

Climate Adaptation Assessment Version 2.0 Public Comment Summary – April 2021

Public Comment / Suggested Edit

Summary of Changes

General

The CAP is too long, "padded" with extra space and imagery, needs to be shorter.

Nobody has time to read a 253 page document. "It would be nice to have a one page summary of what it costs, what needs to be done, and why." The plan has too much fluff. Paul Gero

"There are several non-scientific issues that devalue the revised CAP document. The first of these is that the document is padded with many full-page photographs, white spaces, and low-information graphics. This has resulted in an overly long public document that obscures crucial information, and makes it difficult for community members to assess the evidence presented. The document needs to be revised to make it shorter with a focus on emphasizing key information, rather than burying it in padding." Marta and Roger Sullivan

A web-based executive summary will be added to the www.cortemaderaadapts.org website, and provide a short overview of each section of the Assessment. The Town staff has decided to keep the photos in the assessment to help expand the accessibility and readability of the document.

The report photos are misleading and the tone of the CAP implies too much "disaster" language (when that isn't warranted).

"I do still have concerns with the Towns...use of pictures showing high tides that look bad to the eye but in reality have not caused any damage to date. I also find it interesting that there is no picture of the high water at the town pump station at Golden Hind and Ebbtide where the water does create an issue on a regular basis...but no mention is made of this or is any solution provided." Mike Vogel

"The photos in the report are misleading. Lots of neighbors have built up walls of their own and they work fine. Just because water is in my backyard doesn't mean it is flooding my house or the street. In fact, for the past 20 years, water has never made its way to our garage. On a king tide in winter, after heavy rain will show about an inch next to our home. The water level rises when there's a king tide with weeks of heavy rain." Tom and Kim Boyden

"The Revised CAP follows the first draft in presenting the plan in a melodramatic tone of impending disaster. The document is full of "disaster" imagery presented to imply that the town is constantly inundated by flooding events, and is in imminent danger of being swept away in a natural disaster. Residents know to the contrary that the images presented are of one-off events like unusually high king tides and/or generational flood events. Presenting the Revised CAP document in this way is both deceptive and insults the intelligence of community members. The imagery should be removed or at least clearly labeled to state that it occurred many years ago before certain mitigation measures were implemented, and the document should instead stand or fall on the factual information presented, and the law that applies to planning documents." Thomas Roth Firm

The intent of using photos throughout the Assessment is to convey the risks posed to the community based on actual events. The project team will review the image captions and surrounding texts to ensure that the use of the images is not misleading. Photos of the flooding at Golden Hind and Ebbtide that could be shared if desired by the community or as part of the broader discussion of specific issues and development of solutions.

Any privately constructed walls along the bay or creek would likely require a permit to ensure that the appropriate environmental regulations are satisfied and to ensure that the feature is properly engineered. If this process is bypassed, it could result in impacts to the environment and also becomes very difficult for the Town to rely on the effectiveness of those installed features.

The Town has made updates to more accurately reflect the appropriate tone of the document based on the best scientific data and information available.

Community outreach and engagement opportunities throughout the project were not adequate and did not allow for necessary community involvement and feedback.

The "Town never adequately informed the key homes that would have the most issues with the plan." Tom and Kim Boyden

"We were not aware of the forums and need to have our voice heard in the decision that affects our Mariner Cove residences, community, and property." Russell Albano

"Your communication up until a month ago was extremely meek...Keep in mind that many people do not work at home from 9-5 and may prefer meetings in the late afternoon or early evenings." Keep me in the loop on everything concerning Mariner Cove. Christopher Hesson

"The timeline ignores both the fact that for two years the Town tried to adopt the CAP without a real outreach to the residents (the outreach effort was ineffective and inadequate at best), and that, weeks away from the original adoption deadline, it was caught by the residents and heavily opposed. The Town should stop trying to rewrite history, own its mistakes (the Town Manager's email to residents was a great step in this direction, which again makes the updated CAP extremely disappointing), and include in the CAP a more comprehensive and truthful version of the events and residents' feedback. The Town has collected all the past feedback from residents and we ask that it is linked in the updated document, as it is an integral and important part of it." Marta and Roger Sullivan

It is not too late to be involved. The Town recognizes that community inclusion and engagement is paramount.

