

High Country Conservation

2018

Laramie Rivers Conservation District

WINTER EDITION

Accomplishments

- Upper Laramie Watershed Study completion
- Small Water Projects planning
- Water Quality monitoring
- N. Cedar St. Brownfield cleanup
- Wyoming Toad/Safe Harbor Sites
- Community Gardens at LaBonte Park Learning Center
- New Greenhouse at LaBonte Gardens
- K-12 Conservation Education programs
- Kids Garden Club program
- Range Management and technical assistance
- Urban Agriculture programs and assistance
- Noxious Weed Control project
- 30th Annual Seedling Tree Sale
- Living Snow Fence Program
- Workshops
 - Plant Identification walk
 - Endangered plants and animals walks
 - Home & Energy
- Support of local ag. Youth groups
- 10th Laramie Conservation Expo
- Expo kick-off film event w/ UW Haub School
- Participation and collaboration with many natural resource, agriculture, community, agencies and organizations.
- Small Water Projects
- Cost Share Program
- Laramie ReBuild and Laramie Grown Facebook pages



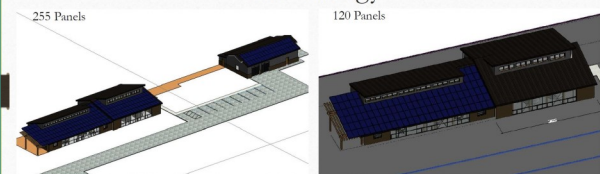
North Cedar/Old Midwest Refinery Site Brownfield Cleanup

After the sale of 2.5 acres to WyDOT for the new viaduct, LRCDD continued cleanup of the remaining parcel. This included a Remedy Agreement with DEQ that included information for the cleanup of contamination on the site. The cleanup had to meet standards defined in the Environmental Quality Act and included prescriptions for treatment, capping, and containment as well as a Use Control Area and Zoning restrictions on future development.



In Spring of '17 LRCDD contracted with Tasman Geosciences to complete the Brownfield cleanup. Tasman removed 2580 tons debris and contaminated soil. They then hauled in 2500 tons of clean fill, disked in 177 tons of bentonite to decrease permeability, and spread 189 tons of top soil which was reseeded with native grasses. LRCDD worked on this clean up for 6 years and consider it a valuable project for the Laramie community.

Energy Production: Solar Energy



In Fall of '16 an UW Engineering students utilized the site for a class project planning for possible future use. Imagining it as an energy efficient building site, students designed environmental plans, net-zero energy use systems, net-positive water harvesting and use systems, and sustainable transportation plans. They presented their projects to members of LRCDD staff as well as exhibited their project posters at a public show at the UW Student Union.

Solar Panel Area (ft ²)	Number of Solar Panels	Energy Production (kWh per year)	Energy Production (\$/kWh)	Initial Cost of Collector System (Installation)	Initial Cost of Collector System (Materials)	Initial Cost of Panels	Initial Cost of Collector System (Warranty)	Maintenance Cost (\$/year)	Cost to fix each panel	Expected Cost for 25 Years (Level)	Expected Cost for 25 Years (Level)	Expected Energy Production for 25 Years (kWh)
60,000	176	285	71,075	187,724.35	130,000	2473.14	\$88,752.70	\$268,752.70	\$268.00	\$268,000.00	\$268,000.00	18,570,000
60,000	176	120	34.2	50,844.48	130,000	2473.14	\$52,500.00	\$268.00	\$268.00	\$268,000.00	\$268,000.00	18,570,000

Cost share Program

Regular Cost Share total \$14,500

17 Total Projects

~ 3 Public Education projects

- * Laramie Local Foods workshops
- * Albany CO. Cattlewomen Ranch Tour
- * WY Stock Growers ranch workshop

