



August 2023

Kittitas County Voluntary Stewardship Program

Biennial Report: 2021 to 2023



Prepared for

Kittitas County Board of Commissioners and
the Washington State Conservation
Commission

Prepared by

Kittitas County Conservation District
Kittitas County VSP Watershed Group

TABLE OF CONTENTS

- 1 Introduction 1**
 - 1.1 Requirements..... 1
- 2 Summary of Actions and Accomplishments4**
 - 2.1 Outreach..... 4
 - 2.1.1 Completed Outreach Activities..... 4
 - 2.1.2 Planned Outreach Activities..... 5
 - 2.2 Conservation Practice Implementation 6
 - 2.3 Agricultural Viability..... 8
 - 2.3.1 Technical Assistance 8
 - 2.3.2 Financial Assistance..... 9
 - 2.4 Monitoring..... 12
 - 2.4.1 Conservation Practice Implementation 12
 - 2.4.2 Streamflow..... 12
 - 2.4.3 Fish Presence in Tributaries 13
 - 2.4.4 Water Quality..... 14
 - 2.4.5 Producer Participation..... 16
 - 2.5 Adaptive Management..... 17
 - 2.6 Reporting 18
 - 2.7 Fostering Partnerships..... 18
- 3 Voluntary Stewardship Program Successes 19**
 - 3.1 Sprinkler Conversion Projects 19
 - 3.2 Safe Fish Passage..... 20
- 4 References 22**

TABLES

Table 1 Summary of progress toward meeting the intent of the Voluntary Stewardship Program.	2
Table 2. Planned outreach activities.....	5
Table 3 Summary of Implement Projects and 2020/2025 Performance and Enhancement Objectives.....	7
Table 4. Financial assistance to farmers and ranchers in Kittitas is essential to the implementation of conservation practices that protect and enhance critical areas in Kittitas County.....	11
Table 5 Producer Participation Monitoring	17

FIGURES

Figure 1. Drone images of irrigated fields with irrigation water management issues.	8
Figure 2. Mid-Columbia Fisheries Regional Enhancement Group crew watering at one of the shrub steppe sites (left) and a Yakama Nation crew planting at one of riparian sites (right).	9
Figure 3. KCCD staff, consulting engineer, contractor, landowner and WDFW staff tour site of fish screen installation and barrier correction project to ensure completion is per the approved design.	12
Figure 4. Map of PIT Tag interrogation sites in Kittitas County. Data is available at https://www.ptagis.org/	13
Figure 5. Initial data collected at the Wilson and Cherry Creeks interrogation sites in 2023. Note the high number of hatchery coho.....	13
Figure 6. Table 10 from Ecology’s Report - “Summary of 2019 status monitoring for TMDL turbidity targets and TSS allocations.”	14
Figure 7. Map of the Kittitas County Water Purveyors water quality monitoring sites.....	15
Figure 8 Wilson Creek at Canyon Road is a compliance point for the Upper Yakima River Basin Suspended Sediment, Turbidity, and Organochlorine Pesticide Total Maximum Daily Load (TMDL).	15
Figure 9. KCWP samples at various locations on tributaries to monitor turbidity levels. The charts above contain 2022 data for cropland east of the Yakima River (Naneum) and west of the Yakima River (Manastash).	16
Figure 10. Turbidity sensor data collected in Wipple Wasteway and Cherry Creek in 2022. Note the data range on the y axis is 25 NTU in Wipple Wasteway and 50 in Cherry Creek.....	16
Figure 11. The Technical Panel support staff visited Kittitas County project sites in May 2023 reviewing practices including sprinklers, riparian plantings, fish screen, and fish passage.....	18
Figure 12. WDFW posted signs in several locations informing the public that carcass dumping is illegal.....	19
Figure 13 RCPP contracts included sprinkler systems (above) and fish screens (below) when needed.....	20

Figure 14. *Fish screen installation on Swauk Creek to accommodate the two diversions that were consolidated. WDFW Yakima Screen Shop provided the screen.....* 20

Figure 15. *Before (left) and after (right) photos of the fish passage barrier in Swauk Creek. The arrow is pointing to the headgate in each photo.....* 21

Figure 16. *The lower irrigation diversion structure on Parke Creek before (left) and after (right) project construction. Removal of this barrier provided 2.3 additional stream miles of habitat.* 21

APPENDICES

Appendix A Outreach Materials

Appendix B Adaptive Management

EXECUTIVE SUMMARY

This Kittitas County Voluntary Stewardship Program (VSP) Biennial Report for fiscal years 2021 to 2023 has been prepared in compliance with the two-year reporting procedures for VSP implementation pursuant to the Revised Code of Washington Chapter 36.70A. As part of the implementation phase, the Kittitas County Conservation District (KCCD) documented implementation of **179** conservation practices that benefit critical areas and help to maintain the viability of agriculture; conducted outreach including presenting VSP at three producer meetings; and maintaining a webpage and a story map explaining VSP to both inform and recruit producers to participate; and facilitated six meetings of the Watershed Group.

KCCD has ongoing and future outreach efforts planned to include periodic Work Group meetings and outreach efforts, providing technical assistance, continuing to develop the monitoring and reporting framework, and identifying adaptive management needs. Through the implementation of conservation practices and active monitoring, the KCCD is on track to meet or exceed goals and benchmarks outlined in the approved Work Plan, indicating successful implementation of VSP.

ABBREVIATIONS

CDS	Community Development Services (Kittitas County)
EQIP	Environmental Quality Incentives Program
KCCD	Kittitas County Conservation District
KCWP	Kittitas County Water Purveyors
KRD	Kittitas Reclamation District
NRCS	USDA Natural Resources Conservation Services
PIT	Passive Integrated Transponder
RCPP	Regional Conservation Partnership Program
RCW	Revised Code of Washington
USDA	U.S. Department of Agriculture
VSP	Voluntary Stewardship Program
Watershed Group	Kittitas County VSP Watershed Group
Work Plan	Kittitas County VSP Work Plan
WSCC	Washington State Conservation Commission
USFWS	United States Fish and Wildlife Service
YBIP	Yakima River Basin Integrated Water Resource Management Plan
YN	Yakama Nation
YTAHP	Yakima Tributary Access and Habitat Program

This page is intentionally blank



1 Introduction

The Biennial Report provides the status and accomplishments of the Kittitas County Voluntary Stewardship Program (VSP) Work Plan (Work Plan; Anchor QEA 2018) implementation process for 2021 to 2023 biennium which spans July 2021 to June 2023. This report was developed by the Kittitas County Conservation District (KCCD) and the Kittitas County VSP Watershed Group as an evaluation of the effectiveness and accomplishments of the County’s Work Plan in meeting the purpose and intent of VSP pursuant to the Revised Code of Washington (RCW) 36.70A.700(2).

The information provided in this report documents work that has been completed and highlights progress made during VSP implementation over the last 2 years. Ongoing and planned implementation efforts were also documented and reported in the 5-year status report, submitted to the Washington State Conservation Commission (WSCC) in November 2020 (5 years from VSP funding award) and in the required biennial reports. The contents of this report include the following:

- Summary of actions and accomplishments by the KCCD and the Work Group in meeting the VSP goals for the 2021-2023 biennium.
- Report on the progress towards meeting the goals identified in the Work Plan as measured by the Work Plan metrics.
- Description of how adaptive management procedures have been instituted.
- Report of the status of Work Plan implementation, including progress toward meeting the modified protection and enhancement benchmarks identified in the Work Plan.

1.1 Requirements

The purpose of this report is to fulfill state requirements pursuant to RCW 36.70A.720 (1)(j), which states that as a part of Work Plan implementation, the Work Group must “conduct periodic

evaluations, institute adaptive management, and provide a written report of the status of plans and accomplishments to the county and to the commission within sixty days after the end of each biennium.” Consistent with WSCC Policy Advisory #05-18 (WSCC 2018), this report includes a summary of how Work Plan implementation is making progress toward meeting the purpose and intent of VSP per RCW 36.70A.700(2).

Table 1 provides a brief summary of the status and progress towards meeting the intent of VSP, consistent with WSCC Policy Advisory #05-18. Section 2 of this report provides a more detailed description of these efforts.

Table 1 Summary of progress toward meeting the intent of the Voluntary Stewardship Program.

