



RMP

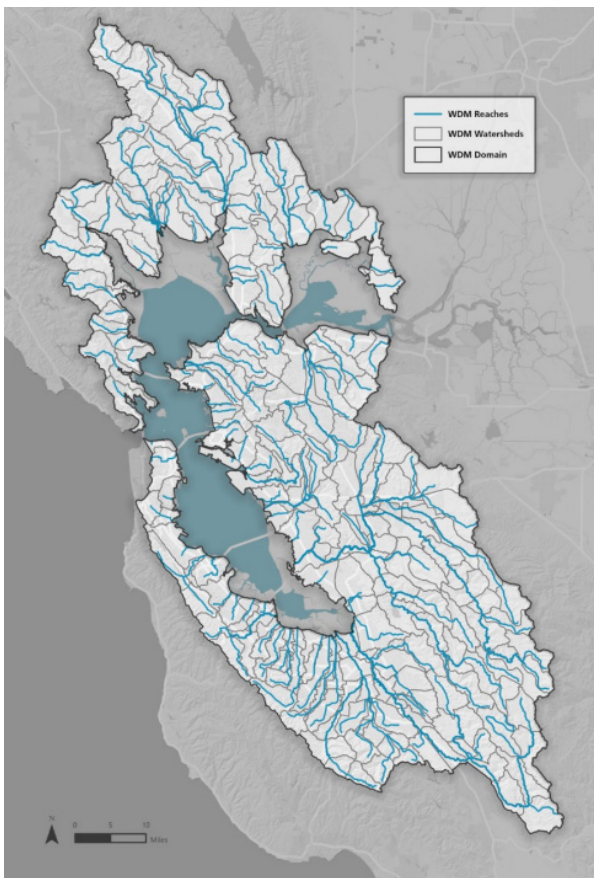
REGIONAL MONITORING
PROGRAM FOR WATER QUALITY
IN SAN FRANCISCO BAY

sfei.org/rmp

Plain Language Summary

Integrated Watershed-Bay Modeling Strategy

Computer models can represent how pollutants move from the land surfaces surrounding San Francisco Bay (its watersheds) into the Bay and through its water and sediment. The RMP has developed a strategy to link different models of watersheds and the Bay. Watershed models predict runoff and pollutant levels, while Bay models predict how water, sediment, and pollutants move and change over time within the Bay.



Key Points

- RMP scientists will **combine models to simulate how pollutants move** from the land to and within the Bay, as well as how they accumulate in aquatic life.
- Computer models will also help predict how management decisions or environmental changes will affect the Bay.
- Priority pollutants to model include **mercury**, **PCBs** (banned industrial chemicals), **microplastics**, and **other contaminants of emerging concern** (a set of many thousands of under-studied or under-regulated chemicals).
- Because many pollutants bind to particles of sediment (sand, silt, and clay), **modeling sediment is a high priority**. Sediment modeling also supports marsh restoration and shoreline climate resilience efforts.

Implications and Future Directions

The models will be accessible community resources that others can use. They will improve our understanding of water pollution

and provide timely information to water quality managers to support the long-term health of San Francisco Bay.