

Annual Report Laramie Rivers Conservation District

2020-2021



Libby Flats Plant Walk 2019

As a local government agency, it is the mission of the Laramie Rivers Conservation District to provide leadership for the protection and enhancement of Albany County's natural resources.

BOARD OF SUPERVISORS

Ruth Shepherd, Chair. Ruth is the urban representative for Albany County, first elected to the Board in 2012. Ruth's paternal grandparents and father lived in Laramie since the mid 1918's, and the Laramie valley has been Ruth's home since 1990.

Robert Shine, Vice-Chair. Bob is the representative at-large, serving on the Board since his election in 2015. Bob owns and leases a small acreage operation that is part of the Oasis Ditch irrigation district.

Carol Price, Treasurer/Secretary. Carol ranches with her family near the town of Rock River. Carol, originally appointed to fill the unexpired term of Kelly Kennedy in November 2014; ran for and took the oath of office as a Supervisor in 2015 to represent agriculture. She currently serves as the President for the Albany County Stockgrowers Association.

Larry Munn, retired UW professor of soil science. Larry and his wife reside on a small acreage parcel that supports a horse training operation near Harmony. Larry is the longest serving member of the Board appointed to replace Nancy Stanton in 2008. He is representing agriculture and has served on the Board since 2009. Our longest serving Board member.

Zachary Iddings is the newest member of the Board appointed to fill the term left vacant when Orville Johnson passed away in May 2021. Zach is the manager of the Monolith Ranch owned by the City of Laramie that purchased the ranch in 1981 to assure a lasting source of drinking water for the residents of Laramie. Zach, appointed to the Board November 2021, represents agricultural interests in Albany County.

LARAMIE RIVERS CONSERVATION DISTRICT STAFF

Martin Curry, Interim District Manager and Rangeland Specialist since March 2007 has served the district for over 14 years. Other duties involve bookkeeping and responsibility for the living snow fence and tree planting services in Albany County. As LRCD engages in re-staffing the District, Martin has graciously accepted the responsibility for the entire operation for the last 10 months. He has taken on this huge task with a calm demeanor and a good sense of humor.

Natasha Dangler, Office Administrator recently joined the LRCD staff. Her background includes a BS degree in Animal Science from Purdue University. She began her career in research on gluconeogenesis studies in animal feed to determine the source of fatty liver disease in dairy cattle. Natasha worked in the pharmaceutical industry setting up trials for animal health before moving over to human oncology/cancer research. She recently established roots in Laramie with her husband, their four children, recruited by her extended family who are long standing members of the community.

NATURAL RESOURCES CONSERVATION SERVICE

Kaitlin Hasler, NRCS District Conservationist. Kaitlin joined the Albany County NRCS staff in September 2021. Prior to her promotion, she worked in a 3-person office in Oregon. Her background includes ranching and farming on the family place in eastern Oregon, and she holds a BS degree in wildlife biology. Kaitlin replaced Ruben Vazquez who served as the DC in Albany County for 13 years.

Jesus Vargas, NRCS Soil Conservationist. Originally from Puerto Rico, where both his paternal and maternal grandparents' own farms. After earning his BS in Agronomy and Environmental Science, Jesus joined the Albany County NRCS office in November 2018.

Clay Thompson, NRCS Civil Engineering Technician. Clay served with LRCD from 1991-2002 before he accepted the position with the NRCS in 2002-Present. Clay ranches west of Laramie with his family.

LARAMIE RIVERS CONSERVATION DISTRICT

LRCD first applied for and received certification from the Wyoming Secretary of State in December 1945. At the time of forming the organization, the Secretary of State assigned the name, the Laramie Rivers Soil Conservation District in December 1949. However, to form the district, the Secretary of State previously added territory to outline the district boundary as early as 1941. The final addition of territory, approved by the Secretary of State, occurred in December 1954. And the current name changed to the Laramie Rivers Conservation District received approval from the Secretary of State in February 2012. However, in legal correspondence, the district used the name Laramie Rivers Conservation District as early as 1984.

