

January 18, 2024

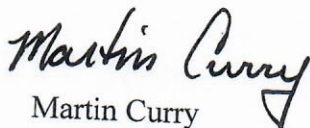
## Laramie Peak WHMA Spring Development

John Henningsen with WGFD approached me about LRCD assisting with a project that consists of development or rehabilitation of 4 springs within the Laramie Peak WHMA. WGFD needs assistance purchasing the tire tanks for this project.

I WOULD RECOMMEND that LRCD partner with WGFD and the other partners involved in this project and outright purchase the 4 tire tanks at \$600.00 apiece for a total of \$2,400.00 using our line Local Led Conservation.

This project aligns well with our mission statement:

*LRCD's mission is to provide leadership for the conservation of Albany County's soil and water, promote and protect the quality of Albany County's waters, and to promote sustained use of Wyoming's water and all other natural resources, to preserve and enhance wildlife habitat, protect the tax base and promote the health, safety, and general welfare of the citizens of Albany County through a responsible conservation ethic.*



Martin Curry

LRCD District Manager

## **Laramie Peak Wildlife Habitat Management Area Spring Developments**

### **Project Leads:**

John Henningsen, Habitat & Access Specialist, Wyoming Game & Fish Department

Jerry Cowles, Habitat & Access Supervisor, Wyoming Game & Fish Department

### **Brief Description:**

Protect and develop water at four spring sites, all within the Laramie Peak WHMA on Wyoming Game & Fish Commission-owned land and OSLI land. The goals are to make water available for wildlife (bighorn sheep, mule deer, elk) and livestock in the form of tire tanks while protecting the springs from disturbance. By installing catch pans and tire tanks we can protect these springs and their wet-mesic zones, facilitate rotational grazing, and increase water holding capacity on the landscape.

### **Proposed Actions:**

- Develop 4 springs- each with collection pipe, spring box, pipelines to and from, and tire tank for use by livestock and wildlife.
- Remove livestock pressure (exclosure fence) from 1 spring to protect important source location.

### **Location:**

This project involves the protection and development of water at four spring sites. All of these sites are within the Laramie Peak Wildlife Habitat Management Area, approximately (by road) 38 miles west of Wheatland, WY or 40 miles east of Rock River, WY. All sites are in Albany County.

Laramie Peak WHMA consists of Wyoming Game & Fish Commission fee title land, state leases, BLM, and public easement across privately-owned land. The spring developments described as Salt Creek, Hay Canyon, and Long Draw would occur on Commission-owned land. The South Fork Cherry Creek site is on Office of State Lands and Investments (OSLI) land (leased by WGFD).

- Salt Creek: NW  $\frac{1}{4}$  of NE  $\frac{1}{4}$  of Section 11, T23N, R72W.  
UTM Location: 13T 464241E, 4648505N.
- Hay Canyon: NE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  of Section 2, T23N, R72W.  
UTM Location: 13T 463584E, 4649215N.
- Long Draw: SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  of Section 1, T23N, R72W.  
UTM Location: 13T 465490E, 4648895N.
- South Fork Cherry Creek: SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  of Section 18, T23N, R71W.  
UTM Location: 13T 466739E, 4645564N. *OSLI- leased and managed by WGFD.*

### **Project Description:**

Laramie Peak WHMA lies 15 miles south of Laramie Peak and 15 miles west of Wheatland where the Laramie Plains meet the Laramie Range. The land was purchased to benefit all



wildlife species with an emphasis on fisheries, bighorn sheep, elk, and pronghorn. The WHMA consists of Wyoming Game & Fish Commission fee title land, state leases, BLM, and public easement across privately-owned land. With these lands and agreements, Laramie Peak WHMA provides public access to over 37,000 acres.

The Laramie Peak WHMA serves as Crucial Range for bighorn sheep, mule deer, and elk. It's a diverse landscape with diverse habitats. Elevation ranges from as low as 5,600' on Duck Creek to over 8,200' on Split Rock Mountain. Ponderosa pine, limber pine, and juniper are scattered throughout. Rocky outcrops and cliffs provide bighorn sheep with the escape cover they require. Open expanses of grasslands and wet meadows give way to sagebrush slopes and even some pockets of aspen.

There is a long history of water development on the lands that are now the Laramie Peak WHMA. The North Fork Cherry Creek watershed and surrounding drainages have been turned into highly productive ranchland from over a century of developments- i.e., reservoirs, diversion ditches, managed livestock grazing, sub-irrigated meadows and hayfields. All of these developments have contributed to the productivity of the landscape for wildlife, as well. The abundant forage, the diversity of habitats, and the varied terrain result in a landscape that benefits a wide variety of terrestrial and aquatic wildlife.

We propose to newly develop 2 springs and to make substantial repairs at 2 springs that were developed nearly 40 years ago. The Hay Canyon and Long Draw locations would be new spring developments. At Salt Creek and South Fork Cherry Creek we need to make substantial repairs (i.e., essentially new developments) to existing developments. Thus, at each location we will develop the spring, bury pipeline, and install a rubber tire tank.

