Annual Reporting for FY 2017-2018

Regional Supplement for New Development and Redevelopment

San Francisco Bay Area Municipal Regional Stormwater Permit

B A S M A A

Bay Area Stormwater Management Agencies Association

September 2018

Alameda Countywide
Clean Water Program

Contra Costa
Clean Water Program

Fairfield-Suisun
Urban Runoff
Management Program

Marin County
Stormwater Pollution
Prevention Program

Napa County
Stormwater Pollution
Prevention Program

San Mateo Countywide
Water Pollution
Prevention Program

Santa Clara Valley
Urban Runoff Pollution
Prevention Program

Sonoma County
Water Agency

Vallejo Sanitation
and Flood
Control District

B A S M A A

To Whom It May Concern:

We certify under penalty of law that this document was prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

James Scanlin, Alameda Countywide Clean Water Program

Courtney Riddle, Contra Costa Clean Water Program

Kevin Cullen, Fairfield-Suisun Urban Runoff Management Program

Matthew Fabry, San Mateo Countywide Water Pollution Prevention Program

Adam Olivieri, Santa Clara Valley Urban Runoff Pollution Prevention Program

Jennifer Harrington, Vallejo Flood & Wastewater District

Bay Area
Stormwater Management
Agencies Association

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Menlo Park, CA 94026

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MRP Regional Supplement for New Development and Redevelopment
Annual Reporting for FY 2017-2018

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BASMAA comments on California Natural Resources Agency *Safeguarding California Plan: 2017 Update – California's Climate Adaptation Strategy* (June 23, 2017)

Response to Comments (excerpt) on California Natural Resources Agency *Safeguarding California Plan: 2017 Update – California's Climate Adaptation Strategy* (January 2018)

INTRODUCTION

This Regional Supplement has been prepared to report on regionally implemented activities complying with portions of the Municipal Regional Stormwater Permit (MRP), issued to 76 municipalities and special districts (Permittees) by the San Francisco Bay Regional Water Quality Control Board (Water Board). The Regional Supplement covers new development and redevelopment activities related to the following MRP provisions:

- C.3.j.i.(2)(g) Green Infrastructure Facility Sizing Analysis, and
- C.3.j.iii. Participate in Processes to Promote Green Infrastructure.

These regionally implemented activities are conducted under the auspices of the Bay Area Stormwater Management Agencies Association (BASMAA), a 501(c)(3) non-profit organization comprised of the municipal stormwater programs in the San Francisco Bay Area. Most of the 2017-18 annual reporting requirements of the specific MRP Provisions covered in this Supplement are completely met by BASMAA Regional Project activities, except where otherwise noted herein or by Permittees in their reports. Scopes, budgets and contracting or in-kind project implementation mechanisms for BASMAA Regional Projects follow BASMAA's Operational Policies and Procedures as approved by the BASMAA Board of Directors. MRP Permittees, through their program representatives on the Board of Directors and its committees, collaboratively authorize and participate in BASMAA Regional Projects or Regional Tasks. Depending on the Regional Project or Task, either all BASMAA members or Phase I programs that are subject to the MRP share regional costs.

Green Infrastructure Planning and Implementation

C.3.j.i.(2)(g) Green Infrastructure Facility Sizing Analysis

MRP Provision C.3.j.i.(2)(g) states that Green Infrastructure Plans should include requirements that stormwater treatment facilities "*be designed to meet the treatment and hydromodification sizing requirements in Provisions C.3.c. and C.3.d.*" The Provision further states that for street projects that are not Regulated Projects:

> *… Permittees may collectively propose a single approach with their Green Infrastructure Plans for how to proceed should project constraints preclude fully meeting the C.3.d. sizing requirements. The single approach can include different options to address specific issues or scenarios. That is, the approach shall identify the specific constraints that would preclude meeting the sizing requirements and the design approach(es) to take in that situation. The approach should also consider whether a broad effort to incorporate Hydromodification controls into green infrastructure, even where not otherwise required, could significantly improve creek health and whether such implementation may be appropriate, plus all other information, as appropriate (e.g., how to account for load reduction for the PCBs or mercury TMDLs).*

MRP Provision C.3.d. contains sizing criteria. These include the option to size facilities to

treat at least 80% of the total runoff over the life of the project, using local rainfall data.

