



SUN RIVER WATERSHED GROUP
1994 - 2019

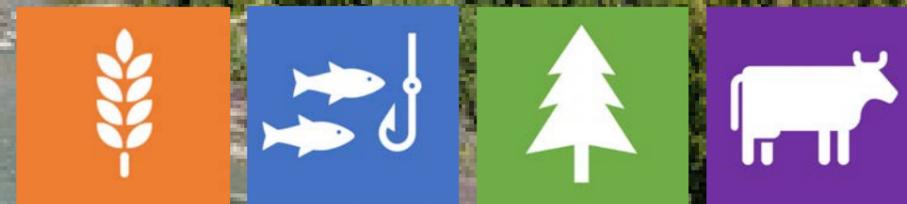
Celebrating 25 years

www.sunriverwatershed.org

This report funded by a grant from:



SUN RIVER WATERSHED GROUP
25 years of success and 10-year
STRATEGIC PLAN



A MESSAGE FROM THE SUN RIVER WATERSHED GROUP

SINCE 1994, the Sun River Watershed Group (SRWG) has been improving the health of the Sun River watershed by finding local solutions to local problems. As we celebrate our 25th anniversary, we look back on the successes of the past and look forward to continuing our work for many years to come.

This document serves not only as a report of the projects and programs SRWG has executed in the past, but also a plan for our future. On our silver anniversary, we have revisited our mission statement, goals, and objectives and have begun to identify tasks to direct us in these pursuits. This Strategic Plan is the product of months of drafting and review and has benefited from feedback contributed by many of our project partners. We'd like to thank everyone who helped develop our plan.

It would be impossible to individually thank all of the donors, funders, partners, volunteers and supporters who have helped SRWG achieve all that we have. However, we would like to acknowledge Allan Rollo who served as the heart and soul of SRWG since the beginning. We hope to build on your legacy and make you proud, Al.

ERLING JUEL, Board Chairperson
Greenfields Irrigation District

DAVID MARTIN, Lewis & Clark Conservation
District

JOHN CHASE, Board Vice-Chair
Cascade Conservation District

SKIP NEUMAN, Muddy Creek Task Force

DEAN PEARSON, Teton Conservation District

LAURA ZIEMER, Executive Committee
Rep., Trout Unlimited

PERK PERKINS, Conservation Community

TRACY WENDT, SRWG Coordinator

PAUL ROOS, Conservation Community

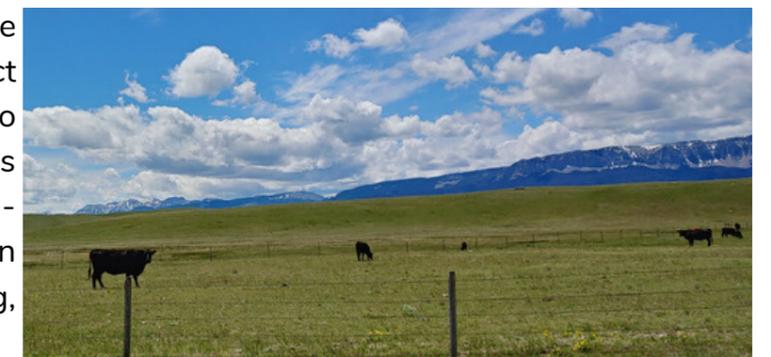
ABOUT THE SUN RIVER WATERSHED

MONTANA'S SUN RIVER watershed is east of the continental divide, south of Glacier National Park, and includes 2,200 square miles in Lewis & Clark, Teton, and Cascade counties. The Sun River starts in the Bob Marshall Wilderness, flowing out of the mountains through rolling foothills of short grasses and scattered timber, winding through rangeland and farms to its confluence with the Missouri River at Great Falls. The watershed includes the communities of Augusta, Simms, Fort Shaw, Sun River, Vaughn, Power, Fairfield, Sun Prairie, and Great Falls. The Sun River provides irrigation for 116,000 acres, served by two irrigation districts and multiple private ditch companies. Land ownership includes private, state, federal, and urban properties.



Photo by Al Rollo

Ranching and farming sustain the rural landscape of the Sun River watershed. The Sun River Project includes a system of reservoirs and ditches to facilitate irrigation. The watershed provides habitat for wildlife and the river has a wild-reproducing trout population, making the Sun River a destination for hunting, fishing, camping, and other forms of recreation.



