin gives you the list of stewardship actions that are occurring on that operation. The larger Red Pin in the bottom middle of the picture and the associated 8 Stewardship Actions that are listed to the right are the only information that shows, no personal landowner information. The Action Map is being used to roll-up actions occurring on the farm/ranch scale to the appropriate watershed for the 5 Year Report of current function and values for critical areas. The landowner responses then go to the Dashboard which summarizes all the stewardship action information received by action, watershed, countywide and status for both the protection and enhancement goals. See the Dashboard below for Garfield County.



The Dashboard shows 99 pins with a total of 600 Stewardship Actions as of June 29, 2023. Whether or not a landowner makes their pin public or not, stewardship actions go to the VSP Dashboard. The cumulative totals by each action are listed by watershed and countywide total is compared to the Protection Benchmarks and Enhancement Goals and Current Status to demonstrate progress. For Residue and Tillage Management, the Action Map total above (68,168.5) is more than the 22,819 ac in cost-share programs in Table 1. Cost-share programs from PCD, NRCS, FSA or WDFW have quality control prior to incentive payments being completed with Ecology, WCSS, SRFB, EQIP and CSP funding. Action Map info is used for 5 Year Report after we complete quality controls.

Action Map Stewardship Practices Detail: Garfield County

Stewardship Category	Alpowa WAU	Pataha WAU	Deadman WAU	Meadow WAU	Snake River WAU	Tumalum WAU	NY Gulch WAU	Dry Gulch WAU	Countywide	2026 Benchmark Objective	2026 Benchmark Status	2026 Enhanced Objective	2026 Enhanced Status
Conventional Farming	107 ac	1,674 ac	1,070 ac	2,800 ac	500 ac	0 ac	0 ac	0 acres	6,151.5 ac	0 acres	n/a	0 acres	n/a
Residue & Tillage Management (No-Till, etc.)	6,052 ac	17,915.5 ac	29,190 ac	7,722 ac	4,284 ac	140 ac	1,715 ac	1,150 ac	68,168.5 ac	5,200 ac	Target Met	19,400 ac	Target Met
Pest Management	6,158 ac	18,266 ac	28,102 ac	10,903 ac	8,584 ac	540 ac	2,665 ac	1,550 ac	76,768 ac	5,200 ac	Target Met	16,600 ac	Target Met
Nutrient Management	5,375 ac	11,489 ac	14,060 ac	8,742 ac	3,109 ac	140 ac	1,865 ac	550 ac	45,330 ac	5,200 ac	Target Met	16,600 ac	Target Met
Water Management (Irrigation)	90 ac	178 ac	140 ac	86 ac	0 ac	0 ac	0 ac	0 ac	494 ac	1 ac	Target Met	6 ac	Target Met
Livestock Management (Prescribed Grazing)	7,843 ac	7,746 ac	12,160 ac	4,421 ac	7,265 ac	2,600 ac	5,000 ac	0 ac	47,035 ac	1,000 ac	Target Met	5,150 ac	Target Met
Livestock Management (Range Plantings)	100 ac	48 ac	0 ac	75 ac	507 ac	5 ac	0 ac	600 ac	1,335 ac	200 ac	Target Met	2,500 ac	In Progress
Livestock Management (Water Facilities)	41 facils	44 facils	80 facils	20 facils	17 facil	12 facils	10 facils	2 facils	226 facils	5 facil	Target Met	20 facils	Target Met
Livestock Management (Watering Wells)	6 wells	14 well	19 wells	6 wells	1 wells	4 wells	3 wells	0 wells	53 wells	3 well	Target Met	20 wells	Target Met
Livestock Management (Fencing)	91,872 ft	28,630 ft	71,880 ft	40,680 ft	13,050 ft	40,000 ft	0 ft	0 ft	286,112 ft	15,000 ft	Target Met	30,000 ft	Target Met
Soil Management (Pasture/Hay Plantings)	62 ac	411.5 ac	2,747.1 ac	161 ac	500 ac	0 ac	0 ac	0 ac	3,881.6 ac	30 ac	Target Met	150 ac	Target Met
Soil Management (Cover Crop)	732 ac	146.5 ac	710 ac	220 ac	0 ac	140 ac	0 ac	0 ac	1,948.5 ac	80 ac	Target Met	600 ac	Target Met
Fish/Wildlife Mgmt (Conservation Cover)	385 ac	6,258.2 ac	3,392 ac	2,818 ac	952 ac	83 ac	300 ac	600 ac	14,788.2 ac	50 ac	Target Met	800 ac	Target Met
Fish/Wildlife Mgmt (Critical Area Planting)	0 ac	784.5 ac	284 ac	3 ac	45 ac	114 ac	0 ac	0 ac	1,230.5 ac	20 ac	Target Met	401 ac	Target Met
Fish/Wildlife Mgmt (Herbaceous Weed)	1,413 ac	4,641 ac	4,205 ac	1,911 ac	4,835 ac	438 ac	175 ac	0 ac	17,648 ac	100 ac	Target Met	500 ac	Target Met
Fish/Wildlife Mgmt (Tree/Shrub Planting)	22.15 ac	2,638.5 ac	663 ac	6 ac	35 ac	114 ac	0 ac	0 ac	3,478.65 ac	400 ac	Target Met	1,500 ac	Target Met
Fish/Wildlife Mgmt (Wetland Wildlife Mgmt)	0.5 ac	22 ac	1 ac	0 ac	0 ac	0 ac	0 ac	0 ac	23.5 ac	3 ac	Target Met	6 ac	Target Met
Fish/Wildlife Mgmt (Upland Habitat Mgmt)	0.5 ac	77.5 ac	522 ac	654 ac	3,535 ac	114 ac	0 ac	0 ac	4,933 ac	200 ac	Target Met	600 ac	Target Met
Fish/Wildlife Mgmt (Access Control)	0 acres	1,936 ac	57 ac	657 ac	6,196 ac	114 ac	0 ac	0 ac	8,960 ac	6 ac	Target Met	20 ac	Target Met
Fish/Wildlife Mgmt (Instream Habitat)	907 structs	9 structs	0 structs	0 structs	0 structs	14 structs	0 structs	0 structs	930 structs	300 structs	Target Met	800 structs	Target Met
Fish/Wildlife Mgmt (Streambank Protection)	15,114 ft	4,570 ft	0 ft	0 ft	0 ft	40 ft	0 ft	0 ft	19,724 ft	4,640 ft	Target Met	18,840 ft	Target Met