No.	VSP Intent	Kittitas County VSP Biennial Report 2021 to 2023
1	The protection and enhancement of critical areas within the area where agricultural activities are conducted	<ul style="list-style-type: none"> • Section 2.1 describes outreach to landowners by KCCD to encourage participation in VSP to promote critical areas protection and agricultural viability. • Section 2.2 describes conservation practices that have been implemented in the biennium. • Table 3 summarizes conservation practices implemented in the 2021-2023 biennium.
2	The maintenance and improvement of the long-term viability of agriculture	<ul style="list-style-type: none"> • Section 2.3 describes how implementation efforts positively impact agricultural viability within Kittitas County.
3	Reducing the conversion of farmland to other uses	<ul style="list-style-type: none"> • Table 3 describes conservation practices that have been implemented since Work Plan approval that have had a beneficial effect on agricultural viability. • Table 5 summarizes outreach efforts by KCCD and participation by landowners to implement conservation practices that benefit agricultural viability.
4	The maximization of the use of voluntary incentive programs to encourage good riparian and ecosystem stewardship as an alternative to historic approaches used to protect critical areas	<ul style="list-style-type: none"> • Section 2.2 summarizes projects implemented by landowners since Work Plan approval. • Section 3 Highlights program success that directly demonstrate the maximization of the use of voluntary incentive programs to protect and enhance critical areas.
5	The leveraging of existing resources by relying upon existing work and plans in counties and local watersheds, as well as existing state and federal programs to the maximum extent practicable to achieve program goals	<ul style="list-style-type: none"> • Section 2.3 summarizes voluntary incentive programs that provide funding to implement stewardship practices. • Work Plan Appendix D: Existing and Related Plans, Programs, and Regulations describes available resources, plans, and programs being used or available to support VSP implementation. One program, the Fish Barrier Removal Board through the Washington State Recreation and Conservation Office has been added since Work Plan approval.

6	Ongoing efforts to encourage and foster a spirit of cooperation and partnership among county, tribal, environmental, and agricultural interests to better assure the program success	<ul style="list-style-type: none"> • Section 2.1 summarizes the methods that KCCD is applying for outreach to interested parties and landowners, including public meeting presentations and regular outreach to encourage partnerships in the community.
7	Ongoing efforts to improve compliance with other laws designed to protect water quality and fish habitat	<ul style="list-style-type: none"> • Section 2.2 summarizes projects implemented by landowners since Work Plan was assembled. • Section 2.3 describes technical assistance efforts by KCCD and other partners including applying for and acquiring permits in compliance with laws designed to protect water quality and fish habitat laws. •
8	A description of efforts showing how relying upon voluntary stewardship practices as the primary method of protecting critical areas and does not require the cessation of agricultural activities.	<ul style="list-style-type: none"> • Table 3 demonstrates that Kittitas County continues to meet or exceed goals and benchmarks outlined in the approved Work Plan, indicating successful implementation of VSP. This will be further supported and verified through continued monitoring and implementation efforts captured in the 5-year status report. • Section 2.3 describes how participating in VSP allows landowners to protect and enhance critical area functions while also promoting agricultural viability.



2 Summary of Actions and Accomplishments

This section includes a summary of activities KCCD has implemented in the 2021-2023 biennium. This includes outreach, conservation practices, monitoring, and adaptive management. This section also provides a summary of reporting efforts, a status report on agricultural viability in Kittitas County as it relates to VSP implementation.

2.1 Outreach

2.1.1 *Completed Outreach Activities*

KCCD is responsible for managing and facilitating the VSP through its implementation. Continued public outreach and education is integral to the success of this process. As described therein, KCCD is committed to reaching out annually to at least 10% of the approximately 300 producers that operate lands with critical area intersects. The 21-23 biennium continued to be impacted by the COVID-19 pandemic and the resulting executive orders influenced in-person public meetings for most of 2021 and 2022. KCCD was able to complete the following outreach to producers in this reporting period:

- The VSP Coordinator provided presentations including VSP at fall 2021 meetings of the Kittitas County Cattlemen (12 attendees), fall 2022 meeting of the Kittitas County Farm Bureau (35 attendees), and the KCCD annual meeting in 2023 (30 attendees).
- A self-assessment checklist and VSP informational handouts were available at the KCCD office, CDS, WSU Extension offices and were provided at various events.
- Kittitas County VSP webpages hosted on KCCD website were maintained. Page analytics indicated 174 unique visitors to the page during this biennium.
- A story map was maintained, explaining VSP in Kittitas County.

Some of these outreach activities are more impactful than others. In general, the in-person workshops and grower meetings allow for potential interaction between the presenter and the audience. Questions can be asked and answered, and the side conversations occur in breaks or at

the end of the presentations/meetings. The impact of the presentation can be felt in those interactions. The passive outreach activities are harder to judge as the contacts are impersonal and only as interactive as the medium allows. The website, story map, on-line map and survey, and the social media posts are documented along with the visits and even time spent, but without any direct interaction, it's difficult to know the impact. The on-line map and survey haven't been as successful as was hoped. Those producers who did participate in the survey all attended in-person events where the purpose of the on-line map and survey was presented. When the in-person events stopped, so did the participation.

2.1.2 *Planned Outreach Activities*

VSP success relies on producer participation and the implementation of conservation practices where critical areas are present. Ongoing and future outreach and implementation efforts are anticipated to include continuing periodic VSP Work Group meetings and outreach efforts, providing technical assistance, continuing to develop the monitoring and reporting framework, and identifying adaptive management needs. Outreach activities planned for the next biennium are summarized in **Table 2**.

Table 2. *Planned outreach activities*

Type	Ongoing and Planned Activities
Maintain Email List	Email list for the Watershed Group and interested parties is maintained by the VSP Coordinator.
Update Website (and Social Media)	The VSP informational and Watershed Group pages on KCCD's website will continue to be updated and maintained and links to VSP material shared on Facebook.
Newsletter	The annual KCCD newsletter will contain at least the equivalent of a full-page article about VSP, as well as providing information about programs that provide assistance with conservation practice implementation supporting the VSP work plan.
VSP Self-Assessment Checklist	The Self-Assessment checklist will continue to be available at various offices, grower meetings and other events. The on-line map and survey will also be promoted as a way to learn about critical areas and self-report conservation practices.
Educational Videos	No educational videos have yet been created
Tours and Workshops	A tour of projects (in-person or virtual) and landowner workshops are planned for 2023 and 2024. A focus on riparian restoration is likely along with a continuation of the soil health topic.
KCCD Meetings	KCCD will include VSP in all grower meetings, workshops and annual meetings of the District.
County Fair	VSP will continue to be included in the KCCD display at the Kittitas County Fair

Association Meetings	VSP Coordinator will continue to reach out to the various associations and businesses to offer presentations.
Watershed Group Member Outreach	Watershed Group members are encouraged to continue to include VSP in their organizations annual meetings and invitations extended to the VSP Coordinator to provide presentations.
Newspapers	Occasional articles may be submitted to the Ellensburg Daily Record and the Northern Kittitas County Tribune.

2.2 Conservation Practice Implementation

This report documents implementation of conservation practices identified by and/or reported to the KCCD in the 2021-2023 biennium, as well as the conservation practices implemented in the previous biennium and the practices reported in Section 4.2 of the Work Plan (July 22, 2011 through 2016).

From 2021 through June 2023, approximately 179 conservation practices have been implemented in partnership with federal, state and local programs that are available to landowners and producers.

Table 3 summarizes the types of conservation practices implemented in the 2021-2023 biennium as well as the previous biennia and the previously reported practices (2011-2016), and identifies protection and enhancement performance objectives for 2025, consistent with Table 5-7 in the Work Plan (Anchor QEA 2018) as updated in 2023.

Projects implemented in the biennium have realized benefits including improving water use efficiency, reducing irrigation induced erosion, opening previously blocked habitat for listed fish species, improving instream and upland habitat conditions, and improving grazing conditions. The projects included varying levels of protections for all five critical areas (wetlands, habitat conservation areas, critical aquifer recharge areas, geologically hazardous areas, and frequently flooded areas). The level of protection and the specific critical area is dependent on the individual project details.

