

Environmental Guidelines for Urban and Rural Land Development in British Columbia



Are you planning a development on your property? If your property includes or is near to streams or wetlands, it may provide habitat for the Western Toad. This fact sheet will provide you with important information about complying with the law and protecting this species while still benefiting from the enjoyment and value of your property.

Western Toads can be found from the valley bottoms to above the winter snow line across British Columbia. Unlike frogs, toads have soft, dry, warty skin with a conspicuous, oval-shaped gland behind the eye. This external skin gland (“parotoid”) secretes an alkaloid milky substance to deter predators. Western Toads vary in colour from brown to green and tan, and have a characteristic light coloured stripe down their back.

Western Toads can live 9–11 years but do not breed until two to six years of age. They migrate between breeding ponds, upland summer (post-breeding) ranges and over-wintering areas. Extensive territories up to 7 km wide have been documented. Toadlets leave their birth wetland *en masse*, making them especially vulnerable to being killed on roads. They do not always follow the same route from their natal ponds, often going in different directions each year.



AT RISK

Western toads are **Blue-listed** in British Columbia. They are vulnerable because:

- Human activities—especially roads and urban development that compromise forests and wetlands—are leading to the loss of suitable habitat and the creation of migration barriers for amphibians;
- Fragmentation of breeding and terrestrial habitats by road networks and development can pose significant barriers to movement; and
- Toads and toadlets have annual migrations which are especially risky when roads and highways cross their route.

You can help these unique creatures through the careful planning of development or other disturbance activities.

LEGALLY PROTECTED

The Western Toad is protected under the B.C. *Wildlife Act* and is a species of **Identified Wildlife** in this province. The federal *Fisheries Act* prohibits the harmful alteration, disruption or destruction of fish habitat, the same habitat that the Western Toad may depend on for breeding and rearing. A permit from **FrontCounter BC** is required before catching or killing toads. Modifications to toad habitat may also require authorization under the *Water Act*, the *Fisheries Act* and/or *Riparian Areas Regulation*.

DEVELOPMENT GUIDELINES

More detailed guidelines for protecting amphibians and their habitat are provided in *Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia* and *Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia (2014)*.

- ☑ Design and locate your development to avoid disturbing critical habitat. Talk to your local government about ways to concentrate development away from areas with high environmental values through density bonusing or clustering.
- ☑ Identify and set aside core zones and management (buffer) areas to protect critical features such as wetlands, adjacent forests and migration corridors. Core areas should be 30 m from the high water level for wetlands and be set aside as “no disturbance zones” (not even used for recreational trails). It is important that naturally vegetated wildlife corridors be retained that connect the wetlands to large patches of natural habitat. See [Table 4.1](#) in *Develop with Care* for recommended buffer distances.
- ☑ Identify migration corridors. If these corridors cross a busy roadway, consider using fencing to direct toads to a safe passageway. An amphibian biologist can help you to design a ‘toad crossing’.
- ☑ Apply best practices to construction including containment of construction and hazardous wastes.
- ☑ Do not to allow sediment and runoff from construction sites to enter nearby streams and wetlands.
- ☑ Protect and connect breeding and hibernating habitats.



- ☑ Never drain or fill wetlands, and maintain streamside habitats in as natural a condition as possible. Ephemeral ponds are especially important for these toads.
- ☑ Maintain adjacent habitat in as natural a condition as possible.
- ☑ Maintain and restore connectivity corridors that have been impacted by development, logging, and other land use activities.
- ☑ Check with your local government to see if there is a bylaw that protects environmentally sensitive areas or unique features in your area, and if so what terms and conditions apply.

For more information: <http://www.env.gov.bc.ca/wld/BMP/bmpintro.html>

Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia
Guidelines for Amphibian and Reptile Conservation during Urban and Rural Land Development in British Columbia
(2014)

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

Changes in or about a stream: http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/

Riparian Areas Regulation: http://www.env.gov.bc.ca/habitat/fish_protection_act/riparian/riparian_areas.html

FrontCounter BC (<http://www.frontcounterbc.gov.bc.ca/>) or contact 1-877-855-3222