

# Riparian Health

## assessment and inventory



### Healthy Landscapes = Healthy Communities

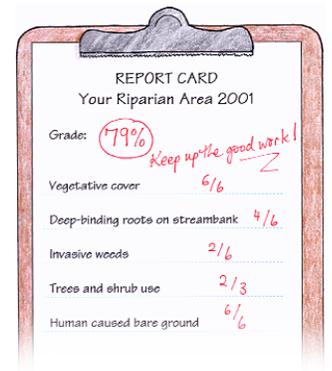
Riparian areas are the green zones around our rivers, streams, lake, sloughs, ponds, springs and seeps. They are a critical portion of the landscape, helping to keep our water supplies clean, our ranching and farming communities sustainable and our fish and wildlife populations healthy.

Like people, riparian areas need to be healthy to function properly. The Cows and Fish program helps agricultural producers and their communities understand the health of their riparian areas in their watersheds and in their individual operations. How do we know what condition riparian areas are in? We use a riparian health assessment as a measuring stick to give us that information. This information allows communities and producers to identify concerns and proactively address specific land use issues. This willingness to face the issues values cooperation over conflict.



### What is Riparian Health Assessment?

Riparian health assessment is essentially a **report card** that gives producers, resource managers and landowners an understanding of the health and condition of their riparian areas. This valuable tool helps people to better understand riparian functions and provides a way to voluntarily address land use issues in riparian areas. Health assessments are excellent monitoring tools when conducted in the same riparian area, several years apart.



### Assessment versus Inventory

#### Riparian Health Assessment

- ◆ A quick survey used by land managers and landowners to check the health status of a riparian area.
- ◆ Limited training and experience is needed to collect information.
- ◆ 11 health parameters make up a riparian health assessment.

#### Riparian Health Inventory

- ◆ An in-depth measurement of riparian health.
- ◆ Usually conducted by biologists with extensive knowledge of riparian systems.
- ◆ 79 health parameters provide comprehensive and detailed riparian health information.
- ◆ Inventories provide detailed data for future monitoring.

# Riparian Health Assessment and Inventory

## What is the Value of Riparian Health Assessments?

Riparian Health Assessments are a valuable tool to help producers, communities and other landowners determine “Where am I at?”. More specifically, they:

- ◆ **Create awareness** among landowners and communities about riparian management issues in their own watersheds.
- ◆ **Help landowners and communities take voluntary action** by assisting local decision-makers develop strategies and find solutions to address riparian land use issues.
- ◆ **Demonstrate that the agricultural sector and other community groups are willing to face the issues** by first acknowledging the need to take stock and determine the current state of the environment of their watersheds and operations.
- ◆ **Build a common understanding between landowners and professional resource managers** and help them work together on riparian management.
- ◆ **Identify the good news stories of agricultural producers and other landowners** who are already managing healthy riparian areas.
- ◆ **Temper the need for legislation and regulation** as proactive efforts by producers and communities address any potential riparian issues.
- ◆ **Help communities and producers monitor their progress** in improving, maintaining and protecting riparian health for their operation or watershed.
- ◆ **Assist producers to identify environmental risk.**
- ◆ **Integrate riparian health into farm and ranch planning.**
- ◆ **Provide baseline information** to measure progress and track riparian health over time.

*“Riparian health assessments are a great starting point for management and monitoring.”*  
- Producer

## How do we Deliver Health Assessments and Inventories?



- ◆ At the request of a local group or individual, Cows and Fish provides initial riparian awareness through presentations at meetings and workshops.
- ◆ When invited by a community or group, we meet with landowners, Agricultural Service Board members, agricultural fieldmen, watershed coordinators and community leaders to discuss potential riparian management options or tools.
- ◆ Riparian health assessment and inventories are part of a community-driven process, building on awareness, field days, demonstration and profile projects and community meetings. The community determines their specific needs and an appropriate timeframe.
- ◆ Funding for targeted health assessments and inventories is provided by the group.
- ◆ Each participating landowner receives a confidential report on the health of their riparian areas and management considerations. The community group receives an overall report based on the summary of all sites examined. Health information remains confidential unless they choose to share the information. Detailed field data remains stored in our computer database for future needs, such as long-term monitoring.
- ◆ At a follow-up meeting, the overall results and general findings are presented, allowing the group to ask questions and discuss what next steps they would like to take as individuals or as a group. Riparian health assessments are the starting points to answering the questions “**Where have we come from?**”, “**Where are we now?**”, “**Where do we go from here?**”, and then later “**Did we make it?**”.

# What does the Riparian Health Assessment Tell YOU?



Keep up the good work! **Healthy**; the site performs all key ecological functions.



Slow down and look! **Healthy, but with problems**; some ecological functions are impaired because of degradation.



