Oregon Department of Environmental Quality

Oregon Nonpoint Source Pollution Program Annual Report for 2022

Appendix B: Detailed Metric Information for Action 319-2

Actions Defined by the 2022 Nonpoint Source Management Plan:

- 319-2. Solicit and select 319 projects that support priorities.
- 319-2-M2. Annually, 100% of funded projects demonstrate progress implementing project objectives.
- 319-2-R6. Description of each open 319 project including Project Name, Agreement Number, Grant Recipient, and a project description that includes identification of the project objectives. Reported annually.
- 319-2-R7. Description 319 project activities or outputs that occurred or were reported to DEQ during the reporting period. Reported annually.

Project Name	Agreement Number	Grant Recipient	Satisfactory Progress Determination	Project Description	319 Total Project Grant Funds	Project Activities or Outputs that Occurred During Reporting Year (2022)	Performance Report in 2022	Agreement Execution Date
Upper South Fork John Day Bioassessment	003-21	South Fork John Day Watershed Council	Yes	The purpose of the Upper South Fork John Day Bioassessment is to determine the effectiveness of the rapid riparian revegetation effort completed on the Upper South Dork John Day River, by repeating the Upper South Fork John Day Bioassessment that was previously performed in 2001, 2004, 2006, and 2017. After developing a Quality Assurance Project Plan (QAPP), temperature loggers will be deployed and macroinvertebrate sampling and analysis will occur. Once sampling has concluded a hired contractor will use the macroinvertebrate model PREDATOR to characterize the collected samples and compile results into a final report to be shared with project partners.	23969	The South Fork John Day Watershed Council successfully completed the field data collection in August and the data has been transferred to the contractors to be processed.	yes	7/16/2020
John Day River Basin Unmanned Aerial Vehicle Vegetation Monitoring	004-21	Blue Mountain Land Trust	Yes	The John Day River Basin Unmanned Aerial Vehicle Vegetation Monitoring project proposes to use unmanned aerial vehicles (UAVs) equipped with multispectral sensors to continuously monitor riparian vegetation throughout the John Day River Basin. Gilliam Soil and Water Conservation District, in partnership with Oregon State University, is developing a procedure for continuous monitoring of riparian vegetation, including a protocol for both planning the flight mission and processing images. Partners will use this protocol to gather baseline data throughout the basin on riparian vegetation cover. This data will enable partners to monitor restoration efforts, inform future restoration plans, and determine best management practices. Staff will be trained and licensed to fly UAVs in accordance with Federal Aviation Administration (FAA) licensing requirements. In conjunction with Project Partners, the UAV will be utilized for the collection of basin-wide vegetation baseline data on the sites of planned restoration projects in their focus geographies, as well as for monitoring of restoration projects after project implementation. In conjunction with Project Partners, staff will coordinate with other natural resource organizations working in the John Day Basin to employ the vegetation monitoring protocol on other restoration projects throughout the basin. Data sharing will be coordinated with Gilliam SWCD and the John Day Basin Partnership to identify areas in need of improved restoration practices. The data collected between all project partners will then be analyzed and cataloged and accessible to all project partners in a user friendly format.	26510	Blue Mountain Land Trust (BMLT) have purchased their drone and have staff currently studying to take the drone FAA testing. Project Partners made progress towards completing the goals of this Project. So far, partners North Fork John Day Watershed Council and South Fork John Day Watershed council have trained and certified staff to complete UAV flights. Sherman SWCD are licensed but have yet to purchase drone equipment. Project partners continue to participate in planning calls and work with other drone operators in the John Day Basin, and are working out a plan on how to engage more practitioners who are interested in having their restoration projects flown pre- and post-implementation.	yes	8/12/2020
Backyard Planting Program 2019	038-21	Tillamook Estuary Partnership	Yes	riparian planting	25149.28	319 funds were used for the site preparation and planting of 2 new riparian projects which included the planting of 165 native trees and shrubs and 800 willow cuttings along 264 feet of riparian areas encompassing approximately 0.2 acres. 5.6 acres of invasive vegetation was removed along 1.3 riparian miles.	yes	9/22/2020
Down and Dirty in Eastern Oregon	059-22	Malheur County Soil and Water Conservation District	Yes	The Malheur Soil and Water Conservation District will conduct water quality monitoring at 14 sites throughout the Malheur and Owyhee Basins. Installation of continuous discharge monitoring sites at 11 locations will be completed, and water quality samples will be collected by project partners. Discharge will be used to calculate pollutant loads at the monitoring sites. Data collected from this project will be analyzed and compared to previously collected data and reports. The primary objectives of this project are to collect and analyze water quality and quantity data to report progress to agricultural producers and regulatory agencies and to identify and prioritize locations for future restoration efforts.	24200	The Malheur Soil and Water Conservation District is working with a DEQ volunteer monitoring coordinator to develop a Quality Assurance Project Plan describing project area, activities, and quality control processes in place to ensure usability of data collected.	yes	5/11/2022

