



## Corte Madera | Shoreline Adaptation Community Engagement Mariner Cove Workshop Summary

**Date and Time:** March 27, 2024 from 5:30-7:00 pm via Zoom

**Attendance:** 36 members of the public

**Town Staff:** RJ Suokko (Director of Public Works), Amy Lyle (Director of Community Development), Phoebe Goulden (Climate Action and Adaptation Coordinator), Adam Wolff (Town Manager), Chris Good (Senior Engineer)

**Consultant Team (Plan to Place):** Dave Javid, Quentin Freeman

On March 27, 2024, the Town of Corte Madera and the consultant team held a virtual community workshop to share information and hear from residents and stakeholders. The workshop was meant to:

1. Present an overview of the Shoreline Adaptation Engagement Effort goals and timeline;
2. Share background information to set the context for this Effort;
3. Share flood vulnerabilities specific to Mariner Cove;
4. Introduce a flood visualization tool (see Exhibit 1 below);
5. Provide an opportunity for participant input through a Q+A; and
6. Share a community-sourced interactive online flood mapping tool (see Exhibit 2 below).

After brief team introductions, Phoebe and RJ presented a description of previous climate adaptation efforts and outreach to date with a summary of feedback received, and an overview of technical studies, highlighting why Mariner Cove is vulnerable to flooding. The team then introduced a flood visualization tool based on the United States Geological Survey Coastal Storm Modeling System (USGS CoSMoS) data that shows the water level in Mariner Cove with the occurrence of a 1) typical high tide; 2) king tide; 3) king tide plus 20-year storm surge event; and 4) king tide plus 100-year storm surge event. The team then opened the floor for participants during a question and answer session. Verbal and chat comments were recorded on a virtual whiteboard (see Exhibit 3 below).

Below is a summary of the comments received verbally and via chat. This feedback will be used to guide how the Town evaluates options for flood mitigation and prevention. The community-sourced interactive online map is live on the project website (<https://cortemaderaadapts.org/shoreline>) and the flood visualization tool is intended to be available to the public in the coming months.



## SUMMARY OF FEEDBACK RECEIVED

Comments and questions received both verbally and via chat are organized by theme. Responses are summarized in *italics*:

POLL RESULTS (see exhibit 3 in appendix for full breakdown of results)

- 92% of participants own their homes, and 64% have lived in Corte Madera for more than eleven years.
- 52% of participants have experienced flooding at their place of residence.
- 43% of participants are somewhat concerned about potential flooding in their neighborhood, and 57% are very concerned.

## COMMUNICATION

- Participants appreciated the thorough presentation and the introduction of the online interactive mapping tool.
- Participants heard about the workshop through various channels including mailers, email blasts and physical a-frame signage.
- How can the public get in touch with Town staff with questions about the Climate Adaptation Effort?
  - *You can email [cmadapts@cortemadera.gov](mailto:cmadapts@cortemadera.gov) with any questions or comments about this effort. This email inbox is monitored by several staff members. Flood Board meetings are open to the public, and you are invited to share your feedback in person during public comment. You can also reach out to the Public Works department at [pwcounter@tcmmail.org](mailto:pwcounter@tcmmail.org).*
- What types of feedback is the Town looking for from the community?
  - *The Town is gathering feedback from the public to determine whether to invest in and begin design work to address flooding vulnerabilities and in general move forward to find solutions. If so, what is the range of solutions the Town should consider?*

## STRATEGIC PLANNING

- Would a pump station at Ebbside address flooding impacts and ponding?
  - *At the lowest point, the tide enters the roadway at approximately 7 ft elevation at Golden Hind and Ebbside. A pump station would help reduce impacts by removing water from the street, when the tide is 7 feet or lower. But for more significant events and as SLR/subsidence occurs, the relative water elevation would get higher and would eventually minimize the effectiveness of the pump station, unless a flood barrier is also installed to prevent inundation from rising tides.*
- How could a tidal gate or flood barrier work in conjunction with a pump station to address flooding impacts and ponding?



