

**ATTACHMENT C**

**DRAFT CLIMATE ACTION AND ADAPTATION PLAN 2024 UPDATE COST ANALYSIS**

## Memorandum

**To:** Tanya Sundberg, Principal, PlaceWorks

**From:** Matt Kowta, MCP, Managing Principal

**Date:** 8-20-2024

**Re:** Cost Analysis for Contra Costa Climate Action and Adaptation Plan (CAAP)

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### Introduction

BAE worked closely with Contra Costa County staff to evaluate the cost implications to the County for the actions contained in the proposed Climate Action and Adaptation Plan update (hereafter, "CAAP") related to County operations and service. As part of the public review process for the proposed CAAP update (hereafter, "CAAP"), it is important for members of the public and local appointed and elected officials to understand the financial implications to the County itself of adopting the CAAP. In addition, it will be helpful during the CAAP implementation phase to have information regarding likely costs, to assist with planning. This analysis is focused on financial implications of the CAAP as they relate to County budget resources. It is not intended to evaluate the financial implications of the CAAP on households or businesses.

This analysis augments the fiscal impact analysis prepared for the land use changes proposed by the General Plan Update. The analysis for the land use changes quantifies the net fiscal impacts (i.e., new annual revenues minus new annual service expenditures) of new development to the Contra Costa County General Fund at current levels of service, to assess the potential impact of land use changes on the County operating budget. This analysis of actions specified in the CAAP seeks to identify how future CAAP implementation actions might contribute to future changes in service levels and cost commitments. This memo also includes a discussion of potential funding sources at this time for CAAP implementation actions.

The cost implications identified in this memo are high level. This is appropriate, given that the CAAP will be implemented over a number of years. Experience implementing the County's existing CAAP, which was adopted in 2015, shows that issues, challenges, and opportunities associated with climate change and CAAP implementation are rapidly evolving and difficult to predict with certainty. Thus, the CAAP provides a general roadmap for actions that the County can take to reduce greenhouse gas emissions and take steps towards adaptation to climate change.

### ***CAAP Actions May Help the County to Avoid Costs and/or Achieve Lifecycle Cost Savings***

Although the focus is on the potential costs to the County for CAAP implementation, it is worth noting that while there are costs associated with CAAP implementation, there are also savings that could result from more efficient operation of buildings, and avoided costs of impacts from floods, extreme heat, drought, and disasters. These savings and avoided costs are not directly attributable to the County. For example, while there may be significant costs to fully electrify the County's vehicle fleet, the County would be avoiding costs of purchasing internal combustion engine vehicles. and the County may also realize long-term cost savings from reduced fuel costs and maintenance costs that could create lifecycle cost savings from converting to zero-emission vehicles.

Similarly, the costs for converting County buildings to all-electric, combined with energy efficiency retrofits and onsite photovoltaic generation or long-term power purchase contracts, may be offset by long-term energy savings versus a status quo situation involving continuing to pay retail electric and natural gas rates based on the energy consumption of the existing, less efficient buildings and equipment and anticipated long-term increases in gas and electricity rates. Pro-actively investing in climate adaptation measures will allow the County to strategically and cost-effectively make investments in a controlled manner, rather than needing to make investments in a reactionary or emergency mode, which will tend to be expensive and perhaps yield sub-optimal results. In other words, a "do nothing" approach would likely have long-term cost impacts to the County that, when fully recognized, can make investment in CAAP implementation much more attractive.

### ***Strategic Approach to CAAP Implementation Needed***

The County will need to approach CAAP implementation strategically, flexibly, and opportunistically as conditions change. Further, many of the resources needed to fully implement the CAAP will come from external sources that the County does not directly control, such as state and federal grant programs. Thus, if resources become available, the County may re-prioritize implementation actions on an ongoing basis to take advantage of time-sensitive opportunities. The County will devote its own resources to activities that bring the most opportunity for benefits and positive results, including continued investment in staffing resources to manage and coordinate CAAP implementation.