List of stewardship actions that have been recorded in the Garfield VSP Action Map as of 6/17/2021. **Green** – Target Met, **Yellow** – In-Progress and **Pinkish** – Behind Goals, most stewardship actions are **Meeting Target** objectives with landowners still to be contacted in 2019/2020 before 5 Year Report submittal.

Instream Habitat improvements are practices that protect and restore critical habitat for ESA listed summer steelhead. Landowners in Alpowa, Pataha and Deadman Creeks have been installing Post Assisted Log Structures (PALS) and Beaver Dam Analog Structures (BDAs) to increase wood and restore functions to these streams for the past 7 years. Instream habitat is solely a benefit to the resource (since these streams are closed to fishing) and landowners have been instrumental in getting structures installed and participating in programs that fund the installation of these fish habitat structures. Habitat surveys identified that instream pool habitat and wood were lacking from streams within Garfield County. With funding from the Salmon Recovery Funding Board, NRCS EQIP, and Ecology's Flow and Implementation Grants, we have worked with private landowners to increase suitable instream habitat for steelhead.



Summer Run Steelhead in the middle of the picture above – Alpowa Creek

Examples of some of the 1,056 structures installed on private lands within Garfield County and some of the immediate benefits to fish habitat with instream structures are on the following pages.

Alpowa PALS – Fish and Wildlife Habitat



Upper picture before, lower picture one month later with PALS placement. Notice the green associated with slowing down and pooling water around structures and how the spring on left bank appears wetter.



There was no rain during the month between drone flights, similar days with some shading differences, stark difference in the green up around Alpowa Creek and the spring on the left bank.

Monitoring:

Water quality monitoring in three watersheds (Alpowa, Pataha and Deadman) and the results are below for the parameters listed in the Work Plan. Dissolved Oxygen, Fecal Coliforms, Total Suspended Solids, Total Per Sulfate Nitrogen, Total Phosphorus, Summer Low Flows and Stream Temperatures.

Watershed	DO	Fecal	TSS	TPN	TP	Flow	Temp
	Pre 2011/Post	Pre 2011/Post	Pre 2011/Post	Pre 2011/Post	Pre 2011/Post	Pre 2011/Post	Pre 2011/Post
Alpowa	10.3 – 10.8	198 - 180	48 - 14	16 -22	16 - 22	6.47 – 8.19	16.85 – 16.77
Pataha	10.6 – 8.64					5.55 – 5.50	18.25 – 18.03
Deadman	10.4 -10.5	73 - 87	24.7 - 21.7	1.5 - 2.2	0.1 - 0.09	2.72 – 4.29	15.93 – 15.94