- *When there is a combination of rain and a high tide, ponding and flooding occurs because water has nowhere to drain to until the tide recedes. A possible solution is adding a pump station to pump out water mechanically. A two-fold plan involving both a pump station and a flood berm would both reduce the risk of flooding and ponding at all times by keeping tides out at a higher elevation, and ensure that trapped water can be pumped out of roadways.*
- If the Town constructs a berm behind houses, will there be public access?
  - *There has been overwhelming feedback so far not to have public access to a berm, in order to maintain privacy. The Town will follow the lead of the public on how solutions should be implemented.*
- What is the timeline for a potential solution?
  - *We are currently focused on identifying the priorities that should be further developed and/or implemented in the next 10 years to provide flood control benefits that provide benefits for 15 years or more.*
- Is the Climate Adaptation Assessment the current document informing the Town's decisions?
  - *The Climate Adaptation Assessment is a long-term planning document that still informs the Town's adaptation planning efforts. For example, this engagement effort to gather public input on what to do to address flood vulnerabilities was a next step outlined by the Climate Adaptation Assessment in 2021. However, our current effort is focused on near term next steps for our Shoreline communities that are responsive to the community's needs and desires. The Town is also updating its Storm Drain Master Plan, which will also provide engineering recommendations to minimize our flood vulnerabilities, with an emphasis on flooding caused by precipitation.*
- What long-term solutions are being considered?
  - *Based on existing flooding observations in Mariner Cove, the Town believes there are opportunities to develop solutions to reduce these events and to account for future sea level rise and subsidence, although the timing, details, and public support are still being evaluated. We've heard positive feedback for a "phased approach" that addresses the vulnerabilities anticipated over a shorter horizon of 15-25 years, rather than a much larger project that addresses subsidence and sea level rise predictions 75+ years in the future. The Town is still soliciting feedback from the community about priorities and how aggressive to be with addressing flood risks.*

*Also, based on the Climate Adaptation Assessment, Marina Village Levee Study (2017) and more recent observations, the Town has elevated concerns about flood risks to the existing Marina Village Berm as a high priority. As a result, the Town has applied to the Federal Emergency Management Agency (FEMA) for a grant to fund the bulk of the design, public outreach, and environmental compliance to study how to strengthen and raise the Marina Village Flood Berm.*



- What are the next steps and plan for implementation, after the Town gathers feedback from the public?
  - *To conclude this engagement process, a mailed survey will go out to each resident in the engagement area to gather input from as many community members as possible. This feedback will inform discussions with the Town Council about funding additional analysis of potential solutions. Based on feedback received so far, the Town expects to further evaluate solutions that can incrementally address the vulnerabilities which are projected to increase over time and be tailored to specific areas with specific vulnerabilities.*
- What are the specifics of a levee, berm, or flood barrier? What would it look like and where would it go?
  - *The term “flood barrier” is a more generic term that later could take the shape of a levee, seawall, sheet pile, or other type of physical, vertical barrier. The specific design details, locations, size and implementation of flood protection infrastructure is not within the scope of the Shoreline Adaptation Engagement Effort, which is primarily focused on gauging community interest in moving forward with potential flood mitigation strategies. If there is community support, the Town will move forward with investing in design and implementation plans for flood mitigation infrastructure in the next phase of this project. Flood barrier types, elevations, locations will be evaluated as part of that future effort.*

#### TECHNICAL INFORMATION

- What does the 1.6ft prediction of sea level rise mean? What present-day tides is that equivalent to?
  - *1.6ft of sea level rise from today’s mean high water is equivalent to today’s King Tides (approximately 6.9ft NAVD88, or a 6.7ft Tide (MLLW datum). This means that the 1.6ft SLR scenario in the CoSMoS model is comparable to the elevation of a King Tide we have experienced in recent years. The visualization tool shows that even without sea level rise, if a king tide were to coincide with a 20-year storm surge or 100-year storm surge, significant storm damage is likely to occur.*
  - *The State has released a draft updated sea level rise guidance, available here: <https://opc.ca.gov/2024/01/draft-slr-guidance-2024/>.*
- How do subsidence and sea level rise interact?
  - *Subsidence and sea level rise do not cause each other, but do compound to create higher flood risk.*
- Can the Town expedite or streamline the process for residents in the flood zone to raise their homes?