Provision C.3.c.i. states that LID treatment measures are harvesting and use, infiltration, evapotranspiration, and biotreatment (bioretention). Bioretention systems shall be designed to have a surface area no smaller than what is required to accommodate a 5 inches/hour stormwater runoff surface loading rate.

In FY 16-17, the BASMAA Development Committee initiated a project to address provision C.3.j.i.(2)(g). This project used continuous simulation modeling to evaluate relationships of facility size to facility performance to develop an approach for implementing green infrastructure projects when there are constraints on facility size.

The project included the following technical tasks:

- Adapt existing continuous simulation models that simulate bioretention performance.
- Compile and update long-term hourly rainfall records at six Bay Area locations.
- Run continuous simulations and evaluate outputs to address questions.
- Present the outputs in the form of charts and equations.
- Document the work in a brief technical memo.

The project was initiated in March 2017 and by the end of FY 16-17, the BASMAA Development Committee had received and discussed the initial results and analysis of the model simulations across the six selected rain gauges and a range of bioretention sizing factors, and considered and agreed upon some additional analyses to run.

In FY 17-18, the additional analyses were conducted and reviewed, and the project was completed in December 2017. In January 2018, the BASMAA Board of Directors approved the report *Green Infrastructure Facility Sizing for Non-Regulated Street Projects* as a BASMAA final product subject to the following conditions: the report is watermarked "Do Not Use, Cite, or Quote" and the report's distribution is limited to only BASMAA member Programs until companion implementation guidance is completed so the report is not used inappropriately.

The BASMAA Development Committee formed the Green Infrastructure Facility Sizing Work Group in December 2017 to develop regional guidance on how to use the modeling results to size GI measures under specific design scenarios and constraints. The Work Group continued its work through the end of FY 17-18 and is expected to complete development of guidance by the end of 2018.

C.3.j.iii. Participation in Processes to Promote Green Infrastructure

This provision requires:

> *(1) The Permittees shall, individually or collectively, track processes, assemble and submit information, and provide informational materials and presentations as needed to assist relevant regional, State, and federal agencies to plan, design, and fund incorporation of green infrastructure measures into local infrastructure projects, including transportation projects. Issues to be addressed include coordinating the timing of funding from different sources, changes to standard designs and design*

criteria, ranking and prioritizing projects for funding, and implementation of cooperative in-lieu programs.

The BASMAA activities described in this section provide compliance for MRP Permittees with this provision.

Grant – Urban Greening Bay Area

Urban Greening Bay Area is a large-scale, grant-funded effort to re-envision Bay Area urban landscapes to develop stormwater-friendly dense, green urban infrastructure that addresses challenges associated with climate change, infiltrates or captures stormwater and pollutants near their sources, and in turn, promotes improved water quality in San Francisco Bay. *Urban Greening Bay Area* is funded by an EPA Water Quality Improvement Fund grant awarded to the Association of Bay Area Governments (ABAG), a joint powers agency acting on behalf of the San Francisco Estuary Partnership (SFEP), a program of ABAG. The term of the *Urban Greening Bay Area* grant project was July 1, 2015 to June 30, 2018, but the term is being extended to December 31, 2019 and additional funding is being provided to support follow-up implementation.

BASMAA is one of the subrecipients of the grant and took the lead on two of the grant project tasks – a Regional Green Infrastructure Roundtable process and a Design Charrette, both of which were implemented between May 2016 and May 2018.

The Regional Roundtable was a two-year process, with work groups as needed, to identify and develop a list of recommendations for integrating green infrastructure and stormwater management funding and investments with future climate change and transportation investments within the region. The Roundtable included convening meetings with local, regional, and state stakeholders, agencies, elected officials, and staff to produce draft and final task reports that identified and recommended possible legislative fixes, agency agreements, consolidated funding mechanisms, and other means and actions as appropriate. The Roundtable used innovative participatory processes that included key experts, regulators, decision-makers, and other stakeholders to share information, solicit and discuss ideas and solutions, and to identify next steps (i.e., a roadmap), which were summarized in the draft and final task reports.

