December 8, 2020

Marin County Board of Supervisors
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Marin County Climate Action Plan Update 2020 and Drawdown Marin Strategic Plan 2020

Dear Board Members,

RECOMMENDATION:

1. Conduct public hearing
3. Accept report on Drawdown: Marin Strategic Plan

SUMMARY:

In November 2015, the Board of Supervisors adopted an updated Climate Action Plan (CAP) with 2020 targets and measures. Since that time, the State established 2030 emissions reduction targets and the County launched the Drawdown: Marin initiative to dramatically reduce countywide greenhouse (GHG) emissions, increase community resilience, and address equity. Drawdown: Marin seeks to engage and empower community members to share their priorities and to design local solutions to climate change. It is a coordinated and collaborative effort involving Marin County cities and towns, organizations, businesses, and individuals who over the last two years, have informed the development of the attached Strategic Plan.

Given the State’s new 2030 targets and the desire to incorporate the countywide work of Drawdown: Marin into the formal County CAP planning process, staff developed an updated Climate Action Plan (2020 CAP Update) that establishes new GHG emission reduction targets for 2030 and identifies the policies and programs necessary to achieve those targets. The 2020 CAP Update sets two targets consistent with both State guidance and the more aggressive Drawdown: Marin goals:

- Reduce GHG emissions in the unincorporated County to 40% below 1990 levels by 2030 using mitigation measures (consistent with State Senate Bill 32)
- Reduce GHG emissions in the unincorporated County to 60% below 2005 levels by 2030 using a combination of mitigation and carbon sequestration measures (consistent with the Drawdown: Marin goal)

Implementation of many of the 2020 CAP Update and Drawdown: Marin strategies are already underway as part of the County’s continuing efforts to reduce GHG emissions and sequester carbon. However, in order to achieve these ambitious, aggressive, and necessary targets, additional strategies, programs, and policies identified in the 2020 CAP Update and Drawdown: Marin Strategic Plan must be developed and implemented with expediency. Achieving these goals will not be possible without significant, diversified funding, strong community partnerships, and ongoing support from the state. Annually, staff will return to the Board of Supervisors with an implementation plan and budget requirements to implement strategies, using the Plans for guidance and incorporating best available resources, technology, and funding sources.

**DISCUSSION:**

*Background and Community Engagement*

The County of Marin is an environmental leader, as evidenced by years of commitment to climate action. During Earth Week 2002, the Board of Supervisors adopted a resolution recognizing both the gravity of climate change and the need for local action. Marin County was one of the first counties in California to take formal action addressing GHG emissions when it adopted the Marin County Greenhouse Gas Reduction Plan in 2006 (2006 GHG Plan). Measures identified in the 2006 GHG Plan were then incorporated into the Marin Countywide Plan adopted in 2007. Subsequently, the County adopted the 2015 Climate Action Plan, which updated the 2006 GHG Plan to reflect changing technologies and opportunities to reduce GHG emissions and to strengthen the County’s commitment to enacting policies and programs to reduce emissions.

In 2017, the Board of Supervisors launched the Drawdown: Marin initiative and further committed the County to dramatically reducing countywide GHG emissions. Drawdown: Marin, an idea developed by the Marin Climate Action Network, seeks to engage and empower community members to share their priorities and to design local solutions to climate change. It is a coordinated and collaborative effort involving Marin County cities and towns, organizations, businesses, and individuals who over the last two years, have informed the development of the attached Strategic Plan.

Recognizing that the work of the countywide Drawdown: Marin efforts must be incorporated and formalized into County planning documents and building on the successes of the 2015 CAP, the County began an update to the CAP in 2019. The updated CAP that is presented here for adoption (2020 CAP Update) revises the County’s proposed policies, programs and goals to align with the state’s 2030 goals while also integrates the work and more aggressive goals developed by Drawdown: Marin.
Throughout the two-year Drawdown: Marin planning process, 150 volunteers participated in six Stakeholder Collaboratives representing six focus areas, a Community Outreach Partnership (COP) (formerly the Community Partnership Council), an Executive Steering Committee (ESC), and as on-call Drawdown Advisors. The general public was also engaged in the County’s CAP process through public workshops in February and October 2020 and a CAP Interest Survey on the County’s Open Gov website from June through August 2020 (see Appendix C of the 2020 CAP Update for survey results).

