Midpeninsula Regional Open Space District

Memorandum

DATE: June 25, 2025

MEMO TO: Board of Directors

THROUGH: Ana Ruiz, General Manager

FROM: Sophie Christel, Management Analyst II, Natural Resources

SUBJECT: Climate Program Update and Scope of Strategic Plan for Adaptation and Resilience to Climate Change (SPARCC)

Climate Program and Policy

In 2018, the Midpeninsula Regional Open Space District (District) Board of Directors (Board) adopted the Climate Change policy chapter (Policy) of the Resource Management Policies and the Climate Action Plan (Plan), setting the District's intentions for addressing climate change. During the FY2026 action plan development process, Board members requested an update on the District's Climate Program and the progress made to date. The Climate Change Policy's overarching goal is to **"Reduce agency-generated greenhouse gas [GHG] emissions, increase carbon sequestration, and promote resilience to climate change impacts."** These are the three branches of the Climate Program, all of which are necessary to effectively address climate change.

Greenhouse Gas Reductions

As of 2022, the District has reduced its greenhouse gas emissions by 30% from the 2016 baseline, ahead of Policy goals. These reductions are a result of implementing numerous actions detailed in the Climate Action Plan, including reducing fossil fuel use by facilities and fleet, offsetting air travel emissions, and establishing hybrid work schedules. An inventory of 2024 emissions is underway and expected to be completed in fall of 2025 (note: these calculations and reports are prepared biennially – every two years). Converting the District's fleet to low-carbon fuels remains the most effective action for further reductions and is already in progress. Although staff will continue emissions reduction work in alignment with Board-approved Policy goals, its impact will be small relative to potential resiliency actions in the preserves; the District's annual carbon footprint is ~1,000 metric tons of CO_2equivalents ($MTCO_2e$), while ~70,000 $MTCO_2e$ are sequestered each year in the preserves. Therefore, while progress continues toward incrementally reducing emissions, staff will be increasing the Climate Program's focus on resilience and sequestration efforts.

Carbon Sequestration and Storage

On average, District preserves are estimated to sequester ~1 $MTCO_2e$/acre/year (~70,000 $MTCO_2e$ annually, total) with greater sequestration in forests and less in scrub and grassland. Total storage is estimated in the tens of millions $MTCO_2e$, though it is difficult to accurately quantify.

Active management of forests and grasslands can promote more carbon storage, especially in the long term, and safeguard existing carbon stocks from disturbances such as from fire, drought, and disease, which would release stored carbon. Projects on the proposed Fiscal Year 2025-2026 Capital Improvement and Action Plan (CIAP) that promote increases in stable carbon storage include:

- MAA05-010 La Honda Forest Health
- 80092 Long Ridge Forest Health
- 80100 Carbon Farm Plan Implementation

Property acquisition remains one of the best tools for expanding the District's carbon banks by protecting land that may otherwise be developed and therefore lose its carbon storage and sequestration capacity. Concurrently, staff will also evaluate promising methods for sequestration enhancement as they arise to identify new ways of increasing carbon storage on District lands that align with our mission and policies.

Intentional actions that affect the physical environment to enhance sequestration is an area that still requires significant research and pilot studies to confirm effectiveness and ensure that unintentional negative impacts to the natural resources are avoided. For example, the potential for negative ecosystem impacts still need to be studied before considering large scale implementation of emerging new techniques and ideas such as adding soil amendments in a wildland setting. Projects to study or begin implementing carbon sequestration enhancements in upcoming Fiscal Years include:

- 80100 Carbon Farm Plan Implementation
- Study of Biochar Impacts to Rangeland Soils (no number, FY26)
- 80109 Rangeland Silvopasture (FY28)

Adaptation and Resilience

The last branch of the Climate Program, resilience, is the area in which the District has the most potential for new and impactful action. Climate change is already affecting the region's ecology and natural communities. Longer and more frequent heatwaves, volatile precipitation, and extended fire seasons have destabilized the ecological functions and ecosystem services that enable life here to thrive. They also impact built infrastructure, human health and welfare, and even financial sectors.

