

## **MONTANA WATER CENTER**

TURNING SCIENCE INTO SOLUTIONS

The Montana Water Center's MISSION is to investigate and resolve the state's water resource issues through research and education. Thank you for your continued support of our work!



The number of federally funded water research institutes in the United States. These institutes were created by the Water Resources Act of 1964, and collectively form the National Institutes for Water Resources (NIWR).

The amount of annual base funding awarded to each water research institute from the United States Geological Survey (U.S. Department of the Interior).

# \$125,000

\$250,000

1500

18

14

54

Estimated number of water research institutes that would immediately disappear without annual USGS base funding. Although the amount is nominal, base funding for the institutes is critical, providing the leverage they need to secure additional resources and funding.

Non-federal funds leveraged this year by the Montana Water Center.

Projected number of early-career faculty and graduate student research projects that will be supported in 2021 by the Montana Water Center; an increase from 10 in 2020.

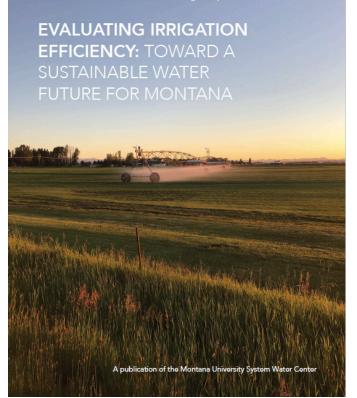
Average number of individuals reached each year through trainings, conferences, and education and outreach events supported by the Montana Water Center. WONTANA University System WATER CENTER

# **SPECIAL PROJECTS IN 2021**

### **Evaluating Irrigation Efficiency**

The Montana Water Center works with experts across the state and the Intermountain West to provide accurate, unbiased and accessible information on issues of vital importance for Montana's water future. In light of this mission, the Montana Water Center convened a technical working group in 2019–2020 to investigate the topic of irrigation efficiency and water conservation.

The working group comprised of a diverse set of stakeholders, including irrigators and irrigation managers, university scientists, agency scientists and managers, legislators, and non-governmental organizations and, through a series of webinars, workshops, and local watershed meetings, investigated how irrigation efficiency measures might best achieve the dual goals of improved on-farm production and maintenance of critical water supplies for downstream water users.



Montana Water Center Technical Working Group

A technical paper, "Evaluating Irrigation Efficiency: toward a sustainable water future for Montana," published in November 2020, synthesizes key information gleaned throughout the project to support decision-making by natural resource agencies, funding entities, legislators and irrigators. The Montana Water Center has already conducted significant outreach on this issue with state and federal agencies and watershed groups, and has plans for continued outreach efforts in 2021.

#### Sample list of agencies, organizations and watersheds involved:

Producers and water commissioners from: Beaverhead, Big Hole, Bitterroot, Gallatin, Musselshell, Shields, Sun, Upper Clark Fork, Yellowstone. Montana Department of Natural Resources and Conservation USDA Natural Resources Conservation Service Montana Fish Wildlife and Parks

U.S. Geological Survey Montana Bureau of Mines and Geology Trout Unlimited Montana State University University of Montana Water Policy Interim Committee Confederated Salish and Kootenai Tribes The Nature Conservancy U.S. Bureau of Reclamation



## FUNDED RESEARCH PROJECTS

Each year the Montana Water Center funds Faculty Seed Grants and Graduate Student Fellowships to faculty and students across the Montana University System.

Over the past three years, \$150,000 has been provided in project funding, supporting 15 faculty, 33 graduate students, and 14 undergraduates.

### **Project Focal Areas**



Water supply planning and forecasting (7 projects)



Water policy and socioeconomics (2 projects)



Water quality and human and ecosystem health (7 projects)



Watershed and ecosystem Functions (14 projects)

### Where Graduate Student Fellows work now

MWC grants encourage research in areas critical to Montana's water resources, and also provide vital support and training for Montana's next generation of water professionals.

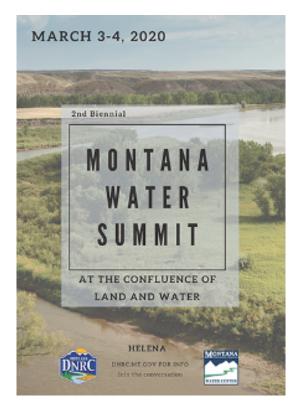
- Bitterroot Program Director, Montana Trout Unlimited, Missoula
- Hydrologist, Montana Department of Natural Resources, Helena
- Scientist, USFS National Genomics Center for Wildlife and Fish Conservation, MIssoula
- Wastewater Specialist, Allied Engineering, Bozeman



## **OUTREACH & EDUCATION**

### **Biennial Montana Water Summit**

The Montana Water Summit is a biennial event organized by the Montana Water Center and the Montana Department of Natural Resources and Conservation. The Water Summits in 2018 and 2020 gathered 300+ policy makers, natural resource managers, university scientists, agricultural producers, land use planners, and community members for statewide, multidisciplinary discussions about Montana's water future and critical issues such as integrated water and land use planning and water management for a growing population and a changing climate. The next Montana Water Summit will be held in March 2022.



#### Annual Meeting of the Montana Section of the American Water Resources Association (MT AWRA)

The Montana Water Center sponsors the annual meeting of the MT AWRA, which is the only water resource-related conference that brings together university faculty and graduate students, local, state and federal agency scientists and water resource managers, and water resource specialists from the private business and non-profit sectors to share their research and insights on water resource management.

#### Project Wet K-12 Water Curriculum

The Montana Water Center continues to collaborate with educational non-profit Project Wet to provide water-focused curriculum and training for primary and secondary school students and teachers.