



Midpeninsula Regional
Open Space District

R-18-103
Meeting 18-33
September 12, 2018

AGENDA ITEM 6

AGENDA ITEM

Draft Climate Change Policy and Draft Climate Action Plan

GENERAL MANAGER'S RECOMMENDATION *den*

Receive an informational presentation and provide feedback on the draft Climate Change Policy and draft Climate Action Plan, including the prioritization criteria for selecting annual Climate Action Plan implementation actions. No Board action required.

SUMMARY

The purpose of this item is for the Board of Directors (Board) to receive an informational presentation and provide feedback to staff on the draft Climate Change Policy and draft Climate Action Plan, including the prioritization criteria for selecting annual Climate Action Plan implementation actions. The Midpeninsula Regional Open Space District (District) is developing a Climate Change Policy that will set voluntary greenhouse gas (GHG) reduction goals for the agency and guide District work on carbon sequestration and ecosystem resilience. An accompanying Climate Action Plan will serve as a roadmap to implement the GHG reduction goals to reduce administrative emissions 40% below 2016 baseline by 2030 and 80% below 2016 baseline by 2050. Staff will incorporate Board feedback received on September 12 and return to the Board with a final Climate Change Policy and Climate Action Plan for consideration in October 2018.

DISCUSSION

Draft Climate Change Policy Overview

The draft Climate Change Policy (Attachment 1) will be a new chapter of the Resource Management Policies. The Policy will set the District's voluntary GHG reduction goals and provide direction on increasing carbon sequestration, promoting ecosystem resilience, and supporting regional climate change efforts. On September 12, the Board will receive information and provide feedback on the following draft Climate Change Policy statements:

Goal CC (Climate Change): Reduce agency-generated GHG emissions, increase carbon sequestration, and promote natural resource resilience to climate change impacts.

- **Policy CC-1:** Reduce administrative GHG emissions 40% below 2016 baseline by 2030 and 80% below 2016 baseline by 2050, in line with the State of California's GHG reduction goals.

- **Policy CC-2:** Reduce non-administrative GHG emissions related to District activities, such as visitor transportation and livestock.
- **Policy CC-3:** Increase carbon sequestration in vegetation and soils and minimize carbon release from wildfire.
- **Policy CC-4:** Prepare for climate change impacts on natural resources and promote ecosystem resilience.
- **Policy CC-5:** Lead by example and support state, regional, and community-scale action on reducing climate change impacts to ecosystem health and biodiversity, and increasing ecosystem resilience.

A useful peer example is East Bay Regional Park District's Policy Framework for Managing Park Resources in a Changing Climate (Attachment 2), which was adopted in March 2018.

Draft Climate Action Plan Overview

The draft Climate Action Plan (Attachment 3) will implement the District's GHG reduction goals. It identifies options to reduce administrative GHG emissions 40% below baseline by 2030. Achieving an 80% reduction by 2050 will be challenging, likely requiring significant changes to everyday operations along with advances in technology. The draft Climate Action Plan recommends conducting a regular GHG inventory to track and report progress towards the GHG reduction goals, and updating the Climate Action Plan between 2025 and 2030 to identify further actions needed to meet the 2050 goal.

The draft Climate Action Plan includes a summary of current and forecasted GHG emissions; an analysis of the effectiveness and cost of ten sample actions; a suite of GHG reduction strategies, actions, and performance indicators for each emissions sector; an implementation and monitoring plan; and a discussion of future work on carbon sequestration, adaptation, and resilience.

Climate Action Plan (CAP) Implementation

To reach the District's GHG reduction goals, staff would propose CAP implementation actions during the Capital Improvement and Action Plan (CIAP) and Budget development process based on Board-approved prioritization criteria discussed in the section below. The Board would review the proposed implementation actions each year during the annual Priority Setting Retreat and again in May and June as part of the annual CIAP/Budget review.

Prioritization Criteria for Annual Selection of CAP Implementation Actions

Annual prioritization and selection of CAP implementation actions will allow the District to adapt each year to ever-evolving changes and advances in technologies, climate change strategies, and climate change grant funding. On September 12, the Board will be asked to provide feedback on the following proposed prioritization criteria for selecting CAP implementation actions to include in the annual CIAP/Budget:

CAP Prioritization Criteria

- Greenhouse gas reduction effectiveness
- Cost
- Availability of external funds, such as grants or rebates
- Ease of implementation
- Operational impacts (for example, vehicle/equipment replacements need to be balanced with operational demands of off-road patrol and maintenance)

- Staff capacity
- Ability to leverage other ongoing programs or projects for economy of scale
- Co-benefits (for example, commute actions that also increase employee retention or vehicle/equipment actions that also enhance visitor-to-staff interactions)
- Consistency with Measure AA, Vision Plan, and Strategic Plan goals and priorities
- Consistency with other District priorities
- Public feedback and requests

Monitoring and Tracking Progress

Staff would conduct a regular inventory of GHG emissions to track progress towards the District's GHG reduction goals and report findings to the Board. To reach the goal of a 40% reduction by 2030, the District would need to reduce administrative emissions by 3% per year (55 metric tons of carbon dioxide equivalent per year) starting in 2019. Managing the GHG inventory and tracking the implementation of the Climate Action Plan is estimated to take approximately 0.5 of a full time equivalent (FTE) position. Note: the Climate Resiliency Fellow who is working currently on the Climate Change Policy and Climate Action Plan is a two-year limited term position ending in 2019. The General Manager will consider requesting Board approval to transition this position to a regular FTE in the Fiscal Year 2019-20 Budget to manage the District's overall Climate Change Program among other related needs. Specific climate change projects on carbon sequestration, climate adaptation, and resilience are expected to be folded into the District's annual CIAP workload and be distributed among the various departments and existing staff.