~ 3 Living Snow Fences installed

~ 6 drip irrigation systems

~ 1 hoop house project

~ 1 raised bed education garden

~ 3 Xeriscapes



Rural Cost Share total \$33,670

8 Total Projects including

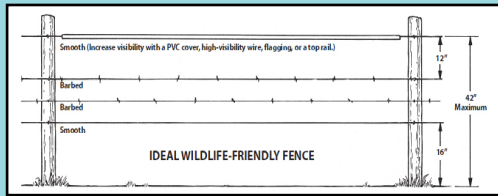
~ Solar Pump Stations

~ Irrigation diversions

~ Pasture Cross fencing

~ Wildlife friendly fences

~ Livestock wells with water storage



Upper Laramie Watershed Study & Small Water Projects



In 2015-16 LRCD contracted Anderson Consulting Engineers for the completion of this study.

In 2016-17 Tony Hoch assisted with reviewing and editing the final report. The study lined out and

prioritized 35 potential water quality projects. Landowners interested in completing projects are eligible for grant funding through LRCD's rural cost share program as well as a Small Water Project grant through Wyoming Water Development Commission. LRCD acts as the sponsor of these projects and works with landowners to ensure the project is completed as approved.

In Summer of 2017 LRCD received it's first Small Water Project application. Resource Specialist, Martin Curry, supplied technical assistance and presented the project to the WWDC board for approval. This project was approved and will be an important template for working out the details on managing the Small Water Project program for water improvement projects.



Tree Program

Recent studies show that trees in the western United States are dying twice as quickly as they did three decades ago. Assisting property owners with tree plantings remains an important focus of our conservation district.

Tree programs include our Annual Seedling Tree sale, assistance planning and installing Living Snow Fences (LSF), financial assistance with urban tree plantings, and information on tree species for our climate and basic tree care.

- Seedlings Sold at Sale: 3700
- LSF's installed : 3 properties
- Tree Consultations: 29
- Cost Share's on urban trees: 3 properties

Urban Agriculture

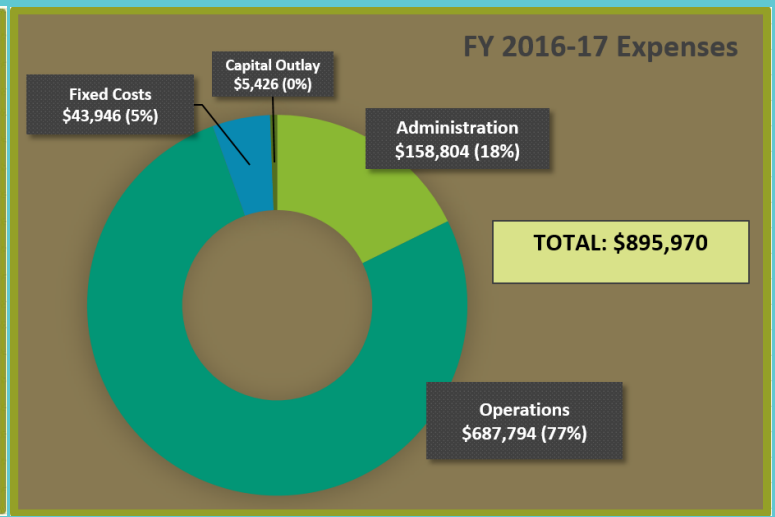
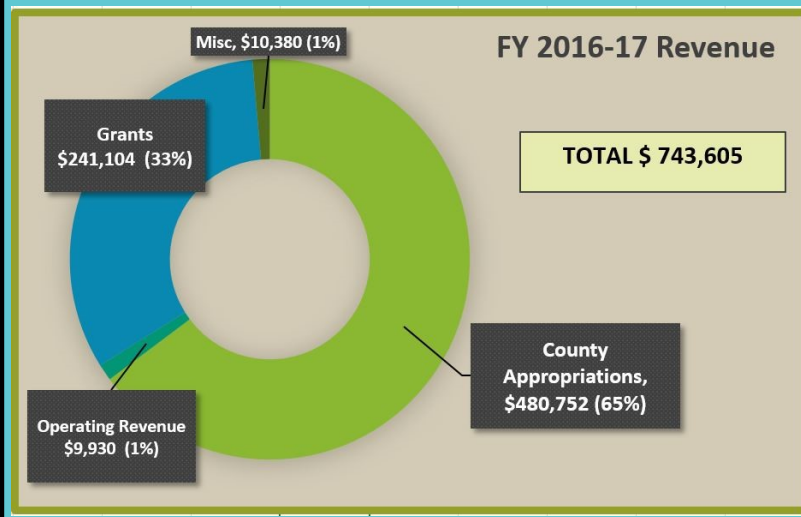
Conservation Districts roots are in agriculture. The importance of maintaining healthy soil and water directly affects growing crops and raising livestock. Our symbiotic relationship with the land means we depend on it for our survival and in return, it is essential that we understand our role as stewards of nature. People in both urban and rural communities are losing the intimate ties to the food that they eat. Through conservation education programs we help re-connect people to the land. We believe that gardening for food and beauty is a powerful hands-on tool that benefits people of all ages. Trish Penny, Laura McGinley, and Tony Hoch are all involved in assisting the community with gardening education, technical assistance and funding.

