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***Collaborative Watershed Stewardship in Action in the West Bragg Creek Area  
by Kathryn Hull, Riparian/Range Specialist, Cows and Fish***

To follow-up on our September 2020 article (“Partners Work to Increase Elbow Tributary’s Resiliency”, available from - <https://erwp.org/index.php/resources-and-information/newsletter-archive>), an exciting multi-partner collaborative project was launched in April last year aimed at riparian and rangeland enhancement in the West Bragg Creek area. What we are now calling the “West Bragg Creek Collaborative Watershed Stewardship Project” is now moving into its next phase – working toward implementing range management and restoration projects. Until now, efforts have been focused on field-based range and riparian health studies that were completed during the summer of 2020 by Longview Ecological (Alan Dodd) and Cows and Fish (the Alberta Riparian Habitat management Society). Results and recommendations coming out of these studies were presented to the project partners in March, 2021. Planning meetings are now ongoing to identify the next steps towards implementation, management discussions and restoration actions.

*Project Background*

In 2019, Bragg Creek Trails (formerly known as the Greater Bragg Creek Trails Association) with assistance from Cows and Fish, were successful in securing a grant from the Government of Alberta’s Watershed Resiliency and Restoration Program (WRRP). Along with Bragg Creek Trails and Cows and Fish, other partners for this project include Alberta Environment and Parks (AEP), the Rocky Mountain Forest Range Association, the Elbow River Watershed Partnership, and local range allotment holders. The goal is to have these stakeholders work together to improve the watershed’s resilience to drought and flood events through enhanced range and riparian health.

*Range and Riparian Health Study Findings*

Last summer was a busy time for rangeland agrologist Alan Dodd (Longview Ecological) and the Cows and Fish riparian health assessment team. Both teams worked to complete more than 70 range health assessments and 10 detailed riparian health inventories in the Bragg Creek project area. The project also involved detailed plant community mapping, sampling forage productivity, and mapping out invasive weeds, poisonous and rare plants.



hooded ladies'-tresses orchid  
(*Spiranthes romanzoffiana*),  
Photo: K. Hull

These studies confirm West Bragg Creek as an ecologically important area, containing rare plants and high integrity, functionally intact, biologically diverse wetlands and headwater stream riparian areas. Sixty-seven different range plant community types were identified. Although riparian habitats are a minor component of the landscape overall, these areas are especially rich in biodiversity. One of the headwater fens assessed had more than 80 plant species, including numerous sedges, willows and wildflowers such as hooded ladies'-tresses orchid (*Spiranthes romanzoffiana*), northern green bog orchid (*Platanthera huronensis*) and marsh cinquefoil (*Comarum palustris*).

Although our field studies did identify many healthy, functioning areas, some 'hotspot' areas were also flagged where there are impacts from long-term cumulative land use pressures from industry, recreation and livestock use. Range management and restoration planning is underway to address some of these areas, but long-term efforts will be needed to see improvement.



Moose Loop Fen Wetland, an example of a high integrity, biologically diverse riparian area that provides habitat for numerous plant and wildlife species. *(Photo credit: Kathryn Hull, Cows and Fish)*



Beaver dams are a common feature in the Bragg Creek watershed – beavers are considered important ecosystem engineers. Their dams create wetlands that provide habitat for numerous fish and wildlife species. Beaver dams also play an important role in storing, filtering and slowing water flows, buffering flood and drought impacts for downstream communities. *(Photo credit: Enna Graham, Cows and Fish)*

### *Stewardship in Action, Launching A Watering System Pilot Project in West Bragg*

On your next summer visit to the West Bragg Creek area, you may notice some changes. A pilot off-stream watering system project is being launched in the Bragg Creek Range Allotment in K-Country. Off-stream water troughs, powered by solar or wind (or both), are a range management tool that can help reduce in-stream use by livestock. By providing easy access to water on stable ground, water troughs help alleviate pressure on our natural streams, rivers and wetlands. This helps to maintain clear, clean water that benefits our native fish and aquatic species and water quality for downstream users. For Bragg Creek, this is especially important since it is considered critical habitat for bull trout, a threatened

native species in Alberta. Water troughs can also benefit livestock health and are widely used by ranchers as a management tool in Alberta.

Other projects underway will include weed pulls and riparian planting along parts of Bragg Creek and continued efforts to reduce erosion along recreational trails.



Example of an off-stream water trough unit. Portable water troughs similar to this will be installed along Bragg Creek as a tool to reduce in-stream use by cattle. (Photo credit: Cows and Fish)



Example of a successful willow staking, streambank bioengineering project adjacent to a bridge crossing in the West Bragg Creek area. Willow roots help to stabilize the soil, reducing erosion and filtering runoff. (Photo credit: Kathryn Hull, Cows and Fish)

### *How to Get Involved*

If you are interested in volunteering with watershed stewardship projects (off-stream watering system projects, riparian plantings, streambank restoration, trail /bridge repairs and maintenance), please contact Bragg Creek Trails ([info@braggcreektrails.org](mailto:info@braggcreektrails.org); <https://braggcreektrails.org/>).

### *Invasive Plant Alert - Help Stop the Spread!*

Help keep unwanted weeds out of the West Bragg Creek area. Although the area is relatively free of weeds, some new invaders like orange hawkweed were detected. Invasive weeds are non-native species that spread rapidly, displacing preferred native species, interfering with natural processes and threatening native biodiversity. Infestations of weeds deteriorate the quality of wildlife habitat, alter

natural fire regimes and affect natural hydrological conditions. To learn more about invasive species threats in Alberta, visit: <https://abinvasives.ca/>.

*How can you help?*

- Remove plant materials and mud from your boots, gear, pets and vehicles before entering K-Country.
- Stay on designated roads and trails.
- Volunteer to help monitor and remove weeds.



Orange hawkweed – an example of a *Prohibited Noxious Weed* that is a priority for eradication efforts in the West Bragg Creek area.  
*Photo Credit: Alan Dodd (Longview Ecological)*