Dating back to December 2018, the project provided outreach notifications in the Town's newsletter, annual Flood Newsletter mailer, Nextdoor posts, Facebook posts, email blasts, and frequent project webpage updates were distributed publicly. The engagement effort also included a series of four public workshops, two public surveys, and several updates at our Town's Flood Control Board meetings in 2019 and 2020.

In a response to requests for additional engagement opportunities, the Town mailed every resident a flyer in January 2021 inviting them to a series of community discussion sessions in February 2021. Two additional public workshops and a discussion with the Flood Control Board as well as efforts by residents helped get the word out about the Assessment and provide additional engagement opportunities for the entire community.

We highly encourage our entire Town to participate in the process of how best to address the many challenges identified by the Adaptation Assessment to date.

Shoreline

Continued presence of the levee and/or retreat language (despite it not being specifically tied to neighborhoods) is unacceptable to leave in the Plan.

"Homeowners remain steadfast in their opposition to any levee proposal." It still exists in the plan in a general sense. Thomas Roth Firm

"Revoke all of the language in the plan about levee, retreat, rezoning, and changing the projected sea level and king tide figures in the revised CAP." Ryan Gardner

Felt stunned and disappointed and lied to. "Todd Cusimano told us all verbally and in writing that the references to "managed retreat" and "levee" would be removed in its entirety." Chris Coghlan

Remove the levee from the plan ("I was under the belief that the levee was going to be removed at this point...")... "I thought our Town Hall call went well and the action plans to follow would be in line with the concerns and suggestions from the residents. I do hope this will be addressed and a resolution will be reached that will work for all parties." Joel Kleinfeld

"Remove the levee and planned retreat language from the plan as promised (in the newsletter). Making the shoreline section of the plan more general in nature, less specific, gives the Town too much power to do what is not in our best interest......Removing the names of the two neighborhoods from the CAP does not matter in the long run because MCMG are the only two waterfront neighborhoods." Vince and Terri Tonne

Both "Levees" and "Managed Retreat" are actions and approaches used or considered by communities across the region, across the State, and around the world to respond to and protect their residents. The historical earthen levee system currently helps protect portions of the Town during storm events.

Mentions of these concepts and actions are included for educational purposes and to align discussions of these concepts with guidance from the California Coastal Commission and Marin County. The Adaptation Assessment does not discuss, nor is the Town considering, as well as specific shoreline protection projects for the Marina Village and Mariner Cove neighborhoods at this time.

Mentions of Levee in version 2.0 of the draft Adaptation Assessment:

- Mention of levee in historic section for construction (pg. 9)
- Example of time needed to plan for construction "adaptation pathway" (pg. 24).
- Discussion of sea level rise affecting current levees (pg. 31)
- Existing levees in shoreline section intro (pg. 62)
- Mention of levees not stopping groundwater rise (pg. 69)
- Levees in types of shoreline protection overview Adaptation Planning graphic from Marin Land-use Planning Guide (pg. 71 & 72
- Protection Section Introduction (pg. 79)
- Case study on Foster City Levee (pg. 80)
- Ecotone Slope Levee description (pg. 82)
- Coarse Beach description (pg. 83)
- Case Study for Tiscornia Marsh (pg. 84)
- Marsh Enhancement Options with Ecotone Slopes and Levees (pg. 85 & 86)
- Marsh related organization and responsibilities (pg. 88)
- References
- Actions S-P-11 (Consideration of fortify existing levees)

"The levee will hurt our view, will be overkill, will have major impacts on our property values, not only for the houses on the water, but for those across the street. Open discussions on the CAP need to happen before any irreversible decisions." Russell Albano

Mentions of Managed Retreat in version 2.0 of the Assessment:

- Definition in Glossary (front material)
- Shoreline adaptation planning overview and Marin Land Use Planning Guide (pg. 71 & 72)
- References

The Town should consider long-term adaptation options (i.e., managed retreat).

The Town should consider offering buyouts to the homeowners and rent them back until they are no longer viable. Community will recoup costs and keep the rest of the community from "bailing out a sinking ship". Town needs to "pull up our big person pants" and think longer-term and not allow the emotions of a single homeowner to halt adaptation progress. Dawn Matheson

"The town should do more in the CAP to present more retreat solutions...Potential realities will be easier to digest now so the expectations are known over a generation." The town should do more than present the popular options (i.e., accommodation and protection strategies). Phil Simon

There are many different potential adaptation actions that the Town could consider taking to respond to the challenges of climate change.

