

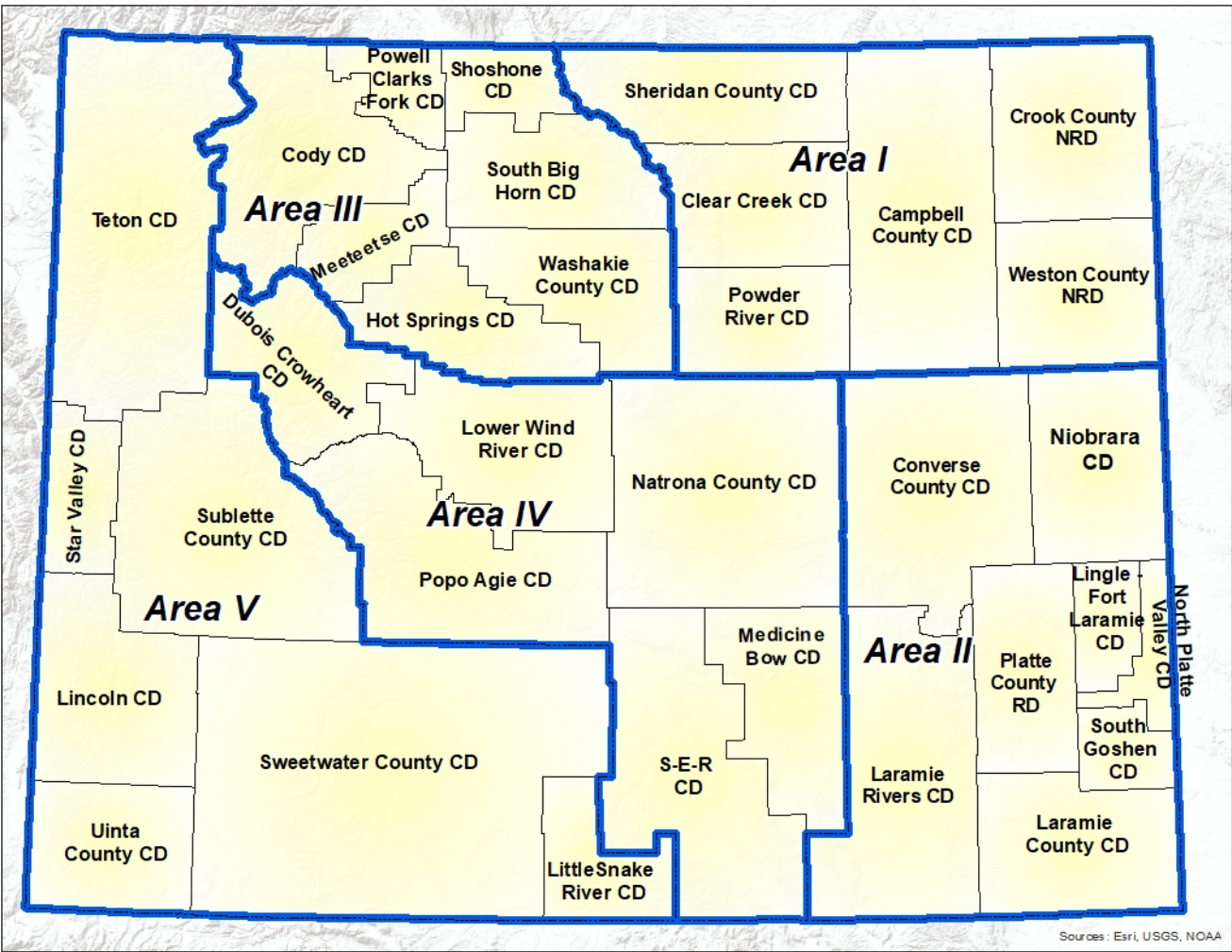
A watercolor painting of a mountain landscape. In the foreground, a light-colored path or road curves from the bottom left towards the center. To the right, a large, calm lake reflects the sky. In the background, a prominent mountain peak is rendered in shades of brown, orange, and yellow, with some blue and green patches. The sky is filled with large, dramatic clouds in shades of grey, blue, and white. The overall style is soft and painterly.

