



Water Quality Monitoring

Presidio of San Francisco

Resource Brief

Above: Mountain Lake is one of several natural surface water features remaining in the Presidio, and one of the sites where water quality is monitored. Photo by Jessica Weinberg McClosky.

Below: Water quality technician collecting samples in Mountain Lake. Photo by Lea Suzuki, The San Francisco Chronicle.

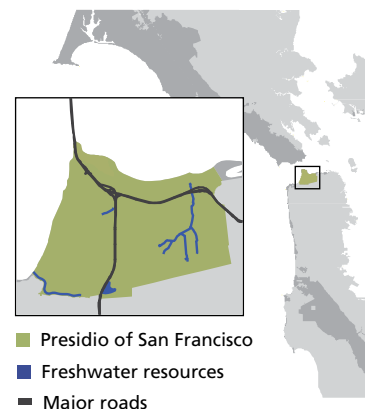


Below: Water quality monitoring site in Tennessee Hollow's east tributary. Photo by Angela Pincetich, NPS.



Why Is Water Quality Important?

Water quality is an indicator of the condition of aquatic habitat and is also an important indicator of the overall health of watersheds. Freshwater quality has a direct impact on marine water quality, riparian habitat, wetlands, and aquatic macroinvertebrates. It also impacts threatened and endangered amphibians, reptiles, and fish that depend on these habitats, as well as human recreation and enjoyment.



Why Do We Monitor Water Quality in the Presidio?

Although many of the natural features of the Presidio of San Francisco have been altered by historical Army use and urbanization, several water bodies remain. These include Mountain Lake and Lobos Creek in the southwest portion of the Presidio, Dragonfly Creek in the northwest, and Tennessee Hollow in the east. In partnership with the Presidio Trust, National Park Service Inventory and Monitoring Program staff conduct monthly water quality monitoring at 16 sites in the Presidio to determine long-term trends in water quality parameters such as water temperature, pH, dissolved oxygen, nitrate (as nitrogen), phosphate, and coliform bacteria.

How Do We Use the Monitoring Data?

- To determine the extent to which lakes and streams at the Presidio meet federal and state water quality standards for recreation
- To guide and evaluate projects to improve water resources, such as the ongoing Mountain Lake restoration efforts

What Have We Learned?

Five years of monitoring has shown that water quality can vary greatly from month to month and site to site in the Presidio's urban environment. Coliform bacteria and dissolved oxygen are especially variable, and can respond quickly with precipitation or seasonal drought. In the future we anticipate that consistent water quality monitoring will allow us to evaluate long-term trends and learn about the effects of active remediation and ecological restoration projects at the Presidio.

To learn more, visit www.sfnps.org/water_quality
Summary by Angela Pincetich, March 2014.

For More Information

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