Flexibility will extend to the specific methods used to implement the CAAP, as the technical understanding of the mechanisms of climate change progress, technological solutions evolve, and as the state and federal regulatory environments and funding programs are updated over the CAAP implementation time-period. With limited resources for one-time capital expenditures and ongoing operations and maintenance costs associated with CAAP actions, the County will need to be strategic in how it approaches CAAP implementation. For example, as the costs of various renewable energy sources change over time, this may shift the focus to certain actions that can take advantage of new cost efficiencies. Or, if new state or federal funding programs are created that favor certain approaches to greenhouse gas ("GHG")

emissions reduction or climate adaptation, the County will need to move opportunistically to leverage these opportunities when they arise. This may mean that certain actions included in the CAAP that have less potential and/or for which less funding is available would be modified, delayed, or re-prioritized.

## **Cost Evaluation Process**

The first step in the process of evaluating CAAP costs was to parse those goals and actions described in the CAAP that are related to County operations and services into a set of discrete actions that could be analyzed, resulting in the listing of actions under each of the goals, as shown in Attachment 1.

The next step was to categorize each of the actions into one of four categories relating to their cost implications, as follows:

### ***Category 1: No New Cost Commitment***

Actions included in this category are actions that the County is already undertaking or is already mandated (e.g., by state law) to do; thus, including these actions in the CAAP does not create any new one-time or ongoing costs for the County General Fund.

### ***Category 2: As Feasible/Funding Available***

After identifying actions that fit into Category 1, all other actions that call for the County to review, explore, consider, assess, or evaluate various activities, or those that are specified for implementation if “feasible”, or similarly described, were included in this category, based on the understanding that these actions will be taken to the extent that they are practical and can either implemented within existing budgetary and staffing resources and/or utilizing funding from outside sources, such as grants. It is assumed that most funding for actions in this category will come from sources external to the County General Fund, but the Board of Supervisors may allocate some General Fund money or funds from other sources to some of these actions if available, on a discretionary basis.

### ***Category 3: Primarily Needs Staff Time for Implementation***

The largest group of actions falls into this third category. These are actions that will primarily require staff time for implementation. Their descriptions in Attachment 1 typically include words like encourage, support, collaborate, promote, coordinate, work with, or facilitate. Many of these actions will fall within the purview of the four full-time equivalent (FTE) positions that are currently funded within the Department of Conservation and Development (DCD) who are dedicated to sustainability issues, including the monitoring and administration of the CAAP. Some of these actions also fall within the purview of staff within the Public Works Department who are tasked with administering various functions that are implicated in CAAP actions, particularly staff involved in energy management. Category 3 actions also represent new responsibilities that will require investment of staff time for full implementation. Below, there is discussion of the estimated increase in FTEs that would be needed to more effectively

address the anticipated increased demands on staff to implement the CAAP, and the potential cost of the additional FTEs.

The Department of Conservation and Development and the Department of Public Works are the two County departments that will have the primary responsibility for implementing the CAAP. County staff have evaluated the CAAP policies and actions and have evaluated the capacity of the existing staff in the Public Works and Conservation and Development Departments to take on new responsibilities for CAAP implementation actions that represent new responsibilities. Overall, the Public Works and Conservation and Development Departments estimate that funding for one additional full-time staff member in each department may be necessary to more effectively handle CAAP implementation responsibilities.

The Department of Public Works estimates that it would require a new entry to mid-level staff member with an estimated annual salary, benefits and overhead cost of approximately \$250,000.

The Department of Conservation and Development estimates that it would require a new entry to mid-level staff member, also with an estimated annual salary, benefits and overhead cost of approximately \$250,000.

***Category 4: Self-Funded – Permit Fees***

A fourth category of actions includes those which may involve increased costs for County operations, but which would likely be self-funded by user fees. Specifically, these are actions that call for implementing various policies through the development review process, where applicants pay for the services via user fees (e.g., building permit fees). User fees are designed to recover the County’s cost of providing the services; thus, there should be an increase in revenues that is commensurate with the increase in the County’s costs for these types of actions.

**CAAP Implementation Funding**

The County began supporting implementation of the existing Climate Action Plan in 2015 with an annual General Fund allocation to the Department of Conservation and Development for staff dedicated to sustainability. For FY 2024-2025, that annual General Fund allocation is \$250,000. Beginning in 2022, the County’s investment in sustainability planning was augmented by a \$500,000 annual allocation for the Climate Equity and Resilience Investment in the Department of Conservation and Development, using Measure X funds (the Measure X allocation for fiscal year 2024-2025 is \$538,000). This provides some of the funding for Department of Conservation and Development staffing discussed previously. In addition, the County utilizes approximately \$300,000 in annual funding provided by the Association of Bay Area Governments to implement the Bay Area Regional Energy Network (“BayREN”) energy efficiency programs in Contra Costa County. Also, the County supports various staff in the

Department of Public Works who work on CAAP-related sustainability issues, including the department's Energy Manager. This analysis assumes that these expenditures will continue.

