

INFORMATIONAL SHEET

Highway 37 Tidal Flooding

Between Highway 101 and Atherton Avenue

WHAT'S THE PROBLEM? High tides and heavy rain can cause flooding of Highway 37 between Highway 101 and Atherton Avenue. This can be partial flooding of a single lane, or significant flooding, which can submerge all lanes of Highway 37. The highway, maintained by Caltrans, is an important artery for Marin traffic, traveled by over 40,000 people per day.

WHY AND WHEN DOES IT OCCUR? The Novato Creek Watershed, the largest in eastern Marin, drains 45 square miles of land on its way to San Pablo Bay. There are many tributaries that flow into Novato Creek, such as Vineyard Creek, Warner Creek, Ignacio Creek, Arroyo de San Jose and Pacheco Creek to name a few. During storms, the hillsides of the watershed become saturated, and the stormwater flows into the tidally influenced Novato baylands. The area is bisected by railroad tracks and Highway 37, and the waterway needs to flow under the Caltrans Highway bridge. The higher water levels from the runoff can linger even after a storm has passed, especially when the flow is met by higher bay tides.

During times of intense rain and/or high tides, the floodwater entering Novato Creek often exceeds the flow capacity of the existing highway bridge. However, that is not the main contributor in flooding the roadway. Levees in the vicinity also overtop and floodwaters eventually inundate Highway 37. This has become worse over the years as the roadway has sunken due to the fact that it was built on top of soft, bay mud. Some stretches of the roadway have dropped as much as 2 feet. Furthermore, sea-level rise (SLR) is predicted to increase by 36" to 66" by 2100, so the situation with Highway 37 will continue to worsen in coming years if left unaddressed.

WHAT CAN BE DONE TO FIX THE PROBLEM? There is no simple solution to the problem, but Caltrans, working with Marin, Sonoma, Solano, Napa counties and UC Davis, developed a study that looked at long term solutions to the Highway 37 flooding and SLR issues. In conjunction with local agencies, Caltrans is considering several options to address current sea level rise projections. These options include raising the roadway onto an elevated embankment or implementing various causeway/bridge systems. The costs range from \$1.26 billion to \$4.3 billion and would require years to complete. In the meantime, Caltrans is moving forward with interim fixes in the range of \$8 million, which includes building a water level safety barrier, updating culverts with potential tide gates, and improving pump activity.

The Marin County Flood Control District has identified options to widen Novato Creek and set back levees which should reduce water elevations under some flooding conditions. More information on this topic can be found on [the Novato Watershed website](#). The effectiveness of these measures is improved when coupled with improvements to existing highways and rail alignments. Caltrans and the County of Marin will continue to explore opportunities and seek funding to make road and flood control improvements to this corridor.

WHAT CAN BE DONE NOW? We must all learn to be aware of and have a plan to respond to tidal conditions and flooding in order to reduce the impacts it may have on our lives. This may include using alternative routes and/or allowing extra time for your trip – especially during peak times of commuter and holiday travel. Also the public can review the 2016 [UC Davis Road Ecology Center's stewardship report](#) on Highway 37 to learn more about the region's sea level rise and project recommendations.

During a storm event, Caltrans and the County of Marin are committed to working together to mitigate flooding issues as soon as possible and ease the impacts to our local roads - including signage and coordination with law enforcement to help with traffic control.

Resources which can help you plan ahead include:

- Monitoring current traffic conditions and transit information at [511.org](#)
- Following Caltrans District 4 (@CaltransD4) and the California Highway Patrol (@CHPMarin) on Twitter
- Following Marin County Department of Public Works on Twitter (@DPWMarin) and on Facebook (@MarinDPW)
- *If you are still unable to find your necessary information, please email Caltrans District 4's Public Information Officer Steve Williams at steve.a.williams@dot.ca.gov*