



**NRD WATER QUALITY PROGRAM
AGRICULTURAL WATER QUALITY MANAGEMENT AREA
BIENNIAL REVIEW SUMMARY**



Management Area: Owyhee Basin

Meeting Date(s): January 14, 2015

LAC Members Present: Rod Frahm (Chair), Vikki Price, Charles Barlow, Lou Wettstein

Implementation Summary (January 2013-December 2014)

Outreach and Education:

- Owyhee Watershed Council-sponsored “Owyhee Field Day” Watershed Health and Function information presented to 1,000 5th graders from Treasure Valley schools

Planning and Projects:

- 566 acres of cropland were converted from flood to sprinkler irrigation
- 12,800 feet of open ditch was replaced with buried pipelines
- 37,886 feet of open lateral irrigation delivery systems were piped to provide pressurized irrigation water delivery to landowners
- 96 acres were converted from flood to border/basin irrigation
- 80 acres were converted from flood to gated pipe irrigation

Monitoring:

- Owyhee River Improvement Project: sampled water quality at 12 locations
- Compilation of all water quality and flow data in the Owyhee Management Area resulted in approximately 4,000 data records from approximately 100 sites

Funding and Grants:

- Funding received from OWEB, NRCS, DEQ, and other conservation partners

Progress Measurement:

- Fletcher Gulch is the Malheur SWCD Focus Area. The SWCD evaluated landscape conditions and collected water samples since 2008. The water quality data are currently being analyzed. See attachment for landscape results

Summary of Impediments:

- Landowners are interested in doing projects but cost-share funds are insufficient to help them implement projects
- Conservation partners lack sufficient staff to respond to landowner desires to make changes
- There is low interest in solutions such as sediment basins because they take high-value cropland out of production and are very expensive
- There may be some landowners that don’t see themselves as part of the problem
- Landowners who do work on their own don’t get credit for the improvements they have made so it appears to outsiders that progress is slow
- Landowners and local partners have concerns that water quality and land condition data will be used in ways that inhibit progress
- Some cropping systems make it difficult to use some of the technological solutions that improve water quality, e.g. drip irrigation
- Some solutions conflict with management practices on adjoining lands, e.g. return flows used by a neighbor for irrigation
- Federal lands are a source of pollutants and noxious weeds but litigation and Federal policies make land management changes difficult
- BLM is a major landowner but is not effectively involved in finding and implementing solutions in the near-term
- Catastrophic wildfires disrupt watershed functions: sediment eroded from burned areas is entering rivers and streams; wildfires are eliminating upland and riparian vegetation and displacing wildlife
- Phosphorus and arsenic enter the Owyhee River from naturally occurring deposits, e.g. ash layers in the upper watershed, not just anthropogenic activities such as farming
- Aquatic and terrestrial weed infestations (including juniper) can reduce water quality

Recommendations for Modifications:

- More public education on land management practices
- Continued interaction among partners so all know what they are working on
- Continue to meet every January to discuss AgWQ issues and activities
- Develop goals common to all partners about watershed management

<ul style="list-style-type: none"> • Ribotype <i>E. coli</i> to determine sources of bacteria • Figure out monitoring needs and how to answer them • Figure out how to show our progress with numbers and do it • Provide more support and funding to irrigation districts to be part of the solution, e.g. provide GIS. • Involve more volunteers with monitoring and other activities • ODA provide more information on riparian conditions, monitoring, and Rules • Control invasives and manage grass fuel loads on Federal range lands to control wildfires
Enforcement: <i>Letter of Compliance -0</i> <i>Water Quality Advisory -0</i> <i>Letter of Warning -0</i> <i>Notice of Noncompliance -0</i> <i>Civil Penalty -0</i> <i>Alternative Measures -0</i>
Total Complaints: 0
Notes:

Attachment:

SWCD staff evaluated pollution potential from 3,350 acres in Fletcher Gulch using the categories shown below. Acreage in Class 1 has doubled since 2008.

Classifications of irrigated acreage based on potential for pollution from sediment.			
	Characteristics to evaluate		
	Visible signs of field irrigation-induced erosion	Irrigation water leaving the control of the landowner and/or entering commingled water	Notes
Class 1	None or minimal	None	
Class 2	Yes	Clear or none	
	None	Dirty	Water entering field from neighbor

Classifications of irrigated acreage based on potential for pollution from manure deposition and transport.			
	Characteristics to evaluate		
	Vegetated buffer zone	Timing of grazing in relation to wet periods (rain and irrigation)	Bare areas in pasture within 50 feet of water body
Class 1	Yes	Timed to avoid runoff of potential pollutants	No
Class 2	Yes	Shortly before wet periods, resulting in potential runoff	No
Class 3	No	During wet periods resulting in runoff	Yes

	Land Condition: % of acreage			
	2008	2011	2013	2016
Class 1	15	23	38	
Class 2	22	21	16	
Class 3	62	55	47	