

California Red-legged Frog/California Garter Snake Problem Statement

Background:

California Red-legged Frog

The California red-legged frog (*Rana aurora draytonii*) is the largest species of frog in the western United States and is found in and near sheltered backwaters of ponds, marshes, springs, streams and reservoirs where their optimal habitat of deep pools with dense stands of overhanging willows (*Salix* sp.) and a fringe of cattails occur. Accessibility to sheltered habitat is considered essential (USFWS 2008a). The California red-legged frog has been documented to travel over land between water sources during winter rains and can use large cracks in the bottom of dried ponds as shelter to maintain moisture and avoid heat and sun exposure in dry seasons (USFWS 2006). The California red-legged frog diet is highly variable though invertebrates are the most common prey (USFWS 2008a).

California red-legged frogs have been extirpated from much of its former historic range and are now most secure in central coastal California. The California red-legged frog was listed by USFWS as a threatened species in 1996 primarily due to threats from habitat loss/degradation, predation, over-harvesting, competition with non-native species, are the primary factors for the decline in the frog populations (USFWS 2008a). Loss of habitat and trampling of habitat are both issues related to recreational activities at GGNRA.

San Francisco Garter Snake

Threats to the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) are the same as for the California red-legged frog since the California red-legged frog is the primary prey of the San Francisco garter snake. The San Francisco garter snake was listed by the USFWS in 1985 as endangered (USFWS 2008b). The snake's preferred habitat is a densely vegetated pond near an open hillside where they have basking areas, cover, and food. Cattails (*Typha* sp.), bulrushes (*Scirpus* spp.), and spike rushes (*Juncus* spp. and *Eleocharis* spp.) are species preferred as cover. On the coast snakes hibernate during the winter and adults may aestivate in rodent burrows during months when ponds dry. The primary food of the San Francisco garter snake is the California red-legged frog but they will also capture small bullfrogs. Young snakes depend primarily on Pacific tree frogs (*Hyla regilla*) for food (USFWS 2008b).

Within GGNRA, the habitat of the red-legged frog and the San Francisco garter snake is found at Mori Point, San Mateo County and Stinson Beach/Redwood Creek watershed in Marin County. Both species have been documented as occurring only at Mori Point and habitat restoration and protection is in progress at that location. Current GGNRA regulations require dogs to be on leash when at Mori Point however, compliance has not

been adequate. Both species are subject to impacts from dogs off-leash in several ways: 1) dogs may trample plants the form cover along the pond edges; 2) pond sediments and habitat may be disturbed if dogs access the ponds; 3) dogs accessing the ponds may also trample tadpoles of the red-legged frog; and 4) dogs may capture frogs and/or snakes causing direct mortality.

Ref:

USFWS. 2008a. *Information about the California Red-legged Frog*. Downloaded file March 5, 2008.

http://www.fws.gov/ventura/sppinfo/profiles/details_amphibs.cfm?speciesid=19

USFWS 2008b. *Species Account San Francisco Garter Snake*. Downloaded file March 5, 2008.

<http://www.fws.gov/sacramento/es/animal-spp-acct/sf-garter-snake.pdf>

USFWS. 2006. *Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Red-legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities; Final Rule*. Federal Register, Vol. 71, No. 71. Thursday April 13, 2006. 19244-19292