Utilizing spring water to fill tanks in uplands provides reliable drinking water to livestock and wildlife. Well-distributed, reliable upland water sources improve range and riparian conditions by giving wildlife and livestock access to drinking water outside the riparian zone. Each of these sites are in terrain where vehicles can reach- but essentially get no further. In other words, these locations are in prime wildlife habitat relatively free of human disturbance.

This project is a collaboration between WGFD and Vale Ranch LLC. WGFD Staff will solicit and administer funds; Vale Ranch will take the lead on construction; WGFD will work in a closely supporting role. We are requesting funding from the WGFD Trust Fund, Water for Wildlife Foundation, Wyoming Wild Sheep Foundation, and Laramie Rivers Conservation District.

#### **Project Timeline:**

- Winter/spring/summer 2024: Secure funding.
- Winter 2024: Acquire 12' tire tanks. Vendor has been located that has them in stock and will sell them to us for \$600/per. *Supplies are limited.*
- Winter/spring 2024: WGFD staff will fabricate spring boxes.
- Summer/Fall 2024: Enter into a Grant Agreement with Vale Ranch LLC. The Grant Agreement will enable Vale Ranch LLC to directly purchase some of the materials, and will serve as the compensatory mechanism for Vale Ranch's labor.
- Install/repair 1-2 spring developments each year (2024, 2025, 2026 if necessary). Vale Ranch will take the lead in on-site construction; timing will be dictated by their availability. WGFD staff will be ready to deliver materials and work in a supporting role.

#### **Project Goals:**



The intent of this project is to make water available for wildlife and livestock while protecting springs from disturbance. The benefits are considerable.

Strategically positioned tire-tank waterers facilitate rotational grazing and will help protect soil and water quality. Water sources facilitate grazing management that mutually benefits livestock and wildlife and provides for vegetation resiliency in the face of climate change. The spring sources support hydrologic function and create sub-irrigated meadow habitat used by wild ungulates, small mammals, birds, and contribute to streams flowing to the Laramie River. We will benefit each of these riparian areas by slowing the movement of water off the land. Installing fencing around the spring development at Salt Creek will minimize disturbance to the sensitive riparian area- which will improve conditions for native vegetation.

### **Project Objectives:**

Each spring site will include the installation of a spring box to collect water, buried pipe to run the water to stock tanks, buried pipe to deliver overflow water back to the stream/wet meadow, and wildlife escape ramps in each stock tank. Water within stock tanks will be available to wildlife and livestock. Spring box installation will follow a standard NRCS design.

Additionally, at Salt Creek, protection of the spring and its associated wet mesic area against erosion and soil compaction will require the installation of fencing (400').

Funds will be used to purchase spring development materials and fence materials. Funds will be granted to Vale Ranch through a grant agreement and will be used for materials and labor. WGFD will provide in-kind labor (surveying/permitting, delivering materials, heavy equipment operation, fence construction, re-establishing vegetation, monitoring for early detection and control of invasive plants, etc.).

Water tanks made from recycled heavy equipment tires are nearly indestructible, easy to set up, and the rubber acts as a natural insulator. In cold weather rubber tire tanks absorb heat making them freeze resistant.

### **Species Benefited:**

Bighorn sheep, mule deer, elk, numerous non-game species.

### **Monitoring:**

WGFD staff will record observations of wildlife use of the springs. Game cameras may also be deployed to demonstrate wildlife use. Photo points taken before/after will be used to show benefits to vegetation. We anticipate the life expectancy of this project to be 20+ years. Routine care and maintenance should extend longevity well beyond 20 years. Operation and maintenance of spring developments includes periodic removal of sediment from the spring box, keeping outlets and overflow pipes clear, preventing erosion from overflow pipes, and rehabilitating ground disturbed during construction. WGFD staff would be responsible for upkeep of fencing. Ranchers and WGFD staff would regularly monitor functioning of the tanks.

### **Budget Narrative:**

Funds will be used to purchase spring development materials and fencing (directly purchasing items or materials for fabricating: spring boxes, pipe, fittings, gravel, rock, concrete, 12' tire

tanks, escape ramps, wood and steel posts, wire fence). Some funds will be given to Vale Ranch through a grant agreement to compensate them for materials they purchase and partially compensate them for their labor ( $\$750 \times 4 \text{ sites} = \$3,000$ ).

