



To: BARC Governing Board
From: Allison Brooks, BARC Executive Director
Date: May 8, 2020
Re: *BARC Recommendations for Legislative Approach for Climate Adaptation and Resiliency*

BARC, through its member agencies the Metropolitan Transportation Commission, the Association of Bay Area Governments (MTC/ABAG), the San Francisco Bay Conservation and Development Commission (BCDC) and the Bay Area Air Quality Management District (BAAQMD), has worked collaboratively to establish the Bay Area as a leader in preparing for the impacts of climate change, including hazards such as increased flooding, sea level rise, wildfires and extreme heat.¹ This year, California state legislators have put forward an array of bills focused on building capacity to manage climate adaptation and resiliency across California. In this document, we highlight these efforts and make recommendations, based on extensive experience in the Bay Area², for how we can build a cohesive statewide approach to climate adaptation and resiliency.

The Need for Climate Adaptation Planning and Investment Remains

While California focuses on responding to and recovering from the immediate and unprecedented public health crisis of COVID-19, it remains important that policy makers at all levels of government continue to focus on the planning and investments necessary to make our communities more resilient to the impacts of climate change. The next two years present a critical opportunity to establish a coherent statewide approach to climate adaptation for multiple hazards, with clear roles and responsibilities outlined for stakeholders at the local, regional and state levels. Recognizing that new funding to implement the programs, activities and investments will likely be deferred to future years, there is still value in the Legislature acting **this year** to put in place a statewide strategy and framework for effective local and regional climate adaptation planning and prioritization.

Background: Current Legislative Efforts on Climate Resiliency and Adaptation

BARC and its member agencies applaud the attention that the state has given to climate adaptation and resiliency in this legislative session, including large-scale resilience bonds that would address multiple climate hazards that were proposed in both the California State Senate and the State

¹ The Bay Area Regional Collaborative (BARC) – also known as the Joint Policy Committee (JPC) - was created through state statute to help in the coordination of the San Francisco Bay Area's regional agencies on issues of regional significance. The BARC Governing Board is comprised of representatives from the Boards/Commissions of the Association of Bay Area Governments, the Bay Area Air Quality Management District, the Bay Conservation and Development Commission and the Metropolitan Transportation Commission. BARC also includes the Executive Leadership three non-voting member organizations including Caltrans District 4, the California State Coastal Conservancy and the San Francisco Bay Water Quality Control Board.

² See Appendix B for a summary of current and past climate adaptation and resiliency initiatives undertaken by BARC and its member agencies.

Assembly as well as in the Governor's FY 2021-21 State Budget.³ Additionally, a number of bills have been proposed to enhance climate adaptation capacity across the state through a variety of mechanisms. Many are focused on outlining the role of state, regional and local governments in managing this issue. These include:

- AB 2148 (Quirk) - outlines the regional role in supporting multi-hazard climate adaptation efforts;
- SB 1100 (Atkins) - would require state and regional agencies to identify and assess opportunities to minimize the impacts of sea level rise, and form a statewide collaborative to support local and regional land use planning and implementation related to sea level rise;
- AB 1992 (Friedman) - would establish a new program to fund climate adaptation planning for transportation impacts, and require the asset management plan and regional transportation plans to take into account the impacts of climate change on transportation infrastructure;
- AB 2619 (Stone) – would establish the Program for Coastal Resilience, Adaptation, and Access to help the state address sea level rise and coastal climate change, and create a related fund that specified state agencies could use to support these actions;
- AB 2371 (Friedman) – would require the Strategic Growth Council to convene a scientific advisory team to advise climate planning and adaptation efforts in the state;
- AB 2621 (Mullin) – would require the Strategic Growth Council to establish guidelines for the development of regional climate adaptation plans by regional collaboratives and establish a grant program to assist in the development of those plans.

As lawmakers focus on advancing legislation related to COVID-19 response and recovery, many of these bills, particularly where they establish new funding programs, could be deferred to another year. However, the Legislature does have the opportunity in 2020 to make progress on putting an approach in place from a strategic, organizational and structural standpoint, recognizing that funding to implement the programs, activities and investments will need to be authorized in subsequent years.