In addition to the above reported practices, one project that involved the entry of water rights into the Trust Water Rights Program to benefit instream flow was completed. The project included on-farm irrigation system improvement practices (converting from rill or flood irrigation to sprinkler irrigation systems). It resulted in 88 acre-feet dedicated to the Trust Water Rights program for 15 years in a tributary to the Yakima River. This project was funded through the Yakima Basin Integrated Plan funding provided through their Water Use Subcommittee and administered by the Department of Ecology. In total, the grant resulted in 342 acres converted from rill to sprinkler irrigation and 688 acre-feet dedicated to instream flow in 5 tributaries.

Table 3 Summary of Implement Projects and 2020/2025¹ Performance and Enhancement Objectives.

	Type	Practice Name	2020/2025 Protection Objectives	2020 /2025 Enhancement Objectives	2011-2016 Reported Data	17-19 Biennial Implementation	19-21 Biennial Implementation	22-23 Biennial Implementation	Total Implementation to Date (2011 to 2023)
Indirect Intersects	Water Management	Irrigation Water Management	533 acres/ 829 Acres	8,521 acres/ 12,173 acres	2753 acres	12,952 acres	6,876 acres	2,174 acres	24,755 acres
		Sprinkler System			4,351 acres	712 acres	1,536 acres	1,451 acres	
		Irrigation Pipeline	6,686 ft/ 10400 ft	139,904 ft/ 199,863 ft	148,569 ft	52,102 ft	30,178 ft	49,400 ft	280,249 ft
	Nutrient Management	Nutrient Management	76 acres/ 118 acres	694 acres/ 991 acres	720 acres	12,131 acres	6,066 acres	648 acres	20,243 acres
	Pest Management	Pest Management	148 acres/ 230 acres	967 acres/ 1,382 acres	1,406 acres	3,811 acres	1,906 acres	0 acres	7,123 acres
	Soil Management	Cover Crop	886 acres/ 1,378 acres	6,141 acres/ 8,773 acres	8,438 acres	100 acres	115 acres	207 acres	14,452 acres
		No-Till/Reduced Till							
		Polyacrylamide				1,645 acres	2,777 acres	1170 acres	
Range Management	Range Planting Prescribed Grazing	225 acres/ 351 acres	1,786 acres/ 2,552 acres	2,147 acres	1,443 acres	589 acres	52 acres	4,231 acres	
	Stockwater Facility	2 facilities/ 3 facilities	41 facilities/ 58 facilities	36 facilities	3 facilities	3 Facilities	0 Facilities	42 facilities	
Direct Intersects	Habitat Management	Riparian Forest Buffer Tree/Shrub Establishment Wetland Restoration	38 acres/ 59 acres	570 acres/ 814 acres	495 acres	0.25 acres	7.9 acres	6 acres	868 acres
		Upland Wildlife Habitat Management/Restoration of Rare & Declining Habitat			353 acres	0 acres	5.7 acres	0 acres	
	Stream Enhancement	Streambank Protection Channel Bed Stabilization	172 ft/ 267 ft	3,813 ft/ 5,448 ft	3,813 ft	195 ft	743 ft	350 ft	5,101 ft
Aquatic Species Passage And Fish Screen		1 project/ 1 project	29 projects/ 42 projects	17 projects	9 projects	12 Projects	5 Projects	43 projects	

¹ 2025 Objectives were modified by the Kittitas County Watershed Group in February 2023.

2.3 Agricultural Viability

Maintaining and enhancing agricultural viability is a multi-faceted effort. It includes providing both technical and financial assistance to landowners and producers to implement conservation practices, as well as continuing efforts to explore new technologies and opportunities to address challenges and limiting factors for local producers. The following sections describe additional efforts to maintain and enhance agricultural viability.

2.3.1 Technical Assistance

Technical assistance is provided to landowners and producers on request. It includes stewardship assessments that provide individual producers with a summary of the critical areas and agricultural lands on their property as well as a listing of potential practices and program resources.

KCCD staff also utilize the drone equipment to assist landowners with irrigation water management and with nutrient management. Seventeen producers were assisted through a total of 29 flights. See **Figure 1** for examples of the assistance provided.

Utilizing VSP grant funding, specific technical assistance has been provided primarily focused on habitat planting assistance to landowners. This assistance ranges from a single site visit to fully developed planting plans and includes both upland (shrub-steppe) and riparian habitats. Approximately 8 landowners have been assisted in this reporting period and two have resulted in new planting projects. Four others have received assistance in maintaining previous planting projects. The Mid-Columbia Fisheries Enhancement Group crew spent more 360 hours on these projects during the reporting period. Labor shortages heavily impacted the work done in 2022 and especially 2023. The Mid-Columbia Fisheries Enhancement Group crew was unavailable in the spring of 2023, delaying several planting projects. The Yakama Nation was able to provide a crew for a small planting on Naneum Creek in April 2023.

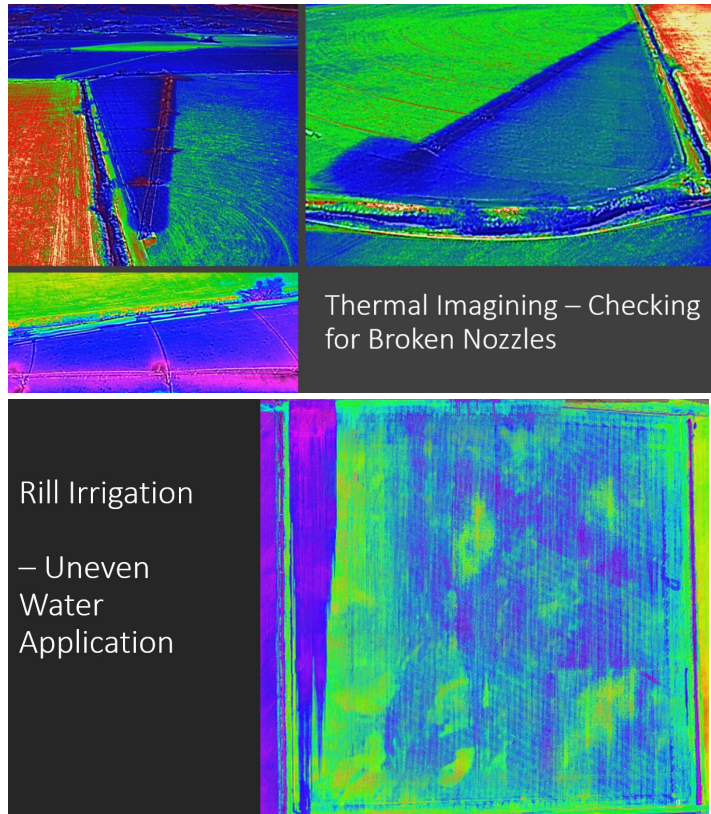


Figure 1. Drone images of irrigated fields with irrigation water management issues.



Figure 2. *Mid-Columbia Fisheries Regional Enhancement Group crew watering at one of the shrub steppe sites (left) and a Yakama Nation crew planting at one of riparian sites (right).*



In addition to the VSP funded technical assistance, the conservation practices that are installed with funding through USDA Natural Resources Conservation Service (NRCS) and the KCCD grant programs include technical assistance to ensure that suitable conservation practices are selected and that the practices are implemented to USDA NRCS standards or to the project design completed by a license professional engineer. That technical assistance includes engineering and design work for fish screen, fish passage and habitat projects, as well as irrigation system upgrades. It also includes archeological surveys and reports to meet cultural and historic resource consultation requirements, and assistance securing permits (e.g. US Army Corps of Engineers 404 permit, WDFW's Hydraulic Permit Application (HPA), Endangered Species Act, etc.). Ensuring compliance with federal, state and local permits assists the landowners in meeting regulatory requirements. This level of technical assistance is essential to the implementation of priority practices to meet the goals and benchmarks of the VSP Work Plan.

2.3.2 *Financial Assistance*

During this reporting period the implementation of conservation practices was achieved with financial assistance through federal, state and local programs. The implemented conservation practices were funded through Farm Bill programs of the USDA Natural Resources Conservation Service (NRCS), and grants through the Washington State Conservation Commission, Department of Ecology, Salmon Recovery Funding Board, Bonneville Power Administration, Kittitas County and KCCD. **Table 4** summarizes the 21-23 biennium payments to producers and funds used to construct projects on private lands. This includes only those funds used to implement conservation practices identified in the Kittitas County VSP Workplan, not all funds provided to producers through these sources.

