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October 31, 2020

Alice Zanzmiller  
Attn: Climate Action Plan Update  
3501 Civic Center Drive, Suite 308  
San Rafael, CA 94903  
Via Electronic Mail: [azanmiller@marincounty.org](mailto:azanmiller@marincounty.org)

## Re: Comments on the Draft Climate Action Plan

Dear Ms. Zanzmiller,

The Environmental Action Committee of West Marin (EAC) is based in Point Reyes Station and has been working to protect the unique lands, waters, and biodiversity of West Marin since 1971. Our work focuses on the environmental issues impacting the unincorporated coastal communities of West Marin from Dillon to Muir Beaches. The climate crisis touches all of our work.

We submit these comments regarding Marin County's Draft Climate Action Plan (Draft CAP). We share our concerns, questions, and suggestions including minor edits. As an initial matter, we note that the comment period for the Draft CAP was quite short (less than 30 days) with limited involvement by members of the unincorporated West Marin community, who will be directly impacted by the Draft CAP. It is also unclear how widely the 2020 Climate Action Plan survey was circulated, the County indicated to us in an email that there were only 26 respondents. In the interest of moving forward, we hope there will be additional opportunities for public engagement, collaboration, and input as the Draft CAP is finalized and implemented.

EAC has been involved in Marin County's climate planning efforts including our most recent participation in two Drawdown: Marin stakeholder collaboratives focused on carbon sequestration and climate resilient communities. As part of our participation in these two collaboratives, we focused our efforts and research on blue or aquatic carbon solutions and the water energy/nexus. We appreciate the efforts to coordinate the Draft CAP with Drawdown: Marin.

EAC has also conducted extensive research on Marin County's groundwater and water resiliency, and we are in the process of finalizing a report on this topic. We continue our focus on climate adaptation as a member of the County's Coastal Communities Working Group, which continues our long-standing work on the Local Coastal Program amendments, our work on C-SMART, and our involvement with other climate adaptation and resiliency projects. We are also actively engaged in supporting coordinated state climate and adaptation planning efforts with the Ocean Protection Council, the California Coastal Commission, and other agencies and partners.

While we understand the Draft CAP draws on a model climate action plan developed by the Marin Climate and Energy Partnership (MCEP) and is intended to support countywide implementation efforts, unincorporated areas of Marin County may require different sets of solutions to reduce greenhouse gas emissions than cities in eastern Marin County.

We submit these comments with the interest of our unincorporated coastal communities in mind. We begin our comments with some general feedback, followed by feedback correlated to each specific Draft CAP section, and culminating with some suggested minor editorial revisions.

### **General Comments, Suggestions and Questions**

In general, we are unclear of implementation pathways for the proposed strategies. Ideally, the design of the Draft CAP would consider the programmatic evaluation at this stage of design in order to facilitate ease of progress reporting in the future. It would be helpful to include some of those measurement metrics for public review that would identify responsible agencies, timelines of implementation, and actions required to realize the goals. For example, some strategies require action by the Board of Supervisors through an ordinance, some are required by California law, while others may be dependent upon partnerships with nonprofits or schools for implementation. It would be helpful if the strategy charts in each section included: 1) the high-level pathway of implementation achievement (if it is required by any local, state, or federal legislation), 2) estimated costs of the strategy and potential funding sources (grant, public funds, etc.), 3) timeline of implementation, 4) actions needed to realize the goal (ex. Ordinance, community partnership, etc.), 5) ease of implementation, and 6) the target GHG reduction goal. These would be incredibly helpful in understanding the priorities and best pathways to achieve those goals.

In general, the Draft CAP was written in a manner that is relatively easy to understand. To aid in the accessibility of the document, definitions of less common words would be helpful to include (within the text) e.g. high albedo (p. 30).

The "What you can Do" boxes are particularly helpful for engaging individuals with ways they can get involved and make a difference in greenhouse gas emissions (GHGs). Where possible, hyperlinks and example contact information would be helpful to include in the "What You Can Do" boxes so that people can undertake these actions with ease when reading the electronic version of the report.