An important potential source of funding for new actions included in Category 2 – As Feasible/Funding Available – is a separate Measure X allocation to the Public Works Department for sustainability, the County's Sustainability Fund. To-date, the Sustainability Fund has been a primary source of funding for one-time expenditures, such as installation of electric vehicle chargers at County buildings. This fund receives an annual discretionary set-aside from the County's Measure X revenues. It initially started as an approximately \$2.5 million per year allocation when the County first began receiving Measure X proceeds and has is \$2.66 million in the 2024-2025 fiscal year. The County will continue to seek grant funding to leverage local funding for CAAP-related actions. Other dedicated funding may be needed to implement longer-term actions that are to be investigated and explored pursuant to the CAAP.

The following is a general discussion of various funding sources that the County will consider for implementing new actions that are included in the CAAP. Some of these funding sources could include: General Fund revenues, Measure X Sustainability Fund, grants, user fees, new taxes, and partnerships.

#### ***General Fund Revenues***

The Contra Costa County General Fund receives the County's discretionary revenues. These are revenues such as property taxes, sales taxes (including Measure X county sales tax revenues), property tax in-lieu of vehicle license fees, plus other less significant revenue sources that the County Board of Supervisors may allocate at its discretion. As mentioned previously, the County currently supports implementation of CAAP-related actions via the General Fund. Because of the flexibility, General Fund Revenues can be a useful funding source for continued CAAP implementation; however, CAAP implementation is just one of many important priorities and needs that the Board must balance in allocating the available funds, including important functions such as public safety, public works, health and human services, and general government. Thus, availability of General Fund revenues to cover new work will be limited and will involve trade-offs with spending on other important community needs. An important consideration for use of General Fund revenues on CAAP implementation will be whether the allocation of local funds can leverage funding from other sources.

Within the 2024/2025 Budget, the County currently supports four FTE positions in the Department of Conservation and Development and one FTE position in the Department of Public Works for staff who work on a variety of CAAP implementation activities. These positions are funded from different sources. As discussed above, these staff have some capacity to take on additional responsibilities for implementation of the CAAP, but there will likely be a need for additional staffing in order to more effectively implement the new CAAP actions, totaling approximately \$500,000 annually (salary, benefits, overhead) for one

additional, funded staff member in the Department of Public Works and one additional, funded staff member in the Department of Conservation and Development.

As mentioned previously, some grant programs have local match requirements. Strategically, it may benefit the County to allocate General Fund revenues to serve as local matching funds for grants. For example, if a grant program has a ten percent local match requirement, the County would potentially leverage its local General Fund dollars at a ratio of nine to one if it was awarded a grant.

### ***Sustainability Fund***

As mentioned previously, the County currently allocates approximately \$2.66 million annually from its Measure X revenues to its Sustainability Fund. The County uses these funds to support various improvements to County facilities related to the existing Climate Action Plan, such as for installation of electric vehicle chargers. The County anticipates continuing to use the available funding to support implementation of the CAAP. Technically, the Measure X revenues are General Fund monies, but the Sustainability Fund is called out separately here because it is a special set-aside of Measure X monies to pay for projects and activities that are distinct from everyday responsibilities of various County departments.

### ***Grants***

Grants are anticipated to be a significant source of funding for CAAP implementation. GHG emissions reduction and climate change mitigation are policy priorities at both the state and federal levels and both levels of government have provided, and are expected to continue to provide, significant funding to support actions and projects that support GHG and climate mitigation/adaptation goals. Grants will be an attractive source of funding to implement the CAAP because they represent an external funding source that does not take away funding from other local priorities and does not increase the tax burden for local households and businesses. A challenge with reliance on grant funding is that the long-term availability of grant funding is unpredictable and the funding often is competitive and can only be used for limited purposes. Many grants will also require local matching funds, either as a threshold requirement for eligibility or as a competitive factor. Additionally, the magnitude of the challenges far exceeds what can reasonably be expected to be addressed by grants. Thus, a strategic approach might involve allocating local funds (see General Fund Revenues, above) for CAAP implementation when needed as a match for grant funding, or when the local funds can leverage other external funding sources.