Conservation District Collaboration in Park County



Wyoming Districts

34 Conservation Districts across Wyoming in 23 counties





"Poverty Flats" - now covered by the Shoshone Reservoir. - F.J. Hiscock - photo. 1906.

Mrs. Joe F. ...









How pass: desert before

Park County Archives



Buffalo Bill Dam: "Made the Desert Bloom"- Beryl Churchill



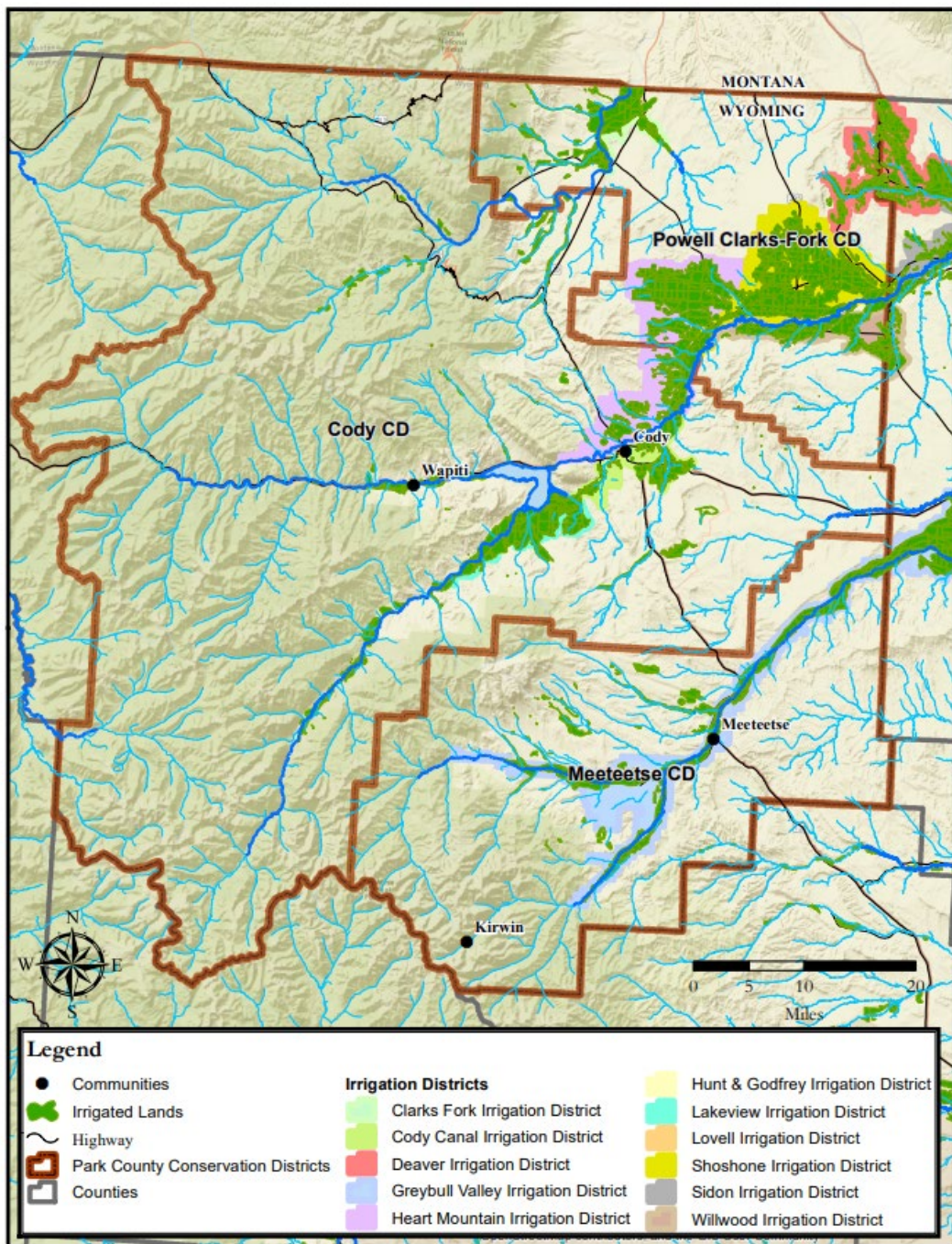
**“Liquid gold runs along irrigation
ditches and laterals” - Cody Times 1950**