Vision, Goals, and Emission Reduction Measures

In 2016, the State passed Senate Bill 32, which set a target to reduce statewide emissions to 40% below 1990 levels by 2030. The California Air Resources Board (CARB) 2008 Climate Change Scoping Plan indicates that because reliable activity data is generally not available to determine 1990 emissions levels for local governments, they should pursue a target, comparable to the statewide target, to reduce emissions 15% below “current” emissions. Marin cities and towns have historically used 2005 as the baseline for its emissions inventories and have set GHG reduction goals relative to that year. The County seeks to align its goals with Marin’s cities and towns’ climate planning efforts; therefore, the baseline inventory for the 2020 CAP Update has been revised to 2005, rather than 1990 which was used in the 2015 CAP. Shared goals will support continued and expanded collaboration between the jurisdictions and consistent assessment of progress toward GHG emission reduction goals.

In Fall 2018, the Drawdown: Marin ESC, with input received from members of the public and the six Collaboratives, developed the following vision and goals:

Vision: Marin reverses its impacts on climate change by implementing local solutions as we create a thriving, equitable, and resilient future for all.

Goals:

- 60% reduction in GHG emissions by Marin County below 2005 by 2030
- Drawdown GHG emissions by Marin County below zero by 2045

Drawdown: Marin intentionally set goals more aggressive than the State and signifies to the community and Marin County jurisdictions that we must accelerate our work to solve climate change now. Drawdown: Marin establishes the broad framework and recommended goals but allows each jurisdiction to set its own goals within its own Climate Action or General Plans.

The 2020 CAP Update establishes the targets in Table 1 below, which are consistent with both State guidance and the Drawdown: Marin goals. To meet these goals, the County has outlined pathways to achieve the State’s emissions reduction target through mitigation alone, and to meet the Drawdown: Marin emissions reduction target through mitigation and sequestration of CO₂ through actions on natural and working lands. The 2030 emissions limits represent the maximum annual GHG emissions that can be emitted in the unincorporated County in 2030 and still meet the goals set forth in the CAP. This CAP does not include measures designed to
reach the 2045 carbon neutrality goal set by Drawdown but includes that target in the table below to highlight the long-term path this CAP sets the County on.

Table 1: 2020 CAP Emissions Reductions Targets

<table>
<thead>
<tr>
<th>Target</th>
<th>2030 Mitigation Only Target</th>
<th>2030 Mitigation + Sequestration Target</th>
<th>2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>2030 Emissions Limit to Meet Target (MTCO₂e)</td>
<td>40% below 1990 level</td>
<td>60% below 2005 level</td>
<td>Carbon Neutral</td>
</tr>
<tr>
<td>Referent</td>
<td>SB 32 Statewide Target</td>
<td>Drawdown Marin</td>
<td>Drawdown Marin</td>
</tr>
<tr>
<td>Measures Required to Achieve Target</td>
<td>Mitigation Only</td>
<td>Mitigation plus sequestration</td>
<td>Mitigation plus sequestration</td>
</tr>
</tbody>
</table>

In the 2015 CAP, the County attempted to complete a revised calculation for a 1990 inventory using the updated protocols. While an inventory was completed for that year and used in the 2015 CAP, it has since been determined that the 1990 inventory is unreliable given the protocol updates and lack of data. Additionally, the County would like to be in alignment with Marin’s cities and towns’ climate planning efforts in order to achieve countywide collaboration. Therefore, the baseline inventory for this CAP update has been revised to 2005. However, the State has set targets using 1990 emissions levels as the baseline. Consistent with the California Air Resource Board’s guidance to local governments, for the purposes of target setting, the County is estimating 1990 levels as 15% below 2005 levels. The 2030 target is set at 40% below that level to be consistent with the State targets. For example, if the County’s 2005 baseline were 100 MTCO₂e, then the calculated “1990 baseline” for the purposes of the State targets would be 85 MTCO₂e. Therefore, the emissions levels to meet the State target would be 51 MTCO₂e (40% below the “1990 baseline” of 85 MTCO₂e).

