WALLOWA Agricultural Water Quality Management Area



Biennial Review Report to the Board of Agriculture and ODA Director Submitted by the Local Advisory Committee (LAC)

Meeting Date: November 29, 2023								
LAC Members Present: Kevin Melville, Lela Kunkle, Dan Warnock, and Kelly Birkmaier								
Reporting Time Frame: Calendar years 2021 and 2022								
PROGRESS MEASUREMENT								
This was a Light Review; progress toward Measurable Objectives will be reported at the next Full Review.								
Activities (Wallowa Soil and Water Conservation District, Natural Resources Conservation Service (NRCS), Grande Ronde Model Watershed)	#	Discussion						
Events That Actively Engage Landowners	5	Irrigation workshop; meeting to discuss an irrigation piping project; meetings to discuss riparian fencing; delivered site maps displaying riparian restoration options within the Imnaha Strategic Implementation Area (SIA); Weed Board invasive grass outreach.						
Landowners Participating in Active Events	29							
Landowners Provided Technical Assistance*	386	Collecting soil monitoring data; upland water; riparian fence designs; set up soil moisture readers; irrigation water piping; livestock watering sites; streambank erosion; water diversions; riparian and stream habitat.						
Site Visits	99	Little Sheep Creek (unrestricted livestock grazing); Big Sheep Creek (winter-feeding corral next to the stream); set up soil moisture sensors; Cross Country Canal headgate; tributary to Prairie Creek (culvert); piping a creek through corrals; tour of the Wallowa Lake dam; cultural resource surveys; visited areas of concern with landowners and partner organizations.						
Conservation Plans Written	0							
Funding Applications Submitted	89	Title II grant for monitoring Joseph Creek pre and post thinning; Title II grant for Big Sheep Creek fence; Oregon Watershed Enhancement Board (OWEB) grant for Big Sheep Creek fence; small grant for Foster Ditch; small grant for Turner riparian fence; small grant to move a corral fence farther away from Imnaha River; National Association of Conservation Districts grant for cultural resource employees; Regional Conservation Partnership Program grant for thinning, weed treatment and brush control – Wallowa north; ODA support grant for water quality monitoring in Wallowa Basin.						
Funding Applications Awarded	89	All funding applications submitted were awarded.						

* Number reported likely double-counts some landowners due to tracking methods.

LAC DISCUSSION

Summary of Progress

- Landowners are working hard to maintain and improve soil health with practices such as no till, cover crops, and crop rotation on irrigated lands. This has greatly reduced soil erosion and sedimentation into waters of the state.
- Back in the 1990s landowners began to protect and fence riparian areas, which has effectively reduced sedimentation and livestock manure from entering waters of the state. Maintaining and improving watershed health is now a common conversation among the agricultural producers in this area.

- Water quality used to be a big concern in the 1990s when fish became Endangered Species Act-listed in the basin. Most issues have been fixed. Now there is interest in restoring stream morphology to presettlement conditions. The Grande Ronde Model Watershed, Oregon Department of Fish and Wildlife, the Nez Perce Tribe, Trout Unlimited, and other partners are working to provide stream restoration above and beyond agricultural water quality regulations.
- NRCS has been working with landowners to make irrigation infrastructure improvements such as piping and converting to more efficient sprinkler systems.
- Wallowa Resources has a program working with landowners with rangelands to address invasive species that can contribute to erosion and sedimentation.
- A lot of beavers are building dams on Big Sheep Creek and Little Sheep Creek, which slows the water down and improves late-season flows.

Impediments

- Contracting services for watershed health projects (e.g., timber thinning) have been scarce making it difficult to get funded projects completed on the ground.
- It is difficult to engage small-acreage landowners in agricultural water quality issues because they don't think of themselves as agriculture or as a potential pollution source. Particularly newer landowners who are new to agriculture and new to the basin. They often don't consider themselves as agricultural operators yet are contributors of agricultural pollution.
- Some landowners are using the land as investment parcels that they plan to flip and are disconnected from watershed health issues.
- The SIA process is not the best process. It is realized that ODA needs to show improvements and that they are working on water quality but there needs to be SWCDs involved at the initial watershed overview.
- Cover cropping on dryland ground is challenging.
- Challenges with sporadic weather systems dumping large quantities of precipitation in localized areas has caused landslides and erosion, resulting in sedimentation to waterways.
- This Management Area has a lot of streams that are flashy systems. These often wash out streamside vegetation, particularly when spring melt quickly raises streams and rivers that then encounter frozen sections and breaks up the ice into large sharp ice chunks that gorges out the banks, riparian vegetation, and stream geomorphology.
- It's challenging to find out what methods work best to control annual invasives such as medusa head.
- Permitting for projects continues to become more onerous in time and expense and there are often contradictory requirements from one agency to the next, which can stalemate projects.
- Watersheds do not heed program boundaries (agricultural lands, public lands, forestry lands); if all aren't
 managed together, managing one portion of the landscape alone is not going to create a healthy
 watershed.
- The newly revised forestry riparian buffer requirement is making it difficult to maintain healthy forests that are resistant to wildfire, as well as reducing the understory's effectiveness for sediment control and reducing forestry grazing value of the land. All these factors increase the likelihood of agricultural landowners selling and the land's use changing when sold to just that of recreational use. Recreational use landowners in the basin have thus far demonstrated that they are less likely to understand how to be good stewards of the watershed.
- OWEB grant focus is on fish and often forgoes high priority upland projects. The health of uplands is equally important to good water quality and watershed health.
- Heavy wildlife in the area affects the success of planting projects.

Recommended Modifications and Adaptive Management

- The LAC recommends that the SIA Partnership review this year's data to see if there is a repeat spike of *E. coli.* The spike in 2022 occurred when no livestock were along the creek. Possible sources include irrigation withdraws, thriving beaver population, and vacation property septic systems. Additionally, the LAC recommends assessing potential causes of high nitrate/nitrites found in the SIA monitoring. Additional monitoring may be necessary to accurately identify the source. Once the source is identified, though, effective restoration actions can then be taken.
- The LAC is interested in research that compares the daily water consumptive use of large trees versus
 value of trees moderating solar heating.
- The LAC recommends that state agencies identify how they are measuring and accounting for what is
 agriculture's contribution to water quality parameters of concern, particularly as it relates to establishing
 agriculture's load allocations in TMDLs.

- The LAC encourages land managers, as well as local, state, and federal agencies, to work together in watersheds as partners across human-made boundaries.
- The LAC encourages Oregon Department of Forestry and state leaders to reconsider and revise the most recent forestry buffer rule as it is affecting agricultural/forestry landowners' ability to maintain good watershed health.
- Remind funders that good watershed health is ridge top to ridge top; uplands, riparian, and in-stream areas are all equally important to watershed health.

ODA COMPLIANCE ACTIVITIES											
Location	Cases		Site Visits	Agency Actions							
				Letter of Compliance		Pre-	Notice of	Civil			
	New	Closed		Already in compliance	Brought into compliance	Enforcement Notification	Noncompliance	Penalty			
Outside SIA	0	0	0	0	0	0	0	0			
Within SIA	2	1	5	0	1	4	0	0			