Powder Brownlee Agricultural Water Quality Management Area



Biennial Review Report to the Board of Agriculture & ODA Director

Submitted by the Local Advisory Committee (LAC)

Meeting Date(s): March 10, 2021

LAC Members Present: Curtis Martin, Co-Chair, Tim L. Kerns, Co-Chair, Tim A. Kerns, Myron Miles

Reporting Time Frame: 2018-2020 Meeting was scheduled for March of 2020, COVID pandemic cancelled meeting.

| PROGRESS MEASUREMENT | | | | | |
|---|-----|--|--|--|--|
| This was a Light Review; quantitative details related to Measurable Objectives are not reported at Light Reviews. | | | | | |
| Activities | No. | Discussion | | | |
| Active Events | 1 | EOU Water Quality Presentation | | | |
| Landowners Participating in Active Events | 10 | | | | |
| Landowners Provided Technical Assistance | 125 | | | | |
| Site Visits | 44 | | | | |
| Conservation Plans Written | 10 | | | | |
| Funding Applications Submitted | 15 | Spring Developments, Watering Facility, Riparian Habitat, Irrigation | | | |
| | | Pipelines | | | |
| Funding Applications Awarded | 10 | Spring Developments, Watering Facility, Riparian Habitat, Irrigation | | | |
| | | Pipelines | | | |

LAC DISCUSSION (focused on water quality data)

Progress

Ellen Hammond presented detailed reporting and summaries for six parameters (*E.coli*, phosphorous, dissolved oxygen, pH, temperature, and bugs). Phosphorus levels have declined statistically over the last 20 years; however, levels are still high. The LAC was interested in the monitoring data and encouraged further monitoring, which is expected for the upcoming TMDLs (*E. coli*, pH, dissolved oxygen, and phosphorus), the Lower Powder SIA and as part of the Powder Basin Watershed Council program.

Impediments

The main water quality impacts from agriculture in our management area include *E.coli* levels during the irrigation season, phosphorous levels between Baker City and Keating, and temperature throughout the watershed. Curtis Martin was concerned about the lack of flow data to help calculate pollutant loads and understand the implications of pollutant concentrations.

RECOMMENDED MODIFICATIONS AND ADAPTIVE MANAGEMENT

There were three recommendations for monitoring: 1) collecting flow data at the monitoring sites, and 2) monitoring in offmonths at DEQ's ambient sites (Baker City and Keating), and 3) adding phosphorous monitoring sites between the two DEQ Ambient Sites (Baker City and Keating). In addition, Myron Miles and Whitney Collins stated that eliminating runoff into streams, especially in the spring, will be important; off channel watering systems, riparian protection, piping irrigation ditches, and irrigation efficiency projects like converting from flood to sprinkler will continue to take place in the watershed. Whitney Collins also reported that with the Lower Powder SIA grant, will be purchasing equipment in order to collect data for phosphorous and dissolved oxygen within the Lower Powder SIA and Keating Focus Area.

| COMPLIANCE ACTIONS | | | | | | |
|--------------------|----------------------|---------------------------------|----------------------------|---------------|--|--|
| Location | Letter of Compliance | Pre-Enforcement Notification | Notice of Noncompliance | Civil Penalty | | |
| Outside SIA(s) | 0 | 0 | 0 | 0 | | |
| Within SIA(s) | 0 | 2 | 0 | 0 | | |