



July 2003 Factsheet 2 of 7 in the Range Riparian Factsheet Series

Riparian Assessments

This Factsheet answers the questions "Should I do a riparian assessment?" and "What method of riparian assessment should I use?"

How do I Know if I should do a Riparian Assessment?

If your riparian area looks like any of the photos on the right you may need to do an assessment. To better assess the health of your riparian area along your natural streams, rivers, creeks, springs, channelized/relocated streams or ditches please fill in the checklist below:

Riparian Health Checklist

(adapted from Cows and Fish 2002, Looking at my Streambank publication, available online at http://www.cowsandfish.org)

Answer the thirteen questions below to find out how healthy your riparian area is. If you are unsure about an answer, leave it blank.	
1. 85% or more of the riparian area is covered with vegetation (of any kind).	Yes <u>No</u>
2. More than 50% of the riparian plants are taller than knee height.	Yes <u>No</u>
3. Shrubs such as willow, dogwood and alder are growing along or near the stream edge and grow without a mushroom or hedged appearance.	Yes <u>No</u>
4. There are young trees and shrubs that will replace the older ones over time.	Yes <u>No</u>
5. Plants such as Kentucky bluegrass (lawn grass), clovers, dandelion and creeping red fescue represent less than 15% of all the plants growing in riparian area. Native plants dominate the riparian area.	Yes <u>No</u>
6. Noxious weeds make up less than 15% of the plants growing in the riparian area (e.g. thistles, knapweed and leafy spurge).	Yes <u>No</u>
7. The bank is NOT damaged by recreational activities, farm equipment or livestock. There are no exposed and eroding soils or slumping banks due to these activities.	Yes <u>No</u>
8. The stream channel is narrow and deep (versus shallow and wide).	Yes <u>No</u>
9. The stream does NOT appear ditched or entrenched and is able to over flow its banks.	Yes <u>No</u>
10. Water in the stream is clear and NOT cloudy or full of sediment.	Yes <u>No</u>
11. There are NO retaining walls, rip-rap or other bank stabilizing structures.	Yes <u>No</u>
12. Wildlife are often seen in the riparian area and fish live in the stream.	Yes <u>No</u>
13. Plants are vigorous, there is carryover of plant litter and forage production is stable.	Yes <u>No</u>

Checklist Summary

How many of these questions did you answer: YES _____ NO

Interpreting the Checklist



If you answered **YES** to 10 or more of the questions and the riparian area looks like the riparian area to the left, it is likely that the riparian area is **healthy and functioning** well, which means it is performing the following key riparian functions:

- improving water quality by reducing excessive erosion and filtering sediment
- capturing bedload, stabilizing streambanks and aiding floodplain development
- providing habitat necessary for all forms of wildlife including birds, ungulates, fish and other aquatic organisms while also providing forage for livestock
- maintaining perennial stream flow and recharging groundwater both of which led to an increased water supply.

If you answered **NO** to 4 or more of the questions and the riparian area looks like the riparian area to the left, it is likely that the riparian area is unhealthy and not functioning properly. Such a riparian area may show the following symptoms:

- decreased water quality
- loss of valuable pasture and/or rangeland through excessive erosion and widening of the stream channel
- loss of forage production and a decrease in the presence wildlife species
- reduced seasonal flow, increased flood peaks and/or a lowering of the water table
- increased exposed soil
- increased presence of invasive and/or undesirable plant species.

If you answered **No** to 4 or more of the above questions or would like to learn more about your riparian area, we recommend you conduct a **Riparian Assessment**.

What Method of Riparian Assessment Should I use?

If you wish to conduct a quick and useful assessment of your riparian area or are interested in determining whether your riparian area is in proper function conduction you may want to use the Cows and Fish Riparian Health Assessment available online at <u>http://www.cowsandfish.org/health.html</u>.

In addition to the method above, two other **Riparian Assessments** are commonly used in British Columbia. The first assessment method is commonly used by the Ministry of Forests when assessing agreements under the Range Act. This assessment method is called the Range Resources Assessment Procedures and is available through the Ministry of Forests website (http://www.for.gov.bc.ca).



The second method consists of Technical References provided by the United States Bureau of Land Management. These technical references are very useful and can be accesses on the following website: <u>http://www-a.blm.gov/riparian/tech.htm</u>.

Further Information



To learn more about this topic please refer to the following websites: http://www.cowsandfish.org



http://www-a.blm.gov/riparian/tech.htm.



For more information on rangeland management, the Rangeland Handbook for BC available on the following website: <u>http://www.cattlemen.bc.ca/handbook.htm</u>

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