Regarding hydrofluorocarbons, why is this not addressed in the Draft CAP (p. 4). Have the grocery stores in Marin been assessed regarding leaking or inefficient refrigeration?

While the abbreviation chart is helpful, it might be good to include the full spelling when each acronym/abbreviation is initially mentioned.

It is sometimes unclear whether statistics (e.g. demographic information) referenced in the Draft CAP is for all of Marin County or unincorporated Marin County. Additional specificity could be added regarding this. For instance, in Chapter 2, there are references made regarding average income, if the data is available, it would be interesting to include data on unincorporated Marin specifically (p. 11)./ In addition, it is unclear if references to estimates of Marin County housing stock constructed before 1980 (p. 10) are for all of Marin or unincorporated Marin. We are also unclear of the reference and calculation of rail service provided by Sonoma-Marín Area Rail Transit (SMART) as it provides service to limited areas of unincorporated Marin County (p.10).

### **Land Acknowledgement and Tribal Engagement**

We appreciate the acknowledgement of the land and its original stewards. We would like to better understand the outreach and engagement with indigenous communities as the Draft CAP was developed, and if the land acknowledgement was approved by the Federated Indians of Graton Rancheria?

### **Draft CAP Goal Should be Stronger**

While the Draft CAP goals seem reasonable, Marin County could set an even higher goal, given the severity of the climate crisis and the history of Marin's environmental policies. With the lack of engagement on the climate crisis on the federal level, it is critical our state and local action sets the standards and leads by example. Ellie Cohen, county resident and C.E.O. of The Climate Center, raised a comment during the October 12 public meeting. We would like to reiterate related to concerns around the need to use the current best available science to assess the severity of the climate crisis. Ms. Cohen also anticipates the need to raise statewide goals based on the recent science and suggested the Draft CAP should include a stronger goal of carbon neutrality by 2030. We also support that goal.

### **Chapter 2: Greenhouse Gas Emissions Inventory, Forecast, and Reduction Targets**

It is really valuable to raise the concerns regarding consumption-based emissions. The sentence "As a comparison, the unincorporated County's community-wide emissions of 380,318 MTCO<sub>2e</sub> works out to about 5.5 MTCO<sub>2e</sub> per household" (p. 14) should be clarified or emphasized. It sounds like there is an indication that the households in unincorporated Marin are responsible for significantly less emissions than Marin households generally. It would be interesting to better understand this.

We would also find it helpful to include a scorecard of the 2015 Climate Action Plan projects and the status (implemented, not implemented, in progress, failed, etc.) of those projects in comparison with the newly introduced Draft CAP projects. For example, if a past project has potential to reduce emissions but was not implemented or only partially implemented that would be helpful to understand to measure

project success and ensure public transparency. We were unable to find a past score card of Climate Action Plan strategies and success rates. It would be helpful for an annual report to be posted online for public review.

Regarding Figure 6, a larger caption could be included, as it is hard to understand without additional detail.

### **Chapter 3: Strategies to Reduce Greenhouse Gas Emissions and Adapt to Climate Change**

#### **Social Equity**

We would like to better understand the County's efforts to include diverse communities in the planning process. In unincorporated West Marin, there were not any public meetings concerning the Draft CAP. The Draft CAP review meetings took place near Marin County offices and not in the communities that the Draft CAP would directly impact. When the February 2020 Draft CAP meeting was scheduled it overlapped with the Coastal Communities meeting in Stinson Beach causing members of unincorporated West Marin to choose between community meetings. EAC participated in that planning meeting and our overall impression was that participation was from cities and environmental or climate action groups. There seemed to be participation or direct engagement with individuals within communities where the Draft CAP will be applied. We are concerned that a wider pool of public participation was missed in the planning process that could have facilitated other ideas and informed the strategies.

#### **Low Carbon Transportation**

A few other solutions that could be added regarding low carbon transportation include EV car shares, making sure to increase the EV infrastructure especially in public places and multi-family housing (including rental properties and HOAs). An EV car share could work well in West Marin, where public transportation tends to be more challenging. It could also be helpful for renters and people that are unable to purchase an EV to have the option to share a car, especially for short trips.