Moving forward, the Town staff will re-engage with community members, particularly residents in the Marina Village and Mariner Cove neighborhoods, as well as appropriate local and regional partners, to work closely and collaboratively to determine how best to respond to the challenges of climate change. Consideration of these alternatives would be analyzed before any project is moved forward.

Environmental Impacts of seawalls

Seawalls in Florida have been outlawed because they cause irreversible environmental harm, and will likely do the same in Corte Madera. Dawn Matheson

The Town is committed to protection of the environment and our unique coastal marsh environment. The Protection Section of the Assessment mentions the need for limit environmental harm from any shoreline protection (pg. 71).

This Climate Adaptation Assessment does not provide any "shortcuts" or "loop-holes" on ideas that future Town Councils may wish to pursue. If implemented, actions discussed in this Assessment would still go through the full public process, such as: additional public notices, public hearings, public workshops, community

	discussions, public review by various boards and commissions, and compliance with the California Environmental Quality Act.
Cost of levee is too great. Levees are not a one-time cost, and maintenance is expensive. Levee failures are catastrophic. Dawn Matheson	Levee costs are not mentioned in the Adaptation Assessment but would be considered if the community decides to further explore those types of actions.
Sea level rise projections are grossly exaggerated, incorrect, not relevant to planning, lacking evidence, etc. SLR analysis is "not based on science, but rather opinion and modeling estimates" "The overall plan is full of exaggerated claims and scare tactics that are not realistic. The shoreline section of the plan does not use evidence to support the alarmist claims about the possibility of climate change. You refer to studies as a source yet those studies do not support the claim in the CAP" Vince and Terri Tonne "I do still have concerns with the Towns use of extreme tide level predictions." Mike Vogel "The height of the Bay water has not risen as high or been as consequential as predicted. I have read the latest information on the CAP proposals and quite frankly, find some of the information contained within as open to interpretation and need for further clarification." Russell Albano CAP has misread the SLR projection source tables. "It seems hyperbolic to choose from the table a sea level rise with a 99.5% chance of not being exceeded (and then rounding up and also neglecting to subtract for the sea level rise we've seen since 2020). Similarly, the expected sea level rise by the end of the century	The discussion of sea level rise in the Assessment is designed to provide a summary of the best available current science and drawn from the California Ocean Protection Council's 2017 Rising Seas in California Report and the California Coastal Commission Sea Level Rise Policy Guidance on how to use and interpret these projections. The Assessment also draws on and summaries the work of Marin County's Baywave project. The Assessment summarizes the range of potential future sea levels based on these documents. The Town and community should have the full range of potential sea level rise projections to consider in future planning efforts. If the Town decides to follow the State Guidance and use risk tolerance levels to aid in selecting and planning for specific future sea levels, these decisions would be made on a project by project basis in the future as those projects developed and chosen for implementation with the community. These sections have been reviewed for clarity and additional links to references have been added.

(2100) is 2.3 feet, with a 95% chance of not exceeding 4.2 feet. The 7-foot number represents a scenario that is literally off the charts. Suggestion: clearly report the median sea level rise from the source table. If desired, clearly report the ranges or 95% probabilities." "Suggestion: show the median sea level rise, with ranges as desired, clearly marked." "On Page 63, the discussion below the graph then seems to revert to actual sea level rise predictions from the source table (the 'median' values) albeit with miscalculations and exaggerations." Nate Blomgren

"Our main point of contention continues to be the arguments put forward by the Town justifying a commitment to the 1 in 200 (0.5%) probability SLR scenarios that caused so much opposition in the first draft of the CAP, and that we were assured would not be included in the updated CAP." Marta and Roger Sullivan

"However, the Revised CAP includes only three citations supporting its claims....This means that the arguments for SLR are based entirely on the data in the 2018 California Guidance (1), and that the Revised CAP includes no specific sea level rise data specific to the Corte Madera sea shore. When it comes to coastal erosion, courts insist on site specific data – general studies are insufficient to support planning decisions. See Surfside Colony v. Cal. Coastal Com (1991) 226 Cal. App. 3d 1260, 1265." "Research by members of the Corte Madera community indicate that the [SLR projection] figure has been commonly and wrongly interpreted as a concrete projection of sea level rise. The data on which it is based is in fact a series of range estimates for a given year based on statistical probabilities, and that is why the 2018 California Guidance presents this data in a table form including the range estimates. The summary of the range estimates of sea level rise as presented in the figure are unscientific and grossly misleading and may not be lawfully relied on by the Town in its planning documents." Thomas Roth Firm

Mean Higher High Water (MHHW) is not a useful benchmark to discuss sea level rise or coastal flooding.