Irrigation Today

Irrigated Lands: Cody & Powell

- 272,295 acres
 - Loss of farmland- increasing number of subdivisions
- Compared to 1939, there were 105,000 acres of irrigated crop land
- 6 major irrigation districts, plus private irrigation districts



Land Use: Cropland, Rangeland, Urban

- **Irrigation Methods:** Flood, sprinkler
- **Crop Type:** alfalfa, sugar beets, dry beans, corn, malting barley, small grains, and pasture crops.
- **Livestock Production:** cattle, sheep and horses.
- **Economic Values:**
 - **Crop sales:** \$63.5 million dollars
 - **Livestock sales:** \$36.7 million dollars



Challenges and Opportunities

- **Water Quality**
 - Sediment
 - Bacteria
- **Increases in subdivisions**
 - Loss of farmland
 - Increasing number of rural well & septic systems
- **Irrigation Practices**
 - Water conservation
 - Water efficiency
- **Water Quantity**
- **Grazing management**
 - Providing offsite watering
- **Forest Management**
 - Increasing wildfire risks
- **Wildlife Habitat Improvement**



Working Together to Protect the Shoshone



Working Together to Protect the Shoshone River

A watershed plan to reduce sediment loading to the Shoshone River upstream of Willwood Dam, Wyoming

[Story map:](#)

<https://arcg.is/0PmPvS>

<https://arcg.is/1ymq19>



Tracking Progress

	Administration	Implementation	Monitoring	Education/Outreach
2019	<p>Evaluate opportunities to find resources to support a watershed coordinator.</p> <ul style="list-style-type: none"> Discuss currently available resources, including those that can be used as nonfederal match for grants Identify entity(ies) able to support coordinator position(s) Identify potential grants that can support coordinator positions; submit applications as appropriate Leverage opportunities to support local funding for conservation districts 	<p>Contact irrigation districts to determine the status of proposed irrigation infrastructure projects that would reduce erosion and sedimentation.</p> <ul style="list-style-type: none"> Contact Lakeview Irrigation District to determine if financial or technical resources are needed to help move a proposed project forward that would pipe water to users and eliminate spilling of irrigation water into Sulphur Creek. Contact Cody Irrigation District to determine if financial or technical resources are needed to assist with potential plans to pipe water to users to eliminate spilling of water into Homesteader and Sage Creeks. <p>Continue NRCS conservation planning and practice implementation.</p> <p>In general, priority tributaries for implementation are Sage Creek, Sulphur Creek, and Dry/Homesteader Creek.</p>	<p>Coordinate to use currently available grant funding (DEQ-319) to complete analysis of tributary sediment samples collected in 2018 and to plan analysis costs for future samples (USGS, DEQ, WGFD).</p> <p>Continue tributary sediment monitoring</p> <ul style="list-style-type: none"> Continued SSC/bedload monitoring at existing sites (Sage, Sulphur, Dry/Homesteader, Cottonwood, Idaho) Increase the number of agency/organization staff and volunteers helping with tributary sediment data collection and operation of ISCOs <p>Complete Sampling and Analysis Plan for monitoring activities; complete QA/QC review of existing data.</p> <p>Complete a site investigation at inactive bentonite mines in Sulphur Creek to determine if it can be visually confirmed whether sediment from the mines is reaching Sulphur Creek or a tributary.</p> <p>Coordinate with UW on potential ISCO equipment for 2020.</p>	<p>Rollout of watershed plan to the public and targeted interest groups.</p> <ul style="list-style-type: none"> Willwood Executive Committee Irrigation Districts Trout Unlimited, The Nature Conservancy County Commissioners, local elected officials Public meeting Other groups as needed <p>Evaluate opportunities to get assistance from a marketing coordinator to help promote ideas and projects developed by Willwood Working Group 3 and build support for local conservation district funding</p> <ul style="list-style-type: none"> Research opportunities through the LOR Foundation Contact Wyoming tourism boards and associations
2020	<p>Continue efforts to find resources to support a watershed coordinator if this activity is not completed in 2019 (see above).</p> <p>Hold biannual work group meetings (CCD chair)</p> <ul style="list-style-type: none"> Identify responsible parties for upcoming tasks Update watershed plan as needed Update milestone table as needed Provide report of progress to Executive Committee At 2nd meeting, elect chair for 2021 	<p>Pending responses from irrigation districts (see above), assist with finding technical and financial resources for irrigation infrastructure projects.</p> <p>Facilitate discussion with irrigation districts, management agencies, and other stakeholders to evaluate solutions to sediment release from Iron Creek. Ask for assistance from management agencies to do this outreach.</p> <p>Pending results of site investigation (see above, Monitoring), evaluate opportunities for sediment reduction at the inactive bentonite mines in the Sulphur Creek watershed.</p> <p>Continue NRCS conservation planning and practice implementation.</p> <p>In general, priority tributaries for implementation are Sage Creek, Sulphur Creek, and Dry/Homesteader Creek. The working group will continue to research these watersheds and will work with landowners and agencies within these watersheds to develop project implementation ideas to be discussed at the 1st meeting of 2020.</p> <p>Identify priority projects/action items for next year.</p>	<p>Continued tributary sediment data collection</p> <ul style="list-style-type: none"> Continued SSC/bedload collection (Dry/Homesteader, Cottonwood, and Idaho) Expand SSC/bedload collection (Iron Creek and McCullough Peaks) Continued ISCO operation (Sulphur, Sage, McCullough Peaks) Expand ISCOs (Dry/Homesteader, Idaho, Cottonwood, Iron) <p>Start in-depth data analysis of available data.</p> <p>Determine whether additional USGS hydroacoustic equipment should be pursued for upstream Shoshone River sites; if pursued, research funding opportunities and submit applications as needed.</p> <p>Encourage related research through the Water Research Program.</p>	<p>Continue presentation of plan to interest groups and the public as needed.</p> <p>Evaluate completed projects and determine if any of them can be promoted to raise public awareness and support for other projects.</p> <p>Host summer 2020 field tour and target this tour toward agencies and organizations who represent potential funding sources.</p>