Funding through the Salmon Recovery Funding Board and Yakima Tributary Access and Habitat Program is targeted to fish habitat improvement, a positive impact on the Fish & Wildlife Habitat Conservation Areas. Some funding sources though allow KCCD to determine or at least provide input into the selection of individual producer applications for funding. This is true with the Conservation

Commission funding and with the RCPP funding. The “Yakima Integrated Plan – Toppenish to Teanaway RCPP Project”² is now a completed project that utilized Farm Bill program funds through the Regional Conservation Partnership Program (RCPP) along with state and local contribution funds. The project addressed critical needs to improve access to and quality of stream habitat, protect fish from entrainment in irrigations systems, and increase quality of and quantity of the water supply. The application ranking criteria provide additional points for projects that:

- Convert from surface irrigation to sprinkler irrigation
- Include irrigation water management
- Have tailwater flowing directly into a river, stream, side channel or canal
- Have a 2% or greater slope on half or more of the planning unit
- Establish or an enhance a 35-50 foot average width buffer on at least 50% of the stream or river in a planning unit
- Install a fish screen
- Remove a fish passage barrier
- Place water in the Trust Water Rights Program for at least 15 years

These ranking criteria provide both incentive to producers to implement more conservation practices in order to improve their chances of funding, but also prioritizes the funding to be used in a way that provides the greatest impact to the natural resource concerns. In all cases of funding for on-the-ground implementation, KCCD consistently seeks to incorporate ranking criteria that align with the VSP Work Plan for Kittitas County.

Through a Washington State Conservation Commission grant contribution to the Yakima Integrated Plan -- Toppenish to Teanaway RCPP project, KCCD provided reimbursement to producers who entered into RCPP contracts for their associated electrical power services costs for their sprinkler conversions. The NRCS programs specifically exclude this expense as a national policy. In this County, power expenses are a limiting factor for producers, so this cost share effort is essential to implementing water conservation practices. The cost share is provided as 50% reimbursement of costs with a maximum of \$25,000 per producer.

Yakima Basin Integrated Plan (YBIP) funding through a Department of Ecology grant was also a contribution to the RCPP project and was focused on the conversion of surface irrigation to sprinkler irrigation in Kittitas County. This funding was secured through an application to the YBIP Water Use Subcommittee by KCCD, Washington Water Trust and Trout Unlimited-Washington Water Project. The projects developed all had a Trust Water component. The first grant was completed, converting 340 acres to sprinkler irrigation and placing more than 680 acre-feet in the Trust Water program for 15 years.

² The Yakima Integrated Plan – Toppenish to Teanaway Project is a 5-year project funded through the USDA NRCS’s Regional Conservation Partnership Program (RCPP) in 2017. The project was led by the Yakama Nation and the Kittitas County Conservation District

A second RCPP project, the “Middle Columbia Steelhead Partnership” was secured. This RCPP project is again led by the Yakama Nation with multiple partners and activities in the Yakima River and Klickitat River watersheds. The first sign-up for on-farm projects occurred in March 2023. Like the previous RCPP project, there is a focus on private agricultural lands in Kittitas County, and both the Conservation Commission and the Department of Ecology are providing significant contributions.

Table 4. *Financial assistance to farmers and ranchers in Kittitas is essential to the implementation of conservation practices that protect and enhance critical areas in Kittitas County.*

Funding Source	Payments to Producers³	Construction on Private Lands⁴	Total
USDA Natural Resources Conservation Service – EQIP ⁵	\$1,654,118		\$1,654,118
USDA Natural Resources Conservation Service – RCPP ⁶	\$947,198		\$947,198
US Fish & Wildlife Service		\$120,000	\$120,000
Washington State Conservation Commission	\$260,843	\$223,017	\$483,860
Department of Ecology	\$349,070		\$349,070
BPA – (Yakima Tributary Access & Habitat Program)	\$32,728	\$33,305	\$66,034
Salmon Recovery Funding Board		\$224,270	\$224,270
Local Funds (KCCD and Kittitas County Public Works)	\$5,622		\$5,622
		Total	\$3,852,1725

VSP grant funds were utilized in this biennium to assist producers working to implement tree and shrub plantings to benefit fish and wildlife habitat conservation areas. Producers interested in implementing planting projects are offered primarily assistance with planting labor, but also a level of cost share for material (plants, weed mats, irrigation supplies, etc.) purchases depending on other funds they may have secured. This further incentivizes habitat planting projects and with the acknowledgement that NRCS cost share rates are much too low to provide the incentive alone. In this reporting period, two planting projects were completed. One upland area (shrub steppe habitat)

³ These payments are made through an agreement between either USDA Natural Resources Conservation Service or the Kittitas County Conservation District and individual producers.

⁴ Construction on private lands includes projects implemented through public works (competitively bid) projects by the Kittitas County Conservation District. Typically, this includes large fish screen, fish passage or habitat planting projects.

⁵ USDA Natural Resources Conservation Service’s Environmental Quality Incentive Program (EQIP) provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits.

<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>

⁶ USDA Natural Resources Conservation Service Regional Conservation Partnership Program (RCPP) is the Yakima Integrated Plan – Toppenish to Teanaway project 2017-2021.

and one riparian (Whiskey Creek). Assistance with maintenance on previously planted projects occurred as well in order to ensure adequate survival rates. Two riparian and two upland projects received maintenance assistance.

In fiscal year 2023, SCC received a \$10 million supplemental operating funds appropriation from the Legislature for riparian restoration. KCCD secured more than \$300,000 of this funding for riparian restoration projects in Kittitas County in partnership with the Yakama Nation and Mid Columbia Fisheries Enhancement Group.

KCCD continues to seek financial assistance sources for agricultural producers in Kittitas County. Applications to the Salmon Recovery Funding and the Fish Barrier Removal Board continue for fish passage and fish screen projects. KCCD submitted a farmland easement project to the Conservation Commissions' solicitation in 2022. The project is a 600-acre agricultural operation in the Swauk area and the funding award is expected in the next reporting period. KCCD is also actively pursuing a third RCPP project.

2.4 Monitoring

2.4.1 Conservation Practice Implementation

All conservation practices implemented and inventoried for this report were part of a landowner agreement with either USDA NRCS or KCCD. The practices were planned to meet NRCS specifications or were designed by a licensed professional engineer. Implementation was monitored by KCCD staff or NRCS staff and then certified by the staff or engineer that implementation met the design. By contract, the participating producers are required to maintain their practices for the practice design life designated by NRCS. KCCD involved projects also require producers to certify their practice for the first five years. This typically done with a letter attestation at the end of each year.

2.4.2 Streamflow

The KCCD continues to monitor stream flow in Manastash Creek as part of the Manastash Creek Restoration Project. In the summer of 2019, a stream gauge was installed with the help of USGS to provide continuous flow monitoring above the irrigation diversions. This data collection is essential



Figure 3. KCCD staff, consulting engineer, contractor, landowner and WDFW staff tour site of fish screen installation and barrier correction project to ensure completion is per the approved design.

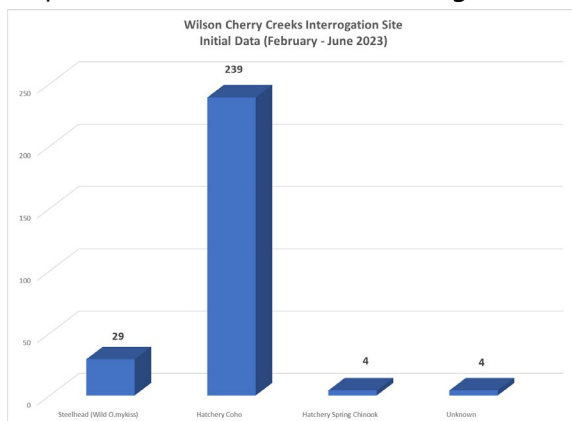
to operation of the irrigation diversions, but also valuable as work continues to acquire instream flow from willing sellers in Manastash Creek. Efforts continue to acquire winter stock water to benefit Mid-Columbia summer steelhead. KCCD also conducts streamflow measurements as needed for project implementation in other tributaries to the Yakima River.