### ***User Fees***

As mentioned previously user fees are anticipated as a funding source for a limited number of CAAP actions. These will involve services such as development review and building permits, which are funded by user fees charged to those requesting the services, with the fees being set at levels that are designed to offset the cost of providing the services.

### ***New Taxes***

No new taxes are proposed at this time to fund CAAP implementation; however, this is an option that could be considered in the future. For instance, the Bay Conservation and Development Commission has estimated that sea level rise adaptation across the Bay Area could require substantial new investment and new tax revenues may be required. Generally, the County can impose taxes to fund governmental services, following specific requirements of state law, such as requirements for first obtaining voter approval. Some new taxes are considered “general taxes” and can be approved by a simple majority of the voters; however, the revenues from general taxes cannot be reserved for specified purposes, such as CAAP implementation. In contrast, revenues from “special taxes” can be specifically reserved for designated purposes, but must be approved with a two-thirds majority vote. New taxes can be attractive because they create a new source of funding that does not affect the availability of other existing funding sources; however, a prerequisite for approval is voters’ willingness to tax themselves. These typically take the form of parcel taxes levied on real estate or sales tax add-ons, such as Measure X.

### ***Financing Mechanisms***

Financing mechanisms such as bonds and intra-fund loans are not a funding source, as they require a source of funds for repayment; however, they can be a useful implementation tool, particularly for projects that may require a significant up-front capital investment in order to yield benefits over a longer term. For example, retrofitting buildings for energy efficiency or to install photovoltaic and battery storage systems requires substantial up-front investment, but can yield long-term savings in terms of avoided energy costs. The County has access to various financing mechanisms that it can consider using when it makes financial sense. For example, if the County decided in the future to establish a new tax to support CAAP implementation, it might elect to pledge some or all of the revenues to serve as the repayment source for a “green bond” that would be used to fund CAAP implementation projects requiring up-front investments. Emerging tools for planning and implementing CAAP-related activities and projects, such as Climate Resilience Districts or green infrastructure districts might incorporate such public financing tools.

Sometimes as an incentive to achieve policy goals, state or federal agencies will provide local governments with low-cost financing programs for borrowing to implement specific types of projects. Financing can also come from private sources, including as part of partnerships, mentioned above. Private financing can include mechanisms such as solar equipment leases, renewable power purchase agreements, or public-private partnership (P3) agreements for development and operation of buildings, whereby the private partner contributes the capital needed for up-front investments and is repaid through a stream of payments over time in exchange for services provided.



### ***Partnerships***

Although not an actual funding source, partnerships can be an implementation mechanism that can help to more cost-effectively implement the CAAP and reduce the funding needed from other sources. Public agencies will typically engage in partnerships when they believe a partner will bring necessary resources to the partnership in an efficient manner. For example, many jurisdictions partner with private businesses to implement climate-friendly services such as public electric vehicle chargers and alternative transportation services, such as rental or subscription e-bikes. In these cases, the private partners typically contribute capital investments, operational know-how, and ongoing management and maintenance services while the public partner may provide the right to install equipment on public property, use public rights-of-way, and so forth. The private partner may collect and retain most of the user fees collected from patrons.

### **Summary**

The proposed CAAP update specifies many actions that will require significant resources for full implementation, including one-time capital costs as well as O&M costs; however, the financial implications for the County are limited by the fact that a number of the specified actions are already being undertaken or required by other agencies (and thus do not represent new costs imposed by the proposed CAAP update), can be self-funded, or will likely be undertaken only when new external funding can be secured, such as from various state or federal grant programs that align with CAAP activities and support state and federal policy objectives.

The most tangible new cost implications for the County include the in-kind staff time required to implement and monitor the proposed CAAP update. County staff estimate that a total of two additional, funded FTE would be required to fully implement the proposed CAAP update and that the total additional annual cost of staff salaries and benefits to implement the Category 3 actions identified in Attachment 1 would be approximately \$500,000 per year. This assumes that the County will continue to fund the existing four FTE positions that currently support CAAP implementation and will continue to make annual allocations to the Sustainability Fund at or above current levels.