The Green above shows where there were improvements from the 2011 baseline to the implementation of stewardship action with water quality monitoring information from the Department of Ecology stream gauges. DO increase at this level is good for fish. Fecal Coliform and TSS decrease is what we hope to achieve with increased stewardship actions. These are occurring with Flow increases from baseline. Temperatures decreasing or remaining the same are important. Stream temperatures in Deadman showed a slight increase from the 2011 baseline, but overall, the monitoring efforts indicate improvements to water quality within Garfield County watersheds. It is unfortunate that there is not a lot of water quality data, but we are using the best available information. In summary, the summer base flow is increasing in Alpowa and Pataha and nutrients are mostly reduced, which means water quality is getting better with less sediment and the resources are recovering within most Garfield County watersheds in WRIA 35.

Aerial imagery for Ag Area, Ag-Riparian Intersect, Ag-Wetlands Intersect, Ag Intersect with PHS were evaluated by Amanda Stahl from WSU. The spatial resolution was 10 meter and the information came from WSDA Crop Types 2011, 2019 (P. Beale WSDA), Riparian Mask (USGS-NHD, D. Theobald et al.), Wetland-USFWS-NWI, Sentinel-2 Imagery (2016 – 2019) and NAIP imagery 2011, 2017. Information is summarized below for aerial imagery monitoring.

Metric	% Change	Overall Accuracy	Notes
Ag Area (minus pasture)	-0.3%	2011 WSDA Crop Type = 95.7% 2019 WSDA Crop Type = 90.8%	Removed pasture because it was not equally complete between 2011 and 2019
Ag - Riparian	0.93%	2011 WSDA Crop Type = 95.7% 2019 WSDA Crop Type = 90.8%	Spatial analysis completed at 10m, Crop type classification has ~5m spatial accuracy
Ag - Wetland	0%	2011 WSDA Crop Type = 95.7% 2019 WSDA Crop Type = 90.8%	Intersect by wetland type ranged from -2.5% to 2.0% change by area = 0% change overall
Ag - PHS	-4.5%	92%	
NDVI	No Net Change	Overall = 95.7 Kappa = 0.999 Omission = 77.6% Commission = 88.8%	Change in NDVI is less than standard deviation for both veg cover classes (green and senesced in late season) on Ag lands

Conclusions:

The Garfield County VSP Work Group agreed with the Technical Panels assessment of the 2020, 5 Year Review. That Implementation of the Work Plan has been successful so far, and if Stewardship Strategies and Actions continue on current trajectory, the Work Plan's goals and objectives will be implemented throughout the County. With continued progress the Work Group believes the Work Plans stewardship action goals and objectives **will be met or exceeded 2026 Enhancement Objectives** identified in the Work Plan.

- Table 1. Stewardship actions and progress towards goals and objectives on page 5.
 - 19 of 20 stewardship actions - exceeding 2026 Objectives from Work Plan as of 8/2023.
- Both program cost-share and self-funded stewardship actions are increasing:
 - Table 6 on page 11.
 - Action Map table on page 16 was used in 5 Year Report with self-funded actions. This ensured we did not duplicate any of the cost-share projects and received information on whole farms regarding stewardship goals and objectives which were all exceeded for both protection and enhancement in 2026.

With continued participation of the Action Map and gathering stewardship actions on the farm or ranch scale and ground truthing the data for inclusion in the 5-Year Report to show that Voluntary Stewardship can and has been protecting and enhancing critical areas within private landownership throughout Garfield County watersheds.

- Action Map information pages 12 – 16, interactive map for farm-wide stewardship information.
- Action Map table on Page 16. This shows all county-wide stewardship goals have been met for 2026.

Outreach, Implementation, Monitoring, Adaptive Management, Agriculture Viability, Participation/Coordination, and Reporting Measurable Benchmarks is occurring at different levels and will be pulled together for the 5 Year Report that is due November 30, 2026 to show status related to what is identified in the Work Plan.

- One-on-one meetings with producers and grower meetings to complete Action Map.
- NRCS and CD cost-share programs will continue and actions documented.
- Critical area functions and values regarding implementation that is occurring;
 - Need clear direction from Technical Panel on what will provide the best value
 - Challenge using aerial imagery for some functions and values in low rainfall areas, change will be slow to detect
 - More clarification is needed in low-rainfall areas
- Adaptive Management – None currently
- Agriculture Viability;
 - Tracked with cost-share programs on Table 1.
 - 93 projects completed with VSP funding in 2019 - 2023
- Participation/Coordination;
 - Tracked with both cost-share programs and the Action Map
 - All program funding and partnerships that guide stewardship actions
- Reporting;
 - 5-Year Report in 2026