



MARIN'S SHIFTING SHORELINE: THE CONVERSATION HAS STARTED AND YOUR VOICE MATTERS.

BY JENNIFER GENNARI

Near San Rafael Creek, two dads push their toddlers in swings, a bicyclist rides by and a woman walks her dog. For Marina Palma, it is a beautiful Saturday in the Canal community. And although it looks like everyone is on dry land, they are, in fact, in the bottom of a bowl, with their streets and homes sinking below the bay.

Palma, a longtime resident and advocate of her community, recently became a member of the San Rafael steering committee on sea level rise so that she can educate and prepare others. Many people don't understand that the flooding already happening during high tides and storms is going to get worse.



Marina Palma



Cyclists navigate saltwater flooding the Mill Valley multiuse path

“We are at risk of losing our homes, and our community would be destroyed,” Palma said. “Together we should make an effort to minimize the effects these floods could have.”

Now is the time for communities to get together throughout Marin County to discuss and strategize next steps to prepare for the rising sea.

“Right now, yards and people’s gardens are keeping the water out,” said Kate Hagemann, San Rafael city climate adaptation planner. “The pumps are able to keep up but they aren’t designed to keep out the ocean.”

EXPANDING OCEAN

The sea surrounding Marin on three sides is one of its most beautiful features. And yet, estimates predict that in 25 years the ocean will be about one foot higher than it is today.

But this isn’t a future problem. Anyone living east of 101 or biking the Mill Valley path or driving in Corte Madera knows

Marin is flooding now.

The Transportation Authority of Marin has identified 19 areas of vulnerability in the county. Mikaela Hiatt, an associate planner at TAM, says they are looking at a timeline of solutions and options, recognizing that some roads, such as evacuation routes, may need attention sooner. “Raising a road 6 inches won’t allow for long-term protection but it could provide access in the near-term,” she said.

We’re all connected by roads, many of which are on the county’s bay side, said Anne Richman, TAM’s executive director. Keeping roads passable is a safety issue.

“An impasse or a failure in one area can affect people who don’t live nearby,” she said. “Even if you live further inland, your ability to get around will be impacted.”

MORE WATER IS COMING

Predicting how high the water will rise or when is less important than preparing,



Community meeting in Sausalito



“We need to plan for that water — whether it comes as storm surge or king tides or sea level rise.”

according to Chris Choo, assistant director of the Marin County Community Development Agency. “We need to plan for that water — whether it comes as storm surge or king tides or sea level rise.”

Planning for what some perceive as a “long-term emergency” is hard, Choo said, but it’s been getting easier. “When you see water rising and rising, waves crashing against your home... it’s humbling and frightening,” she said. “It hits at a gut level.”

Marin County Supervisor Stephanie Moulton-Peters agrees. “No one should be surprised about this anymore,” she said, and our changing climate “is an invitation to co-create the future.”

PLANNING NOW

Over the next months, Marin residents will be invited to workshops to provide ideas and feedback on how to manage flooding and higher seas. Leaders are working to comply with California Senate Bill 272, which directs the nine Bay Area counties to submit shoreline adaptation plans to the Bay Conservation and Development Commission.

Fortunately, Marin has a 10-year head start. The groundwork was laid by former Supervisor Kate Sears, who advocated for living with water sustainably, and Jack Liebster, who won a grant in 2015 for a two-year study to assess the county’s vulnerability to sea level rise. Choo managed that project, culminating in BayWAVE, an interactive map showing where water might flow at different levels and what was in the water’s way.

Early on, to help people imagine the future depth of water, Leslie Alden, at the time Sears’ aide, helped place custom viewfinders along the multiuse path in Mill Valley. When people looked through the viewfinders, they could see their current surroundings and then, with a push of a button, the same landscape covered in 3 feet of water.

“You have to show people,” said Alden, now executive director of Act Now Bay

Area. “When they have an immersive experience, they see it for themselves.”

DRAWING THE LINE

Once people understand Marin’s shorelines are on the move, a first step is to decide where to define the “resilient edge,” the line between land and water. On one side could be marshes and reefs and perhaps floating shops or parking barges. On the other side, buildings and roads could be elevated.

And, of course, all of these adaptation solutions are expensive.

At a January workshop in Sausalito, Matthijs Bouw, a Dutch architect and founder of One Architecture, emphasized that by working together, communities can pool resources to create shared benefits, like parks and ponds that hold stormwater runoff. “It’s more cohesive and cost-efficient but requires buy-in and coordination,” he said.

Participants at that meeting commented on different proposals and possible solutions. “I’m quite impressed by what’s being done with floating communities abroad and in New York City,” said Felicity Gordon, a designer and longtime houseboat resident. Despite misgivings about enlarging the number of floating homes, she enjoyed the workshop and was happy to be part of the discussion regarding her community. “I’m thrilled to see that there’s a long-term approach to addressing sea level rise.”

PROTECTING COMMUNITY

One of the guidelines from SB 272 is to prioritize underserved communities first. With the relationships they’ve built, the county is ready. “We have the ability to apply the equity lens, because we see the whole picture,” said Ariel Espiritu-Santo, assistant county executive. “That’s how we can help. We’re better when we’re together.”

And, she added, “Sea level rise doesn’t know jurisdictional boundaries.”

The Marin Climate Justice

Collaborative, a newly formed group that unites leaders from the Canal and Marin City, is making sure their vision is incorporated into plans: more green spaces, more affordable housing, better transit connections.

The challenge is to protect these communities without displacing the residents. With a large population of renters, gentrification is a concern. “The housing crisis is not separate from the climate crisis,” said Carly Finkle, senior policy manager of Canal Alliance.

The key is listening to the people who live in each community, Palma said. She encourages decisionmakers to get to know the residents of the Canal. “Let’s do what we need to do now so we can stay,” she added. “Our kids were born here and we want them to go to school here. We are Marin.”

MAKING YOUR VOICE HEARD

Individuals can shape how Marin adapts. Janelle Kellman, founder of the Center for Sea Rise Solutions, first became involved in Sausalito as a volunteer on the planning commission. “I saw a very real problem,” she said. “I wanted to get to the bottom of why Sausalito is flooding.”

In 2020, after getting elected to the city council, Kellman started a sea level rise task force. She’s helped win \$2 million in funding, which made it possible for Sausalito to study its vulnerability.

Kellman, who is running for lieutenant governor in 2026, added, “If people see the power of local action, with real outcomes, I hope it will inspire them to say, ‘Hell yeah, that’s where I want to make a difference.’”

Next month, we’ll dive into how to adapt to rising seas, and how nature-based solutions could help us preserve Marin’s communities and the scenic beauty we love in Marin.

For more information: Visit marincounty.gov/your-government/sea-level-rise.

“The right adaptations depend on community input and values and hopes that people have to stay.”

CHRIS CHOO, ASSISTANT DIRECTOR
OF THE MARIN COUNTY COMMUNITY
DEVELOPMENT AGENCY