"MHHW does not have any statistical or predictive meaning, other than being an average of daily high tides. The tide is frequently higher than MHHW, and it is the actual elevation of the tide that determines coastal flooding, not MHHW." - further 'supported' argument with tidal gauge graph. Nate Blomgren

Mean Higher High Water (MHHW) is the most commonly used reference elevation for sea level rise projections. It is generally considered the high tide line and affects shoreline vegetation. Throughout the Assessment elevations are referenced to the NAVD88 vertical datum.

Discussion of risk and probabilities is inaccurate, not portrayed correctly, not useful (as it is currently written) for planning purposes.

The CAP incorrectly discusses SLR probability in an "annual chance" format, similar to the 100-year flood. Nate Blomgren

"The CAP does not use a risk-based approach, the CAP is based on the worst case possibility. The plan should use low or moderate risk based projections." Vince and Terri Tonne This was an error in the discussion of sea level rise probabilities and the use of the "annual chance" wording. Mr. Blomgren is correct, and changes will be incorporated to correct this error.

The planning horizon for the plan and discussed projects are too long.

The Town is using the wrong planning horizons (too long). Shortening the time horizon for planning could allow for the use of high risk-aversion calculations without drastically overbuilding, which appears to be the biggest worry for residents of MC/V neighborhoods. "Within those shortened time horizons, proper cushions could be used to account for uncertainty without massively overbuilding. As the Draft CAP stands now, it appears that averting low-probability events as far forward as 2100 could be a deciding factor in near-term infrastructure." Nate Blomgren

The Assessment does not recommend specific planning horizons or risk scenarios to use for planning. The focus is describing the state of the science and the potential range of sea level rise scenarios for the remainder of the century. Actual planning horizons and risk tolerances will most likely be determined on a project-by-project basis with community input and be based on state and regional guidance.

Using RCP 8.5 or the "business as usual" scenario is misleading. Thomas Roth Firm	Representative Concentration Pathways (RCPs) are currently the best available set of projections that have been developed by the Intergovernmental Panel on Climate Change (IPCC). They are designed to represent a range of potential futures determined by a range of greenhouse gas emission profiles. There is some discussion in the academic world that the higher change scenario (RCP 8.5) is too high to be considered "business as usual". The Town is committed to staying abreast of the latest science and using the most current and appropriate scenarios for planning. The discussion of the Assessment around RCP 8.5 is not a commitment to plan for this level of change, but to inform the discussion around the range of changes possible for the region and the community.
The "proposed" levee will actually cause Marina Village and Mariner Cove neighborhoods to flood, not SLR. Mark Bello	Version 2.0 of the Climate Adaptation Assessment does not include any discussion of a proposed levee for the Marina Village and Mariner Cove neighborhoods.
The Climate Adaptation Plan fails to have "perspective". It's too soon to be planning for something that will happen in 50ish years. Mark Bellow	Actual planning horizons will be determined on project-by-project basis as those projects are considered. It is the Town's responsibility to look to the future and help ensure the health, safety, and well-being of all its residents
Incorrect or misleading information on settlement and/or precipitation. "There are many misleading figures on settlement and rainfall. Increased rainfall? That is simply not true." Tom and Kim Boyden "A new element in the Revised CAP is an new emphasis on the effects of mud/fill subsidence/settlement and increased rainfall in Corte Madera as a justification for adhering to the 1 in 200 probability sea level rise scenario for future planning. These connections are weak or nonexistent." The citations for this paper are not scientific and one is an internal Town document that is not available to the public. "The table/figure showing mud settlement	There is a significant amount of uncertainty around projections of average annual precipitation in the future. The San Francisco Bay Regional Report of the California 4th Climate Assessment (2019) states the following. "Precipitation in the Bay Area will continue to exhibit high year-to-year variability - "booms and busts" - with very wet and very dry years" (pg. 17).

on page 62 of the Revised CAP is mis-referenced to the Town's internal document, and the likely actual source is A-N West, Inc. (2007) (9). These data do not support the arguments in the Revised CAP. The data are unavailable to the public, the community, or anyone for review and analysis." Thomas Roth Firm

"The Bay Area's largest winter storms will likely become more intense, and potentially more damaging, in the coming decades" (pg. 17).