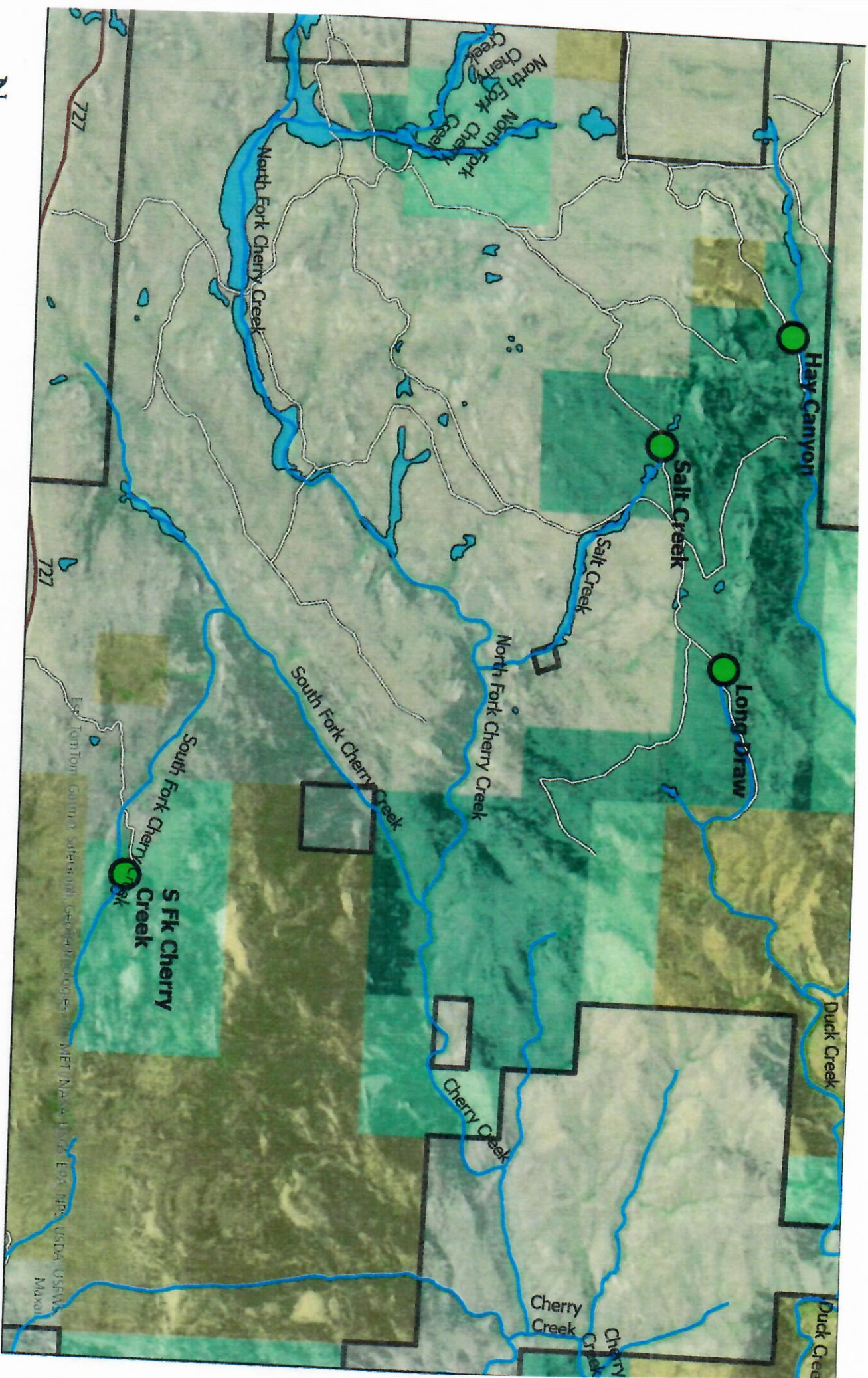
<b>Spring Development (4 sites)</b>	
Collection box, pipe, fittings	\$4,400
Gravel, rock, concrete	\$5,200
12' tire tanks and escape ramps	\$2,800
Labor	\$3,000
<b>Subtotal</b>	<b>\$15,400</b>
<b>Spring Enclosure Fence (1 site)</b>	
Wood and steel posts, wire fence	\$1,000
Labor	In-Kind
<b>Subtotal</b>	<b>\$1,000</b>
<b>Total</b>	<b>\$16,400</b>
<b>Project Partners</b>	
Water for Wildlife	\$3,000
Laramie Rivers Conservation District	\$2,400
Wyoming Game & Fish Trust Fund	\$8,000
Wyoming Wild Sheep Foundation	\$3,000
Vale Ranch LLC (labor, materials)	\$8,200
WGFD (in-kind labor, equipment)	\$8,200
<b>Total</b>	<b>\$32,800</b>

#### **In-Kind Description:**

WGFD will provide surveying/permitting, delivering materials, heavy equipment operation, fence construction, re-establishing vegetation, monitoring for early detection and control of invasive plants, etc.

WGFD and Vale Ranch collaborate closely in the management of Laramie Peak WHMA. Vale Ranch will take the lead on construction, thus will be contributing In-Kind with labor, heavy equipment operation, and trucking expenses incurred in acquiring materials.





# Laramie Peak WHMA Spring Developments

- Wildlife Habitat Management Area
- WHMA Access
- Springs and Tanks
- WYDOT County Roads
- STATE
- COUNTY
- CITY
- National Wetlands, Live
- NHDFlowline\_0
- NHDFlowline\_1
- NHDFlowline\_2