Diamond Basin Bentonite Mine Reclamation Test Plots



Photo provided by the WGFD

- **Diamond Basin Bentonite Mine**
- **Determine best management practices for establishing native vegetation and provide stabilization.**





Sulphur Creek Beaver Dam Analogues

- Site: Sulphur Creek
- Restore connectivity
- Reduce sediment

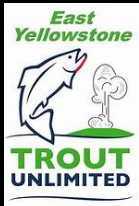
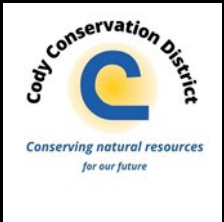
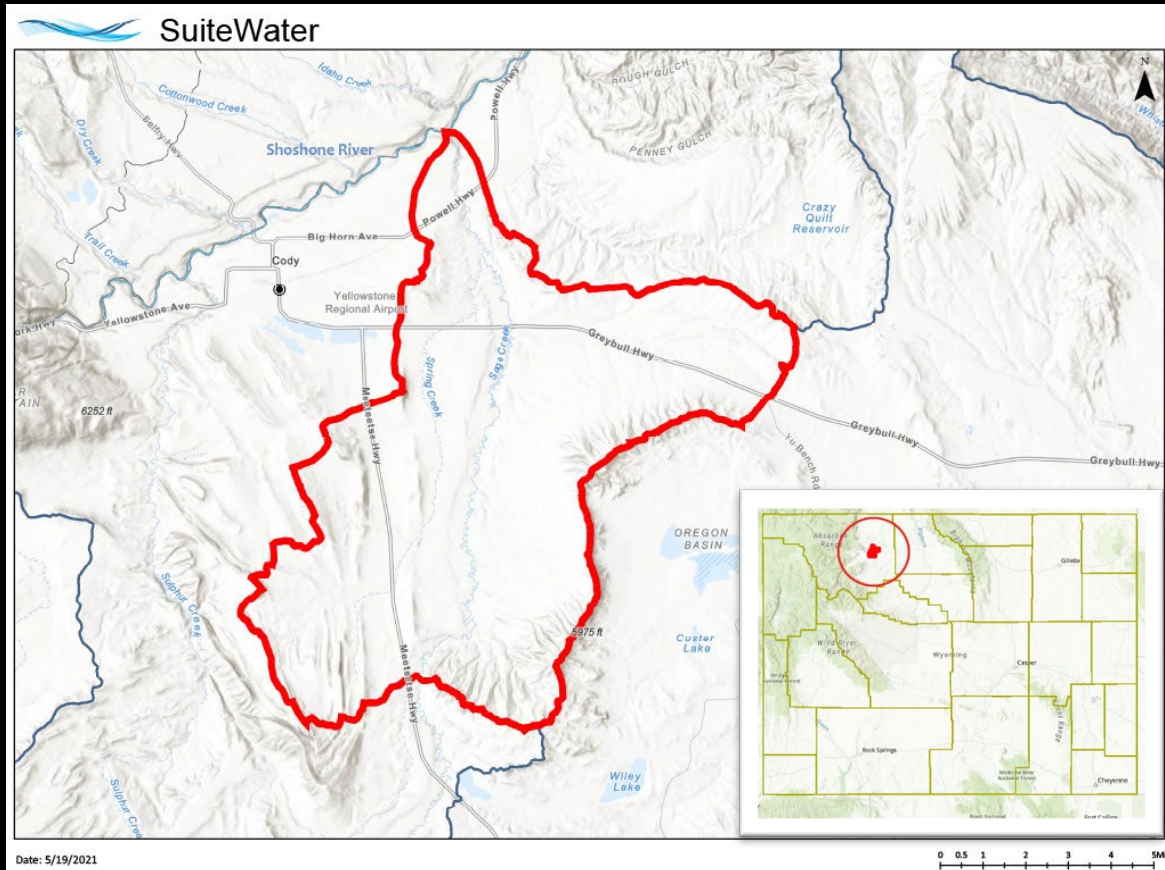