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
<b>BE-1: Require and incentivize new buildings and additions built in unincorporated Contra Costa County to be low-carbon or carbon neutral.</b>					
Design and construct new County facilities to be zero net energy to the extent feasible. (COS-P14.8)	No New Cost Commitment	Yes			
Publicize County ordinances and programs requiring new residential buildings, hotels, offices, and retail to be more energy efficient, with low levels of greenhouse gas emissions. Evaluate the feasibility of including other building types as appropriate.	Self-Funded - Permit Fees				
<b>BE-2: Retrofit existing buildings and facilities in the unincorporated county, and County infrastructure, to reduce energy use and convert to low-carbon or carbon-neutral fuels.</b>					
Create a County policy or program to facilitate making existing residential and non-residential buildings more energy-efficient and powered by carbon-free energy.	Primarily Needs Staff Time for Implementation			Maybe	
	As Feasible/Funding Available				
Continue to conduct energy and water tracking activities, audits, and upgrades of County facilities, including conversion if feasible of County facilities to all-electric space and water heating.	Primarily Needs Staff Time for Implementation	Yes	x	Maybe	
Implement requirements for cool roofs and light-colored, nonreflective permeable paving materials as part of retrofit, repair, and replacement activities, using recycled materials or other materials with low embedded carbon as feasible and as established by the Building Standards Code.	Self-Funded - Permit Fees	Yes			
<b>BE-3: Increase the amount of electricity used and generated from renewable sources in the county.</b>					
Require new commercial parking lots with 50 or more spaces to mitigate heat gain through installation of shade trees, solar arrays, or other emerging cooling technologies. Prioritize the use of solar arrays where feasible and appropriate.	No New Cost Commitment	Yes			
Continue to enroll all eligible, non-solar-equipped County facility electricity accounts in MCE territory in the Deep Green tier.	No New Cost Commitment	Yes			
Explore the technical and economic feasibility of developing and operating microgrids in Contra Costa County, and for County facilities.	Primarily Need Staff Time for Implementation				

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
Explore opportunities to install community solar projects with battery backup to provide clean energy to Impacted Communities.	Primarily Need Staff Time for Implementation				
Encourage installation of battery storage systems in new and existing buildings, especially buildings with solar energy systems and buildings that provide essential community services. (COSP14.7)	No New Cost Commitment	Yes. Part of distributed energy resource plan.			
Evaluate the least-conflict feasible locations for stand-alone battery storage systems and modify land use regulations to such use in these locations.	No New Cost Commitment				
<b>NW-1: Increase composting of organic waste.</b>					
Procure compost or other products made from recovered organic waste in accordance with the County's Recovered Organic Waste Product and Recycled Paper Procurement Policy.	No New Cost Commitment	Yes. This policy already exists.			
<b>NW-2: Reduce waste from County operations.</b>					
Establish a source-separated organics collection service at all County-owned facilities that includes recovering food waste (scraps) and food-soiled paper.	No New Cost Commitment	Yes			
Implement three-stream recycling (trash, recycling, and organic waste) at all County-owned facilities.	No New Cost Commitment				
Establish requirements for source-separated organics collection and three-stream recycling as conditions in lease agreements for County offices.	No New Cost Commitment	Yes			
Conduct waste audits of County facilities, including assessing the volume and composition of all waste streams, to identify challenges with waste activities and develop educational or operational changes to address issues and reduce waste generation.	Primarily Need Staff Time for Implementation			Maybe	
Obtain material for capital projects from local and low-carbon sources to the greatest extent feasible, including allocating additional funds to allow for such materials, and integrate appropriate standards into the County's Environmentally Preferable Purchasing (EPP) policy.	As Feasible/Funding Available				
Continue to reduce paper use in County operations. Procure recycled paper and janitorial supplies in accordance with the Recovered Organic Waste Product and Recycled Paper Procurement Policy.	No New Cost Commitment				

