

# Impacts of and Responses to Sudden Oak Death on Marin Watershed Lands<sup>1</sup>

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## Abstract

The Marin Municipal Water District (MMWD) stewards 22,000 acres of watershed lands in Marin County. Recognized as a biodiversity hotspot, with over 1,000 plant taxa in more than 100 recognized communities, it is one of the first introduction sites of *Phytophthora ramorum* in California. In part to understand and monitor this new threat, MMWD completed its first Vegetation Classification and Map in 2005 with support from California Native Plant Society, California Department of Fish and Wildlife, and Aerial Information Systems (AIS). A 2010 re-map of forested areas with support from the USDA Forest Service and AIS showed the progression of SOD and shift in vegetation types within impacted areas, and a 2015 map tracks increasing canopy gaps and additional impacts to oak woodlands (AIS 2015). Ground sampling and maintenance records reveal new hosts (Rooney-Latham and others 2016), community shifts, threat interactions, and increasing costs and fire danger from dead and downed trees. Responses to forest disease vary based on severity, location, and vegetation type impacted, but include cutting dead and down trees and altering planting palettes.

## Literature Cited

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