To achieve the Drawdown: Marin goals and CAP 2020 targets, Marin County jurisdictions have the flexibility to choose from multiple solutions. The Drawdown: Marin initiative identified 29 climate change solutions across the focus areas of Renewable Energy, Transportation, Buildings and Infrastructure, Local Food and Food Waste, Carbon Sequestration, and Climate Resilient Communities. Of the 29 solutions identified in the Strategic Plan, the ESC endorsed seven solutions for immediate implementation by various entities (see Figure 1); those endorsed solutions were incorporated into the 2020 CAP Update and are identified accordingly in each section of the Plan.

Figure 1: Drawdown: Marin Endorsed Solutions

Zero Emissions Vehicles – Drive Clean Bay Area
Marin Carbon Farming Initiative
Microgrids – Fairfax Pavilion Pilot Project
The 2020 CAP Update also includes a variety of regulatory, incentive-based, and market-based strategies that are expected to reduce emissions. Several of the strategies build on existing programs while others provide new opportunities to address GHG emissions. Current State actions (legislation already passed) will have a substantial impact on future local GHG emissions. Local strategies will supplement these State actions and achieve additional reductions. Successful implementation of the CAP measures will require the combined effort and participation of County and city and town staff as well as residents, community organizations, businesses, and community leaders. The following table depicts the targeted emissions reductions by strategy in order to meet the more aggressive target set by Drawdown: Marin to achieve a 60% reduction in emissions below 2005 by 2030.

**Table 2: 2020 CAP Emissions Reduction Strategies**

<table>
<thead>
<tr>
<th>Emission Reduction/Sequestration Strategy</th>
<th>GHG Emissions Reductions in 2030 (MTCO2e/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Portfolio Standard, Title 24, Light and Heavy-Duty Fleet Regulations</td>
<td>22,884</td>
</tr>
<tr>
<td>Low Carbon Transportation</td>
<td>37,370</td>
</tr>
<tr>
<td>Renewable Energy &amp; Electrification</td>
<td>19,894</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>16,726</td>
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<tr>
<td>Waste Reduction</td>
<td>12,595</td>
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<tr>
<td>Water Conservation</td>
<td>15</td>
</tr>
<tr>
<td>Agriculture and Working Lands - Mitigation</td>
<td>26,297</td>
</tr>
<tr>
<td>Agriculture and Working Lands - Sequestration</td>
<td>55,752</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>191,533</strong></td>
</tr>
</tbody>
</table>

To evaluate and develop the Agriculture and Working Lands measures, the County Sustainability Team was awarded a Department of Conservation grant that allowed it to partner with the Carbon Cycle Institute, University of California Cooperative Extension, the Marin Resource Conservation District, and Marin Agricultural Land Trust to develop a detailed analysis of soil-, vegetation-, and agricultural-based carbon sequestration potential on working lands in the County, develop carbon sequestration goals, identify strategies to continue and enhance carbon farm planning and implementation, and to engage agricultural partners and stakeholders in the CAP update.
**Equity and Climate Resiliency**

Dramatically reducing GHG emissions is imperative. This work and equity are interconnected. Frontline communities suffer first and worst from climate disasters because these communities, which are often made up of low-income people of color who are the least responsible for producing GHG emissions, are located in areas that lack basic infrastructure to respond to climate change. Additionally, these communities often develop resiliency practices long before other communities and build those practices into their social structures. The County and Drawdown: Marin acknowledges these communities have existed and still exist in Marin County and seeks to design and implement solutions with them. This requires internal and external on-going work to normalize, organize, and internalize equity principles and approaches. It is critical to achieving our emissions reduction targets and Drawdown Marin vision and goals.

