

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 Northern Red-legged Frog. This fact sheet will provide you with important information about complying with the law and protecting this species while still benefitting from the enjoyment and value of your property.

Red-legged Frogs get their name from the translucent red underside along the hind legs that deepens in intensity as the frog ages. They have smooth brown, gray, or red skin, partially webbed feet and long hind legs. Their dark mask borders gold-coloured eyes which are oriented laterally.

These frogs breed in wetlands and ponds in the spring. The tadpoles grow quickly, changing to adult form during the summer. Once they finish breeding, the adults leave the wetlands and travel long distances through upland and riparian forests. They are loyal to their homes and will return to natal wetlands even if these are drained or are blocked—leading to local population extinctions.

This species may be confused with the Oregon Spotted Frog, but their ranges overlap very little in B.C. Unlike the Oregon Spotted Frog, adult Red-legged Frogs may be found away from water in moist forested sites.

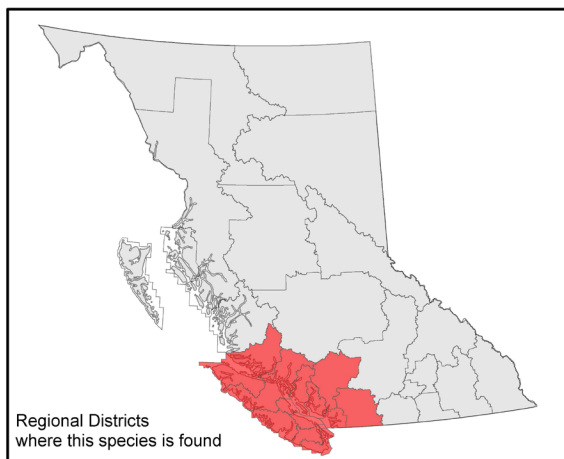
AT RISK

Red-legged Frogs are **Blue-listed** in British Columbia. They are vulnerable because:

- ◆ Like all frogs, they have skin sensitive to pollution, ultra-violet radiation and drought. Urban environments aggravate these effects;
- ◆ It is threatened by the introduced American Bullfrog, which eat other frogs, compete with all native amphibians for habitat, and may carry the chytrid fungus which is responsible for amphibian deaths; and
- ◆ 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 all amphibians.

LEGALLY PROTECTED

The Red-legged Frog 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 Red-legged Frog may depend on for breeding and rearing. A permit from **FrontCounter BC** is required before catching or killing frogs. Modifications to frog habitat may 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 frog migration corridors. Core areas should be 30 m from the high water level for wetlands and be “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 forest.
- ☑ Avoid significant disturbances during development by delineating buffers and no disturbance areas (including



migration corridors) through use of temporary fencing and signage.

- ☑ Control all sediment and surface runoff on construction sites and prevent it from entering nearby streams and wetlands.
- ☑ Avoid year-round garden ponds that can attract American Bullfrogs. Ponds that dry in the late summer are better for Red-legged Frogs, as the predatory bullfrogs cannot reproduce successfully in them.
- ☑ Protect and connect breeding habitats:
 - ◆ Avoid activities that necessitate relocation of Red-legged Frog populations such as filling in wetlands, road construction and drainage culverting;
 - ◆ Maintain adjacent forest cover in as natural a condition as possible; and
 - ◆ 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 restrictions 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

*Photos: Header - Frog habitat: Pamela Zevit; Northern Red-legged Frog: Marlene Caskey; Red frog legs: Caroline Astley.
Back page - Northern Red-legged Frog: Ryan Durand. American Bullfrog (invasive): W Price.*