- *The Town will help people through the current process and is undertaking streamlining efforts, including eliminating design review requirements in the flood zone. Planning Staff are always available to work with residents and contractors attempting to raise their house.*
- *There will be a Zoom workshop on April 9 on the design review process for home raising. Information on the workshop can be found [HERE](#).*
- Will potential flood adaptation projects need to be reviewed and cleared through CEQA? How does this inform the timeline?
  - *Yes, any public project will need to comply with CEQA; in addition, any federally funded project would need to comply with CEQA and NEPA. Furthermore, any project done on the Bay requires permits from a host of regulatory agencies. Until we define the scope of the project, it's hard to predict the time needed to achieve compliance and obtain these permits but there are projects that have implemented this type of infrastructure (such as Foster City). The Town would build a team involving engineering, and environmental consultants to diligently work through this process.*
- What is the difference between ponding and flooding, and why is the Town prioritizing addressing flood impacts?
  - *Ponding typically refers to when water is present on a roadway, but is not causing damage to private property. Flooding specifically refers to when water is severe or voluminous enough to where it causes damage to private property. With a limited budget, the Town is being strategic to prioritize flooding risks first, then ponding.*

Go [HERE](#) for a link to the presentation slides and a recording of the workshop.



Exhibit 1: Snapshot of flood visualization tool that is currently being built out, and is expected to be publicly available in the coming months.

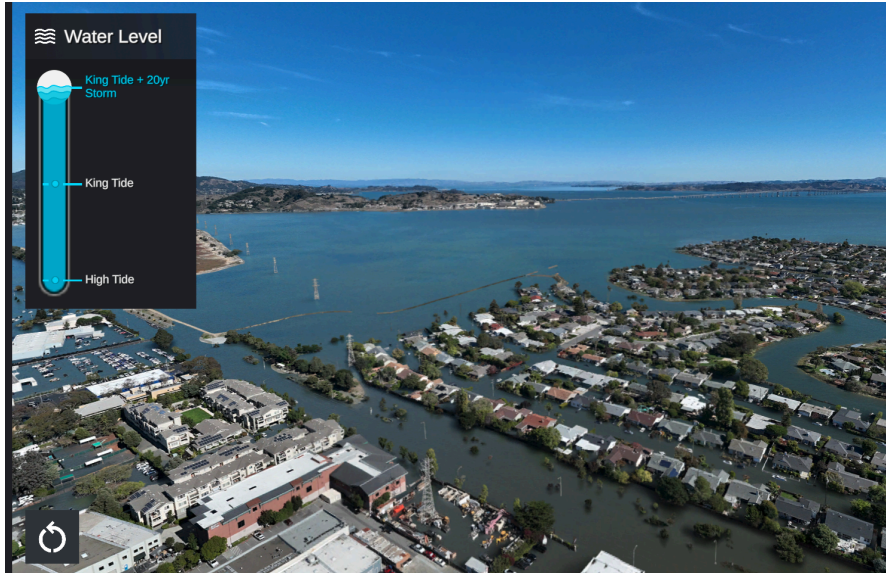
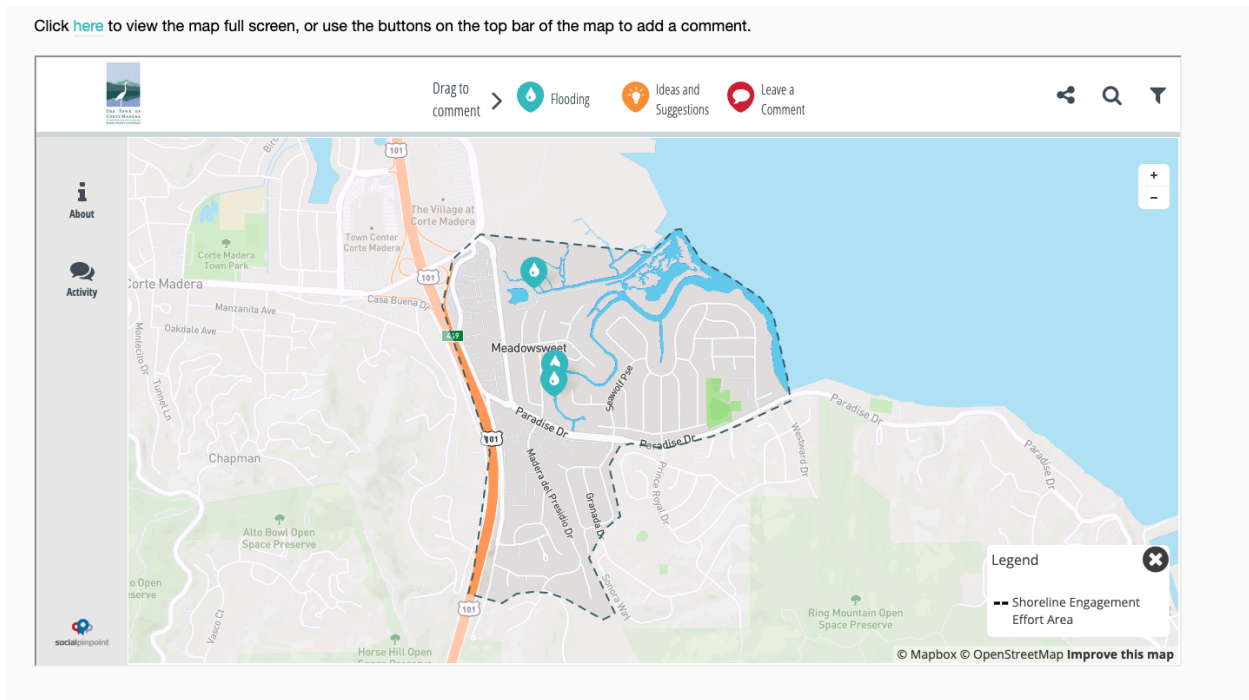


