



## Backgrounder:

### *Where Land and Waters Meet: Understanding and Protecting Riparian Areas in Canada's Forests*

**EDMONTON, January 19, 2004** - Riparian areas are diverse and complex zones where land and water interact. Riparian areas include the shoreline or bank of a water body and the surrounding vegetation. They extend up from the shoreline for as far as the water body impacts the vegetation, and extend into the water as far as the shoreline vegetation impacts the aquatic environment.

Due to the complexity of these zones of interaction, riparian areas tend to have a concentrated diversity, both physically and biologically. They are extremely sensitive, and there is still much to learn about them. However, riparian areas in Canada's forest regions are increasingly affected by logging and other human activities. Human development is evident in at least 95% of Canada's forested secondary watersheds. It has been estimated that 80% of the riparian corridors in North America and Europe are affected by development, such as agriculture, urbanization, and/or forestry.

The Global Forest Watch Canada (GFWC) report, *Where Land and Waters Meet: Understanding and Protecting Riparian Areas in Canada's Forests*, is a comprehensive review of relevant North American scientific literature to date. It provides a number of facts about riparian areas in Canada, and outlines their key roles and functions: regulation of light and temperature, maintenance of bank stability, input of litterfall and coarse woody debris, moderation of water and sediment yield, nutrient cycling, and the provision of habitat for a range of organisms.

The report addresses the negative impacts of forestry on these roles and functions. For example, logging in and near riparian areas results in the loss of habitat for a range of organisms, removes shade-providing vegetation (which can result in increased temperatures of water bodies), reduces the amount of litterfall and coarse woody debris (sources of nutrients and habitat), and can cause an increase in the amounts of water and sediment that enter a water body.

The final section of the report titled, "Management Implications and Considerations," discusses measures that may be taken to mitigate the effects of forestry (and other human development) in and near riparian areas. The use of buffers is described with regards to how they can help to sustain a number of key riparian functions. The importance of maintaining connectivity between riparian areas and upland forests is outlined as well. The reports notes how strategic road building can limit access to riparian areas and mitigate the direct impacts of the road itself (e.g. increased sedimentation, loss of vegetation and habitat). Finally, it discusses the obvious: reducing the percentage of a watershed that is logged can greatly reduce the negative impacts to riparian areas.

The report concludes by reiterating that the roles and functions of riparian areas may be affected for many years following disturbance, and notes that there is still a need for research and education about riparian stewardship. It identifies a need for a legal and policy review of riparian management, and suggests that a system of audits, which would help to determine the best possible management practices.

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*Where land and waters meet: Understanding and Protecting Riparian Areas in Canada's Forests*, including maps, figures, and satellite pictures, as well as media briefing materials, is available for download at: [www.globalforestwatch.ca](http://www.globalforestwatch.ca)

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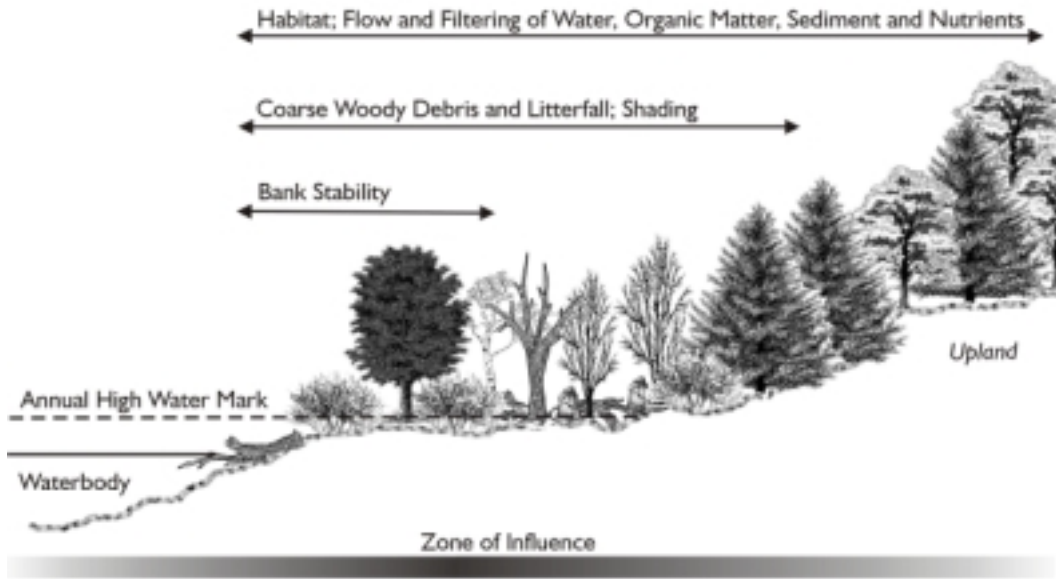


Figure 1. Schematic diagram of a riparian area.



Figure 2. Development status of Canada's watersheds (circa 2000).

*These and other figures from the report can be downloaded at:*  
<http://www.globalforestwatch.ca>