2.4.3 Fish Presence in Tributaries

KCCD, through VSP funding, continues to participate in the monitoring of tributaries of the Yakima River for fish presence. VSP funds were utilized in the last biennium to purchase passive integrated transponder (PIT) arrays to be installed by the Yakama Nation and monitored through a cooperative effort by USFWS, Washington Department of Fish & Wildlife at the confluence of Wilson Creek and Cherry Creek. Installation occurred

and the site was operational in early 2023. PIT arrays are already maintained in Manastash Creek, Taneum Creek, Teanaway River, Big Creek, Little Creek, Tucker Creek, and Tillman Creek. The data collected is being used as an indicator of the impacts of various project implementation along with efforts by the Kittitas Reclamation District to supplement flows in these tributaries.

Of particular interest is the increasing number of hatchery coho detected at the sites, a result of the



Mel Sampson Coho Facility coming on line near Ellensburg. See **Figure 5**. The project plan for the facility is an integrated population, with broodstock consisting of approximately 600 adults collected locally at Roza Dam. Approximately 700,000 smolts/parr are being produced per year and

Figure 5. Initial data collected at the Wilson and Cherry Creeks interrogation sites in 2023. Note the high number of hatchery coho.

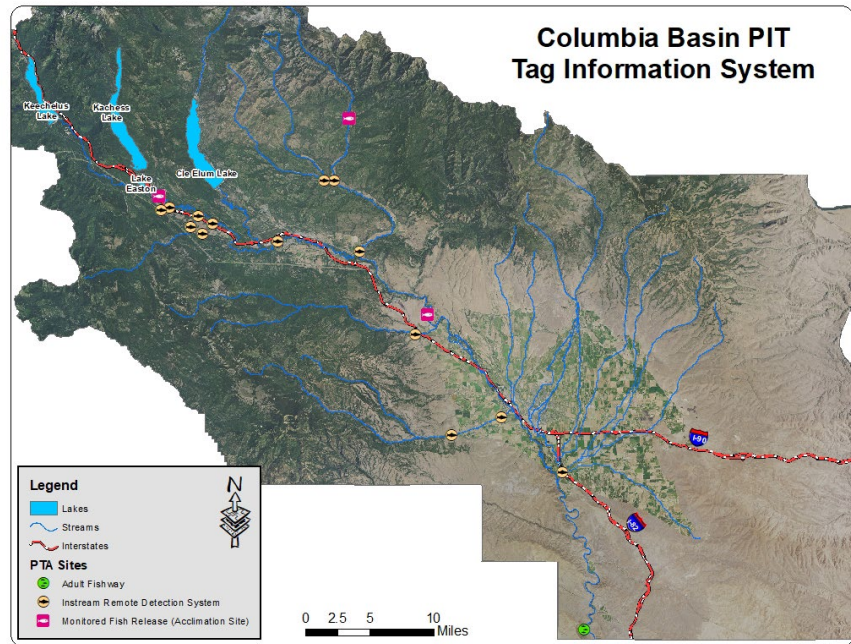


Figure 4. Map of PIT Tag interrogation sites in Kittitas County. Data is available at <https://www.ptagis.org/>.

released in upriver tributaries. The long-term target is for returns to average 20,000 locally adapted adults per year. The first smolt release was in April 2021 and the first adult return is expected in 2024.

2.4.4 Water Quality

In 2019, the Washington Department of Ecology conducted TSS and turbidity monitoring as part of a final report card for the Upper Yakima Suspended Sediment TMDL. Ecology’s analysis and report was published in July 2021 and presented to the Kittitas County Watershed Group in February 2022.

The results of the 2019 monitoring study contain the following conclusions:

- TMDL implementation has shown improvements to water quality in the upper Yakima River basin to date and should be continued in order to provide additional benefits.
- Most turbidity targets were met in 2019, which is good news and points to success in TMDL implementation progress. See **Figure 6**. The TMDL turbidity targets are a robust measure of progress because they adjust for background levels year to year. Wilson Creek (WILC) showed improvement from 1999 but did not meet its turbidity target. Sorenson/Fogarty (FOG) also did not meet its turbidity target. The Yakima River at Umtanum (YKUM) needs more improvement, but this site is just downstream of WILC and will reflect future progress made there.

Table 10. Summary of 2019 status monitoring for TMDL turbidity targets and TSS allocations.

Location Name	Site	Turbidity Target Met?	TSS Allocation Met?
Yakima River at Nelson Siding	YKNS	---	Yes
Cle Elum River at Bullfrog Rd. Bridge	CLE	---	Yes
Crystal Creek near mouth	CRY	---	Yes
Cle Elum POTW effluent	CLPOTW	---	Yes
Teanaway River at Lambert Rd.	TEAL	Yes	Yes
Swauk Creek at mouth	SWAC	---	Yes
Taneum Creek at mouth	TANC	Yes	Yes
Dry Creek at mouth (new location)	DRYM	---	No ¹
Packwood Ditch at S. Thorp Hwy	PACK	Yes	No
Manastash Creek at Brown Rd.	MANL	Yes	Yes
Ellensburg POTW effluent	ELPOTW	---	Yes
Reecer Creek in Irene Rinehart Park	REEC	---	Yes
Sorenson/Fogarty at Riverbottom Road	FOG	No	Yes
Wilson Creek at Hwy 821	WILC	No	Yes ²
Wenas Creek at Wenas Road	WEN	Yes	Yes
Yakima River at Umtanum Creek Bridge	YKUM	No ³	Yes
Yakima River at Harrison Bridge	YKHB	Yes ³	Yes

Dashes in cells (---) indicate that no TMDL turbidity target exists for the site. Yellow highlighting added to “Yes” cells as a visual aid.

¹Site DRYM lies downstream of the original TMDL site for Dry Creek (DRY). Site DRYM receives irrigation return flow, which was not considered in the calculation of the original TMDL TSS loading allocation for this site.

²Wilson Creek 2019 TSS loading was very close to the TMDL TSS load allocation.

³Target was evaluated using continuous gage data collected at YKSM and YKEA (background). See Appendix D for the turbidity target evaluation of these sites.

- Most TMDL sites met their TSS load allocations in 2019, also showing success in TMDL implementation. It is clear that low flow due to low snowpack in 2019 helped reduce TSS loads in the early season (Apr-June). Progress from BMP implementation was evident in the late season (July-Oct) when more stable flow conditions allowed comparison between years.⁷

Figure 6. Table 10 from Ecology’s Report - “Summary of 2019 status monitoring for TMDL turbidity targets and TSS allocations.”

⁷ WA Department of Ecology, 2019 Effectiveness Monitoring for TSS and Turbidity TMDL Targets, July 2021

Long term water quality monitoring in the upper Yakima continues to be conducted by the Kittitas County Water Purveyors (KCWP) who sample streams and canals for turbidity. See **Figure 7** for a map of their monitoring locations.

The KCWP data indicates a downward trend for turbidity at the Wilson Creek at Canyon Road site, a compliance point for the Upper Yakima River Basin Suspended Sediment, Turbidity, and Organochlorine Pesticide Total Maximum Daily Load (see **Figure 8**). This is consistent with the Ecology monitoring report conclusions.

Water Quality Monitoring Sites

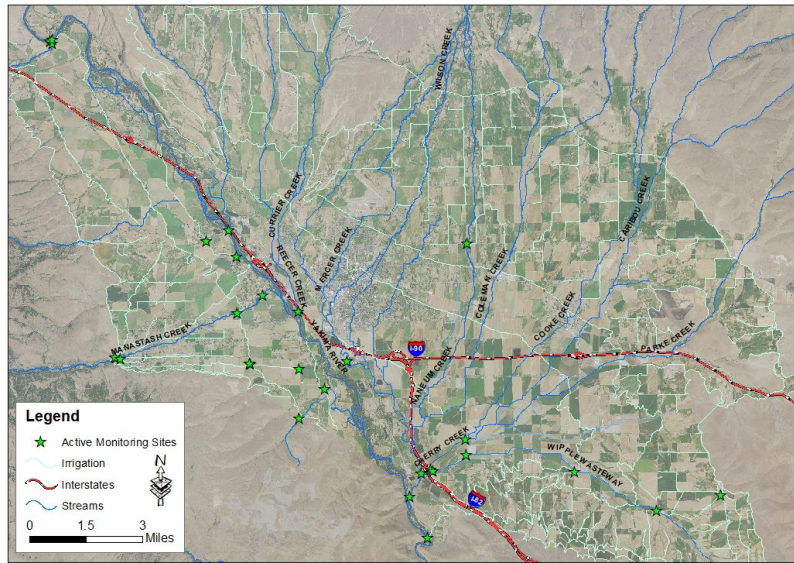


Figure 7. Map of the Kittitas County Water Purveyors water quality monitoring sites.

