



RANCHING AND ALBERTA'S HEADWATERS



LANDOWNER ACTIONS = HEALTHIER WATERSHEDS

"the concept of stewardship ran deep in my father long before the word became fashionable" - Rancher

Cows and Fish and the **Southern Alberta Land Trust Society (SALTS)** partnered with ranchers to look at two important streams in the foothills of the Bow River Basin. We know that riparian health can vary when grazing cattle along streams and rivers, leading to a wide range of views on the issue of riparian grazing. The goal of this project was to assess trends in riparian health along two streams where ranching is the dominant land use, and where ranchers are actively engaged in riparian management.

The streams we selected already had significant data on range and riparian health, and water quality information. We re-examined riparian sites to compare health over time, and to see how it related to ranch management practices.

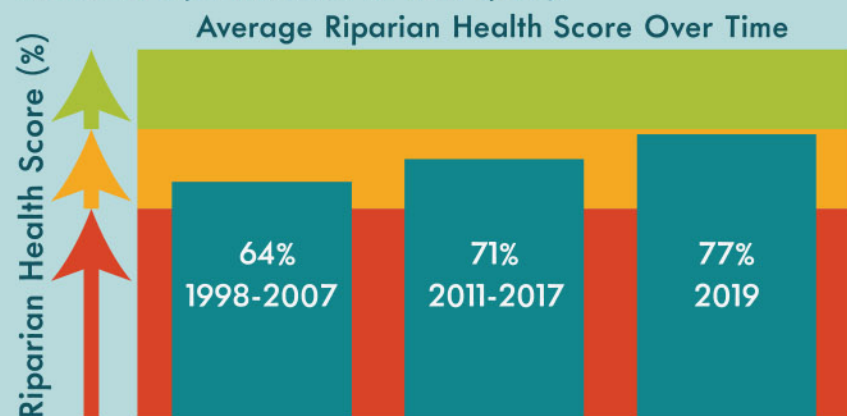
While the project focused on two streams, there are dozens of similar streams in Alberta's foothills that play a critical role in supporting the ranching economy, water resources, and fish and wildlife habitat. This includes clean drinking water for significant communities downstream, including Calgary.

WHAT DID WE FIND? HIGHER RIPARIAN HEALTH SCORES

Cows and Fish re-assessed 8 riparian sites that had been looked at 15-20 years ago. All sites improved since they were first examined, resulting in much higher average health!

The current average riparian health for these sites is **higher than the provincial average score of 70%.**

Range health varied but overall rates in the high end of the "healthy but with problems" category. Although water quality data was preliminary, it showed that management upstream of sampling points was having a positive effect on water quality.



Despite major flooding events on both streams (2005 and 2013), riparian health scores improved, suggesting watershed resilience is supported by good riparian health. This is good news for people downstream when it comes to flood mitigation!

HOW DID THE RANCHERS DO IT? "IT DEPENDS"

Participating ranchers use a wide range of management practices to maintain riparian health, and they adapted their practices over time. These changes included the time of year they used riparian pastures, the intensity of grazing, use of off-stream watering facilities, and strategic fencing. Another key lesson was that these ranchers did not look at the riparian pastures in isolation from the rest of their pastures. Instead, they tried to use them in concert to optimize both upland range, and riparian health.

Overall, applying the four grazing management principles was essential to successful management. Appropriate timing, stocking rates and intensity, careful distribution and adequate rest are woven into the management strategies of these ranches. However, each ranch has incorporated them in unique ways suited to their operations and land base.

- ➔ **Grazing can be compatible with good riparian health and can improve health over time.**
- ➔ **Grazing can support good water quality outcomes in the whole watershed by continuing to provide important riparian functions such as filtering.**
- ➔ **Engaged landowners who continue to learn and apply beneficial practices do improve riparian health, meaning those organizations that invest in riparian education are getting a return on their investment.**



"When and where the cows graze depends on a lot of factors - you need to be very flexible week to week, month to month to make the best management decisions" - Rancher

OUR CONCLUSION? RANCHING AND WATERSHED HEALTH CAN GO HAND IN HAND

Long-term commitment by ranchers to riparian health and adaptive grazing management results in a healthy landscape, benefiting both the ranch and communities downstream - something only some land uses can achieve.

Success requires continuously adapting management, an ongoing commitment to learning, the application of new knowledge and availability of resources.

It can take a long time to improve the health of the landscape, but as this project has shown, it is more than possible in less than one generation of ranch management.

Since every ranch is different, no one solution fits every ranch, but in most cases there are things that every ranch can do to improve range and riparian health.

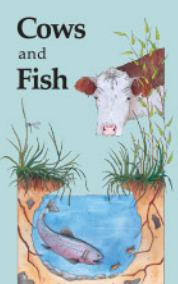
Sharing knowledge, experiences and passion, leads to management change and healthier watersheds.

What's your story?

Contact us!

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