Red light - stop and take action!  
**Unhealthy**; most riparian functions are lost or impaired.

## Healthy riparian areas perform many functions:

- ◆ Trap, store and slowly release water.
- ◆ Buffer the impact of flood and droughts.
- ◆ Filter water, improving water quality.
- ◆ Provide habitat for fish, wildlife and plants.
- ◆ Offer shelter and forage for livestock production.

## What Happens Next?



Riparian health assessments are a starting point. They provide landowners and communities with a snapshot of the health of their riparian area(s) and point out potential areas to focus management on. Health assessments help landowners and communities better understand landscape function, allowing them to make more informed management decisions. Health assessments provide the foundation for action plans, helping define management changes and priorities.

Riparian health assessments are not a finger pointing exercise - we recommend you use the information to understand, communicate and motivate.

Once the assessments are complete, Cows and Fish will continue to work with landowners and communities and help them to implement changes that will further improve the health of their riparian areas.

### *Health Assessment - A Landowner Example*

*Riparian health assessments can provide a variety of useful information. For example, the assessment may tell you that there is not much tree or shrub regeneration in your riparian areas. The solution may be to change the timing of grazing to allow for more growth of younger woody plants. This will allow your riparian area and the benefits it provides continue into the future.*

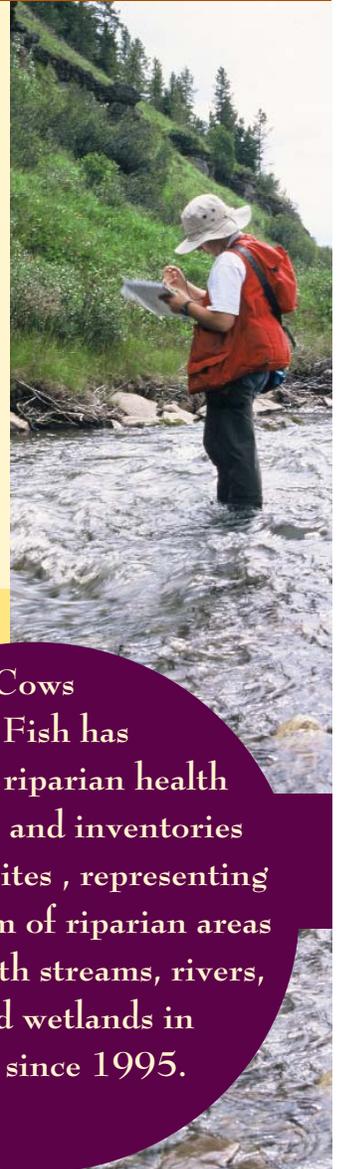


# The Role of the Cows and Fish Program in Riparian Health Assessments and Inventories

The Cows and Fish program is involved in riparian health assessment and inventory in several ways:

- ◆ Working with experts internationally, we developed methods to assess the riparian health of Alberta's streams, rivers, lakes and wetlands.
- ◆ We conduct riparian health assessments and inventories in an objective and independent manner.
- ◆ We train others to conduct riparian health assessments and inventories.
- ◆ We help landowners and communities interpret results of their riparian health assessments and inventories.
- ◆ We assist landowners and communities to implement changes that will help address riparian issues.
- ◆ We help communities to use riparian health assessments as a monitoring tool.

Our program staff have strong academic and field training in riparian ecology. Riparian health assessment and inventory methods were developed and refined by riparian and plant community ecologists, fish and wildlife specialists, botanists and hydrologists.



## Health Assessment - A Community Example

On a watershed basis, riparian health assessment helps a community understand the health of their entire area. For example, many communities have been able to profile landowners who are maintaining healthy riparian areas, sharing their insight and management techniques with others in the group. The community group may identify a common issue, such as invasive weeds. They can then work together to increase awareness of the issue and develop farm and ranch plans that address the issue.

Cows and Fish has conducted riparian health assessments and inventories at over 800 sites, representing over 1000 km of riparian areas associated with streams, rivers, lakes and wetlands in Alberta since 1995.

## Riparian Health Training

The Cows and Fish program offers training about riparian areas, riparian and grazing management and riparian health through presentations, field days and workshops. Who should take riparian health training? Riparian health assessment training is encouraged for anyone interested in riparian health including landowners, cottagers, producers, general public and resource managers.

Photo Credits: Lorne Fitch, Kelsey Spicer



Working with producers and communities on riparian awareness

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### Cows and Fish Partners

Producers & Community Groups, Alberta Cattle Commission, Trout Unlimited Canada, Canadian Cattlemen's Association, Alberta Agriculture, Food & Rural Development, Alberta Sustainable Resource Development, Alberta Environment, Department of Fisheries & Oceans, Prairie Farm Rehabilitation Administration, Alberta Conservation Association

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