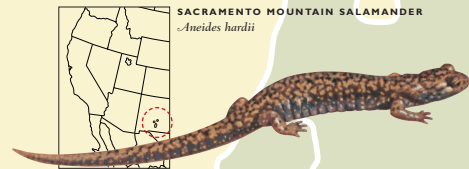




CALIFORNIA TIGER SALAMANDER
Ambystoma californiense



SANTA CRUZ LONG-TOED SALAMANDER
Ambystoma macrodactylum croceum



SACRAMENTO MOUNTAIN SALAMANDER
Aneides hardii



DESERT SLENDER SALAMANDER
Batrachoseps major aridus

Imperiled Amphibians of the West

THE NEED FOR PROTECTION

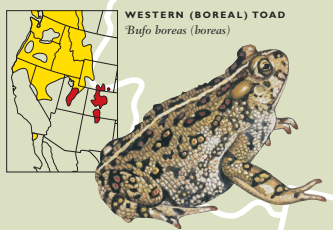
Over the last few years, numerous reports have documented that amphibians are in catastrophic decline worldwide – yet few people realize the extent of amphibian decline in our own backyard. In the United States, 21 species of amphibians are formally protected under the Endangered Species Act, and another 12 are candidates for protection. Frogs and toads have been hit particularly hard, especially in the West. The Sierra Nevada region alone harbors three imperiled amphibian species – the Yosemite toad, the mountain yellow-legged frog, and the California red-legged frog – which already are extinct in 50-99% of their historic ranges. In fact, every species on this poster is at risk of extinction in all or part of their ranges.

Amphibian decline is linked to a number of factors, including disease and pollution, but the foremost cause is *loss of habitat*.

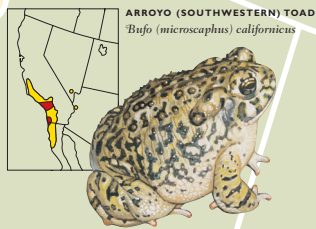
Most herpetologists agree that local habitat destruction is the biggest threat facing amphibians today. Livestock grazing, stream channelization, dam construction, timber harvest,

off-road vehicle use, mining, agriculture, residential and recreational development, introduced species, and the application of herbicides and pesticides comprise a partial list of harmful habitat-degrading activities driving amphibians to extinction. The need for habitat protection is paramount if we wish to save these unique native species.

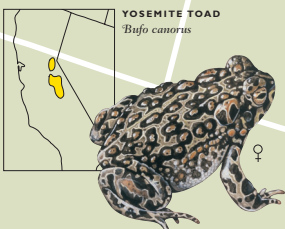
Indeed, high quality freshwater habitats are among the most imperiled habitats on earth, declining at a rate even greater than that of tropical rainforests. Amphibians and all other sensitive species that rely on clean streams, intact riparian areas, and undisturbed wetlands are in serious trouble – over half of all the imperiled species in North America are aquatic. Amphibians are particularly sensitive to watershed disturbance because most species have both aquatic and terrestrial life stages. As such, they can be viewed as indicators of watershed health, and their perilous condition tells us that our nation's watersheds are in urgent need of preventative medicine.



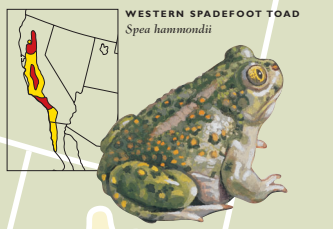
WESTERN (BOREAL) TOAD
Bufo boreas (boreas)



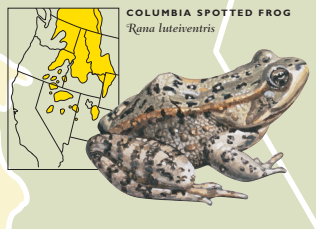
ARROYO (SOUTHWESTERN) TOAD
Bufo (microscaphus) californicus



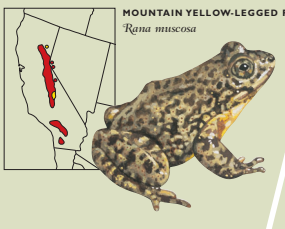
YOSEMITE TOAD
Bufo canorus



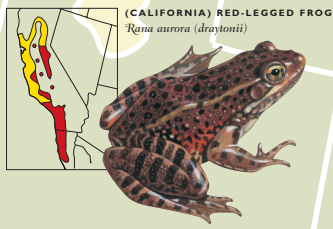
WESTERN SPADEFOOT TOAD
Spea hammondi



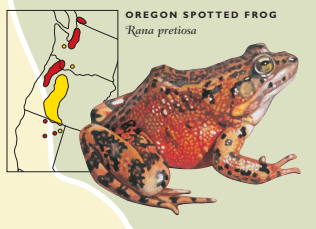
COLUMBIA SPOTTED FROG
Rana lateralis



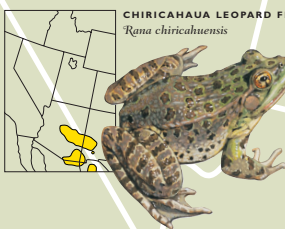
MOUNTAIN YELLOW-LEGGED FROG
Rana muscosa



(CALIFORNIA) RED-LEGGED FROG
Rana aurora (draytonii)



OREGON SPOTTED FROG
Rana pretiosa



CHIRICAHUA LEOPARD FROG
Rana chiricahuensis



RELICT LEOPARD FROG
Rana onca

WHAT WE CAN DO

In response to the amphibian crisis, Pacific Rivers Council has launched an Amphibian Protection Program that utilizes scientific, legal, and educational tools to secure protection of native amphibians and raise public awareness about their declining numbers. By working closely with scientists, state and federal agencies, and concerned individuals, we can develop conservation plans that:

- Protect existing healthy amphibian populations by minimizing watershed disturbances.
- Protect priority habitats – including riparian areas, seeps, springs, and wetlands – across the landscape and identify special areas that serve as refuges for the most at-risk species.
- Link the recovery of declining amphibian species to the protection and recovery of the aquatic ecosystems on which they depend.

PACIFIC RIVERS COUNCIL

Pacific Rivers Council's goal is to ensure that adequate protection of imperiled amphibians becomes a conservation priority in the West and throughout the nation. By supporting ongoing research into amphibian declines and working toward their recovery, these and other species dependent on healthy freshwater ecosystems have a chance at survival. For more information go to www.prcrivers.org.

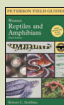


PACIFIC RIVERS COUNCIL
P.O. Box 80796 • Eugene, OR 97440
541.345.0119 • www.prcrivers.org

MAP LEGEND

- Yellow box: Current Range (imperiled within all or part of range)
 - Red box: Imminent Risk of Extinction
- (maps and images not to scale)

The historic ranges are not depicted but generally were much greater than current ranges and supported more robust populations of the featured species.



Illustrations by Robert C. Stebbins

Consult A Field Guide to Western Reptiles and Amphibians for detailed descriptions of these and other species, including information for making accurate field identifications, discussion of survival status, and more.