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Remote Sensing & Source Water Inventory for the S. Fork Walla Walla R.	085-21	Walla Walla Basin Watershed Council	Yes	The Remote Sensing and Source Water Inventory for the South Fork Walla Walla River project will protect groundwater and essential aquatic habitat by using LiDAR technology to fill the data gap about the current status of water sources feeding the Walla Walla River. The data will be used by project partners to develop a strategy for protecting watershed functions relating to natural basalt aquifer recharge, flow, and water temperature in the upper watershed. After a Quality Assurance Project Plan is submitted and approved, all available source water data will be compiled and reviewed. After acquiring LiDAR for the Upper and Middle South Fork Walla Walla River HUC-6 units, a hydrologic map of the watershed will be developed and an inventory of potential and existing spring input locations will be completed. The last component of this project is to collect water samples for isotope and tritium analysis by USGS, once completed the findings will be summarized in a written report and community outreach will be conducted.	17800	The Walla Walla Basin Watershed Council has collected the Lidar information, and field trainings have occurred to conduct a springs inventory in the S. Fork Walla Walla Watershed.	yes	4/22/2021
Upper Willow Creek Basin BMPs Program	086-21	Morrow Soil and Water Conservation District	Yes	The Upper Willow Creek Basin Best Management Practices (BMPs) Program aims to reduce heat pollution in the Upper Willow Creek watershed by implementing a cost-sharing program for private agricultural landowners to install BMPs. A major nonpoint source of water quality impairment in the Willow Creek watershed is heat input that results in high water temperatures. Temperature increases may be caused by both natural and anthropogenic events resulting in vegetation removal, low seasonal stream flows, changes in channel morphology, and alteration of the floodplain. Project goals include the reduction of instream water temperatures and agricultural nutrient inputs through the development of best management practices such as the development of riparian buffer zones and off stream stock watering areas.	14915	The Morrow SWCD sucessfully entered into an agreement with one landowner to complete a feeding pen relocation project. The project aims to decrease erosion and nutirent loading to Hinton Creek. The project began in late fall and was completed in December.	yes	4/29/2021
Walla Walla Basin Water Quality Education and Outreach	089-21	Walla Walla Basin Watershed Council	Yes	The Walla Walla Basin Water Quality Education and Outreach project will support the Walla Walla Basin Watershed Foundation's goal to improve audience understanding of water quality problems in surface and ground water and how protection and restoration efforts can aid in restoring healthy hydrological and ecological systems. With a collection of lecture and hands-on educational experiences, the program reaches 600+ students and 100+ adults each year in the Umatilla and Walla Walla Basins, largely in the Milton-Freewater area, but also various other locations, including Athena and Walla Walla. Many of the educational activities address human-related stream heating associated with flow diminution and channel manipulation, including loss of riparian vegetation. Other water quality, human-caused impairments included in the 303(d) of the Clean Water Act are addressed, including sediment, nitrate, ammonia, bacteria, pesticides and others. Both surface and groundwater resources are addressed, including the interconnectedness of the systems. To achieve the educational goals of improving awareness and understanding of the related issues, over 20 lessons and activities for both youth and adults are coordinated.	11990	The Walla Walla Basin Watershed Council (WWBWC) Education and Outreach program implemented the Salmon and Trout Enhancement Program (STEP) with approximately 150 5th grade students and 40 high school students. Lessons focused on water quality as central factor in supporting good habitat for endangered and protected anadromous native fish. For the 2022 school year, the WWBWC adapted its Watershed Field Day program to a partnership with the Frazier Farmstead Museum to serve approximately 150 4th grade students, 10-12 school staff and 5 high school students with a collection of environmental and cultural education. The WWBWC coordinated a community volunteer event at the Ferndale School Demonstration Restoration project, 12 community members learned about restoration of riparian habitat and water quality benefits as well as helping get area ready for Outdoor School. The WWBWC partnered with the Beaver Coalition to host a tree planting event on April 9th 2022, during which approximately 30 community members volunteered to plant both rooted and unrooted tree starts.	yes	4/26/2021
South Umpqua NPS Turbidity Assessment Phase #2 (123-20)	123-20	Partnership of Umpqua Rivers	Yes	watershed assessment	39640	During 2022, the Partnership for Umpqua Rivers (PUR) used 319 grant funds to collect monthly grab sample monitoring data at approximately 65 locations per month in both the North and South Umpqua watersheds. Grab sample data parameters collected at each monitoring location include temperature, conductivity, pH, dissolved oxygen, turbidity, phycocyanin, nitrate, and E. coli (at select sites based on need). 319 grant funds were used to purchase the	yes	5/9/2020