ABOUT THE SUN RIVER WATERSHED GROUP

THE SUN RIVER WATERSHED GROUP (SRWG) formed in 1994 as a working group to tackle water quality issues on Muddy Creek. In 1996 SRWG became a 501(c)3 nonprofit to better attract funding and enable expansion of our projects to the greater Sun River watershed. SRWG works with local stakeholders to resolve natural resource challenges affecting local resources.

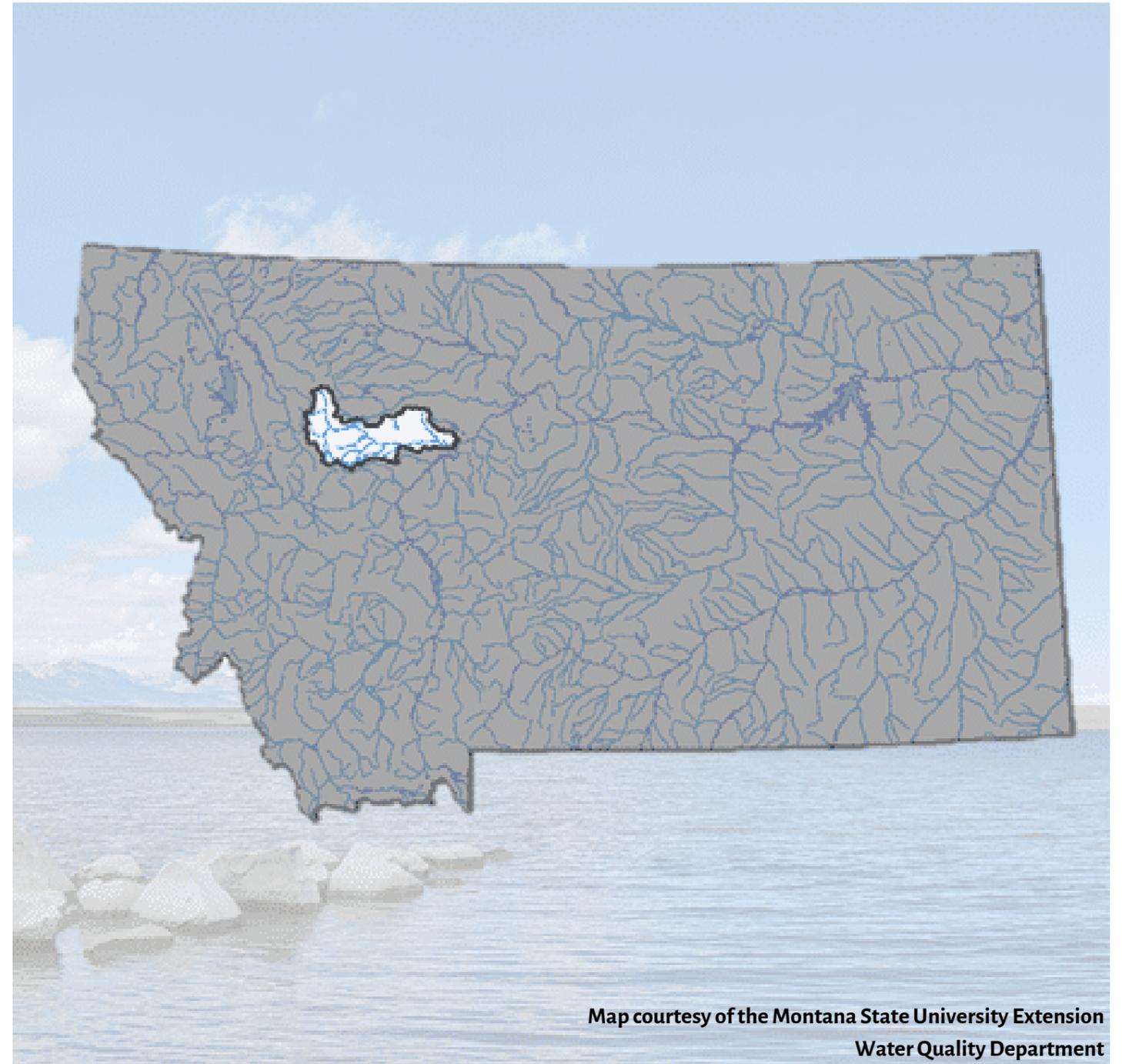
Before SRWG's inception, resource discussions in the Sun River watershed were characterized by a history of disputes over water rights, causes of erosion, water supply for fisheries and recreation, and declining water quality. Collaborative work, led by the Muddy Creek Task Force, began to change that, working together to improve one of the worst non-point-source pollution problems in Montana. The group discovered innovative ways to work together to address this issue. After successful work on Muddy Creek, the Group began to address other areas of the watershed. Along Elk Creek, a key Sun River headwater tributary, habitat and irrigation infrastructure improvement projects benefited irrigators and fish. An erosion-control project on Willow Creek reduced a major sediment contributor to Willow Creek reservoir. SRWG worked with local irrigation districts, with help from private and public partners, to improve irrigation infrastructure to help ensure the viability of agriculture across the watershed. Mill Coulee, a lower river tributary, was the target of important habitat and stream-side vegetation projects.