The Board of Supervisors is a five (5) member elected board by the residents of Albany County. The selected members of the Board represent both rural and urban populations within the county. This is an all-volunteer board that is only reimbursed for travel expenses while engaged in the district's business. The employees are full-time specialists with responsibilities to implement the projects and programs for the district. Voters in Albany County continue to support a one (1) mil levy tax that first passed on a ballot initiative as .75 of a mil in 2004. After one-year, the Albany County Commissioners approved the full mil for the Laramie Rivers Conservation District (LRCD).

MISSION STATEMENT

It is the mission of Laramie Rivers Conservation District to provide leadership for the conservation of Albany County's soil, water, and all other natural resources; preserve and enhance wildlife habitat; protect the tax base; and promote the health, safety, and general welfare of the citizens of Albany County through responsible conservation ethic.

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NATURAL RESOURCES CONSERVATION SERVICE
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KAITLIN HASLER, District Conservationist
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LAND USE AND BUDGET INFORMATION

FY 20-21 INCOME

Mill Levy	\$565,797
Other	\$20,168
SUBTOTAL	\$585,964
Grants	\$127,585
TOTAL	\$713,550

GRANTS	
Wildlife/CRM	\$81,560
WWDC Small Water Projects	\$0
WACD/NRCS Engineering funds	\$37,202
WY Dept. of Ag	\$8,823
WACD Water Quality grant	\$0
TOTAL	\$127,585

FY 20-21 EXPENSES

Personnel	\$288,299
General Operation	\$37,097
Capital Outlay	\$7,018
Programs	\$209,641
TOTAL	\$542,055

Personnel	
Payroll	\$193,493
Indirect payroll costs	\$73,496
Contract Services	\$5,579
Board Expense	\$15,731
TOTAL	\$288,299

General Operations	
Office Supplies & Equipment	\$24,483
Vehicles & Travel	\$1,447
Insurance	\$6,628
PT Summer Staff	\$4,539
TOTAL	\$37,097

Capital Outlay	
Office Computers	\$7,018
TOTAL	\$7,018

Programs	
Education	\$4,808
Community Gardens	\$40
Tree Program	\$11,685
Regular Cost Share	\$12,248
Rural Cost Share	\$43,372
Locally Led Conservation	\$4,209
Youth Ag Support	\$2,150
Small Acreage Program Support	\$1,100
Conservation Workshops	\$150
WACD/NRCS Engineering projects	\$25,928
N. Cedar Brownfield Monitoring	\$5,417
Wildlife projects	\$98,534
TOTAL	\$209,641

Albany County's agricultural land is a non-renewable resource that sustains many of our other natural resources and open lands. Agriculture is important to the county with the raising of livestock, primarily cattle and sheep, and haying as a way of life for generations. In the Albany County Comprehensive Plan, LRCD reported 287 operating agricultural units, with an average size of 6,700 acres per operation. Approximately 95,000 acres of meadow are primarily in flood irrigation concentrated along the Big and Little Laramie Rivers, Rock Creek, and other streams in the county. (*Albany County Comprehensive Plan*).

Tree Sales/Living Snow Fences

TREE SALES

Four (4) landowners were successful in planting living snow fences. LRCD profited in selling 6,185 trees and shrubs during the annual tree sale in May 2020.

Varieties include trees suitable for planting windbreaks, ornamental shrubs, and some fruit trees, which over the years have proven fit for planting in thin soils, as well as withstanding the high winds of Albany County.

When landowners provide a consistent and reliable water supply during early growth years, the success rate of the woody plants sold through the district are surviving to maturity.



PLANTING SERVICES



District services include sales of tree survival aids, weed barriers, equipment and providing technical expertise when planting in appropriate locations for the best survival rates. LRCD developed a ranking sheet for landowners to identify benefits of planting a living snow fence.

Water Quality

IRRIGATION – RESTORATION PROJECTS

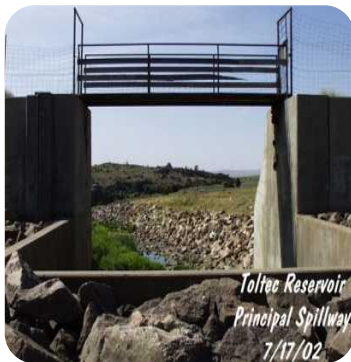
LRCO received funding from the **Wyoming Wildlife Natural Resources Trust Fund** in June 2020. \$30,000 is targeted to rehab two (2) of five (5) irrigation diversions located on the South Fork of the Little Medicine Bow River. \$45,000 is dedicated to the remaining three (3) diversions. A contractor, selected in October 2021 will begin work in mid-January 2022.

