Working in Wetlands

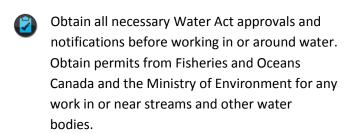


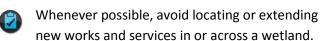
Wetlands occur where the water table is near the soil surface and includes areas like ponds, cattail marshes and seasonally-flooded areas. Wetlands are valuable to us since they absorb water runoff, and filter and replenish ground water. They are often biologically rich and support a variety of wildlife from insects, to frogs, birds and turtles.

- Wetlands pop up in surprising places--from cattails in roadside ditches to low areas that are flooded for a few months in the spring.
- Many local wildlife species are adapted to using these seasonal wetlands, so even small wet areas can be very valuable for wildlife.
- As a result of river channelization and human development many ponds and marshes have been lost. Climate warming is also increasing the loss of historic wetlands.

Local governments have an important opportunity to manage, restore and enhance existing wetlands so that people can continue to enjoy the rich wildlife found here from colourful dragon flies and birds to frogs and turtles.

When planning work in wetlands -







Maintain water levels. Do not alter the hydrology of the wetland/riparian area by restricting the inflow or outflow of surface, sub-surface or groundwater or reducing residence time of waters.



Ensure that any works are carried out within approved timing windows (usually August to April) to minimize disruption to fish and breeding or nesting wildlife.

- ✓ Plan for erosion and sediment control. Prevent the movement of sediments, road salts and other deleterious substances into wetlands. Establish vegetated swales or other features to prevent the movement of sediments or contaminants into sensitive habitats.
- ✓ Use non-toxic oils for machinery working in a wetland. Wash cement-covered equipment far from watercourses to avoid polluting the water. Equip storm sewers with in-pipe and end-ofpipe features to protect water quality (e.g. oilgrease separators, sediment traps).
- Restore or enhance any disturbance to wetlands. Rehabilitation planning involves site assessment and establishing rehabilitation goals based on local conditions. Make a plan to revegetate the work area. Using native plants will reduce the need for maintenance.
- Minimize the use of pesticides and herbicides near water bodies.

Species that depend on wetlands include:



Amphibians:

- Protect identified breeding wetlands and nearby grassland foraging habitat.
- Maintain water levels during spring and summer.
- Create ponds to compensate for loss of natural breeding habitat.
- Install culverts under roads and amphibian fences along roads near areas with high numbers of amphibians

Painted Turtles:

- Turtles prefer ponds or sluggish streams with variable water depths and 80% of the area less than 3 meters deep. Muddy or sandy bottomed wetlands are needed for hibernation.
- Maintain emergent plants such as cattails along the edges of the wetland.
- Turtles lay their eggs in unvegetated south-facing slopes or banks with light soil. They may travel over 100 meters to nest sites. Use "turtle crossing" signage on roadways if needed.
- Position rocks or logs in shallow water for basking sites.
- Keep people and pets from entering wetlands by using fencing or raised boardwalk trails

Guidelines and Best Management Practices for Wetlands

BC Ministry of Environment: Standards and Best Management Practices for Instream Work

Wetlands Stewardship Partnership: Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia

Text: Margaret Holm, Anna McIndoe, 2011.

Photos: Ducks Unlimited, Dick Cannings, J. Kevin Dunn.