Creating a Framework: Establishing Roles and Responsibilities for State, Regional and Local Government

As mentioned above, critical to establishing a successful framework for managing multi-hazard adaptation and resilience is understanding the specific roles and responsibilities of different stakeholders at the state, regional and local levels. Each level of government operates from a particular vantage point where a specific set of engagement strategies, expertise and decision-making can best be deployed to achieve shared outcomes. In a world of constrained resources, we must optimize the needed expertise at each level of government as best we can, finding ways meet objectives as efficiently as possible. For example:

- State agencies and stakeholders can institutionalize legislative directives, provide high-level guidance and appropriately-scaled resources to help the diverse regions across the state meet the challenge.

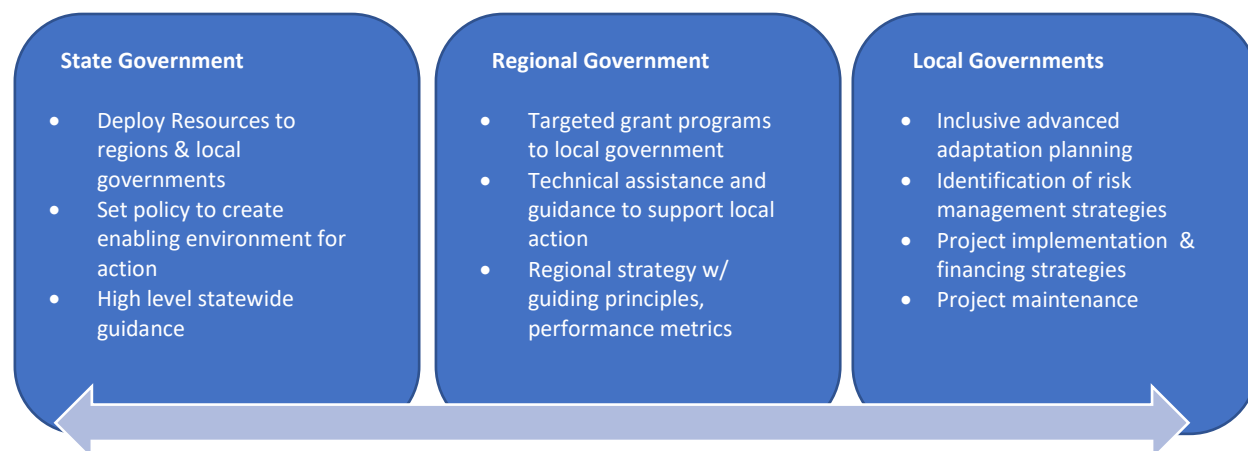
³ As of March 2020, Senate Bill 45 (Allen) proposed over \$5.51 billion to fund a wide range of wildfire prevention and other climate resilience and natural resource protection-related activities. Another resilience bond bill, AB 3256 (Garcia), was being developed in the Assembly. Similarly, the Governor proposed a nearly \$5 billion climate resilience bond in the 2020-2021 State Budget.

- Regional agencies and stakeholders are best positioned to work in partnership with local governments and stakeholders to develop measurable goals and performance measures. They are also best positioned to provide targeted grants and resources to meet local needs while ensuring individual investments and activities add up to regional resilience.
- Cities and counties are best positioned to engage in inclusive, community-based planning and problem solving that leads to decisions about which adaptation projects will work best to address local hazards, vulnerabilities, needs and priorities.

A statewide climate adaptation and resiliency approach is challenging in a large, diverse state comprised of regions facing different types of climate hazards from wildfires, sea level rise, drought and extreme heat. Regions across California are comprised of small towns, cities and counties with varying levels of capacity to plan for and implement climate adaptation measures. The state's role needs to be flexible enough to recognize where and how limited resources can be optimally deployed to achieve the best results.

The state can create greater efficiencies by granting resources directly to the large, urbanized regions where regional planning agencies already have high capacity to conduct regional planning, work closely with local governments and deploy grants strategically to meet shared goals. Hands-on state-level guidance and technical support would be best utilized in more rural and dispersed areas where staffing capacity is limited, and climate adaptation efforts are nascent or just getting started.