Some of our 2016-17 highlights include

- ~ Labonte Park Education & Community Gardens
- ~ Kids Garden Club
- ~ Edible Landscapes
- ~ Garden blend Soil Sale
- ~ Gardening Workshops
- ~ Xeriscaping / Low-water landscape design
- ~ Laramie Grown Online Farmers Market



Financials



EDUCATION & OUTREACH

K-12 Education: 3500 kids reached
 \$68,000 investment in community through Environmental Education programs and Education Coordinator position.

Conservation Programs and Support:

- * Conservation Kids Program
- * Kids Garden Club
- * Ag Expo
- * WY State Science Fair
- * Support of FFA and 4H teams
- * Laramie Conservation Expo
- * The Charlie Cart Project ~ a mobile kitchen classroom for hands-on education

Conservation Subjects:

- ~ Learning about nature
- ~ Wildlife
- ~ Healthy Soils
- ~ Erosion
- ~ Water quality & quantity
- ~ Macroinvertebrates
- ~ Gardening
- ~ cooking produce from gardens
- ~ Composting/ Vermicomposting
- ~ Bird Habitats
- ~ Conservation trees



Adult education: 1600 adults reached
 \$50,000 invested in community through Conservation workshops, publications, programs, and events and staffing.

Workshops

- Plant Walk
- Endangered Plants and Animals walk
- Weed spray days
- Ecological Site Description (ESD) training
- Composting

Online

LRCO Website w/ publications and informative links

Social Media

- ~ Laramie ReBuild w/ 1100 followers
- ~ Laramie Grown Online Farmers Market w/ 500 followers



**LARAMIE RIVERS
CONSERVATION DISTRICT**

5015 STONE ROAD

LARAMIE, WY 82070



NON-PROFIT ORG

U.S. POSTAGE

PAID

PERMIT #9

LARAMIE, WY

82070



**APPLY NOW FOR SUMMER
PROJECTS!
Regular Cost Share Program**

**Reimburses 50% of qualifying
projects up to \$1000**

- Living Snow Fences
- Drip irrigation
- Water conservation
- Low-water landscaping
- Beautification Projects
- Conservation education
- Energy Conservation

**For more information
call 721-0072 or
visit www.lrcd.net
to download an application**

LRCDC Staff

Tony Hoch - Director

Trish Penny - Education Coordinator

Martin Curry - Resource Specialist/Bookkeeper

Laura McGinley - District Clerk/Communication Specialist

LRCDC Board of Supervisors

Ruth Shepherd - Urban Supervisor / Chairperson

Larry Munn - Rural Supervisor / Vice-chair

Jim Rogers - Rural Supervisor / Secretary Treasurer

Carol Price - Rural Supervisor

Bob Shine - At Large Supervisor