Homeowner specific remedies will be sufficient - Specific recommendations for fixes to the stormwater drainage system, improving access to elevating homes, etc. Tom and Kim Boyden.

Regional Collaboration is Critical

"The Town's participation in collaborative regional efforts, multijurisdictional planning, and engaging the community in understanding the risks and possible solutions is critical. The Town needs to maintain an ongoing dialogue and increase communication with members of the community to be effective in its Climate Change Adaptation effort." Marin Audubon Society The Adaptation Assessment also notes the importance of regional collaboration in developing solutions.

Nature-based solutions presented in marsh areas will need to be further reviewed and analyzed prior to implementation.

"The Paradise Drive discussion focuses on raising the road to accommodate sea level rise. Marin Audubon purchased Triangle Marsh and restore tidal marsh almost 30 years ago. The project consisted of restoring tidal marsh and construction of a berm that provides transition habitat as well as protection for inland areas against rising seas. The marsh is already at risk from sea level rise and the ferry wake. Our concern is that raising the road not impact Triangle Marsh further." Marin Audubon Society

"Figure 3-10 shows two ecotone slopes that are described as being in areas where there is no marsh. However, the small section shown to the north is on the Heerdt Marsh. Locating an ecotone slope here would require filling of the Heerdt Marsh wetlands, the

Any actions discussed in the Assessment will require further review, analysis, and refinement prior to implementation. Protection of the Marshes is a critical concern for the Town and the other agencies who own and manage the different marsh lands.

If implemented, actions discussed in this Assessment would still go through the full public process, such as: additional public notices, public hearings, public workshops, community discussions, public review by various boards and commissions, and compliance with the California Environmental Quality Act.

historic marsh that has never been diked. This slope should be moved further north, so that it is out of the marsh and uplands owned by MAS and CDFW." Marin Audubon Society

Hillside

"The new version of the plan includes negative and seemingly biased editorializing on undergrounding, without benefit of data from an actual study of our specific situation. The two-pager section is inappropriate and should be removed entirely. The study will outline the facts for our area. Match the body copy of the action with the two-pager." Maureen O'Rorke

"In the revised version the request to conduct a comprehensive study on undergrounding on our hillsides is now included. Thank you. Unfortunately, the new version also includes negative and seemingly biased editorializing on undergrounding, without the benefit of data from an actual study of our specific situation. It at best, using a legal analogy, "leading the witness." Please remove the section in its entirety. It is unnecessary and biased commentary. When the facts are known, taken from the study, an update to the plan can be provided to appropriately inform the community regarding undergrounding." Jean Burns

"Please delete the [undergrounding two pager] from the CAP. The independent investigation is supposed to address the pros and cons of undergrounding. The attached sections seem one-sided and the Town should take a neutral stance on these issues prior to the independent report." Kevin and Collin Woodall

"I want to thank the Town for putting together a wide-ranging plan to deal with issues that will face its residents for years to come. I was pleased to see that the Town listened to the concerns expressed by the hillside residents during private meetings and the The wording used in the discussion "undergrounding" has been reviewed and updated to remove any wording that could potentially negatively bias consideration of this adaptation action.

The Town is committed to the effective stewardship of public funds in our efforts to support community resilience and will use the best available science, community input, and findings of further studies and evaluation to inform the selections of adaptation actions to implement.

An additional action has been added to the Adaptation Assessment for consideration.

As supported by the outcomes of the "undergrounding" feasibility study, send a formal request to PG&E to underground electrical utilities in hillside portions of the Town. PG&E owns and maintains public electrical facilities in the Town of Corte Madera, therefore the Town is committed to working with PG&E to fully explore options for safeguarding electrical infrastructure in strategic hillside neighborhoods to ensure the safety and wellbeing of Corte Madera residents

Feb 4th zoom workshop and included language in the revised climate adaptation plan to fund a feasibility study on undergrounding of utilities on our hillsides. I am concerned however; that the hillside language in this revised plan included several passages about the limitations of undergrounding and other seemingly biased statements - before a comprehensive study has even been initiated. These comments give the impression that the Town has already reached a conclusion that undergrounding in the hillsides should not be undertaken. I am requesting the town modify or remove this language so that a more neutral tone regarding undergrounding is in the final plan. Let's have an open mind and let the comprehensive study speak for itself regarding undergrounding." Mike and Leslie Cunningham