Appropriate management of natural lands is now widely recognized as a key piece of combatting climate change. California's Fourth Climate Change Assessment (2022) identifies Natural

Systems as one of three pillars of climate change resilience. In support of this state-level emphasis on natural climate solutions, the California Natural Resources Agency has multiple plans for adaptation and resilience, including the Natural and Working Lands Climate Smart Strategy (2022) and Pathways to 30x30 (2022). Agencies in our region, including California State Parks, East Bay Regional Parks District, Valley Water, and multiple cities and counties, have also published or are developing climate resilience plans and programs. To fulfill the Policy goal of climate resilience, the General Manager, under their signing authority, authorized a contract with consultant BluePoint Planning to assist with developing a climate resilience plan based on District operations, personnel, and policies. The resilience plan, identified as the Strategic Plan for Adaptation and Resilience to Climate Change (SPARCC) in the Fiscal Year 2025 CIAP, will ultimately guide the inclusion of science-backed climate change adaptation and resilience measures throughout District activities, projects, and programs.

SPARCC Project Purpose

The purpose of the SPARCC is to define the District's pathway in addressing ongoing and future impacts of climate change on public lands and agency operations. The SPARCC document will set goals, describe and prioritize high-level actions, and provide scientific background, tools and frameworks for understanding and incorporating climate change considerations into project planning and delivery. This plan will advance the District's Climate Change Policy goals and complement the existing emissions-focused Climate Action Plan. **The SPARCC will expand and shift the Climate Program's efforts beyond mitigation for GHG emissions into adaptation and resilience**, where many opportunities for meaningful action remain. The SPARCC began as a supporting project on the FY25 CIAP and has shifted to a full operating project (80101) on the proposed FY26 CIAP. Work with the consultant will begin in June 2025 and is expected to conclude by June 2026.

SPARCC Project Team and Scope

The SPARCC requires participation from all departments because the issue touches every area of District operations, directly or indirectly. The project team will be composed of the project manager (Natural Resources Management Analyst), the consultant team from BluePoint Planning, and 11 staff from departments most directly impacted by climate change and thus most likely to be responsible for implementing the plan. In addition to this core team, management staff from all departments and the General Manager's Office (GMO) will have the opportunity to participate in interviews with the consultant and/or review key deliverables throughout the process. The Planning and Natural Resources committee (PNR) will be engaged to comment on the draft plan goals, action list, and the final plan document in Fiscal Year 25-26, and the final plan will be presented to the Board for approval in Fiscal Year 26-27.

The scope of services with BluePoint Planning includes the following tasks:

1. Literature and Background Review – Review and summarize materials, including District documents, plans from similar agencies and organizations, and scientific literature, to create a foundation of best practices to support the Plan's goals and actions.

2. Manager Interviews – Conduct small-group interviews with management and GMO staff to receive input on the needs, opportunities, and challenges regarding climate adaptation and resilience in the District's work. These interviews will directly inform the development of the draft goals for the plan.
3. Meetings and Workshops – Facilitate a kickoff meeting with the project team to orient staff with the project process and facilitate two in-person interactive workshops to collaboratively develop the plan goals and a prioritized menu of actions.
4. Draft Goals and Actions – Develop draft goals and a draft action list for staff to refine through the interactive workshops. Present the draft goals and draft action list to the Planning and Natural Resources Committee for review and input.
5. Implementation Targets and Tools – Develop realistic targets and timelines for implementation of the action list, which will be further refined by the project team, and provide a suite of basic tools (e.g. flowcharts, checklists) to support implementation and incorporation of resilience and adaptation considerations into project work.
6. SPARCC Writeup – Produce a final plan document, subject to review by the project team, management staff, and PNR, which will be presented to the full Board for approval.

Next Steps

The 2025 biennial report on the District's GHG reductions will be presented to the Board in the fall of 2025 to inform the Board on District progress in reaching its next emissions reduction milestone of 40% reduction by 2030. Moreover, the SPARCC will begin in earnest at the start of Fiscal Year 2026, starting with a goal-setting workshop held with the consultant.

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