The Design Charrette task involved coordinating with the cities of Sunnyvale and San Mateo to conduct a Bay Area design charrette to develop cost-effective and innovative "typical" designs for integrating green infrastructure with bicycle and pedestrian improvements at roadway intersections. The overall goal of developing standardized, transferable designs was to make progress in addressing the high cost of design, implementation, operations, and maintenance that inhibits the widespread use of green infrastructure and LID features.

During FY 17-18, BASMAA's key accomplishments on the *Urban Greening Bay Area* project included:

- The Draft Roadmap of Funding Solutions for Sustainable Streets was distributed to Roundtable Participants in September 2017 and discussed at a September 19, 2017 Roundtable meeting.
- Feedback on the Roadmap was incorporated in the Final Roadmap, which was published in April 2018.
- BASMAA and SFEP began forming a Roadmap Committee to guide implementation of the Roadmap.
- The BASMAA Vice-Chair presented on the Roadmap at the May 2018 CASQA Quarterly meeting and submitted an abstract for the 2018 CASQA conference, which was accepted as an alternate presentation.

Work products of the Urban Greening Bay Area grant are posted at: http://www.sfestuary.org/urban-greening-bay-area/#planning. The Planning section includes documents related to the Regional Roundtable and the Implementation section includes documents related to the Design Charrette.

Participation and Comments

In addition to the *Urban Greening Bay Area* grant efforts described above, BASMAA submitted comments to the following agencies regarding the listed documents.

BASMAA comments to State Coastal Conservancy on *Strategic Plan 2018-2022* (October 30, 2017) (attached). Most of BASMAA's comments were incorporated (see attached excerpt of Response to Comments) into the Plan (http://scc.ca.gov/about/plan/).

BASMAA comments to California Natural Resources Agency on *Safeguarding California Plan: 2017 Update – California's Climate Adaptation Strategy* (June 23, 2017) (attached). Most of BASMAA's comments were incorporated (see attached excerpt of Response to Comments) into the *Safeguarding California Plan: 2018 Update*.

ATTACHMENT

C.3.j.iii. Participate in Processes to Promote Green Infrastructure

BASMAA comments on
State Coastal Conservancy Strategic Plan 2018-2022
(October 30, 2017)

Response to Comments (excerpt) on
State Coastal Conservancy Strategic Plan 2018-2022
(November 2017)

Alameda Countywide Clean Water Program

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Vallejo Sanitation and Flood Control District

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Bay Area Stormwater Management Agencies Association

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Menlo Park, CA 94026

510.622.2326

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October 30, 2017

State Coastal Conservancy
spcomments@scc.ca.gov

Subject: Strategic Plan 2018-2022

State Coastal Conservancy:

On behalf of the Bay Area Stormwater Management Agencies Association (BASMAA), thank you for the opportunity to provide comments on Strategic Plan 2018-2022. BASMAA is a 501(c)(3) non-profit organization comprised of the municipal stormwater programs in the San Francisco Bay Area representing 100 agencies, including 85 cities and towns, 8 counties, and 7 special districts. BASMAA focuses on regional challenges and opportunities to improve the quality of stormwater flowing to our local creeks, the Delta, San Francisco Bay, and the Pacific Ocean.

Comments

Regional Context: San Francisco Bay Area

BASMAA recommends the Coastal Conservancy recognize more explicitly efforts occurring in the realm of stormwater management. As a result of state regulations, Bay Area agencies are embarking on significant stormwater planning efforts that will build a foundation for decades of future actions to manage stormwater more sustainably to meet water quality goals and simultaneously provide additional benefits such as increased flood resiliency, enhanced groundwater recharge, increased urban greening, and improved climate change adaptation. We recommend adding another bullet to the list of five-year efforts in the Bay Area that indicates the Coastal Conservancy will support development and implementation of multi-benefit Green Infrastructure and Stormwater Resource Plans to improve watershed health and build climate change resiliency.

