

ABOUT PUBLIC LANDS



Information on

- **Importance of Healthy Riparian Areas**
- **Recreational Developments and Shore Land Uses**
- **Agricultural Use of Riparian Areas**
- **Industrial Use of Riparian Areas**

Created October, 1997

Managing Riparian Areas

Riparian areas on public land are the vegetation zones next to flowing and standing water bodies (e.g., rivers, lakes, sloughs). They are found in all natural regions of the province, from the prairies and foothills to the boreal mixed wood region. Although they make up only about two per cent of the land in Alberta, they are often far more productive than the adjoining upland. Because of this, they are used extensively by wildlife, agricultural producers and recreationists.

Importance of Healthy Riparian Areas

Quality water is an essential component for all life (e.g., domestic drinking water, aquatic life). In well-managed watersheds, riparian areas store water and recharge groundwater during floods and rainstorms. Stored groundwater is gradually released back into streams, providing water during late summer, fall and winter.

Well vegetated riparian areas help reduce the impact of flooding by dissipating water energy before adjacent lands are damaged by erosion. Sediment carried by flood waters is filtered through and trapped in riparian areas. This helps to build and stabilize stream banks. Healthy riparian areas can also filter sediment and nutrients from surface run-off from adjacent lands.

Riparian areas often support a unique mixture of trees and shrubs that can maintain a wide variety of plant and wildlife communities. Both the density and diversity of plant and wildlife species is normally higher in riparian areas than on adjacent uplands. In Alberta, about 80 per cent of the province's wildlife depend on these areas for part or all of their life cycle. In addition, wild animals use riparian areas as corridors to move from one area to another. Riparian areas are highly valued for many recreational pursuits such as hunting and fishing, bird watching and other outdoor activities.

Recreational Developments and Shore Land Uses

The land manager works closely with recreational users, cottage owners and municipalities to promote careful management of riparian areas on public land. Developments that affect publicly owned riparian areas may require authorization from the land and resource manager. These uses may also be subject to specific management practices.

Riparian areas that are next to lakes are generally either the wet meadows at a water body inlet or outlet, or the surrounding treed areas. The land manager often recommends to the municipality that it set aside these and adjacent upland areas as environmental reserves when a new subdivision is created next to a lake. These reserves separate the

ABOUT PUBLIC LANDS

riparian area and bed and shore from the recreational subdivision.

Industrial Use of Riparian Areas

Water bodies and adjacent riparian areas on public land are often affected by various industrial activities. Typical activities include sand and gravel extraction, as well as linear disturbances involving pipeline and seismic line crossings. The type of soil, slope and slope stability, size of a crossing and the time of year will determine how a site may be developed. Users are required to prevent silt and sediment from affecting fish spawning activities, recreate lost fish habitat and rebuild embankments to prevent erosion. Vegetation cover should also be restored and protected from grazing until it's established.

If you require updated information, contact any of the offices below:

Alberta Sustainable Resource Development
Lands Division
Rangeland Management Branch
9920 - 108 Street
Edmonton, Alberta T5K 2M4
Telephone: (780) 427-3595

Forestry Division
Forest Management Branch
9920 - 108 Street
Edmonton, Alberta T5K 2M4
Telephone: (780) 422-4590

OR call the Lands or Forestry office in your area.

OR you can visit the Lands Division Website:
http://www.srd.gov.ab.ca/land/c_1.html