Addressing equity and antiracist work are on-going efforts as the County and Drawdown Marin move forward with implementation of the Strategic Plan and 2020 CAP Update. The County will continue to work with its community-based partners and internally to identify specific actions it can take to address equity. As implementation efforts continue for both Plans, considerations that must be forefront include ensuring that measures and solutions are accessible by all; implementation efforts continue to be designed and implemented with broad community input and support; and time and effort is put into connecting with and building relationships of trust to better understand community priorities.

**Implementation and Next Steps:**

In March 2020, the ESC directed the Drawdown: Marin Coordinator to investigate the possibility of creating a County-nonprofit partnership, which includes forming a new nonprofit. The purpose of this joint endeavor is to increase fundraising ability and effectiveness and shift decision-making authority from the County to the new Board, made up of local jurisdictions and agencies, community members, nonprofits, community-based organizations, and business members. The new nonprofit Board and staff will be responsible for continued implementation of the seven Endorsed Solutions and 22 other solutions developed by the Stakeholder Collaboratives. To effectively implement the solutions, the Board and staff will also seek multiple funding sources in 2021.

Implementation of many of the 2020 CAP Update and Drawdown: Marin strategies are already underway as part of the County’s continuing efforts to support climate protection. Going forward, actions that will begin with the adoption of the 2020 CAP Update include: research and development of key ordinances and programs, prioritization and implementation of strategies not currently underway, program management, and emissions tracking. Strategy prioritization will be based on several factors including cost effectiveness, available funding, emissions reduction efficacy, general benefits to the community as well as timing and funding availability necessary to support meeting the 2030 target.
The County, public agencies, and community members will incur both costs and savings from implementation of the local GHG emissions reduction strategies included in the 2020 CAP Update and the Drawdown: Marin Strategic Plan. Primary costs are related to capital improvements and other investments, as well as community engagement and programmatic operational costs. Despite these upfront and ongoing costs, some strategies will result in long-term cost savings from reduced energy use and maintenance. Real and on-going community relationship building can help shift power dynamics by empowering communities to speak up about priorities and will benefit multiple County planning processes and projects. These efforts will likely have multiple benefits beyond emissions reductions; for example, increased knowledge of climate change, increased community resilience, and deeper connection with the land and ecosystems. Multiple different funding sources must be identified and leveraged including grants, local government and agency contributions, private sector partnerships and foundations, and possibly public funding mechanisms such as a sales or parcel tax or fee.

Addendum to Countywide Plan EIR
An Addendum to the 2007 Marin Countywide Plan Final Environmental Impact Report (2007 CWP FEIR) was prepared that analyzed the proposed 2020 CAP Update and compares the potential impacts to the conclusions of the 2007 CWP FEIR. This analysis was completed to determine the requirement for further environmental documentation pursuant to the State CEQA Guidelines sections 15162, 15163 and 15164. The Addendum identifies no new or substantially more severe impacts of the proposed 2020 CAP Update compared to those identified and evaluated in the 2007 CWP FEIR. Mitigation measures identified in the 2007 CWP FEIR would be applied to the 2020 CAP Update, as proposed, to reduce or avoid significant impacts. With the application of these previously-identified mitigation measures, no new significant impacts or substantial increase in the severity of previously identified impacts requiring revisions to the 2007 CWP FEIR would occur. No new mitigation measures are required for the adoption and implementation of the proposed 2020 CAP Update.

FISCAL/STAFFING IMPACT:
Adoption of the Marin County CAP Update 2020 and receipt of the Drawdown: Marin Strategic Plan will not result in any impacts to the general fund in the current fiscal year. A number of proposed measures are expected to be implemented through existing programs and state and federal grants. Measures that would require any additional funding will be considered in terms of priority as part of the annual budget process.

REVIEWED BY: (These boxes must be checked)
[ ] Department of Finance [ X ] N/A
[ X ] County Counsel [ ] N/A
[ ] Human Resources [ X ] N/A
SIGNATURE:

Dana Armanino    Alex Porteshawver
Principal Planner  Sr. Program Coordinator

ATTACHMENTS:
1. Marin Climate Action Plan Update 2020
2. 2020 CAP Response to Comments
3. Addendum to Countywide Plan Environmental Impact Report
5. Drawdown: Marin Strategic Plan 2020