More emphasis could be added to the Draft CAP to ensure public transportation is accessible and utilized, including overcoming any barriers to this. More detail could also be added around what a yellow school bus program is and whether this would be utilized. For example, in areas of unincorporated Marin school buses are not available and result in individual car trips to drop off students and pick them up.

We are unclear if the Draft CAP is factoring transportation by visitors (Point Reyes National Seashore hosts 2.5 million visitors annually) and commercial activities (trucking activities for transporting goods to and from areas of unincorporated Marin County such as milk trucks and other industrial transportation). Both of these activities create additional GHG emissions in Marin County and could be offset with different focused strategies. In the agricultural section we will elaborate further. For visitation, improvements on public transportation and/or introduction of shuttle buses would assist with reduction of individual vehicle transportation.

Micromobility is an interesting idea, and it would be interesting to learn more about the safety concerns around this. Also related to micromobility and increased biking in West Marin, there was a question raised during the October 12 public meeting, which we would like to re-raise related to concerns about lack of bike lanes and safety of biking in West Marin. Staff members of EAC would ride bikes to work if there were safe and connected bike lanes and pathways.

Another helpful tip for the “What You Can Do” box would be avoiding multiple shopping trips where possible and combining errands.

When comparing to other counties, like Santa Clara (p. 21), it would be clearer to indicate this is a reference to counties statewide. It is unclear whether it is a statewide, regional or other comparison.

### **Renewable Energy and Electrification**

A potential low emission suggestion that could be included for PSPS is using an inverter with an EV. In addition, the Community Resilience Hub is very interesting, although the details around this are unclear. More detail could be added on this and how it ties into the Draft CAP.

We would also like to see strategies identified in the Marin:Drawdown process that would create pathways for renewable energy sources (like the installation of in-pipe microturbines) be included in the Draft CAP as we understand that Marin Municipal Water District has applied for funding to include these solutions that would reduce their energy use in a relatively short amount of time.

### **Energy Efficiency**

We are very supportive of actions that would require updating policies for energy efficient permitting and energy assessments for residential property points of sale. We would like to emphasize that most jurisdictions in Marin County require a Residential Resale Report to inspect building permit records and a physical inspection of all residential units before sale. In unincorporated Marin County, this is not the case. Therefore, we request any ordinance language updates to include energy audits that are presented to the Board of Supervisors also require a Residential Resale Report for unincorporated Marin County or at a bare minimum also include a septic system inspection. A program in unincorporated Marin would increase permit compliance and generate funding to support the additional staff needed to conduct and enforce these inspections.

It would be helpful to highlight the co-benefits of cool pavement related to heat islands, etc. Cool pavement could be installed at transportation stops for instance.

### **Waste Reduction**

California’s Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions (SB 1383) is not referenced in this section. SB1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020, and a 75 percent reduction by

2025. The law provides CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets, and establishes an additional target that not less than 20 percent of edible food that is currently disposed of is recovered for human consumption by 2025. These goals should be integrated into the Draft CAP.

We request that stronger and clearer language is used in order to achieve waste reduction goals. For example, WR-C6 1 and 2 “encourage” extended producer responsibility without defining what that encouragement means. Who is encouraging? How will that happen?

In addition, in areas where the County is able to support solutions for reuse of materials should be incentivized. For example, WR-C7 2 should either define what “investigate” means or should outline that the County is researching steps to create an incentive program for the development of material reuse centers. Ideally, the County would have incentives to promote these types of businesses being developed to reduce waste and promote reuse.

Solutions for connecting communities and promoting reuse of materials are missing. In unincorporated West Marin ideas for repair cafes, resource rental or borrowing centers (for tools, equipment, etc.) have been discussed as options to reduce waste and encourage sharing of materials and skills. Public support of these types of ideas that promote repairing materials rather than purchasing new materials should be supported and included in the Draft CAP.

