

Prairie Dog Creek Watershed Meeting Minutes
February 19, 2019
Prairie Dog Community Center

Susan Holmes, SCCD
John Kane
Jim Mickelson

Larry Barbula
Bruce Davidson
Dick Legocki

Andrew Cassiday, NRCS
Jackie Carbert, SCCD
Carrie Rogaczewski, SCCD

Meeting Opening and Introductions

Susan Holmes called the meeting to order at 6:00 pm and introductions were made.

2017 Monitoring Results Recap

Jackie provided a recap of the 2017 monitoring results on the Prairie Dog Creek watershed. Monitoring was done at eight stations; five on the mainstem of Prairie Dog Creek and three tributaries (Wildcat Creek, Meade Creek and Jenks Creek). Parameters monitored included instantaneous and continuous temperature, pH, conductivity, dissolved oxygen, discharge, turbidity and *E. coli* bacteria. Macroinvertebrate sampling and habitat assessments were also completed at three sites at the end of the season.

Two sites reported temperatures at or slightly above the 20°C instream temperature standard on July 11th. All other sites reported temperatures below the standard for the entirety of the monitoring season. All sites reported continuous temperature readings that exceeded the 20°C standard, apart from PD10. All pH measurements were within the standard. All sites met the minimum instantaneous dissolved oxygen concentration standard of 5.0 mg/L for early life stages and 4.0 mg/L for other life stages. Average conductivity values generally increased from upstream to downstream at mainstem and tributary sites (handout). Overall conductivity was higher in the early season than in the late season.

Bacteria concentrations exceeded the standard at all stations from May-July, apart from PD10. The same was observed from July-September, except for PD09 and JC01. Typically, concentrations were higher from during the early season than during the late season, except at WCC01 and PD10. An increase in bacteria concentrations was observed during the early season from 2014 to 2017 at most mainstem stations. PD10, however, decreased during this time. During the late season, bacteria concentrations increased at PD01, PD05 and PD06 from 2014 to 2017; whereas concentrations at PD09 and PD10 decreased during this time. Generally, concentrations at tributary sites increased from 2014 to 2017 during the early season. Late season concentrations decreased at all three tributaries from 2014 to 2017.

Carrie explained the uncertainty and variability that is inherent with using *E. coli* as an indicator for potential pathogens. Concentrations can fluctuate greatly in response to things like water temperature, water quantity, and suspended sediment. In the short term, it may be hard to see any trends or positive changes within the watershed, but the hope is that over the long term improvements will be evident.

Progress Updates/Priority Areas

Plan Review

The Prairie Dog Creek Watershed Based Plan, which was approved in 2011, was updated in 2018 to reflect new data, load information, and project needs. Carrie went over completed milestones which included annual watershed meetings, updated progress registers and load reduction estimates, annual watershed newsletters, and water quality monitoring. Overall, the SCCD is on track with the implementation goals of the updated plan, with the exception of project installation. Project requests continue to be down in all watersheds. It is unclear whether that is because all of the “easy” projects are done, current economic conditions, or lack of awareness on issues/programs. There are a few pending projects requests within the watershed. Carrie explained that the SCCD may consider incorporating NRCS projects into progress registers in the future.

Progress Registers – Completed Projects

The group reviewed the progress update and progress register. The progress register documents water quality projects within the watershed to demonstrate progress that may not be reflected in water quality sampling in the short-term. Carrie explained the different projects on the register. The projects that are on the progress registers are primarily those done through the SCCD office and do not reflect other activities/projects completed by other organizations or individuals. Since 2001, 20 projects have been completed within the watershed that include corral relocations, septic replacements, stockwater and fencing installations, diversion replacements, and riparian buffers. There were no new projects within the watershed in 2018.

Reduction Requirements/Priority Areas

Load reduction requirements are calculated for each subwatershed for each monitoring year. Maps depicting the load reduction category (low, medium, high and very high) provide a visual representation of general changes in reduction requirements over time. The maps are not intended to be used to determine specific water quality trends within the watershed. SCCD uses the maps when ranking projects; the load reduction category of the appropriate subwatershed is one of several ranking criteria used to determine whether a project is funded. Just because a project falls within a low reduction category does not mean it won't receive assistance. As of the 2017 data, most subwatersheds are in the low or medium reduction category, with the exception of the Meade Creek subwatershed, which is in the high reduction category. The largest subwatershed, Dutch Creek, was not sampled in 2017 and therefore had no data to determine a load reduction category for the area. Carrie reminded the group that SCCD offers willow plantings for bank stabilization, free of charge.

TMDL and Watershed Plan Update

Carrie briefly explained the Wyoming Department of Environmental Quality's (WDEQ) requirements; when waterbodies do not meet water quality standards, the state has 8-13 years to develop a pollution remediation plan through a Total Maximum Daily Load (TMDL). The Prairie Dog Creek watershed has no permitted point sources for bacteria; programs to address non-point sources are voluntary. WDEQ utilized much of the Prairie Dog Creek Watershed Plan in writing the TMDL, as much of the work had already been completed for the plan. The Prairie Dog Creek TMDL was approved in 2018.

Carrie also mentioned the TMDL to be completed by the Montana Department of Environmental Quality (MDEQ) on portions of the Tongue River watershed located within Montana in 2018. The MDEQ will be looking at electrical conductivity (salinity) and may utilize some of the conductivity data that has been collected by the SCCD in the northern WY regions of the watershed. SCCD met with the MDEQ last summer but has not heard any updates regarding the salinity TMDL since then.

The meeting was adjourned at 6:45 p.m. The next meeting is tentatively scheduled for February 2019.

Submitted by Jackie A. Carbert, Program Assistant