On the Big Laramie River, LRCO joined with numerous partners in the planning phase of rebuilding the **Oasis Ditch** diversion. The new upstream diversion design allows for fish passage and will improve the ability of the ditch users to utilize their water rights more efficiently. This project will be one of the larger financial commitments for all partners. One of the desired outcomes and challenges of this project is to remove



sediment buildup from the past 150 years and open the river channel to allow for fish passage, while at the same time avoiding a rapid release of sediment downstream. LRCO applied for and received a \$40,000 grant from WDEQ to study alternatives in 2022 for releasing the sediment load.

In 1985 the **Toltec Watershed Improvement District (TWID)** built a dam in northern Albany County. The NRCS Watershed Protection and Flood Prevention Program funded the dam construction. This is a multi-purpose dam for flood protection, agricultural water supply and recreation. As a project sponsor, LRCO has management responsibility for the Toltec Watershed Improvement District (TWID) and works with their board on improved record keeping and budget reporting requirements. This group meets quarterly with LRCO during the year, and holds an annual dam inspection with the NRCS, LRCO, WGF, and members of TWID.



WATERSHED IMPROVEMENT PROJECTS

WWNRT Grants WGFD & NRCS EQUIP and USFWS Funds plus landowner contributions

The **Big Laramie/Mountain Meadow** property combined WWNRT grants (\$50,000), WGFD, and USFWS and NRCS EQUIP funds to complete a 1,600 ft. segment of streambank improvements.

Bank cut modifications



The **Big Laramie/Jelm Project** combined WWNRT grants (\$150,000), LRCD, WGFD, and NRCS EQUIP and USFWS funds, as well as a large landowner contribution on a 5,900 ft. segment of the Big Laramie that focused on streambank restoration. This project also included development of an oxbow slough to hold water for preserving the cottonwood gallery. Although this project was on target to close in the summer 2021, the Mullen Fire postponed activity in that area. Work is slated to resume in the late fall with project completion by mid-December 2021.



Oxbow Slough



TMDL – DEQ

In May, 2021, the Wyoming Department of Environmental Quality (DEQ) accepted LRCD's water quality monitoring data for the Big and Little Laramie Rivers. These rivers exceed the standards for maintaining a level of water quality that is safe for human consumption. As recently as 2015-2016, 86 percent of the water samples at a key site in the Little Laramie River exceeded the total maximum daily load (TMDL) for *E. coli*. These sample sites represent sources of bacteria loading. To solve the problem and meet Section 303(d) of the Clean Water Act to reduce *E. coli* loads and achieve water quality standards, all sources and pathways that potentially deliver bacteria to the Big and Little Laramie Rivers are under consideration.



Implementation of the DEQ water quality improvement plan is voluntary for nonpoint source pollution and dependent upon the actions of watershed stakeholders. This approach allows watershed stakeholders to determine how and where to reduce bacteria loads. LRCD held two (2) unattended public meetings during the late summer of 2021, which indicates if LRCD is to be successful in addressing *E. coli*, the district will need to consider other incentive programs to improve water quality. Reducing the *E. coli* bacteria load might not become the primary focus of water projects sponsored by LRCD on the rivers, but improved water quality could become an unintended consequence of implementation of other riparian habitat improvements.

Rangeland Resources

LIVESTOCK WATERING SYSTEMS

Monolith Ranch – City of Laramie/LRCD Partnership



The Laramie Rivers Conservation District (LRCD) works closely with management to stage well-water improvement projects on the Monolith Ranch. Initially the ranch managers worked through the LRCD rural cost-share to partially fund a 12,000-gallon cistern that began converting above ground watering tanks to underground storage. One immediate benefit for installing the cistern eliminated frozen water tanks and conserved water,

and ultimately reduced man hour's necessary to remove ice from the older water tanks. The cistern installation reduced fuel and labor costs from when water had to be hauled in. And approximately 6,000 gallons of water/per day was lost in the winter due to ice removal. This project cost \$27,000 with \$21,286 in materials and contractor costs. The district paid \$5,000 in materials, contractor, or equipment rental, along with contributions from ranch ownership and management.

