During 5/29 – 11/22, 2017, The River Otter Ecology Project continued long-term monitoring of recovering river otter populations, including within Ca State Parks lands. Monitoring included camera trapping at 2 sites (Please see Figure 1) for population numbers, pup numbers, and behaviors; surveys on foot for otter track and sign; fecal sample collection for future genetic and prey analysis, and sample collection for Salmonella and/or Vibrio spp.

Because individual otters are indistinguishable from each other, we conservatively estimate the population numbers from each area to be the maximum number seen on camera at once. Because of this, our numbers likely represent a slight undercount.
Results/Discussion

Camera Trapping

Figure 1: Camera Sites, 2017

Population, Pup numbers
During 6 years of camera trap monitoring of Devils’ Gulch (DG01), no river otter videos have been collected.

Our camera trap at LC01 detected a total of 5 river otters, including 2 juveniles during 2017. A SPAWN (Salmon Protection and Watershed Network) biologist observed 6 otters of unknown age downstream of Devil’s Gulch, close to the “Swimming Hole” bridge, December 31, 2017. The otter was eating a newt, Taricha granulosa or Taricha torosa. This is of great interest due to the toxins the newts carry. We have no other information about this. Please see photo below.
Surveys

Surveyors detected no latrine sites downstream of the LC01 camera during summer, 2017.
**Disease Surveillance**

During the 2017 season, we collected fecal samples from LC01 for *Salmonella* and/or *Vibrio spp* testing, in partnership with The Marine Mammal Center.

Possible *Vibrio fluvialis* was isolated from one sample. The isolate will be sent to UC Davis for further testing.

**Conclusion**

River otters are apparently thriving along Lagunitas Creek, are giving birth and increasing their populations slowly. We believe that otters spend some time in Lagunitas Creek fishing and eating crayfish, but we have not found evidence of natal dens. We suspect river otters move upstream from Tomales Bay as well as downstream from Kent Lake on occasion.

We've found no evidence of river otters on State Parks land along Redwood Creek in 2017.

Continuing research goals are to begin a prey study including State Parks lands and to increase our understanding of populations/ranges of the reservoir and Lagunitas Creek otters using molecular methods.