

Wyoming Reclamation and Restoration Center Matching Funds

SUMMARY

What We Do:

The Wyoming Reclamation and Restoration Center (WRRRC) helps to maintain and protect Wyoming's land, air, water, and wildlife by promoting restoration of the complex components and functions of disturbed ecosystems. With a special emphasis on energy and natural resource development activities in the arid west, WRRRC educates new professionals, provides information about ecological restoration and land reclamation, creates new knowledge, and addresses the concerns of industry, government, and the public.

- Education through University of Wyoming degree programs including coursework and an undergraduate minor and graduate certificate in Reclamation and Restoration Ecology. Many students participate in research and industry internships to learn practical skills in the field.
- Outreach including educational programs, workshops, and publications with the goal to assist agency and industry personnel with skills needed for successful planning, monitoring and management.
- Research to improve our knowledge and develop methodologies in restoration; conducted by center affiliates in cooperation with landowners, industry, and local, state, and federal agencies.

State Match Funding:

At the inception of the WRRRC, the Wyoming Legislature appropriated \$1.5 million in matching funds to support the mission and activities of the center. Since that time, the University of Wyoming has secured \$1.319 million in donor funds, with \$181,000 reverting back to the state. The operation of the WRRRC is supported in part with endowment funds earmarked for the WRRRC.

WRRRC is a critical piece in Wyoming's energy future, ensuring that energy projects continue to be mutually beneficial to the state's economy, residents and landscapes, as well as to energy producers and consumers. Reclamation and restoration represent the final step in successful mining and deconstruction efforts, and additionally provide ongoing stewardship of the rangelands, forests, and tourist sites that comprise Wyoming's other lucrative resources.

OUTCOMES OF STATE MATCH FUNDING SEPTEMBER 2020

Funding provided to the WRRRC by the State of Wyoming was used primarily for three activities.

1. Expansion of both graduate and undergraduate education in Land Reclamation and Ecosystem Restoration at the University of Wyoming.
2. Creation and presentation of outreach programs throughout the state to increase knowledge of professionals in this field as well as other interested citizens.
3. Funding research through graduate assistantships on critical Wyoming reclamation issues to advance reclamation methods and improve outcomes of restoration projects in the state.

Over 400 students have taken the Introductory Land Reclamation class (REWM 4200) since 2010, and over 100 students have earned the undergraduate minor in land reclamation since 2010. In addition, more than 30 students have obtained graduate degrees (11 Ph.D.s and 20 masters' degrees) and the UW Graduate Certificate in Reclamation during the same period.

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OUTCOMES OF STATE MATCH FUNDING SEPTEMBER 2020

Two of our graduates are professors of Land Reclamation and Restoration Ecology—one at North Dakota State University and one at Tribhuvan University in Kathmandu, Nepal. Other WRRRC graduates can be found working at coal mines in the Powder River Basin, working in the Jonah gas field, or working as regulators for the Bureau of Land Management.

For many years during the last oil and gas boom, all of our graduates were obtaining jobs in Wyoming and the Rocky Mountain region. Jobs are now more difficult to find as the price of oil, gas, and coal have dropped to very low levels. But it is safe to say that the WRRRC has supplied many well-trained reclamationists to the job market.

One company—KC Harvey Environmental of Bozeman, Montana—has informed us that they go out of their way to find graduates of the WRRRC to hire as employees because they are so well prepared. State matching funds have provided WRRRC the resources to improve our undergraduate teaching program and to fund 12 graduate assistantships since 2010. Hundreds of UW students have been positively impacted by education programs delivered by WRRRC as a result of support from state matching funds.

Outreach activities conducted by WRRRC over the years reached all parts of Wyoming including organizing reclamation workshops in 12 communities around Wyoming, hosting the 2013 annual meeting of the American Society of Mining and Reclamation in Laramie, organizing the Wyoming Wildlife Habitat Restoration Symposium held at the Casper Events Center in 2016, publication of 10 extension bulletins on topics important to reclamationists, and organizing and housing reclamation data for oil and gas fields around the state. Moreover, reclamation workshops were presented to audiences throughout Wyoming. Many of the people attending these workshops were professionals working for mining companies, oil and gas companies, environmental consulting firms, reclamation contractors, and state and federal regulatory agencies, including the BLM.

Faculty and students working with WRRRC are regular participants and speakers at the Annual Petroleum Association of Wyoming Reclamation Conference in Casper. In addition, WRRRC once provided funding to a group of elementary education students at UW to develop teaching materials to teach young school children about the importance of land reclamation.

The state matching funds program has been critical in funding these outreach activities, many of which have ended as funds from the state match have been spent. Through these outreach activities, the WRRRC has built a strong reputation around the state as an authority on land reclamation.