Figure 1: Examples of Government Roles in Climate Resilience at Different Scales



Regional Recommendations for Successful Climate Adaptation and Resilience Legislation

Over the next year, resiliency-related legislation at the state level should be oriented towards creating a coherent approach that reinforces these roles. The following are recommendations for how BARC and its member agencies believe climate adaptation legislation, including a potential resilience bond, can best be structured to support successful climate adaptation in the Bay Area while deploying scarce resources most efficiently to build upon progress that has already been made:

Recommendation 1: Designate Metropolitan Planning Organizations (MPOs) as the Regional Agencies to Support Climate Adaptation and Resilience Efforts at the Regional Scale

To deliver planning, funding, and guidance most efficiently and equitably to local governments, BARC and its partners recommend that the Legislature designate metropolitan planning organizations (MPOs) as regional leads for managing climate adaptation and resilience efforts in the state's four major metropolitan areas.

Recent climate adaptation proposals under development in the Legislature, including new climate adaptation planning processes and resilience bonds, designate specific state agencies or “regional collaboratives” as the responsible implementing agencies. We believe that in the four major metropolitan areas of the state, which contain 80 percent of the state’s population, MPOs should be designated as the implementing agencies for providing planning guidance and distributing funding to local governments. This will allow resources to be deployed most efficiently and equitably.

Designating the four major MPOs as the regional entities responsible for any new climate adaptation planning or funding program would ensure that regions build on existing planning processes, and that any bond funds are allocated quickly and effectively to local governments. MPOs, which are already responsible for developing Sustainable Communities Strategies every four years, are best positioned to support local governments and partner with other relevant regional agencies in prioritizing strategies consistent with regional climate adaptation and resilience goals.

The state’s large MPOs have the expertise and capacity to work with the appropriate state agency to manage pass-through funds, develop outcome-oriented grant programs in partnership with cities and counties, and foster coordinated regional-scale approaches across jurisdictional boundaries.

Recommendation 2: Establish a Regional Grant Program to Fund Regional Planning Guidance, Local Advanced Adaptation Planning and Prioritization of a Pipeline of Resilience Projects

*To ensure the state's major metropolitan areas are prepared to deliver critically needed climate adaptation projects once significant funding for capital improvements becomes available, we recommend the Legislature first appropriate funds to support regional and local agency advanced adaptation planning, with the **majority of funds being distributed to local stakeholders**. A conceptual framework for potential amounts and uses of these funds in the Bay Area is attached as Appendix A. Successful deployment of any future resilience bond funding requires that local governments conduct advanced adaptation planning to establish a pipeline of resilience projects.*

How Would Funds Be Used?

Funds would be used to support local governments evaluate land use decisions through the lens of near and longer-term vulnerability to climate hazards and arrive at a clear set of **actionable strategies** to adapt and become more resilient. These are the type of expenditures not necessarily eligible for bond proceeds but essential to ensuring the best and most effective strategies are deployed through resilience bond resources. MPOs would administer the funds, working closely with local government partners and other stakeholders, including regional climate collaboratives, to develop a grant program that supports consistent approaches across jurisdictions and focuses resources where local capacity is most limited.

MTC/ABAG and other BARC member agencies can facilitate the essential action-oriented planning by working with every city and county in the Bay Area facing climate change impacts and teeing up a pipeline of adaptation projects that are eligible for resilience bond resources. Local adaptation plans can be integrated into the region's sustainable communities strategy (SCS)—Plan Bay Area—which includes climate adaptation and resilience as a key component. MTC/ABAG and other BARC member agencies can work closely with the appropriate state agency to ensure that adequate resources are supporting the investments identified as critical to strengthening the Bay Area's adaptive capacity to manage climate change hazards.