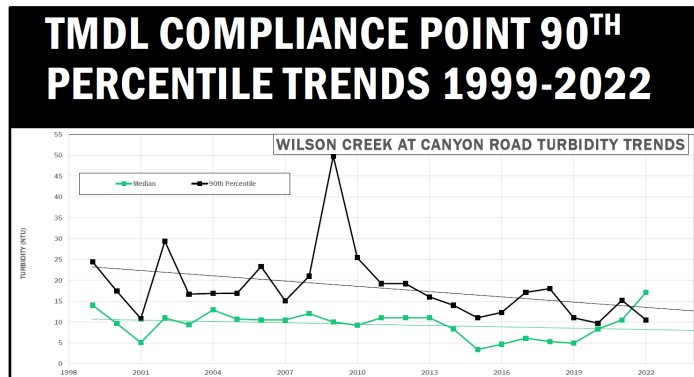


Figure 8 Wilson Creek at Canyon Road is a compliance point for the Upper Yakima River Basin Suspended Sediment, Turbidity, and Organochlorine Pesticide Total Maximum Daily Load (TMDL). The Kittitas County Water Purveyors have sampled this location continuously for two decades and their data shows a downward trend for turbidity. The watershed above this compliance point contains approximately two thirds of the cropland in the Kittitas Valley.

In addition to the TMDL compliance points, the KCWP also samples at several locations on various tributaries, establishing background location and comparing the sites (see **Figure 9**). This information is helpful in targeting the financial assistance to producers, particularly the irrigation upgrades to sprinkler systems that reduce return flow (and associated sediment and nutrients) to streams and waterways.

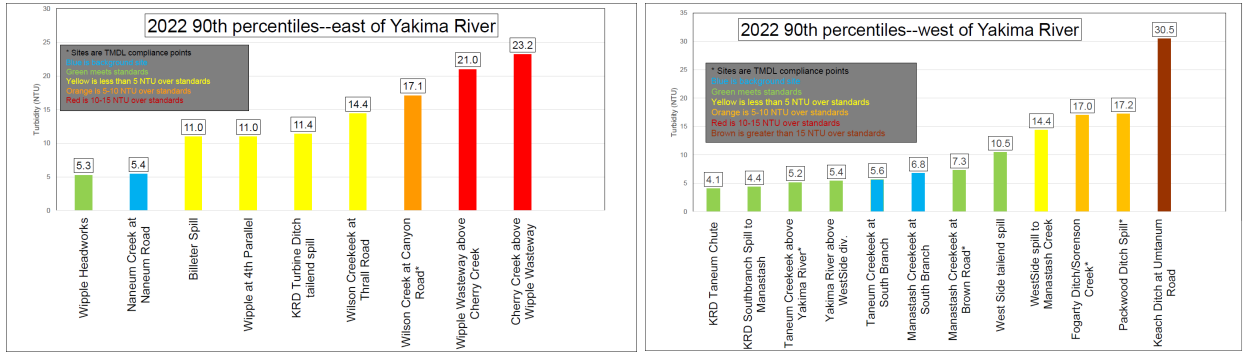


Figure 9. KCWP samples at various locations on tributaries to monitor turbidity levels. The charts above contain 2022 data for cropland east of the Yakima River (Naneum) and west of the Yakima River (Manastash). The TMDL set the compliance at 5 NTU over background for tributaries. Note the blue for the background sites and then a color scale for the other locations including green for less than background; yellow for 0-5 NTU over, orange for 5-10 NTU over, and red for 10-15 over, and brown for more than 15 NTU over background.

Utilizing VSP funds, KCCD procured two turbidity loggers and KCWP deployed them on Cherry Creek and Wipple Wasteway where each cross Moe Road. This further indicates the source areas for the turbidity in Wilson Creek (the TMDL compliance point). In 2022, the loggers were only in place collecting data from July to October. Initial data clearly notes that Cherry Creek experiences higher NTU events.

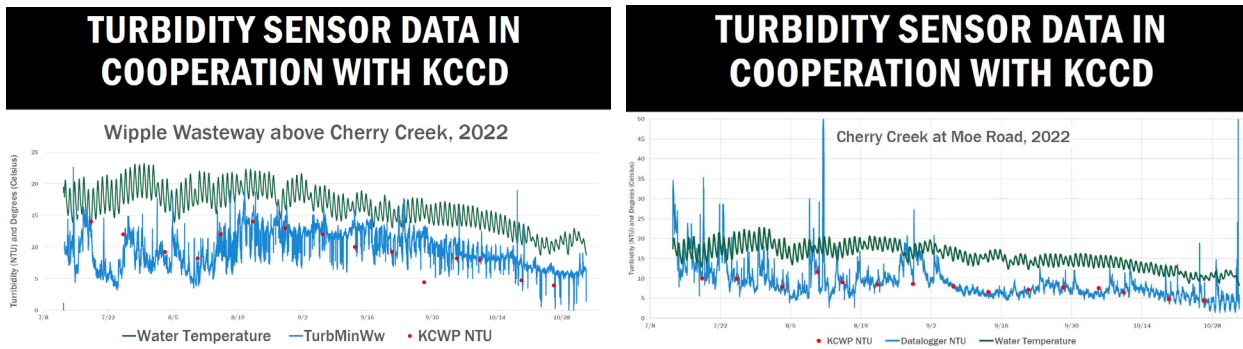


Figure 10. Turbidity sensor data collected in Wipple Wasteway and Cherry Creek in 2022. Note the data range on the y axis is 25 NTU in Wipple Wasteway and 50 in Cherry Creek.

2.4.5 Producer Participation

The VSP Coordinator at KCCD is committed to monitoring public participation and stewardship practices every 2 and 5 years. Results of efforts by KCCD to monitor producer participation are summarized in **Table 5**, consistent with the Work Plan.

Table 5 Producer Participation Monitoring

Participation Goal: Promote producer participation in voluntary stewardship of agricultural lands and critical areas to meet the protection and enhancement benchmarks and protect critical areas functions and values at a County-wide watershed level.		
Objectives/Benchmarks	Performance Metric/ Monitoring Method	Biennial Status
Sufficient active participation by commercial and non-commercial agricultural operators (farmers and ranchers) over 10 years that achieves the protection of critical area functions and values at a County-wide watershed level.	<ul style="list-style-type: none"> • Number of acres reported in key stewardship practices or number of key stewardship practices • Sufficient producer participation necessary to meet protection and enhancement benchmarks 	KCCD has been tracking and reporting conservation practices as summarized in Table 3 . Producer participation is on track to meet benchmarks. In particular, the RCPP sign-ups have regularly seen as many as one third of the annual applications from new/beginning farmers and producers who've not previously had NRCS contracts.
Passive participation by commercial and noncommercial agricultural operators in VSP stewardship practices is maintained or increased over 10 years on agricultural land.	<ul style="list-style-type: none"> • Mapping and aerial photo evaluation and/or rapid watershed assessment of practices in place • Random sampling of farmers and ranchers in the field by technical assistance providers with willing landowners 	KCCD is developing a methodology for tracking passive participation and impacts to critical areas via GIS to document passive participating and also to assist in targeted landowner outreach.
Technical assistance and outreach are provided to agricultural producers to encourage stewardship practices and VSP participation.	<ul style="list-style-type: none"> • Number of outreach and education events • Number of event attendees 	KCCD provided 3 presentations in this reporting period with total attendance of 77 ⁸ and outreach materials presented at each.

2.5 Adaptive Management

Adaptive management is applied on an ongoing basis as needed. In 2023, the Kittitas County Watershed Group reviewed the status of the goals and benchmarks. Many of the 2025 protection and enhancement objectives had already been met or were expected to be met and exceeded prior to the 2025 reporting date. KCCD staff prepared a table displaying protection and enhancement objectives, implemented practice metrics, and expected additional practice metrics. New 2025 protection and enhancement objectives were proposed and accepted by the Watershed Group for all but two categories of practices. Of those two, one was reduced slightly (spring development and stockwater facilities) and the other (streambank protection) was unchanged. All categories now require additional practice implementation to meet 2025 objectives. See Appendix B for the working table presented to the Watershed Group.