During the past year, the ranch manager applied for and received rural cost-share funding for a solar well development that removed the need for cattle to water from the East side of the river during the winter-feeding operations, as well as during the summer grazing season. This solar well installation and subsequent water tank cost approximately \$15,000.



Previously, the stock watering system was not adequate to meet the livestock stocking demand. It benefits the ranch to utilize the hay produced locally. As planning goes forward, the Monolith ranch manager hopes to secure backing for the next stage of water projects by developing an additional solar well in the Pioneer Pasture (west side) that further excludes cattle watering in the river. As additional wells are developed, extra pasture is accessible year around for rotational grazing management.

The Monolith ranch management team demonstrate strong leadership converting windmills to solar pumps for livestock watering. And they have several reasons for doing this work:

- ♦ Windmills do not always function during the summer months.
- ♦ Solar pumps are more reliable, and maintenance is more efficient.
- ♦ Solar water tanks are monitored using remote cell phone data, which eliminates water waste, as well as driving time and fuel to check individual windmills.

In the past year, LRCD provided rural cost-share funding for four (4) additional livestock watering projects, excluding the one (1) on the Monolith ranch, so five (5) livestock watering projects in total.



FENCING AND GRAZING PLANS

Landowners applied for and received funding to replace old sheep wire fencing with wildlife friendly fencing (1 project) and funded cross fencing (1 project) for improved pasture management.



Woven wire fencing (old sheep fencing)



- *Replacement fencing (smooth bottom wire)*

The Rangeland Specialist implemented one (1) small acres grazing plan, and provided additional education for small acre operations, as well as instructed the landowner on how to operate a 35-acre pasture with two horses.



Forestry

MULLEN FIRE

On September 17, 2020, the Mullen Wildfire started in the Savage Run Wilderness Area of the Medicine Bow National Forest and soon became one of the largest wildfires in recent Wyoming history. Before a foot of snow on October 24th and 25th doused the flames, the fire had consumed 176,876 acres of largely public and some private lands.

LRCD participated in a Wildfire Recover workshop held on June 5, 2021, at the WYCOLO fire station that had an attendance of over 100 people. The topics presented ranged from noxious weed control, tree planting post wildfire, wildlife, rebuilding structures and erosion control



Mullen Fire Photos: Travis Pardue

- The Cameron Fire in Colorado, affected the headwaters and tributaries for the Big Laramie River, has the potential for a greater impact on the river's watershed by depositing a significant amount of ash into the river.

The district is a designated Cooperating Agency with the USFS LaVA program, offering project based, technical assistance and public meeting support to the USFS.

Wildlife

WYOMING TOAD

LRCD first signed a Safe Harbor agreement with the USFWS for the Wyoming toad in February 2005. This is a voluntary agreement that lasts approximately 30-years. In this case the agreement is up for reconsideration in August 2054, or until the landowner or federal agency decides to terminate the agreement(s). LRCD is instrumental in serving to manage pass through funds for telemetry studies at the Mortensen Lake Wildlife Refuge, the Buford Foundation, the Outrider location, as well as cooperating with several private landowners in the Laramie Valley to monitor toad survival.

On June 8, 2021 Noreen Walsh, Regional Director of the USFWS (8 western states), the Assistant Regional Director, Matt Hogan, Noah Jones, field representative for Congresswoman, Cynthia Lummis, Laura Curran, field representative for U.S. Senator, John Barrasso, and Holly Kennedy, field representative for U.S. Senator, Liz Cheney attended an adult toad release event at the Mortensen Lake Wildlife Refuge.



Toads for the release came from separate breeding populations, supplied by the Saratoga National Fish Hatchery, Leadville National Fish Hatchery, and the Cheyenne Mountain Zoo.

There are concerns at the Outrider location for the continuation of toad releases in that area because of garter snake predation on the toads. The USFWS

continues to monitor the situation and are collecting more data before determining if it is necessary to reconsider releases under the Safe Harbor agreement for that area.