The appendix could include a basic recycling guide to avoid “wish cycling” as referenced. The Draft CAP should also reference the Draft Reusable Foodware Ordinance.

### **Water Conservation**

Regarding water conservation, the “What you can do” boxes are helpful, and we appreciate suggesting that people replace appliances when it’s time to do so. It seems wasteful and costly to replace appliances that are in good working order.

A few suggested additions to this section include suggesting increased residential and commercial water meters or devices that provide real time data so people know when they are wasting water. While the water energy/nexus is included in Appendix A (page A-4), this solution could be included in the Draft CAP itself.

### **Consumption-Based Emissions**

While we understand the need for reliable metrics to assess consumption-based inventories in order to track changes in emission levels over time to inform decision-making; the Draft CAP seems to only have explored use of the Bay Area Air Quality Management District and U.C. Berkeley developed consumption-based emission inventory. We would like to understand if the County considered other inventory methods. The Stockholm Environment Institute’s February 2019 report, *Estimating consumption based greenhouse gas emissions at the city scale, A guide for local governments*, that provides information on how local governments can track consumption-based emissions inventories



through consumption based surveys, utility billing data, and waste audit data<sup>1</sup>. This report features examples of local municipalities and the ways that they calculate consumption-based emissions inventories. Inclusion of consumption-based emissions inventories in the Draft CAP would provide more accurate information on Marin County's emissions.

We also raise the concern that in either Consumption-Based or a Community-Emission method tracking methods, the calculation seems to be based on the full-time population numbers or number of households. The impacts of visitation to unincorporated West Marin should be factored into this equation. In communities like Marshall, Stinson Beach, Inverness, Bolinas, and Dillon Beach, transient occupants of short-term rentals make up a non-trivial portion of the actual population, but their emissions don't seem to be accounted for. If we overlooked this calculation, please let us know where it is being factored.

Related to the "What You Can Do" box, it would be helpful to add a comment regarding being mindful of shipped goods (and the related GHG emissions). It would be good to add "Reduce, reuse, recycle (mindfully)" with the emphasis on "reduce" that connects to the Waste Reduction strategies. In order to reduce waste, we must reduce consumption.

### **Adaptation and Community Resiliency**

Environmental hazards (rising sea levels, wildfire, drought, etc.) are key drivers in this section and require community connection and engagement for resilience and adaptation planning. In unincorporated West Marin, some of our residential communities are now second homes or vacation rentals. It would be helpful to highlight community actions that foster increasing community relationships with second homeowners and to connect existing communities.

It would be helpful to create an online list of community emergency preparedness groups (that are already coordinating with the County) for property owners to access.

In addition, key resources for regulating agencies would be important to include for planning, and emergency preparedness as these agencies are usually conducting public outreach and education on the environmental hazards that communities will face. For example, the California Coastal Commission, Marin County Wildfire Prevention Authority, etc.

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<sup>1</sup> Derik Broekhoff, et. al., "Estimating consumption-based greenhouse gas emissions at the city scale, A guide for local governments", February 2019. <https://www.sei.org/wp-content/uploads/2019/03/estimating-consumption-based-greenhouse-gas-emissions.pdf>

Adaptation is such a key part of our community’s resiliency. It would be helpful if references to the sea level rise projection data included in this section, as the science is rapidly evolving. A brief reference to emerging groundwater concerns could be mentioned in this section<sup>2</sup>.

### **Community Engagement and Empowerment**

The recommendation to join a Resilient Neighborhoods team is helpful, although this is not applicable in unincorporated West Marin<sup>3</sup>. A reference to West Marin Climate Action<sup>4</sup> would be helpful to add to the Draft CAP. Of course, it’s not possible to include all involved groups, but environmental and climate focused groups in unincorporated areas of Marin County that participated in the Draft CAP process should be included in the report since the unincorporated areas of Marin are geographically spread out and different types of nonprofits shoulder resilient community type of information sharing and outreach depending on the village.

Regarding individual carbon footprints, it would be helpful to include a hyperlink or additional information where you can assess your current carbon footprint. “Diverse” could be defined under number one on page 40.

