October



UINTA COUNT



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UCCD & Partners Complete 6th Bear River Project

In 2002, instream channel and bank erosion were identified as significant sources of sediment load to the Bear River causing an unstable river and water quality concerns. With that in mind, UCCD partnered with landowners, USFWS Partners for Fish and Wildlife Program, Trout Unlimited, the Wyoming Wildlife Natural Resource Trust, Wyoming Game and Fish, Wyoming Department of Environmental Quality, the National Association of Conservation Districts and other private organizations to address the erosion concerns and improve the overall health of the Bear River watershed.

Since 2018, six large restoration projects have been completed on the Bear River. The most recent project was completed in September of this year and included replacing a concrete rubble push-up dam with a permanent rock structure that allows irrigators to get their water, even during low flows, without having to get in the river with heavy equipment. The new structure improves stream stability and allows for fish passage. The project also included 6,100 feet of streambank restoration using toewood, sloping and reinforcing the banks with willow transplants. This project connected several similar projects downstream making four miles of contiguous river restoration on the Bear River.

What Are The Results So Far?

The Bear River Total Maximum Daily Load (TMDL) (2014) cited an overall 19% reduction in total suspended solids needed to meet the goals of the TMDL on about 36 miles of the Bear River. Based on the TMDL estimates, instream erosion for the entire reach at that time totaled 20,207 tons / year. A 19% reduction would be a reduction of 3,839 tons / year for the entire listed reach. When combining the six completed projects, our projected reduction in instream erosion is about 4,510 tons / year. However, several additional years of data will be needed to begin to learn if the projects are significantly reducing total suspended solids.

Our goals with these projects are to improve stream stability, improve water quality by reducing sediment and increase landowner awareness and interest in stream restoration. So far, our efforts have been successful and we continue to work with landowners to identify more projects that will help improve the Bear River Watershed. Please contact the Uinta County Conservation District if you would like to be a partner in our stream restoration efforts.

Eroding bank in middle of project reach, pre-construction.



Same location post-toewood installation, 2025





The soil system needs fuel in the form of carbon; dead plants are one of the best sources (and they are free).



8' Tire Water Tanks available!

Contact UCCD for more information



Fall is for Building Soil article taken from dirtworkswyo.com

Growing food and flowers in Wyoming is tough, feeding your soil in the fall will help. Nature needs time to work. Add compost, manure, wool, crab meal, kelp and other organic amendments in the fall to support a vibrant spring garden.

Soil is a living system and must be fed and nourished just like us. The worms and microbes in the soil need time to work and break down the organic nutrients into a form that plants can use. By feeding them in the fall, your soil will be healthier and your spring chores will be easier.

Fall is also the best time to build and fill new raised beds, or start a new sheet mulch garden.

Carbon is the driver of the soil system and Wyoming soils are very low in carbon. Fortunately, this is an easy problem to solve!

Key Fall Soil Care Practices

1. Clean Up, But Not Too Much

Remove diseased plants but leave as much healthy plant debris as you can. Cut off the tops of larger plants like peppers, corn, and squash and leave the roots in the ground to decompose and feed the worms.

2. Add Compost

Spread 1-2 inches of compost across your garden and landscape. The nutrients in compost will be available in the spring when it's time to plant. Compost is also great for the lawn.

If you till your garden, add compost and other amendments after harvest and then incorporate with the tiller. Mulch with at least 2 inches of wood chips, chopped leaves, straw, alfalfa hay, wool, etc.

If you have a no-till garden, spread compost in the areas you will be planting next year and incorporate with a shovel or hand trowel. Cover with plenty of mulch!

3. Add Organic Fertilizers and Amendments

Compost is a great source of nutrients and active carbon. Active carbon feeds the soil microbes that feed your plants. Biochar provides stable "forever" carbon for the soil. It can very quickly improve soil structure (less compaction and erosion), and improves the ability of your soil to hold water and nutrients for the plants.

*Biochar and compost used together provide plant nutrients, active carbon, and stable carbon - a serious boost for your soil!

If you are building or rejuvenating raised beds or struggling with soil that is difficult to work with, try biochar and wool in the fall. Both of these are outstanding sources of carbon. Crab meal provides chitin - a source of calcium and phosphorus that also has unique disease fighting characteristics.

5. Mulch for Food and Shelter

Never leave your soil bare! Mulch feeds the worms and microbes, saves valuable water, keeps the soil cool in the summer, and discourages weeds. Use wood chips, alfalfa hay, straw, wool, grass clippings, chopped leaves, burlap, etc.

*Visit <u>dirtworkswyo.com</u> for more information about fall soil care, compost and other amendments mentioned in this article. <u>Dirt Works Wyoming</u> is a Wyoming based company that offers a variety of products to help you build healthy soil.

You can also visit UCCDs website, under Programs/Composting to find more information about composting and links to a number of educational resources.



Bear River Watershed Community Conservation Program

"Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."