Exhibit 2: Snapshot of community-sourced interactive mapping tool. The map is live on the website [HERE](#).

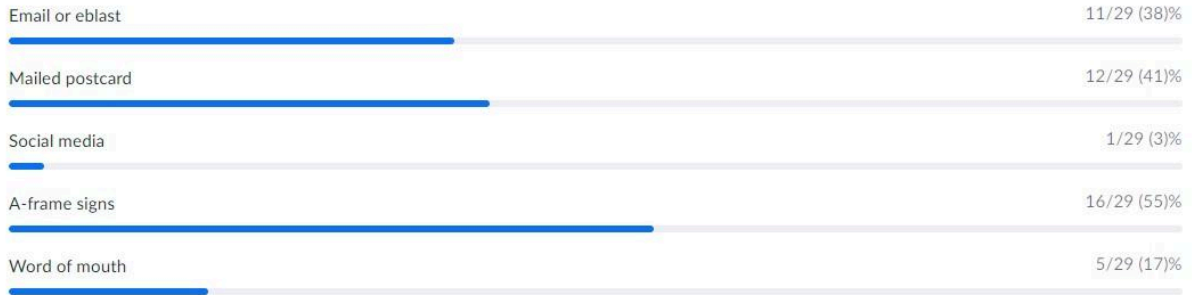




*Exhibit 3: Snapshot of poll results.*

**1. How did you hear about this workshop?** (Multiple choice)

29/30 (97)% answered



**2. What is your housing situation?** (Multiple choice)

25/30 (83)% answered





**3. How long have you lived in Corte Madera?** (Multiple choice)

22/30 (73)% answered



**4. Have you experienced flooding at your place of residence?** (Multiple choice)

21/30 (70)% answered



**5. Rate your level of concern about potential flooding in your neighborhood?** (Multiple choice)

21/30 (70)% answered