Protect and Restore the Coast

Our primary concern with this section of the Strategic Plan is that the Bay Area is not explicitly included in regard to efforts to improve water quality, such as Objective 6G – Implement projects to improve water quality to benefit coastal and ocean resources. If this section is intended to address Coastal Conservancy jurisdictional areas outside of the Bay Area, then BASMAA recommends adding a similar objective to the Bay Area strategic goals. If not, then BASMAA recommends adding support for projects in the Bay Area under Objective 6G.

Climate Ready

Overall, BASMAA recommends the Coastal Conservancy better recognize and support goals and requirements of the State Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board in regard to stormwater management. As stated already, municipalities are required by state regulations to develop Stormwater Resource Plans and Green Infrastructure Plans showing how grey infrastructure will gradually be "greened" to manage stormwater more sustainably,

meet long-term water quality goals, and build climate change resiliency. These water quality mandates will require significant levels of green infrastructure implementation in the coming decades – efforts that will directly support the Coastal Conservancy's goals. Currently, however, the Strategic Plan is generally silent on many of these stormwater-related issues.

In addition to overall support and recognition of the benefits of supporting green infrastructure implementation for stormwater management and climate resiliency, as a forward-focused document, we recommend that Strategic Plan 2018-2022 recognize and capture the emerging shift from a focus on Complete Streets to Sustainable Streets. Because of the water quality drivers, communities are moving from the current focus on Complete Streets that address active transportation issues to Sustainable Streets that also incorporate green infrastructure for stormwater management – thereby reducing runoff from urbanized areas, mitigating flooding, improving water quality, recharging groundwater, reducing urban heat island impacts, improving aesthetics, reducing greenhouse gas emissions, and mitigating the effects of climate change.

A Sustainable Streets focus would take advantage of the many natural linkages between stormwater quality management, transportation planning, greenhouse gas reductions, and climate change mitigation strategies. It would also build on the ABAG / San Francisco Estuary Partnership *Urban Greening Bay Area* project (http://www.sfestuary.org/our-projects/water-quality-improvement/greenplanning/). *Urban Greening Bay Area* includes a Regional Roundtable series of working meetings where local, regional, state, and federal agencies, elected/appointed officials, and private sector and non-profit partners are developing policy solutions to integrate transportation, climate, and water quality investments. Coastal Conservancy staff have been active participants in the Regional Roundtable process.

The Climate Ready goal should include a statement of support for implementation of Green Infrastructure Plans and Stormwater Resource Plans to achieve multi-benefit climate change resiliency, water quality improvement, groundwater recharge, etc. Additionally, Objective 8C should include a concomitant statement, and Objective 11A should include a statement of the connection with water quality goals prioritized in the Water Boards' Basin Plans and related permitting efforts of the State and Regional Water Boards.

Thank you again for the opportunity to comment. If you have any questions, please contact me at 650-599-1419 or our Executive Director, Geoff Brosseau at 650-365-8620.

Sincerely,

Matt Fabry, Chair
Bay Area Stormwater Management Agencies Association

cc: Sam Schuchat, Executive Director, State Coastal Conservancy
Bruce Wolfe, Executive Officer, San Francisco Bay Regional Water Board
Tom Mumley, Assistant Executive Officer, San Francisco Bay Regional Water Board
Keith Lichten, Watershed Management, San Francisco Bay Regional Water Board
BASMAA Board of Directors