The SRWG is comprised of private or public stakeholders who have a vested interest in the watershed and commit to support our mission. An elected board of directors governs the organization, led by an executive committee comprised of a Chairperson, Vice-Chair, At-Large representative, and Secretary-Treasurer. The board reserves positions for representatives from Teton, Cascade, and Lewis & Clark Conservation Districts. Current federal, state, and local agency partners include the US Bureau of Reclamation, US Fish and Wildlife Service, US Bureau of Land Management, US Forest Service, Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, Montana Fish, Wildlife and Parks, and the MSU Extension Service. Other key partners include local landowners, Greenfields and Fort Shaw Irrigation Districts, Trout Unlimited, the Front Range Weed Round Table, Missouri River Flyfishers, Broken O Ranch, and the Audubon Society.

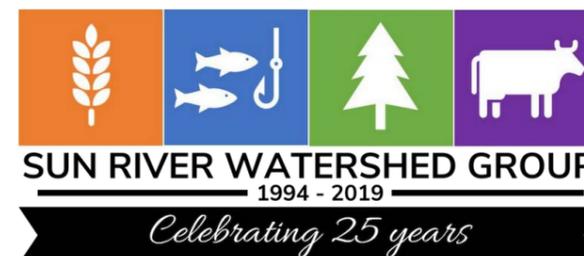


Early Muddy Creek project, est. 2001
Photo by Al Rollo

LOCATION OF THE SUN RIVER WATERSHED



Map courtesy of the Montana State University Extension
Water Quality Department



CONTACT

(406) 214 2868

info@sunriverwatershed.org

www.sunriverwatershed.org

Find us on Facebook and Instagram

STRATEGIC PLAN

OVER THE PAST 25 YEARS, SRWG has gotten to know many of the stakeholders in the Sun River watershed - landowners, land and water managers, community members, agencies, and other organizations. We have held many public meetings and convened working groups, had casual conversations, and conducted surveys. Through these interactions, SRWG has come to know what Sun River stakeholders value as resources in the watershed and threats that our community is concerned may interfere with those values. Threats include:

- Noxious weed infestations
- Sediment load contributions
- Poor water quality
- Insufficient stream flows
- Problematic land management
- Degraded and poor fisheries
- On-farm efficiencies/irrigation systems

This Strategic Plan outlines the goals and objectives that will guide our actions over the next 10 years to mitigate these threats and to protect and restore the resources of the Sun River watershed as valued by our communities. The Plan will be supported by annual workplans that identify which actions will be completed each year, including programmatic work and strategies for improving our organizational capacity. This Plan seeks to strengthen the long-term sustainability, efficiency, and effectiveness of SRWG, which are key to on-the-ground implementation of projects that promote our mission.

FOR A COPY of the appendix of this Plan, including maps, task list, and annual workplans, contact SRWG at info@sunriverwatershed.org.

MISSION

SRWG works collaboratively to protect and restore the resources of the Sun River watershed and its communities

GOALS

Improve water quality by reducing sediment, nutrients, and temperature

Ensure streamflows are adequate in all seasons to support multiple uses including agriculture, recreation, fish, and wildlife

Promote healthy fish and wildlife habitat

Control noxious weeds and reduce infestations

Restore hydrologic processes such as floodplain connectivity and river migration

Foster collaboration across the Sun River watershed and its stakeholders

Provide community education about watershed issues and solutions

Sustain an organization capable of pursuing these goals



Photo by Fred Telleen



Photo by Sarah Howe Cobb

STRATEGIC OBJECTIVES

- Establish measurable targets for meeting water quality standards
- Reduce unnatural discharges, sediment, and nutrient contributions to Muddy Creek, other tributaries, reservoirs, and the Sun River
- Continue water quality monitoring to add to SRWG's long-term database and to inform progress towards water quality targets
- Plan and promote water quality through partnerships and communication



