



Bridging the Gap

Your Connection to Engineering Services

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How Caltrans Will Reduce Future Flood Impact on SR 37

Climate-change-induced rainfall is predicted to exacerbate flooding and sea levels by 2050, leaving State Route (SR) 37 permanently flooded with depths up to five feet. Caltrans Bridge Design has a plan to prevent flood damage.

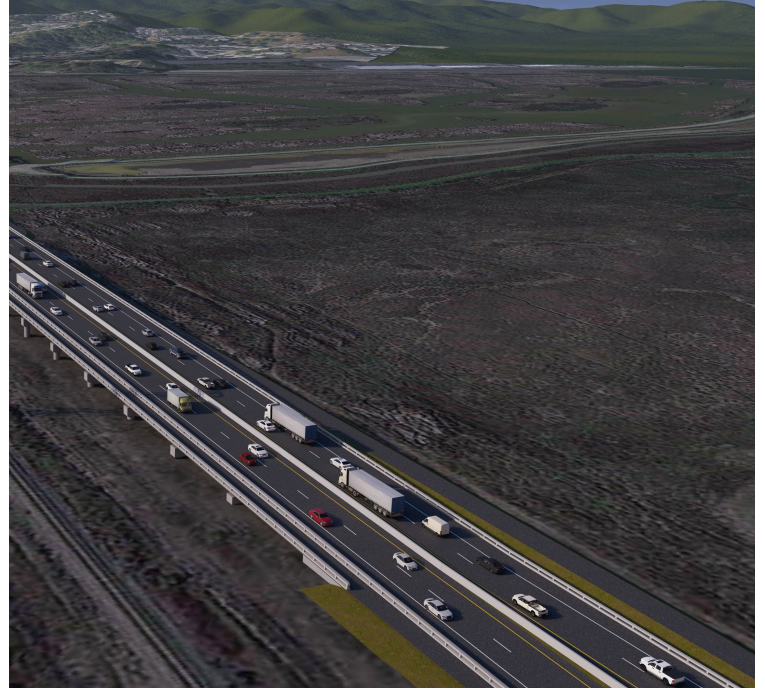
Most of SR 37 in Marin County lies below sea level with regular highway flooding occurring during winter rain and high tide. Projections indicate the area will flood during the upcoming ten-year storm surge event.

Rising future sea levels will worsen forces like erosion, flooding, and storm events, potentially damaging our roads and infrastructure. The state has flood prevention measures set to reduce flood risk including infrastructure and flood prevention projects.

The SR 37 Flood Reduction Project addresses a section of SR 37 stretching from US 101 to Atherton Avenue under a crossing bridge with muddy soil. Current roadway elevations are a staggering low of two to three feet, totaling two miles below 12 feet. The project reduces the impact future flooding will have on traffic by raising the roadway.

Replacing the Novato Creek Bridge is the first phase of the SR 37 Flood Reduction Project. For all sea level rise projections, the likelihood of the bridge experiencing coastal flooding by mid-century is nearly 100 percent. The project plan recommended a minimum 18 feet elevation for the bridge soffit. Caltrans needs to raise the bridge 17 feet to meet this requirement.

Caltrans will construct a precast prestressed California-wide flange girder in three stages. First, we will build a bridge between the left and right bridges, keeping traffic open on the current road. Second, Westbound traffic will move to the new middle structure while engineers demolish the lefthand road and widen the newly built structure. Third, West and Eastbound traffic will move to the new wider structure as engineers demolish the right side of the road before extending the new structure to its final width.



Placing precast girders is quicker than casting a concrete box girder in place, creating less disruptions for travelers. Traffic can be reopened ahead of schedule because the girders are precast and only the top deck concrete is poured into place. Traditional cast-in-place structures require the girders to be poured in place with a longer wait time to reach ideal strength before pouring the remaining deck. This would cause major road delays for California drivers.

Interim approaches are needed on both sides to raise the roadway to the proposed Novato Creek Bridge elevation. A 570-foot stretch of the highway requires removing bay mud and placing expanded polystyrene (EPS) blocks and lightweight cellular concrete above and below the EPS blocks. The SR 37 Flood Reduction Project will involve three stages of highway construction to allow two lanes of traffic to remain open while raising the bridge to prevent future flood damage. Construction is tentatively planned to begin in Spring 2027, with completion of the project's first phase in Fall 2029. If you're interested in working on innovative projects like this, visit [Working with the Division of Engineering Services](#) to learn about job opportunities.