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						nitrate and phycocyanin probes that are now used regularly in monitoring efforts throughout the North and South Umpqua Basins.		
Siletz Watershed BMP Landowner Engagement Phase #2 (126-20), amemded	126-20	Lincoln SWCD	Yes	Ag BMP project development; stakeholders involvement/information	23353	319 funds added to grant Agreement in subsequent grant cycle; 319 funds used in construction of an agricultural livestock heavy use area (using NRCS funds & local match)	yes	8/10/2020
Nehalem - Riparian Restoration and Water Quality Monitoring	143-20	UNWC	Yes	riparian restoration, baseline monitoring	8998	No outputs for 2022. Project completed. Final report recieved 6/30/21	yes	5/19/2020
Little Butte Creek Watershed/Lower Antelope Creek	151-20	Jackson SWCD	Yes	BMP planning and implementation, Irrigation	47275	JSWCD converted 50 irrigated acres from wild flood to pivot irrigation system which eliminated tailwater runoff and reduced E. coli and temperature loading into Antelope Creek.	yes	7/16/2020
NW OR Restoration Partneship 2019	152-20	Tillamook Estuary Partnership	Yes	riparian planning	15458.58	From February 2022 through May 2022, 319 funds were used to support 2000 hours to the Oregon Youth Authority's (OYA) at-risk, incarcerated youth at TEP's nursery located on OYA property. Since February, the crew has power washed over 550 container holding boxes, thinned 1000's of seedlings, and loaded over 30,000 plants in NORP members' vehicles.	yes	7/10/2020
Upper Klamath and Lost subbasins Stewardship Agreement Planning Efforts	178-21	Klamath Basin Water Users Protection Association	Yes	The Klamath Basin Water Users Protection Association (KWUA) will work together with irrigation districts, The Bureau of Reclamation, U.S. Fish and Wildlife Service, DEQ, and NCWQCB to draft the Upper Klamath and Lost River Subbasins TMDL Stewardship Plan that will be reviewed and adopted by the stakeholders. The Stewardship Work Group will create a comprehensive implementation plan that will address the Upper Klamath and Lost River Subbasins Nutrient and Temperature TMDLs. KWUA will coordinate planning sessions twice per month for the Upper Klamath and Lost River Subbasins TMDL Stewardship Plan and ensure the representation of interested stakeholders. KWUA will communicate efforts to the various participants and act as a liaison between districts and other entities interested in being part of the implementation plan. KWUA will work closely with DEQ and NCWQCB during the planning process and communicate information between parties in between quarterly planning sessions.	29470	The Klamath Water Users Protective Association has primarily focused on coordinating and consulting with Oregon Department of Environmental Quality (ODEQ) and the California North Coast Water Quality Control Board (NCWQCB) on behalf of the stakeholders regarding development of the Implementation Plan.	yes	6/17/2021
2019 STREAM Enhancement and Restoration	180-20	Tillamook SWCD	Yes	riparian planting	31379	No outputs for 2022.	yes	8/12/2020
Johnson Creek--Gresham Riparian Reforestation	22-23	Johnson Creek WSC	Yes	riparian restoration	20950	We have done site preparation weed treatments throughout the project area, and the initial planting was completed this winter; crews should be out any day for a first round of post-planting maintenance, if they haven't done it already. We will continue maintenance weed control through the growing season, and will do infill planting as needed in the fall/winter.	yes	10/1/2021