Photo by Rai Hahn



Photo by Rai Hahn

SINCE 1994 SRWG projects have reduced sediment inputs to Muddy Creek by 80% - from 200,000 tons to 27,000 tons per year. Water quality data has been collected for nearly 20 years, helping identify issues and track the progress towards water quality goals. Over 180 miles of the Sun River and tributaries have been assessed for potential improvements and those assessments help guide this plan and future projects

STRATEGIC OBJECTIVES

- Formalize reservoir adaptive management and winter flows in the Sun River
- Optimize reliability of irrigation water delivery and maintain Sun River flows
- Sustain and improve snow and streamflow data, reliability, and incorporation into water management decisions watershed
- Improve communication among water users, irrigation districts, agencies, and the SRWG to improve flow management
- Plan for extended or more frequent drought

OVER THE PAST 25 YEARS SRWG has lined over 85,000 feet of ditch, resulting in more efficient water conveyance. SRWG conducted two reservoir operation studies, resulting in 100% increase in winter flows without jeopardizing reservoir fill. Through water delivery infrastructure upgrades, SRWG has improved irrigation-season flows so they are now primarily at or above 100cfs - a 70% increase in similar water years over pre-project flows.



promote

HEALTHY HABITAT

STRATEGIC OBJECTIVES

- Improve fish habitat in key reaches
- Sustain fish habitat health and connectivity
- Protect and improve habitat for other key species of fish and wildlife
- Seek to increase public awareness and support for fish and wildlife in the watershed



restore

HYDROLOGIC PROCESSES

STRATEGIC OBJECTIVES

- Identify long-term watershed-scale approaches to restoring hydrologic processes
- Identify, assess, and prioritize reach-scale projects to reestablish hydrologic processes

Hydrologic processes are healthy river behaviors such as floodplain connectivity and channel migration.

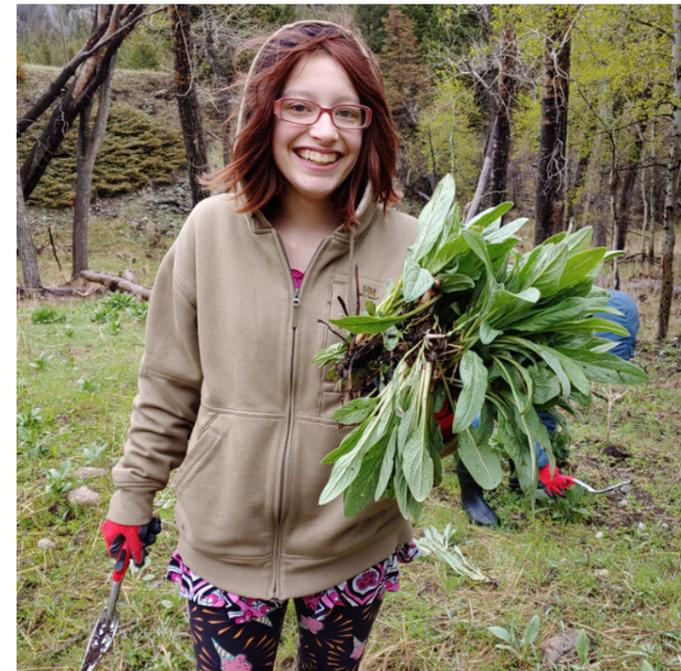


control

INVASIVE WEEDS

STRATEGIC OBJECTIVES

- Suppress or control noxious weeds in the Sun River Watershed



provide

COMMUNITY EDUCATION

STRATEGIC OBJECTIVES

- Grow community knowledge, involvement, and support for watershed issues
- Promote SRWG Strategic Plan as a vehicle to address watershed issues



A QUARTER CENTURY OF SRWG PROJECTS

SRWG projects over the years have benefited fish and wildlife habitat, restored hydrologic processes, and helped manage the spread of noxious weeds. By involving volunteers, students, and community members, SRWG has helped educate the public about issues faced in the Sun River Watershed. These projects include:

- Collaborating with hundreds of people and organizations to provide local solutions to local problems
- Planting over 20,000 trees on Muddy Creek
- Removing 40 tons of trash from the lower Sun River
- Leading or supporting eight annual weed pulls or spray days in the watershed each year
- Releasing over 5 million bio-controls to help manage noxious weeds
- Pulling over 17,000 pounds of knapweed by 1,000 volunteers
- Increasing wild trout populations, particularly across similar low-water years
- Operating, managing, and/or maintaining a network of streamflow gages in key locations throughout the Sun River and tributaries
- Improving over four miles of stream banks along Mill Coulee, 10 miles on Big Coulee, and 10 miles on Elk Creek
- Replacing over 500 car bodies with native vegetation along stream banks