Commentor	Suggested Revisions and Comments	Section or Region	Coastal Conservancy Staff Response
Bay Area Stormwater Management Agencies Association	Regional Context: San Francisco Bay Area BASMAA recommends the Coastal Conservancy recognize more explicitly efforts occurring in the realm of stormwater management. As a result of state regulations, Bay Area agencies are embarking on significant stormwater planning efforts that will build a foundation for decades of future actions to manage stormwater more sustainably to meet water quality goals and simultaneously provide additional benefits such as increased flood resiliency, enhanced groundwater recharge, increased urban greening, and improved climate change adaptation. We recommend adding another bullet to the list of five-year efforts in the Bay Area that indicates the Coastal Conservancy will support development and implementation of multi-benefit Green Infrastructure and Stormwater Resource Plans to improve watershed health and build climate change resiliency.	SF Bay Area	We have added the following statement to the list of Major Efforts in the San Francisco Bay Area: "Support development and implementation of multi-benefit Green Infrastructure and Stormwater Resource Plans to improve watershed health and build climate change resiliency."
Bay Area Stormwater Management Agencies Association	Protect and Restore the Coast Our primary concern with this section of the Strategic Plan is that the Bay Area is not explicitly included in regard to efforts to improve water quality, such as Objective 6G – Implement projects to improve water quality to benefit coastal and ocean resources. If this section is intended to address Coastal Conservancy jurisdictional areas outside of the Bay Area, then BASMAA recommends adding a similar objective to the Bay Area strategic goals. If not, then BASMAA recommends adding support for projects in the Bay Area under Objective 6G.	SF Bay Area	We agree that the Bay Area should be explicitly included in our efforts to improve water quality and have added numerical targets for the Bay Area to objectives 6F (Complete 4 plans to improve water quality to benefit coastal and ocean resources) and 6G (Implement 8 projects to improve water quality to benefit coastal and ocean resources).
Bay Area Stormwater Management Agencies Association	Climate Ready Overall, BASMAA recommends the Coastal Conservancy better recognize and support goals and requirements of the State Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board in regard to stormwater management. As stated already, municipalities are required by state regulations to develop Stormwater Resource Plans and Green Infrastructure Plans showing how grey infrastructure will gradually be "greened" to manage stormwater more sustainably, meet long-term water quality goals, and build climate change resiliency. These water quality mandates will require significant levels of green infrastructure implementation in the coming decades – efforts that will directly support the Coastal Conservancy's goals. Currently, however, the Strategic Plan is generally silent on many of these stormwater-related issues. In addition to overall support and recognition of the benefits of supporting green infrastructure implementation for stormwater management and climate resiliency, as a forward-focused document, we recommend that Strategic Plan 2018-2022 recognize and capture the emerging shift from a focus on Complete Streets to Sustainable Streets. Because of the water quality drivers, communities are moving from the current focus on Complete Streets that address active transportation issues to Sustainable Streets that also incorporate green infrastructure for stormwater management – thereby reducing runoff from urbanized areas, mitigating flooding, improving water quality, recharging groundwater, reducing urban heat island impacts, improving aesthetics, reducing greenhouse gas emissions, and mitigating the effects of climate change. A Sustainable Streets focus would take advantage of the many natural linkages between stormwater quality management, transportation planning, greenhouse gas reductions, and climate change mitigation strategies. It would also build on the ABAG / San Francisco Estuary Partnership Urban Greening Bay Area project (http://www.sfestuary.org/our-projects/waterquality-improvement/greenplanning/). Urban Greening Bay Area includes a Regional Roundtable series of working meetings where local, regional, state, and federal agencies, elected/appointed officials, and private sector and non-profit partners are developing policy solutions to integrate transportation, climate, and water quality investments. Coastal Conservancy staff have been active participants in the Regional Roundtable process. The Climate Ready goal should include a statement of support for implementation of Green Infrastructure Plans and Stormwater Resource Plans to achieve multi-benefit climate change resiliency, water quality improvement, groundwater recharge, etc. Additionally, Objective 8C should include a concomitant statement, and Objective 11A should include a statement of the connection with water quality goals prioritized in the Water Boards' Basin Plans and related permitting efforts of the State and Regional Water Boards.	Climate Ready	We have added the following statement about multibenefit green infrastructure under our Climate Ready goal: "In urban areas, the Conservancy will continue to support multi-benefit projects that use nature to reduce stormwater runoff, mitigate flooding, improve water quality, recharge groundwater, reduce urban heat island impacts and create neighborhood open space."
Resource Conservation District of Santa Cruz County	The RCD commends the Conservancy for the manner in which it achieves its goals by providing funding and technical assistance to partners. The Conservancy's grant-making process, in particular, is an effective and efficient mechanism through which funds are allocated to priority projects and programs. The RCD urges the Conservancy to resist pressure to further modify its grants program as with what we've seen under Proposition 1. We feel that the program has historically balanced the need for competitiveness with an appreciation of the impact on applicants and the marginal value that the additional requirements tend to have. Also, a successful element of the grants program is that Conservancy staff are available to discuss projects, pre-application, and advise potential applicants on perceived competitiveness and ways in which projects or applications could be made stronger. This approach makes for better projects, and is respectful of the significant investment of resources required effective grants applications. Similarly, while there will always be room for improvement, the application document itself is reasonable for the size of grants usually awarded.	Overarching Goals	The Conservancy will continue to strive to accomplish projects and provide grants in an effective manner and will continue to provide staff resources to aid in project development and implementation. We recognize that applying for and managing grants is time consuming and challenging for nonprofits and public agencies and strive to reduce the barriers to the extent feasible given state laws and policies we have to follow.