Cost Analysis of Sample CAP Implementation Actions

Costs and GHG reductions were modeled for ten sample CAP actions that, if implemented, would reduce administrative GHG emissions by 40% (see table below). This analysis identifies one pathway to reaching the 40% reduction goal, but many other combinations of actions could achieve the same reduction. Therefore, the information presented in the table is not meant to be prescriptive but rather illustrate that reaching the 40% reduction goal is possible. Costs and GHG reductions are not analyzed for the full list of actions in the Climate Action Plan due to limitations in the project scope and budget.

The table shows that some actions would result in ongoing annual operating costs, such as purchasing 100% renewable electricity (\$570 per year) or providing a transit/carpool/bike incentive (\$21,002 to \$43,619 per year depending on participation). Some actions would require upfront capital costs that are paid back over time through cost savings, such as purchasing electric bikes or all-terrain vehicles (ATVs) for ranger patrol (\$60,000 upfront cost, paid back in two years through vehicle fuel savings). Downsizing trucks would result in both capital savings (due to lower purchase price at the time of replacement) and operating savings (due to fuel savings). Finally, some actions would have no associated cost, such as expanding telecommuting and compressed work schedules. The addition of a solar panel system for the new Administrative Office (AO) is expected to result in a net cost savings for energy use. At this time, it is too early to know whether other direct and indirect costs would apply to improve the energy efficiency of the building.

Altogether, the ten sample actions analyzed would result in an estimated net annual operating savings of \$82,671 due to savings in fuel and energy use. Net upfront capital costs will depend on energy efficiency improvements and costs associated with the AO building.

Cost and GHG Reduction Analysis of 10 Sample Actions

SECTOR	ACTION	GHG REDUCTION FROM BASELINE	NET ANNUAL OPERATING COST*	NET UPFRONT CAPITAL COST*
Vehicles, Equipment, Business Travel	Switch to renewable diesel (completed in September 2018)	6%	\$0	\$0
	Downsize F350 trucks at time of replacement (25% of trucks and 100% of trucks scenarios)**	2.5-10%	(\$13,952 - \$55,807)	(\$34,729 - \$138,915)
	Increase ranger patrol on electric bikes or all-terrain vehicles (ATVs)	4%	(\$33,434)	\$60,000
	Purchase carbon offsets for all business travel	6%	\$374	\$0
Employee Commute	Transit/carpool/bike incentive (low and high scenarios)	3-6%	\$21,002 - \$43,619	\$0
	Expand telecommuting (low and high scenarios)	2-5%	\$0	\$0
	Expand compressed work schedules (low and high scenarios)	1.5-3%	\$0	\$0
	Allow AO staff to work at new SAO (4 staff/day and 10 staff/day scenarios)	0.3-0.8%	\$0	\$0
Facilities	Purchase 100% renewable electricity	5%	\$570	\$0
	New AO: Zero Net Energy (solar panel system plus 60% energy use reduction through renovation)	2%	(\$47,612)	TBD
Total (Range)		32-48%	(\$50,435 - \$114,907)	(\$78,915) - \$25,271 + AO costs
Total (Average)		40%	(\$82,671)	(\$26,822) + AO costs

*Negative values indicate net savings.

**It may not be feasible to downsize all F350 trucks. Further analysis is required to assess whether smaller trucks can meet operational needs for fire response and off-road patrol and maintenance. This table shows that downsizing F350 trucks has high GHG and cost savings potential since smaller trucks are comparatively lower in cost.

FISCAL IMPACT

There is no fiscal impact associated with this item at this time. There are sufficient funds in the Fiscal Year (FY) 2018-19 budget to complete the Climate Change Policy and Climate Action Plan. The fiscal impact of implementing a Board-approved Climate Action Plan will vary each year based on priorities, staff capacity, and funding. As part of the annual CIAP and Budget development process, the Board will consider prioritizing and approving budgets for new projects and purchases to further the CAP and reach the District's GHG reduction goals. Depending on the actions implemented, the District may see a net cost or net savings per action. Staff has already begun implementing some no-cost priority actions, such as switching from conventional diesel to renewable diesel (made from agricultural byproducts).

BOARD COMMITTEE REVIEW

To date, the full Board has received two informational presentations on the District's Climate Change Program.

- On March 28, 2018 (R-18-28), staff provided an overview of the Climate Change Program and an inventory of the District's administrative GHG emissions.
- On June 27, 2018, (R-18-67), the Board provided feedback on the development of a draft Climate Change Policy and draft Climate Action Plan, seeking to base the District's work on the State of California's GHG reduction goals of 40% by 2030 and 80% by 2050.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

The draft Climate Action Plan is not a project subject to the California Environmental Quality Act. When the Board considers the final Climate Action Plan in October, a CEQA finding will be discussed in that future Board report.

NEXT STEPS

Staff will incorporate Board feedback and bring a final Climate Change Policy and final Climate Action Plan and to the Board for consideration in October 2018.

Attachments

1. Draft Climate Change Policy
2. East Bay Regional Park District Climate Change Policy Framework
3. Draft Climate Action Plan

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