Recommendation 3: Leverage any forthcoming funds whether in the form of a state resilience bond, state/federal infrastructure stimulus or some other mechanism to respond to both the impacts of COVID-19 while also advancing climate adaptation and resilience objectives

BARC and its partners recommend that we enlist any future bond or stimulus funds to support the development of infrastructure projects that help rebuild our economy and create jobs, while also meeting climate adaptation objectives. The Bay Area has a diverse range of already-identified projects that - if funded - could greatly accelerate our efforts to adapt to climate change, making our communities healthier and more resilient in the process. These include vulnerable bridge approaches, stretches of highways and aging wastewater treatment and flood protection infrastructure built along the shoreline, and socio-economically vulnerable communities that have developed community-based strategies to manage flooding and sea level rise and other hazards. Of note is that fact that the San Francisco Bay Restoration Authority (SFBRA) has distributed more than \$46 million across the region through Measure AA, a parcel tax approved by over 70 percent of Bay Area voters in 2016 that will raise an estimated \$500 million over 20 years for wetland restoration and multi-benefit flood protection projects⁴. *State matching funds could accelerate the rate and scale of marsh restoration by three times or more over the next few years.*

These are the types of projects that can help stabilize the construction workforce, which was the hardest-hit sector in the 2009 recession, and only recently reached its pre-recession workforce level in the Bay Area in 2017⁵.

Recommendation 4: Strengthen the Bond's Support of the Bay Area's Most Socio-Economically Vulnerable

We recommend that state-designated low-income communities be designated as eligible recipients of funds targeted to both disadvantaged communities and vulnerable populations. ⁶ SB 45 (Allen), as currently written, focuses many of the bond-funded resources toward disadvantaged communities and, in many cases, both disadvantaged communities and vulnerable populations. While we support

⁴ Link to FY2018-2019 Annual Report for San Francisco Bay Restoration Authority:
http://sfbayrestore.org/sites/default/files/2020-02/sfbra_annual_report_draft_fy_18_19.pdf

⁵ <http://www.vitalsigns.mtc.ca.gov/jobs-industry>

⁶ "Low-income communities" are defined as census tracts with median household incomes at or below 80 percent of the statewide median income, or with median household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093 of the Health and Safety Code.

this approach, we are concerned that the bill does not explicitly define either “disadvantaged communities” or “vulnerable populations.” The narrow definition of disadvantaged communities used for Cap-and-Trade funds has historically underrepresented the Bay Area’s low-income communities.

Conclusion

One reality that the global COVID-19 pandemic makes abundantly clear is that advanced planning and coordination at a regional level can save lives. This was demonstrated admirably by the coordinated action of the Bay Area’s county health departments in response to the immediate threat posed by the novel coronavirus. Similarly, we need to prepare at all levels of government for the serious risks posed by climate change. BARC, and its member agencies, recognize the need for multi-hazard climate planning at the regional and local levels to determine the most impactful and appropriate actions and investments to adapt to climate change impacts, leveraging resources provided by the State.

In the San Francisco Bay Area, unique regional circumstances—including our vulnerable geography, extensive regional-level planning efforts, and a robust ecosystem of agencies, organizations and stakeholders—create a thriving environment through which state-led adaptation planning and funding processes can be successfully deployed by local and regional governments. The recommendations in this document lay out a Bay Area-specific framework for regional climate adaptation that builds on the strong foundation we have built and are ready to expand upon. We believe this approach can serve as a model that could be replicated across the state with our partner MPOs in California’s major metropolitan areas.

BARC staff recommends that the BARC Governing Board support a coordinated effort to advance the recommendations outlined above working with local, regional and state partners over the next two years.

Appendix A: Breakdown of Estimated Resource Needs for Regional Approach to Advanced Adaptation Action Planning (from Recommendation #2)

This \$40 million investment outlined in Recommendation #2 would be applied to the following set of activities:

a. Local Advanced Adaptation Action Planning (one-time): \$25 million

MTC/ABAG would use these funds to administer a grant program to support local adaptation planning, concurrent with the work of Bay Adapt and with assistance from the new Local Government Services Program. This would build upon a similar effort that MTC/ABAG has already undertaken successfully on a smaller scale, deploying SB1 advanced adaptation planning resources from the California State Transportation Agency (CalSTA) to MPOs.