LRCD provided the avenue for BLM pass through funds (\$15,000) for dog trial training in 2020 to “sniff out” toads in the wild. This has been only marginally successful, as surveys by field scientists suggest it is just as effective to use humans when searching for the toads. It appears that a dog rustling through the habitat might provide a greater distraction for the toad than do human searchers.



MULE DEER

Martin Curry, LRCD Interim District Manager and Rangeland Specialist, participates on the local Mule Deer Working Group. This group formed as a partnership with WGFD, LRCD, the Mule Deer Fanatics, various private landowners, and the University of Wyoming Coop Unit. UW's Coop Unit is responsible for collaring mule deer and conducting Chronic Wasting Disease (CWD) research on mule deer populations in Wyoming. The group holds a Spring and Winter meeting in Albany County, and during the Winter meeting CWD was the focus of the participants and presenters.



The group last met for a field tour in the Spring, 2021 at the base of Jelm Mountain. The Wyoming Wildlife magazine published an article about this working group meeting in their Fall, 2021 issue.

MULE CREEK HABITAT IMPROVEMENT PROJECT

LRCD worked closely with the WGFD to manage \$110,000 in pass through funding to treat juniper thinning on the Mule Creek ranch in north Albany County. This project focuses on habitat improvement for elk and mule deer populations in the Laramie Range.



District Operations

The LRCD Board of Supervisors is proud to acknowledge that *Martin Curry, Interim District Manager/Rangeland Specialist and Bookkeeper* for the district was honored as the *Regional Employee of the Year 2020*, and he *completed re-certification for Water Quality Training in 2021*. And Martin completed fourteen (14) years with the district when he accepted the offer to take over the leadership of LRCD as the Interim District Manager. Martin's leadership skills are numerous, and the Supervisors cannot thank him enough for his loyalty to the Laramie Rivers Conservation District.

The following bulleted items are highlights of the District's routine tasks throughout each year. However, there are several that deserve added recognition (see below).

- Annual audit review
- WDA financial budget compliance
- Annual Budget Hearing
- Local Working Group (LWG) team meeting with NRCS
- WACD State Convention via Zoom meeting
- Wheatland Area II meeting
- Completed sale to private buyer of the North Cedar property (Yttrium Plant brownfield cleanup with DEQ, WYDOT, Trihydro and EPA)
- Prepared outreach bulletins
- LaBonte Summer Garden
- WACD and NACD dues paying memberships
- Support WACD fundraising
- Elected officials contacted individually during COVID19
- Board operated with four (4) members (May-Nov. 2021)
- Water Quality Training Re-certification
- LRCD sponsored City of Laramie's gutter bins (2)
- Albany County subdivision reviews (6 completed)

North Cedar Property – Yttrium Plant

The North Cedar property is the site of a Brownfield cleanup that has been historically used as a petroleum refinery, Yttrium processing plant, logging business, auto paint/body shop, and a trash disposal business. The site is ¼ mile to the east of the Laramie River. An unconfined aquifer is present at the depths of approximately 5 to 8 feet across the site. The primary contamination feature in the subsurface is a hydrocarbon smear zone ranging in thickness from 2 inches to 1 foot. The smear zone is located at the top of the unconfined aquifer. The primary direction of groundwater flow is from the southeast to the northwest across the site and in the direction of the Laramie River.

LRCD purchased the property and accepted the responsibility for voluntary remediation of the approximately 2.8-acre site. LRCD received a \$200,000 grant from the EPA, and the

District contributed approximately \$20,000 in public funds toward four (4) years of monitoring obligations for this project.

- \$7,500 (2019) first year monitoring cost to close on the remediation project
- \$5,416 (2020) second year monitoring requirement for continuous tracking
- \$5,790 (2021) third year monitoring requirement for continuous tracking

Early view of the Yttrium Plant (looking north)



- *Harney Street overpass (WYDOT) eastern view after property cleanup*

The District successfully sold this property in late June for \$200,000. Unique to this sale, an individual bid to establish a commercial business on the site, which puts it back onto the City of Laramie property tax records. Brownfield properties rarely move from cleanup to occupancy, as most buyers are reluctant to continue the monitoring requirements. However, in this case, LRCD's oversight of the cleanup, responsibility for monitoring, and the Wyoming DEQ's release of this property for commercial development made it easy for a private enterprise to purchase a highly visible property for their company's new location.