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Walla Walla River Forks Floodplain Reconnection and In-stream Enhancement Implementation	55-22	Confederated Tribes of the Umatilla Indian Reservation	Yes	The Walla Walla River Forks project, located at the confluence of the North and South Fork Walla Walla Rivers, involves reactivating floodplain, improving fish passage and in-stream habitat complexity, and restoring historic river channel. Implementation of this project will improve habitat for native fish species such as bull trout (Salvelinus confluentus), Mid-Columbia steelhead (Oncorhynchus mykiss), Mid-Columbia spring Chinook (O. tshawytscha), and interior redband/rainbow trout (O. mykiss), while benefiting natural channel morphology and in-stream processes. This restoration effort aims to improve water quality and quantity, geomorphology, hydrological connectivity, riparian vegetation, and aquatic biota. This project supports the proposed management strategies outlined in the Walla Walla Subbasin Stream Temperature Total Maximum Daily Load and Water Quality Management Plan (ODEQ, 2005). Specifically, the project will increase river shading, floodplain area, sinuosity, and hyporheic exchange. Implementation activities include riparian buffer protection and enhancement, instream flow augmentation, erosion control, large wood placement, and channel restoration. The primary project objective is to enhance habitat for native fish and wildlife by restoring ecosystem function throughout the site.	62651	The Confederated Tribes of the Umatilla Indian Reservation have removed 850 feet of existing levee to improve connectivity with relic side channel and floodplain habitat, enhanced 2250 feet of off-channel habitat and 4.9 acres of floodplain habitat, installed 94 large wood habitat structures, made improvements on irrigation diversions, and enhanced 2 acres of riparian habitat by installing native plants and native seed mixes.	yes	3/23/2022
Tillamook SWCD 2018 Stream Enhancement & Restoration	56-20	Tillamook Co SWCD	Yes	riparian restoration, fencing	11000	No funds were expended on this grant. The funds were to be "reprogrammed"	yes	12/20/2019
Northwest Oregon Restoration Partnership 2021	72-23	Tillamook Estuary Partnership	Yes	riparian planning	37388	No work reported but project is open and on track.	yes	2/1/2023
Reforestation of Humbug Creek on the ODFW Wildlife Refuge	73-23	Upper Nehalem WSC	Yes	riparian reforestation	12512	No work reported but project is open and on track.	yes	2/28/2023
Nestucca, Neskowin and Sand Lake Basin Riparian Improvement Project	80-23	Nestucca Neskowin WSC	Yes	riparian planting	16000	No work reported but project is open and on track.	yes	2/23/2023
Backyard Planting Program 2020	90-21	Tillamook Estuary Partnership	Yes	Site specific riparian planning	28429	319 funds were used in 2022 to support 130 hours of project management (which includes establishing and meeting with program participants, site prep, partner coordination) as well as 5 hours of plant establishment time and 12 hours of project monitoring.	yes	5/25/2021
Northwest Oregon Restoration Partnership 2020	91-21	Tillamook Estuary Partnership.	Yes	Preparing plant materials for riparian restoration	14928	319 funds were used to support >2000 employment hours to the Oregon Youth Authority's (OYA) at-risk, incarcerated youth at TEP's nursery located on OYA property. The OYA nursery crew sowed 35,000 seed tubes and transplanted over 37,000 seedlings into gallon pots that will be grown at the nursery for another year, or two, then will be planted into restoration projects all over the NWOR region.	yes	5/24/2021
Nestucca, Neskowin and Sand Lake Basin Riparian Improvement Project	92-21	Nestucca Neskowin WSC	Yes	Identification new project areas for riparian restoration.	18179	No work reported but project is still open and on track.	yes	5/24/2021

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Antelope and Little Butte Creek WQ Improvement Project	93-21	Jackson Co SWCD	Yes	BMP implementation	43502	JSWCD converted 129 irrigated acres from wild flood to pivot irrigation system which eliminated tailwater runoff and reduced E. coli and temperature loading into Antelope Creek.	yes	9/3/2020
Bacteria, continuous temp. and pesticide monitoring in the Long Tom WS (094-21)	94-21	Long Tom WSC	Yes	monitoring	24943	The Long Tom Watershed Council has provided continued monitoring of E Coli and temperature for Bear and Ferguson Creeks to inform future targeted outreach with partner agencies to landowners in the area and support riparian enhancement and livestock management projects.	yes	5/26/2021
Monitoring riparian conditions via Remote Sensing to support Statewide implementation of WBP	95-21	PSU, Institute of Natural Resources	Yes	Technical assistance modeling / statewide monitoring	42796	The overarching goal of the full project, which was only partially funded, was to test the capability to estimate shade on channels and other waterbodies via remote sensing, both with and without lidar data availability. The test results would then be used to determine a viable strategy for statewide monitoring of riparian vegetation condition, focusing on developing a repeatable, cost-effective method for assessment of progress toward achieving TMDL temperature goals. A sub-goal of the first phase of the project was to develop a simple riparian vegetation classification for use in an operational system for state and transition modeling in riparian areas. INR and Oregon DEQ mutually decided this goal was better postponed until a later phase of the project, and focused attention on developing the sample design and field protocol for ground-truth data to support the main goal. Goals that had been set for the second phase, which was not funded, included refining methods of optical-based mapping of canopy cover and vegetation height, and testing methods for mapping change in shade, cover or height. These goals were not attempted as the second phase was not funded; however, we have produced preliminary mapping results for both lidar-based and optical imagery-based scenarios.	yes	2/5/2021

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