These funds would be used by cities and counties, special districts, asset managers, and community-based organizations to complete comprehensive climate adaptation action planning at the appropriate geographic scale. The process would support informed decision-making to determine a range of local and regional-scale strategies needed to reach an acceptable level of risk to climate hazards.

a. Regional Adaptation Guidance & Technical Assistance (one-time): \$15 million

These funds would support limited-term regional planning staff to integrate climate adaptation into the Sustainable Communities Strategy and administer a new grant program for local jurisdictions. These funds would also provide pass-through grants to partner agencies and organizations for specific roles in supporting local jurisdictions, with a four-year goal to complete local advanced adaptation planning in all critical geographic locations, with frontline disadvantaged communities prioritized.

The new Local Government Services program at MTC would coordinate efforts of staff across multiple agencies, including MTC, BCDC, and the California State Coastal Conservancy's Bay Area Program, to provide data, mapping, best practices and the latest science and research to cities and counties. This would also align with the priorities currently set out in Assembly Bill 2148 (Quirk), calling for a designated regional entity to support adaptation planning at the regional scale.

Related specifically to managing sea level rise and increased flooding, the new Bay Adapt initiative will develop a planning framework and methodology for use across local jurisdictions for the purposes of consistency and continuity, establish performance metrics to be incorporated into the SCS, and develop a collaborative Local Government Services program to support local jurisdictions in completing advanced adaptation plans for sea level rise and flooding. We are confident this approach is transferrable to other climate hazards.

Table 2: Budget for Regional Approach Climate Adaptation and Resiliency

Activity	Budget
Local Advanced Adaptation Planning	
Grants to Cities and Counties ⁷	\$22,000,000
Grants to community-based organizations	\$3,000,000
Sub-total	\$25,000,000
Regional Adaptation Plan, Guidance & Technical Assistance	
MTC/ABAG Limited-Term Staffing (multiple years) ⁸	\$8,000,000
Partner Agency Sub-Contracts ⁹	\$6,000,000
Research Partners ¹⁰	\$1,000,00
Sub-total	\$15,000,000
TOTAL	\$40,000,000

⁷ MTC/ABAG would provide grants to all eligible cities and counties for climate adaptation planning, providing clear criteria and guidance on the planning and risk management approach.

⁸ MTC/ABAG will hire some limited-term staff over the 4-year period outlined in this proposal to develop the grant program for local jurisdictions, administer grants, complete the resilience component of the region's Sustainable Communities Strategy (SCS), integrate local advanced adaptation plans into the SCS.

⁹ MTC/ABAG would sub-contract with partner agencies that have clear roles and responsibilities in the Bay Adapt Network and in the Local Government Services program, supporting local jurisdictions in completing advanced local adaptation plans, and integrating work into other relevant regional and local plans.

¹⁰ This work would build upon climate research work done by SGC and OPR: <http://www.sgc.ca.gov/programs/climate-research/resources>.

APPENDIX B: List of Bay Area Regional Climate Adaptation and Resiliency Initiatives by BARC and Member Agencies

The Bay Area Regional Collaborative (BARC)¹¹ and its member agencies, which include MTC/ABAG, have laid much of groundwork necessary to develop a coordinated regional adaptation implementation plan within the next four years, in time to be integrated into the next Sustainable Communities Strategy and other regional planning efforts. Our region has undertaken a number of adaptation planning activities, largely related to sea level rise and increased flooding, that have helped create a more enabling environment for the implementation of climate adaptation and resiliency projects around the Bay Area. While the focus thus far has been on managing sea level rise and increased flooding, the approaches and best practices learned are transferable to other hazards. These projects include:

- **Adapting to Rising Tides** - Since 2011, the [Adapting to Rising Tides \(ART\) Program](#), led by BCDC, has worked with cities, counties, and other stakeholders around the Bay Area to understand their vulnerability to sea level rise, how future flooding will affect communities, businesses, infrastructure, and natural systems, and potential strategies for resilience. This includes the ART Portfolio – a collection of guidance, tools and information, including the [Bay Shoreline Flood Explorer](#) –as well as a “Help Desk” function. Most recently, through a Sustainable Communities grant from Caltrans, with matching funds from MTC, BARC and BCDC completed the first regional-scale flooding and sea level rise vulnerability assessment called Adapting to Rising Tides Bay Area (ART Bay Area). This information allows us to understand the interrelated risks across Bay Area systems and prioritize the necessary interventions at different water levels to protect specific assets.
- **Community Engagement** - BARC and its member agencies are working in partnership with the Bay Area Regional Health Inequities Initiative (BARHII) and community-based organizations in the most socio-economically disadvantaged locations in the Bay Area with the goal of engaging directly with the residents to understand local concerns and priorities as they relate directly or indirectly to climate change. This work aligns closely with the State’s focus on starting with the needs and priorities of disadvantaged communities, working alongside community leaders to build shared capacity to manage multiple climate hazards over time.
- **Integrating Sea-Level Rise into the Sustainable Communities Strategy** - For the first time, MTC/ABAG staff are integrating sea-level rise into Plan Bay Area 2050 (e.g. the Bay Area’s Sustainable Communities Strategy) so that the region and localities can make informed decisions about future growth areas, transportation investments and other land use and community development issues in light of the projected risks that could emerge from flooding and sea-level rise if we keep to business-as-usual. This guidance will align with the Ocean Protection Council’s (OPCs) latest projections for sea level rise.¹²

¹² The Ocean Protection Council updated its sea-level rise guidance in 2018, synthesizing the best available science on sea-level rise projections and rates. The report is available here:

http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf.

- **Resilient by Design Bay Area Challenge** - BARC led the Resilient by Design Bay Area Challenge, which brought together interdisciplinary design teams of architects, landscape architects, ecologists with community-based organizations and local leaders in nine socio-economically vulnerable frontline communities to identify multi-benefit solutions to address vulnerabilities to climate hazards.
 - Through SB1 advanced adaptation planning resources from Caltrans, with matching funds from MTC, BARC and the San Francisco Estuary Partnership (SFEP) are conducting a deeper analysis in four Resilient by Design locations to develop specific strategies that will address flooding and sea level rise vulnerabilities. The project areas are: South San Francisco, the Dumbarton Bridge West Approach + Adjacent Communities, North Richmond and the communities adjacent to State Route 37 in the North Bay (including areas located in Marin, Napa, Solano and Sonoma counties).
- **Bay Restoration Regulatory Integration Team** - To support integrated permitting of adaptation projects in the Bay Area, the region's primary permitting agencies created the Bay Restoration Regulatory Integration Team (BRRIT) in 2019, a partnership with the California State Coastal Conservancy, to improve the permitting process for multi-benefit habitat restoration projects and associated flood management and public access infrastructure in the San Francisco Bay and along the shoreline of the nine Bay Area counties, excluding the Delta Primary Zone. MTC is a key supporter of this effort and BCDC is a member of the BRRIT.
- **Measure AA** –Over the past two years, the San Francisco Bay Restoration Authority (SFBRA) has successfully distributed over \$46 million to innovative projects across the region through Measure AA, a parcel tax approved by over 70 percent of Bay Area voters in 2016 that will raise an estimated \$500 million over 20 years for wetland restoration and multi-benefit flood protection projects. The region is primed and ready to scale up the delivery of resources to complete more projects. MTC is a contributor to the operating budget of the SFBRA.
- **Bay Adapt: Regional Strategy for a Rising Bay** – Building on the strong foundation of science, research and planning that exists in the Bay Area, Bay Adapt is a new strategic initiative that aims to establish partnership agreements between regional agencies, local governments, and other stakeholders to address sea level rise. As the first step toward a more comprehensive regional adaptation plan, Bay Adapt strives to build a coalition of Bay Area leaders around a shared set of guiding principles and coordinated regional priorities.

Given the central role in supporting the foundational work completed above and the ongoing work guiding planning and distributing critical resources for housing, land use and transportation, BARC and its partner agencies are extremely well-positioned to coordinate planning at the regional scale and provide guidance and best practices to local leaders to address the complexity of impacts for which the Bay Area region must prepare. With its funding, financing and planning authorities, MTC/ABAG is also well-suited to receive and transmit resources and advance adaptation through the Sustainable Communities Strategy and the Regional Transportation Plan.