Photo Credit: Travis Cundy, WGFD

NATIONAL WATER QUALITY INITIATIVE

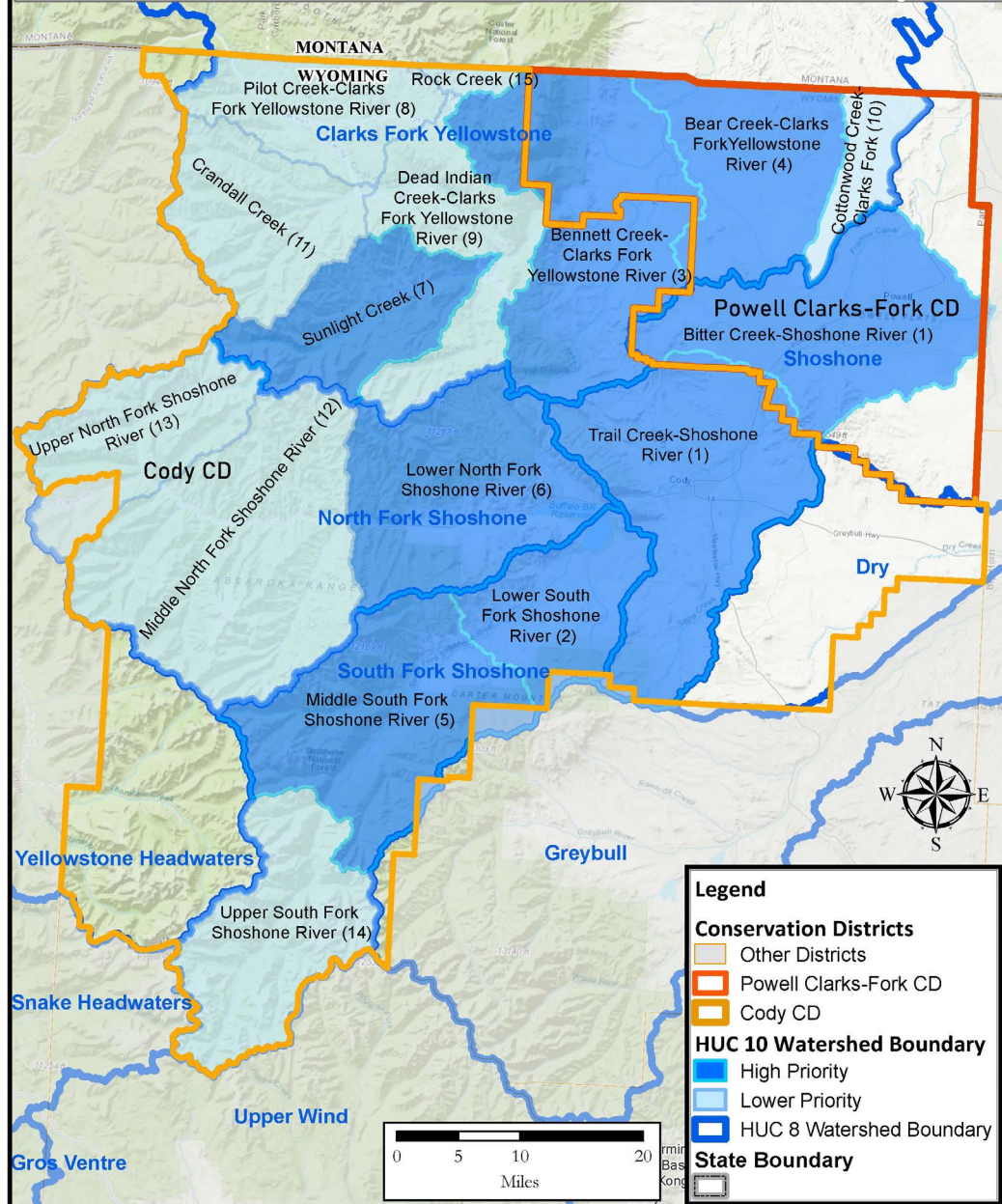


- Lower Sage Creek Watershed
- Goal: identify non-point source contributors of sediment and addresses “critical source areas” in the watershed.
- Goal: Implementation of conservation management practices to reduce sedimentation.

Provided by: Cathy Rosenthal, WACD



Upper Shoshone and Clarks Fork-Yellowstone Watersheds of Interest for Level 1 Watershed Study



Upper Shoshone and Clarks Fork Yellowstone Watersheds: WWDO Level I Watershed Study

- 2,163,009 Acres
- 1,293,508 Acres in Priority Watersheds

WWDO Level I Watershed Study Process

- ✓ Submit Application-March 2021
 - ✓ Watershed Tour-May 2021
 - ✓ Call out for proposals-June 2021
 - ✓ Pre-proposal Meeting/Tour-August 2021
 - ✓ Review Bids/Feedback to WWDO-September 2021
 - ✓ Consultant Interviews/Selection-October 2021
 - ✓ Select Water Committee/WWDO Meeting-November 2021
 - ✓ Legislative Session-February 2022
- ? If approved, Study kicks off in Spring 2022. Expected to be approximately 18-month process. Watershed Study (with projects and cost estimates) completed Fall 2023

