

Current Hazard Mitigation Actions

Mitigation Action	Hazards Mitigated/ Goals Met	Jurisdiction/ Responsible Agency	New, Existing, Completed, Removed	Estimated Cost and Potential Funding Source*	Timeline/ Priority	Comments/ Progress
Inspect Woodrat 1 and Woodrat 2 reservoir impoundments and install any recommended improvements to structure(s) or spillway(s).	Dam failure	BCPUD	New	Cost TBD	2 - 5 years	Reduces the risk of a dam failure that could destroy the district's water treatment plant (located below Woodrat 1) and/or risk of loss of these emergency stored water supplies.
Relocate gravity sewer main off of Terrace Avenue at Surfer's Overlook	Debris Flow, Erosion, Landslide, Post-Fire Debris Flow	BCPUD	New	Est. Cost \$500,000	2 – 5 years	Eliminates the risk of a sewer main failure/spill due to bluff erosion at this location (BCPUD relocated its high pressure water main off of this location in 2013).
Retrofit or replace the existing concrete impoundment structure at the district's upper diversion point on the Arroyo Hondo Creek.	Debris Flow, Erosion, Landslide, Post-Fire Debris Flow	BCPUD	New	Cost TBD	2 – 5 years	Eliminates the potential for impoundment of erosion materials/debris behind this structure and the need for associated reservoir siltation removal projects.
Inspect and install recommended improvements to the existing radial gate (or replace radial gate) at the district's lower diversion point on the Arroyo Hondo Creek.	Drought	BCPUD	New	Cost TBD	1 -2 years	Ensure reliability of the district's water supply during low creek flow (drought) conditions; eliminate leaks/water loss currently occurring when this diversion point is in use.
Evaluate feasibility of desalination, water recycling, groundwater recharge or additional groundwater sources as supplemental sources of water supply.	Drought	BCPUD	New	Cost TBD	2 – 5 years	Add resiliency to the district's water supply and prepare for climate change impacts to surface water sources.
Replace aging and deteriorating steel water mains on the Bolinas Mesa	Drought	BCPUD	New	Est. Cost \$2.5 million	3 – 5 years	Ensure reliability of district's water supply by reducing unaccounted for water loss due to leaks (currently estimated at 5,000 gallons per day, or 5-10% of district water production).

Seismic retrofit of the district's West Tank (potable water storage tank, 440,000 gallons)	Earthquake	BCPUD	New	Est. Cost \$750,000	1 – 2 years	Retrofit of critical water storage tank that is vulnerable to damage in an earthquake (BCPUD completed retrofit of East Tank in 2021).
Replace existing district administrative building	Earthquake	BCPUD	New	Cost TBD	2 – 5 years	Building is 100+ years old and not built to current code; inspection confirms replacement needed; site assessment underway. Eliminate threat to public safety.
Replace (or slip line) existing A/C water and/or sewer mains with C900	Earthquake	BCPUD	New	Cost TBD	4 – 5 years	Reduce possibility of catastrophic failure of critical facilities during earthquake.
Conduct feasibility analysis and upgrade sewer treatment facility to perform during extreme rainfall (50 year+) events.	Flooding	BCPUD	New	Cost TBD, est. is \$5 – 8 million	2 – 5 years	Enable the district to operate in compliance with its Waste Discharge Order and eliminate the possibility of discharging untreated wastewater.
Repair County-owned seawall under Wharf Road to stabilize it and prevent land subsidence.	Land Subsidence (Sinkhole)	BCPUD/ County of Marin	New	Cost TBD	1 -2 years	Eliminate recurrent sinkholes in Wharf Road and protect critical district infrastructure (water and sewer).
Inspect sewage treatment and storage pond levees and install any recommended improvements.	Levee Failure	BCPUD	New	Cost TBD	2 – 5 years	Reduces risk of levee failure and catastrophic
Conduct feasibility study and implement project to retrofit or relocate existing sewer lift station.	Sea Level Rise; Tsunami	BCPUD	New	Cost TBD	4 - 5 years	Reduce or eliminate threat posed by sea level rise to critical sewer pump station.
Consult with licensed arborists and/or registered foresters and remove trees on district properties that pose a threat to public safety during severe wind events.	Severe Weather – Wind, Hail, Lightning	BCPUD; Fire District	New	Cost TBD**	1 – 2 years	Reduce threat to public safety during extreme wind event storms in Bolinas.
Consult with fire authorities and licensed arborists/registered foresters and implement recommended projects to remove trees on district property and replace them with safer vegetation.	Wildfire; Severe Weather - Heat	BCPUD, Fire District	New	Cost TBD**; Fire Safe Marin, CalFire	1 – 2 years	Reduces chance of wildland fire and supports environmental restoration.
*BCPUD will seek state and/or federal funding for all eligible projects	** potential private grants					