- Funds from the property sale were added to the New Building Reserve Fund in the LRCD budget.



Rooted in Laramie

LRCD partnered with Rooted in Laramie to replace trees in the tree canopy areas along the streets in town. The District requested a presentation from the local Director when asking for funding to purchase trees. LRCD contributed \$3,500 for purchasing trees. This grant from the District paid for all of the trees planted in 2021.

Pilot Hill

LRCO is a charter member of the Pilot Hill recreation site east of Laramie. In this capacity, the District contributes annually to projects most closely related to the District's mission. This year LRCO contributed \$5,000 toward aquifer protection and the Wildlife Habitat Management Unit in partnership with the WGFD.

LaBonte Community Garden

A seasonal intern hired by LRCO managed the community gardens and the kids' garden during the summer 2021. The garden yielded 70 lbs. in vegetables, which the District donated to Laramie Interfaith, a non-profit organization that distributes food to the underserved population of Laramie. Produce included turnips, carrots, zucchini, green beans, beets, cucumbers, peas, and radishes. Highest yields were turnips and green beans. There is one demonstration beehive in the garden, and the beekeeper harvested 25 lbs. of honey for approximately 24 bottles, which the District shares with partners and cooperators.

Subdivision Reviews

During 2020-2021, LRCO reviewed a total of six (6) subdivisions. These requests predominantly asked for division of a single property into one or two smaller parcels within an existing subdivision. Currently, LRCO staff and the Board support infilling properties within existing subdivisions.

LRCO is also providing Albany County with technical and educational information, for example, modified grazing plans on small acres. The District addresses natural resource concerns when submitting subdivision review comments to Albany County by using Small Acreage Outreach resources, such as Barnyards & Backyards publications; Albany County Weed & Pest plant lists of concern, and LRCO technical resources.



Photo Credits:

Martin Curry, LRCO Interim District Manager and Rangeland Specialist/Bookkeeper

Mindy Meade, Biologist, USFWS Partners for Fish & Wildlife

Travis Pardue, Assistant District Forester, Wyoming State Forestry

Cooperative Agreements & Partnerships

The District works with the following agencies and organizations to serve their goals and objectives to protect and enhance the natural resources for the benefit of the residents of Albany County.

- Albany County Stockgrowers and CattleWomen's Associations
- Albany County Fair Board/Fairgrounds
- Albany County Government
- Albany County Weed and Pest
- City of Laramie – Natural Resource Planning Committee
- Conservation Corps – UW Student Group
- Haub School of Environment and Natural Resources (SENR)
- Laramie County Conservation District (LCCD)
- Laramie Emergency Planning Committee (LEPC), representing FEMA and Homeland Security
- Medicine Bow Conservation District
- National Association of Conservation Districts (NACD)
- Natural Resources Conservation Service (NRCS)
- Pilot Hill Wildlife Habitat Management Unit
- Private Individuals and Landowners
- Rooted in Laramie
- Saratoga-Encampment-Rawlins Conservation District (SER)
- Society for Range Management (SRM)
- The Department of the Interior Bureau of Land Management (BLM)
- US Forest Service – Cooperating Agency LaVA
- US Fish and Wildlife Service – Safe Harbor Agreement
- University of Wyoming Cooperative Extension Service – Small Acres/Barnyards and Backyards
- Wyoming Ag in the Classroom
- Wyoming Association of Conservation Districts (WACD)
- Wyoming Conservation District Employees Association (WCDEA)
- Wyoming Department of Agriculture (WDA)
- Wyoming Department of Environmental Quality (DEQ)
- Wyoming Department of Transportation (WYDOT)
- Wyoming Game and Fish Department (WGFD)
- WYRED
- Wyoming State Forestry



*2022 LRCD Board of Supervisors, Left to Right:
Carol Price, Secretary/Treasurer; Bob Shine, Vice-Chair; (back) Larry Munn, Supervisor
(front) Ruth Shepherd, Board Chair; Zach Iddings, Supervisor*



*2022 LRCD Staff:
Martin Curry, Interim District Manager
Natasha Dangler, District Administrator*



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