Measuring the Health of the Mountain: A Report on Mount Tamalpais' Natural Resources (2016) (Chapter 21 excerpts)



# **RIVER OTTER**

## Lontra canadensis



Condition: Good Trend: Improving

Confidence: Moderate



### WHY IS THIS RESOURCE INCLUDED?

North American river otters are charismatic predators that make excellent ambassadors for watershed conservation and wetland restoration. They are highly observable and often detected, which also makes them good candidates for citizen science monitoring. River otters are considered an indicator species and their presence is a hopeful sign of improving watershed conditions.

These apex aquatic predators play an important role in ecosystem health, as they eat fish, crustaceans, invertebrates, birds, and amphibians. Their high energetic demands require them to consume 15–20% of their body weight in prey daily. North American river otters spend 75% of their time on land, with the remaining time hunting and traveling in waterways. Their use of both terrestrial and aquatic habitats, combined with their attractiveness to the public, make them an ideal species for fostering public engagement in Mt. Tam's watershed health.

### **OVERALL CONDITION**

Historically extirpated from the San Francisco Bay Area, the return of North American river otters after a decadeslong absence is a true wildlife success story. Their populations here have significantly increased both in number and distribution over the last decade. Currently, North American river otters can be found in every part of Mt. Tam's watersheds, from the headwaters to the coast and San Francisco Bay. Observational data from the River Otter Ecology Project also indicate the presence of otters in most water bodies in the One Tam area of focus.

### **DESIRED CONDITIONS**

The desired condition is that North American river otters are present in all suitable water bodies in the One Tam area of focus.

#### **STRESSORS**

**Human-related Stressors:** Historic persecution, loss of habitat, and poor water quality were probably major factors in the extirpation of North American river otters from the San Francisco Bay Area. Fur trapping may have also contributed to their decline. Today, they are susceptible to being hit by vehicles as they traverse terrestrial habitats.

**Fishery Declines:** Fish are a primary prey for North American river otters, so declines or collapses of fisheries can have serious impacts on their population numbers and distribution.

**Watershed Development:** Because of their dependence on aquatic ecosystems, the loss or degradation of these habitats—as a result of human development or land use changes—can negatively affect North American river otters. They are also vulnerable to aquatic pollution, as well as secondary exposure to rodenticides.

**Disease:** North American river otters are susceptible to diseases such canine distemper, feline and canine parvovirus, and rabies, and may be susceptible to mercury poisoning from the fish they prey upon.

### **METRICS AND GOALS**

Metric	Condition Goal(s)	Status
<b>Metric 1</b> North American river otter presence	North American river otters are present in all suitable water bodies	$\bigcirc$

#### **INFORMATION GAPS**

**Population Data:** While North American river otters have been documented in Mt. Tam's watersheds, little is yet known known about their population demographics beyond their presence and limited abundance data. Data on their home range and dispersal patterns are also lacking, and the distribution and abundance of prey are poorly understood. River Otter Ecology Project observational and genetic work in progress should ultimately help to answer some of these questions.

**Water Quality Impacts:** Insufficient information is available about how the health of North American river otters is linked to water quality indicators for toxins and pathogens.