We strongly support continued coordinated efforts, including the completion of the environmental hazards section of the Local Coastal Program amendments. A coordinated effort related to sea level rise and coastal adaptation is key including coordinating with state agencies such as the California Coastal Commission and the California Ocean Protection Council.

### **Chapter 4: Agriculture and Working Lands**

While we acknowledge the great opportunity to sequester carbon on working or agricultural lands, we note that the Draft CAP seems to focus heavily on parts of this solution, perhaps at the expense of not fully considering other potential solutions. We are supportive of solutions that seek to implement a suite of solutions with co-benefits to sequester carbon on agricultural and working lands to promote clean water, reduce erosion, and sequester carbon. We understand that an assembly of interconnected actions will make the most impact in reducing GHG emissions and are apprehensive to support strategies that place too much emphasis on one type of solution.

### **Carbon Farming Practices**

We are supportive of environmentally responsible carbon farm planning solutions as implemented by Marin Agricultural Land Trust and Marin Resources Conservation District. However, we are concerned

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<sup>2</sup> Kevin Befus, et al., “Projected responses of the coastal water table for California using present-day and future sea-level rise scenarios: U.S. Geological Survey data release”, August 11, 2020, <https://doi.org/10.5066/P9H5PBXP>.

<sup>3</sup> “Our Climate Action Teams,” <https://www.resilientneighborhoods.org/climate-action-teams.html> (Few of these teams seem to be in West Marin)

<sup>4</sup> <https://www.westmarinclimateaction.org>



that Carbon Farm strategy emphasizes compost application as a primary strategy to reduce GHG emissions for agricultural lands without clarity on the importance of other solutions and potential miscalculations in potential acreage available for such strategies.

For example, the Carbon Farm Practices outlined in Table 14: Carbon Farming Practices, could be updated to provide clarity on the 19 completed Carbon Farm Plans on 8,307 acres of land. It would be helpful to have additional information on these plans, including length of complete implementation of the plans, the order in which the suite of activities/strategies were implemented, total cost to implement, and limiting factors for strategies (cost, loss of grazing acreage, geography, etc.).

### **Compost on Rangelands, Croplands, and Vineyards**

The strategy proposed for compost on rangelands and croplands needs additional information. As an example, we are aware of a few approved and implemented Carbon Farm Plans by Marin Agricultural Land Trust that included a suite of actions to sequester GHG emissions. These plans have taken multiple years to implement the strategies. In some cases, the first strategies to implement were protection of riparian corridors and installation of fencing to support prescribed grazing. Application of compost was only applied on a small percentage of the total acreage of the ranch (on top of a hillside) and only after planting and establishment of windbreaks (to prevent the compost from blowing away).

When we review Table 14: Carbon Farming Practices, a total of 8,976 acres were implemented with a Carbon Farm Practices. 11% of that total acreage included compost application. In Table 16: Carbon Sequestration Approaches and Estimated Totals, indicates that 28% of the 215,012 potential acres (in the chart which we note is higher than the text reference of 130,480 acres on page 48) may be appropriate for compost application. It would be helpful to explain the 17% increase in potential acreage for this strategy when compared to the 19 implemented Carbon Farm Plans.

Related to this question on potential acreage of compost application, the totals on Figure 10: Map of Potential Compost Application Areas (p. 48), requires an update and revision of the total potential acreage.

- The compost application area is too great and incorrectly factors 28,000 acres in the Point Reyes National Seashore and Golden Gate National Recreation Area. The September 2020 release of the General Management Plan Amendment: Final Environmental Impact Statement (FEIS) allows for up to 9,000 acres of compost application in the “pasture zone.” In addition, the FEIS requires compost to be produced within the park, which means the actual application of compost acreage will be much less than 9,000 acres of land.
- The map is unclear as it is missing identification of public lands, cities, and other landmarks. The map seems to include Marin Municipal Water District lands as well as some California State Park lands near Millerton State Park that would not be eligible for compost application. We request the map is updated to include key features and exclude public lands.