⁸ The presentations were given at events often attended by many of the same producers. The estimate of different individual producers reached by these presentations is 30 to 40.

2.6 Reporting

The VSP statute sets two main reporting requirements during the implementation of an approved VSP work plan: a two-year status report at the end of each biennia, and a five-year review and evaluation report. This document is the two-year status report and thus provides a summary of accomplishments in the 2021-2023 biennium. The 5-year performance review for Kittitas County was submitted in November 2020 indicating all goals and benchmarks were met. The Washington State Conservation Commission concurred in April 2021. The 10-year performance review is due in 2025.

The Technical Panel members and their support staff have provided helpful feedback and guidance in the wake of the 5-year performance review. In May 2023, all four agency support staff visited Kittitas County sites with KCCD staff.



Figure 11. *The Technical Panel support staff visited Kittitas County project sites in May 2023 reviewing practices including sprinklers, riparian plantings, fish screen, and fish passage.*

2.7 Fostering Partnerships

The continuing development of robust partnerships between the Watershed Group members, including the agricultural, tribal, environmental, and county interests was demonstrated in this reporting period. Outreach opportunities have been set up through and promoted by Watershed Group members for their organizations.

Watershed Group meetings have included presentations from both members of the Watershed Group entities and the Technical Committee to share information about monitoring activities. This has included Yakama Nation Fisheries and National Marine Fisheries presenting information about mid-Columbia Steelhead monitoring (PIT tag arrays) and over population status. The Kittitas County Water Purveyors and Department of Ecology presented water quality monitoring data and the status of the TMDLs in the Upper Yakima watershed. VSP funds were utilized to purchase supplies and equipment in this reporting period to support both of these monitoring efforts.

Technical Subcommittee member agencies have also attended Watershed Group meetings to share emerging issues. Washington Department of Fish & Wildlife attended a Watershed Group meeting to discuss the wolf depredations and the potential relationship to carcass dumping on public lands at the edge of the valley. A carcass composting facility was discussed, but the immediate action was to share WDFW's current ability to pay the transfer station fees for small carcasses with the community.

In addition, WDFW posted signs (see **Figure 12**) in some of the dump sites and shared that progress with the Watershed Group.

On-the-ground projects have been and are being developed with input and assistance (both technical and financial) from Technical Committee members and Watershed Group members. For example, the USDA Natural Resources Conservation Service RCPP funded projects, the “Yakima Integrated Plan Toppenish to Teanaway” and the “Middle Columbia Steelhead Partnership” are led by the Yakama Nation as the contracting partner with NRCS and involve a large group of partners including the KCCD and members of the Kittitas County Watershed Group and Technical Committee.

Overall, the VSP program has been promoted within the community by individual members of the Watershed Group and the Technical Committee members. This level of involvement by all partners is crucial to continuing success of VSP in Kittitas County. Communication to and between the Watershed Group members and the Technical Committee members will be maintained through regular meetings of the Group, updating the website and sharing the successes of VSP with the community.



Figure 12. WDFW posted signs in several locations informing the public that carcass dumping is illegal.

3 Voluntary Stewardship Program Successes

Many projects have been successfully constructed or implemented in the County since the VSP Workplan was approved in 2018. A few project highlights from this reporting period are described below.

3.1 Sprinkler Conversion Projects

KCCD continues to implement projects that address water quality and inefficient use of irrigation water through various funding sources. This includes the “Yakima Integrated Plan – Toppenish to Teanaway Project” funded through the USDA Natural Resource Conservation Services’ (NRCS) Regional Conservation Partnership Program (RCPP) with contributions from several state agencies (e.g. Ecology and the Washington State Conservation Commission). The RCPP project is a voluntary conservation program that provides producers with technical and financial assistance to invest in solutions that conserve natural resources for the future while also improving agricultural operations. Applications were accepted and then ranked to determine funding. For the RCPP funds, screening and ranking criteria were established by the Kittitas County Conservation District (KCCD) Board of

Supervisors defining three funding pools (“Insufficient Water-Drought”, “Livestock”, and “Fish & Wildlife”) and further prioritizing activities and geographic areas within the eligible areas. The ranking criteria provide additional points for projects that address the major resource concerns of this RCPP including insufficient water, water quality and fish & wildlife habitat. These resource concerns directly impact critical areas including primarily fish and wildlife habitat conservation areas and frequently flooded areas.

Four sign-ups for this RCPP project were conducted between 2017 and 2020. Over the life of the project, 27 contracts were implemented on 1,570 acres. Of the 27 producers, 11 had no previous EQIP contracts and 6 were beginning farmers (less than 10 years of farm management). Six of the projects were primarily constructing during this reporting period.

In addition to the RCPP funds, there is also funding available through Washington State Conservation Commission (SCC) and Department of Ecology grants. The SCC grants, Natural Resource Investment and RCPP Contribution, funded three sprinkler conversions in this reporting period. The Ecology grant (Yakima Basin Integrated Plan Water Use Subcommittee) funded one sprinkler conversion in this reporting period.

3.2 Safe Fish Passage

The Yakima Tributary Access & Habitat Program (YTAHP) is a long-standing program to work on unscreened irrigation diversions, fish passage barriers and instream and riparian habitat improvements. In this reporting period, two projects were completed addressing a total of four fish passage barriers and fish screens.

The first project was on Swauk Creek, where two diversions were consolidated to the location of the upper diversion, requiring a larger fish screen (**Figure**



Figure 13 RCPP contracts included sprinkler systems (above) and fish screens (below) when needed.



Figure 14. Fish screen installation on Swauk Creek to accommodate the two diversions that were consolidated. WDFW Yakima Screen Shop provided the screen.

14) for the site to accommodate both diversions. A rock ramp was constructed instream to achieve elevations needed to divert irrigation water and to provide fish passage (**Figure 15**) into 10 miles of habitat.



Figure 15. Before (left) and after (right) photos of the fish passage barrier in Swauk Creek. The arrow is pointing to the headgate in each photo. Correction of the barrier ensures year-round passage into 10 miles of habitat.

The second was a project on Parke Creek that consolidated diversions from two large channel spanning concrete dam structures to a new pump location downstream, allowing both structures to be removed and the stream restored. Pre-project, the diversions included two unscreened headgates serving different landowners and two fish passage barriers. After construction was completed, all diverted water is screened and both barriers were removed achieving passage into an additional 2.3 miles of stream benefiting summer steelhead, spring Chinook and coho. The project was funded by the Fish Barrier Removal Board and YTAHP.



Figure 16. The lower irrigation diversion structure on Parke Creek before (left) and after (right) project construction. Removal of this barrier provided access to 2.3 stream miles of habitat.

4 References

Anchor QEA, 2018. Kittitas County Voluntary Stewardship Program Work Plan. Prepared for the Kittitas County Conservation District and the Washington State Conservation Commission. May 2018. Available at:

https://docs.wixstatic.com/ugd/cec2f9_432221a2747249bda5c995da605ad23b.pdf

WSCC (Washington State Conservation Commission), 2018. Policy Advisory #05-18: Approved VSP Work Plan Implementation Reporting Requirements & Procedure. Revised July 2020.

Available at: <https://www.scc.wa.gov/vsp/statewide-advisory-committee-roles-responsibilities>.

Appendix A

Outreach Materials

- KCCD Website Pages for VSP and the VSP Watershed Group

Website for VSP (<https://www.kccd.net/voluntary-stewardship-program>)



- Home
- Announcements
- About KCCD
- Programs
- Contact Us

Voluntary Stewardship Program

Washington State's Voluntary Stewardship Program (VSP) was created in 2011 to provide an alternative approach for counties to address Growth Management requirements for agricultural activities.

How it Works

The [Washington State Conservation Commission \(SCC\)](#) administers funding for counties to implement the program. Counties then designate a work group to develop a watershed-scale plan that will:

- Identify critical resource concerns.
- Identify agricultural activities in the critical areas.
- Create a plan for targeted outreach to assist landowners in developing farm plans that address agricultural impacts to critical areas on their property.
- Identify and maintain economically viable agriculture while protecting and restoring critical areas

In October 2015, the Board of County Commissioners (BOCC) worked with the Kittitas County Conservation District to enlist our assistance with facilitation of the Watershed Group. We entered into an interlocal agreement with the County in November. The BOCC passed [Resolution 2016-001](#) in January 2016 designating the Kittitas County Conservation District as the lead entity for the Voluntary Stewardship Program.