- Aldo Leopold



Landscape conservation can only happen if everyone in the landscape can participate. Pheasants Forever, through the Community Conservation Program, can provide innovative financial solutions and expert guidance for landowners and partners alike by:

- <u>Upfront Funding</u>: No out-of-pocket costs; participants pay back their share over time.
- <u>Technical Expertise</u>: Conservation planning, project implementation, and compliance handled by our team.
- <u>Time Savings</u>: We navigate funding applications and manage contractors, freeing you to focus on your operation.



Pheasants Forever's Impact:

Since its creation in 1982, more than \$1 billion to 580,000 habitat projects benefiting 28.8 million acres. This has improved wildlife habitat, supported sustainable agriculture, and strengthened rural communities

Contact:

Will Benkelman

Bear River Watershed Resilience Project Coordinator 785-764-8895

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WYOMING NATURAL RESOURCE FOUNDATION



\$20 PER TICKET - OR - 6 FOR \$100

Drawing will be held November 20th, at our 80th Anniversary Annual Convention. You do not need to be present to win. Thank you for supporting our foundation!

Support natural resource conservation with your tax-deductible donation. Your donation supports Foundation projects including stream and river restoration, forest health and tree planting, water quality and watershed protection, educational programs and more

> 1st: Side by Side Polaris 570S in partnership with Brown Company in Wheatland

> > 2nd: Chainsaw

donated by Shively Hardware

Seedling Tree Orders Coming Soon!

The Uinta County Conservation District will soon be accepting orders for our annual seedling tree and shrub sales.

Order forms will be available on our website when they are ready so check back often to see what species are available.

We hope to add a few new species to the list this year!



Bareroot bundles of 25 &10 cubic inch tubes

Some of the services we offer to help your planting be successful include suggestions for site prep, design, species selection, spacing, water requirements and more. Southwest Wyoming is a tough place to grow trees, making sure you have the right tree for the right place will give them that extra boost they need to survive and thrive. We also offer weed barrier, polymer, tree protectors and diatomaceous earth for sale throughout the year. Please give us a call or stop by to take full advantage of our tree program and assistance!

We can't stress enough how important it is to get your order in as early as possible! Don't wait until the April deadline, some species will sell out quick!

UCCD Teaches Educational Stations at Outdoor Field Trips

As NATURAL RESOURCE EDUCATION is a strong part of the mission of the Uinta County Conservation District, we strongly encourage and support outdoor education activities that utilize local resources (local experts, facilities, etc.). UCCD employees recently participated in two outdoor education events.

UINTA SCIENCE SCHOOL

For the second year running, Clark Elementary 5th graders attended a week-long outdoor education event at the Uinta County Youth Camp in the

mountains south of Bridger Valley. This successful event, coined *Uinta Science School* (*USS*), is a result of a collective effort by many and is spearheaded by Clark Elementary science teacher, Josh Cox.



USS exposes the Clark 5th graders to many learning opportunities throughout the week. Along with teachers from the school, the U.S. Forest Service, Wyoming Game and Fish, and Pheasants Forever, UCCD was once again invited to teach a station at the camp.

UCCD employees, Katie and Kerri, led three groups of students through a macroinvertebrate inquiry of the Youth Camp fish pond. The students collected

macroinvertebrate specimens from the rocks and moss along the edge of the pond. They used magnifying glasses and field guides to identify their specimens, then worked together to calculate the number of pollution tolerant and intolerant species to find a total index value to determine the water quality rating for the pond.

LIS BRIDGER LAKE FIELD TRIP

UCCD also participated again in the annual Lyman Intermediate School (LIS) 5th grade **Bridger Lake** Field Trip.

LIS students were taught how to use a dichotomous

key to identify plant specimens. Students found five different tree species in the campground. They learned the visual anatomic differences between Subalpine fir, Englemann spruce, Lodgepole pine, Common juniper, and Quaking aspen.



Students had a hands-on review of the meaning of the

words evergreen, deciduous, coniferous, arborist, and botanist. They also learned about other plants in the area, including the Dwarf lodgepole pine mistletoe, which is a parasitic species that lives on the lodgepole pine around Bridger Lake.



Interested in an outdoor education activity?

Contact us!

UCCD also offers grants for outdoor education events held in Uinta County.

Uinta County Conservation District

P.O. Box 370, 204 East Sage Street Lyman, WY 82937 (307) 288-0214

CHANGE OF SERVICE REQUESTED

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U.S. Postage Paid
Lyman, WY
Permit No. 11





Available at the UCCD office in Lyman & the UW Extension office in Evanston





Power Hour

WINTERIZING YOUR YARD OR SMALL ACREAGE



COME LEARN ABOUT

- -Nutrition & care for sheep, goats, horses and chickens during colder months.
 - -Gardening tactics for springtime success.

Mallery Larson - UW Extension Educator
Tues, October 28 - Noon to 1 pm
UCCD Office, 204 E Sage St, Lyman

Free light lunch with RSVP

Questions? Call 307-288-0214 or email ksabey.uccdegmail.com

'Power Hour' held monthly. Topic suggestions? Let us know! Check our website (www.uinfacountycd.com) & follow us on Facebook/Instagram.