- We are unclear if agricultural lands currently in use for dairy production and apply liquid manure to large areas of pasture are also eligible to have compost applied. Our understanding is that dairies must meet the requirements of the Regional Water Quality Control Board and develop nutrient management plans that calculate how much manure/compost/fertilizer that will be added to a pasture without creating potential nutrient discharges. Additional information on this would be helpful to identify dairy pastures in the map.

### **Riparian Buffers and Restoration**

Table 16: Carbon Sequestration Approaches and Estimated Potential, indicates that compost application and riparian restoration have the longest rate of return on GHG sequestration. We would like to see more emphasis on protecting riparian corridors based on the rate of GHG sequestration and the multiple co-benefits that include 1) creation of habitat, 2) clean water, 3) recharge groundwater sources, and 4) creation of natural windbreaks.

We understand this is an expensive solution that requires intensive labor investment of a rancher as well as a loss of grazing acreage when implemented. Therefore, we recommend the Draft CAP seek to overcome those challenges by providing solutions through strategies that promote funding incentives for riparian fencing projects, incentives for water source projects (to create water sources away from riparian areas), and to consider implementing buffer areas on agricultural and working lands to ensure that livestock are not in riparian areas.

### **Blue Carbon**

In addition, blue carbon is only mentioned under Chapter 4, but this is also a stand-alone carbon sequestration solution, which has many co-benefits including reducing ocean acidification, and could be discussed more. We need more state and local carbon assessments for wetlands and estuaries.

### **Chapter 5 Implementation and Monitoring**

While the Draft CAP is comprehensive and presents many strong solutions, a Draft CAP must have the ability to have strong measurements, monitoring, and enforceable measures to be truly effective. This could be emphasized. For instance, there are a few suggestions related to passing ordinances. This would be one concrete way to advance solutions and lower GHGs. The annual assessments will also be critical. One comment that was raised during the October 12 meeting was related to using stronger language, which we would like to reiterate.

While we acknowledge the challenges, it is concerning that the past CAP goals were not met by 2020 (p. 7). We would like to ensure that this Draft CAP is successfully implemented. Monitoring and measurements will be critical to the success of the Draft CAP.

Regarding “supportive” actions, how is it possible to track these without any measurement criteria (e.g. p. 27 & p. 33)?

Overall, we are supportive of the implementation goals in this section and as we mentioned earlier in our comments creating an annual public facing scorecard. We reiterate our request for inclusion of each strategy table to include: 1) the high-level pathway of implementation achievement (if it is required by any local, state, or federal legislation), 2) estimated costs of the strategy and potential funding sources (grant, public funds, etc.), 3) timeline of implementation, 4) actions needed to realize the goal (ex. Ordinance, community partnership, etc.), 5) ease of implementation, and 6) the target GHG reduction goal. These would be incredibly helpful in understanding the priorities and best pathways to achieve those goals.

### **Funding & Communications**

Another challenging aspect will be funding for these projects and the Draft CAP. We understand the extreme budget challenges faced, but where possible we support designated county and state funding to develop and implement the Draft CAP and other GHG reduction and climate adaptation efforts.

Also related to implementation, is there a communications and collaboration (cross-departmental) plan around the implementation of the Draft CAP? The cross-departmental collaboration was alluded to at the October 12 meeting. This type of plan could be formalized.

### **Suggested Editorial Revisions**

- P. 24 - Bullet 2 under *LCT-C7: Employee Trip Reduction* has an errant underscore.
- P. 42 - Bullet 4 under *CE-C3: Community Engagement and Empowerment via Drawdown Marin* has an extra comma.

Thank you for all of your hard work on this plan, and for your consideration of these comments. It has been an especially challenging year and we applaud Marin County's continued commitment and leadership in developing solutions for the climate crisis, coastal resilience, and adaptation; and we look forward to continuing to work with you.

Respectfully,



Morgan Patton  
Executive Director



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cc: Dennis Rodoni, Marin County Supervisor  
Rhonda Kutter, Aide to Supervisor Rodoni