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
Continue engagement with TRUE zero-waste certification for County projects.	No New Cost Commitment	Yes			
Enact Bay-friendly landscaping practices at County facilities. Develop County policies and practices for Bay-friendly landscaping.	No New Cost Commitment	Yes			
Explore opportunities to reuse wood from County tree maintenance activities as an alternative to chipping.	No New Cost Commitment	Yes			
<b>NW-3: Increase community-wide recycling and waste minimization programs.</b>					
Create a source-reduction program in partnership with regional agencies to promote rethinking, refusing, reducing, reusing, and regenerating of materials.	Primarily Need Staff Time for Implementation			Maybe	
<b>NW-4: Reduce emissions from landfill gas.</b>					
<b>DR-1: Reduce indoor and outdoor water use.</b>					
Require new development to reduce potable water consumption through use of water-efficient devices and technology, drought tolerant landscaping strategies, and recycled water, where available.	No New Cost Commitment				
Identify opportunities for graywater use in public spaces and implement them as feasible.	Primarily Need Staff Time for Implementation			Maybe	
	As Feasible/Funding Available				
Promote the installation of composting toilets at appropriate County facilities in locations without wastewater service.	Primarily Need Staff Time for Implementation			Maybe	
Encourage the installation of graywater and rainwater catchment systems, particularly for new construction, as feasible for wastewater infrastructure. Reduce regulatory barriers for systems and explore creating incentives for installing these systems in new and existing buildings.	Primarily Need Staff Time for Implementation			Maybe	

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
<b>DR-2: Ensure sustainable and diverse water supplies.</b>					
Encourage Contra Costa Health to work with Groundwater Sustainability Agencies to ensure that new well permit applications are in accordance with County ordinances and State construction standards and require a hydrogeological evaluation in areas with known water shortages to ensure that the sustainable yield goals can be met.	Primarily Need Staff Time for Implementation				
Require, where feasible, the use of permeable surfaces for new or reconstructed hardscape areas.	Self-Funded - Permit Fees				
	As Feasible/Funding Available				
<b>TR-1: Improve the viability of walking, biking, zero emission commuting, and using public transit for travel within, to, and from the county.</b>					
Secure additional funding for the maintenance and expansion of bicycle and pedestrian infrastructure improvements. Support efforts to obtain additional funding to maintain and expand public transit operations and infrastructure improvements.	No New Cost Commitment	Yes			
Support CCTA to develop and implement methods for tracking EV and e-bike charging and availability across jurisdictions.	Primarily Need Staff Time for Implementation			Maybe	
<b>TR-2: Increase the use of zero-emissions vehicles. Transition to a zero-emission County fleet by 2035 and a community fleet that is at least 50 percent zero-emission by 2030.</b>					
Require new County vehicles to be zero emission to the extent a viable vehicle is available on the market, that charging or zero emission fueling equipment is conveniently located where the vehicle will be stored, and as required by C61 Advanced Clean Fleet regulations, with the goal that all County vehicles will be zero emission by 2035.	No New Cost Commitment	Yes			
Install electric vehicle charging equipment and other infrastructure needed to support the transition to a zero-emission County fleet at County facilities. Consider the appropriate locations, number, and capacity of infrastructure to facilitate the transition of the County fleet to zero-emission vehicles.	No New Cost Commitment	Yes			
Provide incentives for zero-emission vehicles in partnership with MCE, BAAQMD, and other agencies.	No New Cost Commitment	Yes			
Update off-street parking ordinance to include a requirement for zero-emission vehicle charging infrastructure. Consider including incentives for developers to exceed minimum requirements (i.e., density bonus).	Primarily Need Staff Time for Implementation			Maybe	

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
Work with Public Works to pursue the use of renewable natural gas (sourced from recovered organic waste) for transportation fuel, electricity, or heating applications in cases where battery-electric, hybrid-electric, and sustainably sourced hydrogen fuel-cell sources are not available.	As Feasible/Funding Available		x		x
Support implementation of the Contra Costa County Electric Vehicle Readiness Blueprint.	Primarily Need Staff Time for Implementation			x	
<b>NI-1: Protect against and adapt to changes in sea levels and other shoreline flooding conditions.</b>					
Coordinate with State and regional agencies, neighboring jurisdictions, property owners, utilities, and others to prepare a sea level rise adaptation plan.	Primarily Need Staff Time for Implementation			x	Maybe
Convene a working group that includes local jurisdictions, local shoreline communities, community-based organizations, property owners, businesses, and other stakeholders to collaborate on shoreline flooding adaptation strategies.	Primarily Need Staff Time for Implementation			x	
<b>NI-2: Protect against and adapt to increases in the frequency and intensity of wildfire events.</b>					
Require any construction of buildings or infrastructure within a High or Very High Fire Hazard Severity Zone in the Local or State Responsibility Areas, or in the Wildland-Urban Interface, to incorporate fire-safe design features that meet the applicable State Fire Safe Regulations and Hazard Reduction Around Buildings and Structures Regulations for road ingress and egress, fire equipment access, and adequate water supply.	No New Cost Commitment				
Review indoor air filtration standards and consider whether filtration requirements can and should be strengthened for projects permitted by the County	Primarily Need Staff Time for Implementation			x	
<b>NI-3: Establish and maintain community resilience hubs.</b>					
Create a virtual resilience hub that connects County resources to communities through virtual community networks to provide detailed, up-to-date information about preparing for natural disasters, public safety notifications and alerts, space for virtual gathering and information sharing, and other appropriate uses. Materials shall be available in multiple languages.	No New Cost Commitment				