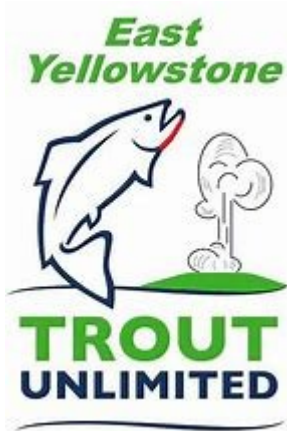
WE NEED YOUR INPUT-Meetings will be announced.

Partners



UNIVERSITY
OF WYOMING

Extension
Park County



United States
Department of
Agriculture

Natural Resources Conservation Service



MERIT ENERGY COMPANY

Local agricultural producers



**Powell Clarks Fork
Conservation District**

Local irrigation districts



Park County: Wow, are we growing!!!

How are Conservation Districts working with others to address resource conservation, including changes in land use and water demand?



- **Outreach Efforts-Pertinent Workshops Offered**
- **Collaboration with Partners-Small Acreage Team Development**
- **Partnerships are Key! Irrigation Districts, Park County Weed and Pest, UW-Extension, Neighboring Conservation Districts, Park County Commissioners, Park County Planning and Zoning, State Engineer's Office, USDA-Natural Resources Conservation Service**



**Thank-you for
your time!**

Powell Clarks Fork Conservation District

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