What are Critical Areas?

There are five critical areas identified in Washington's GMA:

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

**Learn about critical areas on your property -
Click here to visit the Kittitas County
VSP On-Line Map & Survey**

Background

1990 – Washington Legislature passes [Growth Management Act](#) (GMA), which requires state and local governments to manage growth by identifying and protecting critical areas, designating urban growth areas, and preparing and implementing plans and regulations. While well-intentioned, implementation of GMA requirements meets with years of conflict and

Kittitas County VSP

Watershed Group webpage
[Click here for meeting notices, meeting minutes, materials, maps, data, etc.](#)

Next Meeting:

The next meeting is scheduled for July 21, 2023 10 AM to 12 PM at KCCD Conference Room (2211 W Dolarway Road, Ellensburg). Find the agenda here with virtual meeting participation instructions.

Biennial Report Issued:

KCCD, on behalf of the Kittitas County VSP Watershed Group, issued the Biennial Report for Kittitas County. [Click the link below](#) to learn about the progress made in our County.



Final Kittitas County VSP Work Plan

The Kittitas County VSP Work Plan was submitted to the Washington State Conservation Commission on March 1, 2018. The Work Plan was presented to the State Technical Panel on March 30, 2018. It was approved by unanimous vote of the Technical Panel on April 27, 2018. The final Work Plan is available here:



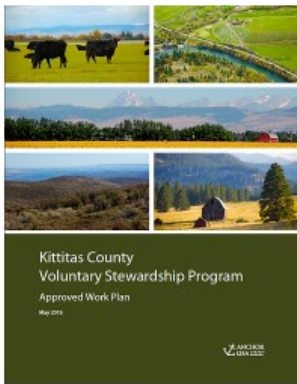
Website for Watershed Group (<https://www.kccd.net/kittitas-county-watershed-group>)



Kittitas County VSP Watershed Group

Final Kittitas County Work Plan

The Kittitas County VSP Work Plan was submitted to the Washington State Conservation Commission on March 1, 2018. The Work Plan was presented to the State Technical Panel on March 30, 2018. It was approved by unanimous vote of the Technical Panel on April 27, 2018. The final Work Plan is available here:



Watershed Group Membership List

(Updated July, 2022)

VSP Watershed Group Members are requested to review the Open Public Meetings Act training video produced by the Attorney General's office. [Click here to view the video.](#) Please let KCCD know when you have completed this training.

What are Critical Areas?

There are five critical areas identified in Washington's GMA:

- Wetlands
- Frequently Flooded Areas
- Critical Aquifer Recharge Areas
- Geologically Hazardous Areas
- Fish and Wildlife Habitat Conservation Areas

In Kittitas County, information about critical areas can be found on the County's website by [clicking here](#)

**Learn about critical areas on your property -
Click here to visit the Kittitas County
VSP On-Line Map & Survey**

Meeting Documents

The next meeting of the Watershed Group will occur in on July 21, 2023 from 10 AM to 12 PM in the KCCD Conference Room (2211 W Dolarway Road, Ellensburg). The meeting will also be on the Zoom platform. See agenda below for details. Agendas, minutes and other meeting materials are available below.

July 21, 2023
[Agenda](#)

February 17, 2023
[Agenda](#)
[Meeting Slide Deck and Info](#)
[KCWP 2022 Water Quality Data Presentation](#)
[Minutes](#)

January 13, 2023
[Agenda](#)
[Meeting Slide Deck and Info](#)
[Carbon Farming - Lynn Brewer](#)
[Minutes](#)

July 22, 2022
[Agenda](#)
[Meeting Slide Deck and Info](#)
[Minutes](#)

March 4, 2022
[Agenda](#)
[Meeting Slide Deck](#)
[Yakama Nation - Zack Mays Slide Deck](#)
[NOAA NMFS - Sean Gross Slide Deck](#)
[Minutes](#)

January 14, 2022
[Agenda](#)
[Meeting PowerPoint](#)
[Ecology 2019 Water Quality Data PowerPoint](#)
[KCWP 2021 Water Quality Power Point](#)
[Minutes](#)

November 12, 2021 (rescheduled)

October 22, 2021 (rescheduled)

Story map explaining the Kittitas County VSP.

<https://kccd.maps.arcgis.com/apps/Cascade/index.html?appid=c08cb177b4004708bc2c563fcf14a225>



Appendix B

Adaptive Management

- Working table of protection and enhancement goals.

Kittitas County Voluntary Stewardship Program

Type		NRCS Code	Practice Name	2020 Protection Objective	2020 Enhancement Objectives	Total Implementation (2011 to 2020)	2025 Protection Objective	2025 Enhancement Objectives	NEW 2025 PROPOSED Protection Objectives	NEW 2025 PROPOSED Enhancement Objectives	Total Implementation 2021-2022	Remaining Needed to meet 2025 Proposed Protection Objectives	Remaining needed to meet 2025 Proposed Enhancement Objectives										
Indirect Intersects	Water Management	Management Practices	449	Irrigation Water Management	533 ac	8,521 ac	22,581	829	12,173	2,459	27,489	2,056	-22,178	2,852									
			WQT01	Irrigation system automation																			
			WQT07	Regional weather networks for irrigation scheduling																			
		Structural Practices	442	Sprinkler System											6,406								
			441	Microirrigation																			
	Nutrient Management	Management Practices	430	Irrigation Pipeline	6,686 ft	139,904 ft	266,001	10,400	199,863	12,413	416,000	71,334	-58,921	78,665									
			590	Nutrient Management	76 ac	694 ac	18,917	118	991	2,060	19,864	647	-17,504	300									
			AIR08	Nitrification inhibitors or urease inhibitors																			
			WQL04	Plant tissue tests and analysis to improve nitrogen management																			
			WQL07	Split nitrogen applications, 50% after crop emergence or pasture green up																			
	WQL11	Precision application technology to apply nutrients																					
	Pest Management	Management Practices	595	Pest Management	164 ac	967 ac	7,123	230	1,382	775	7,538	0	-6,348	415									
			AIR04	Use drift reducing nozzles, low pressures, lower boom height, and adjuvants to reduce pesticide drift																			
			AIR07	GPS, targeted spray application (SmartSprayer), or other chemical application electronic control technology																			
			PLT19	Herbicide resistant weed management																			
	Soil Management	Management Practices	327	Conservation Cover	886 ac	6,141 ac	13,075	1,378	8,773	1,424	17,550	2,279	-13,930	2,196									
			329	No - Till																			
			340	Cover Crop																			
			ENR12	Use of legume cover crops as a nitrogen source																			
345			Reduced Till																				
Range Management	Management Practices	550	Range Planting	225 ac	1,786 ac	4,131	351	2,552	450	4,227	47.4	-3728.4	49.0										
		528	Prescribe Grazing																				
		ANM09	Grazing management to improve wildlife habitat																				
	Structural Practices	574	Spring Development											2 facilities	41 facilities	42	3	58	3	55	9	-48	4
		614	Stock Water Facility																				
Direct Intersects	Habitat Management	Management Practices	395	Stream Habitat Improvement and Management	38 ac	570 ac	500.3	59	814	59	875.0	0.9	-811.2	4.8									
			390	Herbaceous Cover																			
			391	Riparian Forest Buffer																			
			512	Pollinator Habitat																			
			612	Tree/Shrub Establishment (Upland/Shrub Steppe Plantings)																			
			612	Tree/Shrub Establishment (Riparian Plantings)																			
			643	Restoration of Rare & Declining Habitats																			
			645	Upland Wildlife Habitat Management																			
			657	Wetland Restoration																			
	Stream Enhancement	Structural Practices	580	Streambank and Shoreline Protection	172 ft	3,813 ft	4751	267	5,448	293	5,448	400	-4,858	297									
			584	Channel Bed Stabilization																			
		Structural Practices	614	Stock Water Facility	1 project	29 projects	38	1	42	2	51	8	-44	5									
			396	Aquatic Species Passage																			
587	Structure for Water Control (Fish Screen)																						