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
<b>NI-4: Sequester carbon on natural and working lands in Contra Costa County.</b>					
Explore ways to increase carbon sequestration on County-owned facilities.	Primarily Need Staff Time for Implementation			x	
Inventory wetlands, floodplains, marshlands, and adjacent lands that could potentially support climate adaptation (e.g., through flood management, filtration, or other beneficial ecosystem services) and mitigation (e.g., carbon sequestration). (COS-A5.1)	Primarily Need Staff Time for Implementation			x	Maybe
Partner with regional landowners and agencies to establish carbon sequestration programs and incentives.	Primarily Need Staff Time for Implementation		Maybe	x	Maybe
	As Feasible/Funding Available				
<b>NI-5: Minimize heat island effects through the use of cool roofs and green infrastructure.</b>					
Promote installation of drought-tolerant green infrastructure, including street trees, in landscaped public areas. (COS-P7.8)	As Feasible/Funding Available		Maybe		Maybe
Increase tree planting in urbanized areas, and open spaces where ecologically appropriate, emphasizing areas with limited existing tree cover, using low-maintenance native tree species that are low fire risk and ensuring water supply resources are not compromised (COS-P6.2).	As Feasible/Funding Available		Maybe	x	x
Consider preparing and implementing a Tree Master Plan for the unincorporated county.	Primarily Need Staff Time for Implementation		Maybe	Maybe	Maybe
Provide, where feasible, shade trees or shade structures at parks, plazas, and other outdoor spaces.	As Feasible/Funding Available	Yes	Maybe		x
Update County tree ordinance to consider whether factors for approval of tree removal and/or replanting requirements are adequately considering Impacted Communities (e.g., tree cover, replanting standard).	Primarily Need Staff Time for Implementation			Maybe	

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
<b>NI-6: Protect communities against additional hazards created or exacerbated by climate change.</b>					
Promote, and develop as necessary, available funding sources to create incentives for residents and businesses to prepare for natural disasters, particularly members of Impacted Communities.	Primarily Need Staff Time for Implementation			Maybe	
Consider projected impacts of climate change when siting, designing, and identifying the construction and maintenance costs of capital projects.	Primarily Need Staff Time for Implementation			Maybe	
Support and fund efforts to enhance ongoing community and cross-sector engagement in community-level resilience and cohesion. Support non-government organizations to actively engage in developing a network of community-level actions that enhance resiliency.	Primarily Need Staff Time for Implementation			Maybe	
<b>CE-1: Provide access to affordable, clean, safe, and healthy housing and jobs.</b>					
Track development of local micro-grid battery storage policies and systems in other jurisdictions and identify potential opportunities for Contra Costa County.	Primarily Need Staff Time for Implementation			Maybe	
Adopt an ordinance at least as stringent as the State's maximum idling laws, and coordinate with CARB and law enforcement to achieve compliance. (HS-A1.5).	Primarily Need Staff Time for Implementation			Maybe	
<b>CE-2: Invest in solutions to support climate equity.</b>					
Evaluate and adjust County planning and expenditures for infrastructure and services as needed to ensure equitable investment in Impacted Communities, consistent with SB 1000.	Primarily Need Staff Time for Implementation			Maybe	
Continually engage communities most affected by climate change in developing and implementing climate solutions and ensure that such solutions provide benefits to Impacted Communities.	Primarily Need Staff Time for Implementation			Maybe	
Work with schools, Contra Costa Library, business groups, and community-based organizations to educate and inform community members about climate change and related sustainability topics.	Primarily Need Staff Time for Implementation			Maybe	
<b>CE-3: Increase access to parks and open space.</b>					
Support land acquisition for new parks and open space areas and protect such lands through fee title acquisition or through deed restrictions like conservation easements.	As Feasible/Funding Available				



Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
Increase the tree canopy, where feasible, on public property, especially in Impacted Communities and areas with a high heat index, by prioritizing funding for new street tree planting and maintenance.	As Feasible/Funding Available				Maybe
<b>CE-4: Ensure residents have equitable, year-round access to affordable, local fresh food.</b>					
Work with community groups to establish and maintain urban gardens, particularly on vacant lots and park land in Impacted Communities.	No New Cost Commitments	Yes			
<b>CE-5: Ensure that large industrial facilities act as good neighbors.</b>					
Regularly track data on fossil fuel production and transportation in Contra Costa County.	Primarily Need Staff Time for Implementation			x	
<b>L-1: Establish Contra Costa County as a leader among local governments for addressing climate issues.</b>					
Facilitate trainings for County staff on climate change (including the results of the Vulnerability Assessment and the 2024 CAAP technical work) and how they can support climate action through their work with the County and at home.	Primarily Need Staff Time for Implementation			x	
Incorporate integrated pest management into new construction and retrofit programs on County properties.	No New Cost Commitments	Yes. Already have to do IPM.			
<b>L-2: Continue to recognize the climate crisis as an emergency for Contra Costa County and make addressing climate change a top County priority.</b>					
Assess County programs, policies, operations, and projects (excluding stationary sources) for their contribution to achieving the County's GHG emissions reduction goals and consistency with the 2024 CAAP.	Primarily Need Staff Time for Implementation			Maybe	
Disclose GHG emissions to a registry such as the Carbon Disclosure Project (CDP).	Primarily Need Staff Time for Implementation			Maybe	
<b>IS-1: Monitor and report progress toward achieving Climate Action Plan goals on an annual basis.</b>					
Monitor implementation of the Sustainability Fund for projects in County facilities.	No New Cost Commitments	Yes			

Attachment 1: Climate Action and Adaptation Plan

Goals and Actions Related to County Operations and Services, continued

GOALS and Actions	Action Categorization	Already doing / required?	Requires New / Increased County One-Time / Capital Expenditures	Requires New Unfunded In-Kind County Staff Time	Adds Other New Recurring County Operating Costs
Use the 2024 CAAP implementation and monitoring tool to track GHG benefits from 2024 CAAP implementation and identify progress toward the 2024 CAAP reduction goals.	Primarily Need Staff Time for Implementation			Maybe	
Pursue refinements to improve the County permitting system and other systems as needed to support collection of 2024 CAAP implementation data.	Primarily Need Staff Time for Implementation		Maybe	Maybe	Maybe
<b>IS-2: Continue collaborative partnerships with agencies and community groups that support Climate Action Plan implementation, with an emphasis on residents and community-based organizations from Impacted Communities.</b>					
<b>IS-3: Secure necessary funding to implement the Climate Action Plan.</b>					
Include GHG emissions reduction strategies in the capital improvement programs for County-owned and managed facilities and infrastructure, and other plans as appropriate.	No New Cost Commitments	Yes.			
<b>IS-4: Continue to update the baseline emissions inventory and Climate Action Plan every five years.</b>					
Prepare a GHG emissions inventory that shows GHG emissions after emergency conditions created by the COVID-19 pandemic are expected to have ended.	Primarily Need Staff Time for Implementation			Maybe	Maybe
Update the 2024 CAAP to incorporate new technologies, practices, and other options to further reduce emissions. (HS-A3.1)	Primarily Need Staff Time for Implementation			Maybe	Maybe
<b>IS-5: Maintain and update the Climate Action Plan to allow for greater resilience.</b>					
Coordinate, where possible, updates of the Climate Action Plan, General Plan Safety Element, and Local Hazard Mitigation Plan cycles to ensure plan alignment and coordination of climate mitigation and adaptation efforts.	No New Cost Commitments	Yes.			
Assess the implementation status and effectiveness of adaptation strategies.	Primarily Need Staff Time for Implementation			Maybe	