ATTACHMENT

C.3.j.iii. Participate in Processes to Promote Green Infrastructure

BASMAA comments on
California Natural Resources Agency
Safeguarding California Plan:
2017 Update – California's Climate Adaptation Strategy
(June 23, 2017)

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June 23, 2017

California Natural Resources Agency

Subject: Comments on Draft *Safeguarding California Plan: 2017 Update – California's Climate Adaptation Strategy*

California Natural Resources Agency:

On behalf of the Bay Area Stormwater Management Agencies Association (BASMAA), thank you for the opportunity to provide comments on the Draft *Safeguarding California Plan: 2017 Update* (Update). BASMAA is a 501(c)(3) non-profit organization comprised of the municipal stormwater programs in the San Francisco Bay Area representing 100 agencies, including 85 cities and towns, 8 counties, and 7 special districts. BASMAA focuses on regional challenges and opportunities to improve the quality of stormwater flowing to our local creeks, the Delta, San Francisco Bay, and the Pacific Ocean.

Stormwater agencies throughout California are increasingly mandated by the State and Regional Water Boards to develop and implement stormwater management plans to achieve long-term water quality goals. This will require significant investment in green infrastructure and other approaches to capture, treat, and infiltrate stormwater runoff. We believe this work will play a significant role in supporting climate change resilience and should be appropriately addressed in the Update. As such, we appreciate the inclusion of Recommendation W-8, "Utilize low-impact development and other methods in state and regional storm water permits to restore the natural hydrograph." However, **we have some specific suggestions on how Recommendation W-8 could be improved**.

First of all, stormwater management and efforts to support implementation of green infrastructure solutions are being supported by more state agencies than just the State and Regional Water Boards. For example, the Department of Water Resources administers the Integrated Regional Water Management program and associated bond funds. Similarly, the Strategic Growth Council and State Coastal Conservancy have been on the forefront of efforts to integrate green infrastructure with other state priorities. We **recommend this section be revised to address programs and efforts that are already or will be implemented by all relevant state agencies**, not just the State and Regional Water Boards.

Secondly, we **recommend the Update make a strong connection between the Transportation and Water sectors in regard to stormwater management**. Currently, the Transportation recommendations seem focused on impacts to transportation infrastructure as a result of climate change and not on the role transportation infrastructure plays in both causing and adapting to climate change impacts related to stormwater runoff, flooding, and increased temperature.

Transportation infrastructure makes up a significant amount of the impervious surfaces in urbanized areas, with streets and parking lots often constituting 25-50% of urbanized land areas. As such, transportation infrastructure is a major contributor

to stormwater runoff and associated pollutants, as well as to urban heat islands. This will become a bigger issue with climate change as runoff may increase under more intense storms and heat islands get worse with increasing temperatures.

Transportation systems serve as the primary surface conveyance system for stormwater runoff and therefore represent a key opportunity to capture and manage stormwater before it enters underground drainage systems or receiving water bodies. Incorporating green stormwater infrastructure in roadways – such as through stormwater curb extensions, sidewalk infiltration planters, street trees, and rain gardens that capture, infiltrate, and treat runoff – creates "Green Streets" that improve water quality, reduce urban flooding, recharge groundwater, mitigate urban heat islands, and enhance the bicycle and pedestrian environment.

There is an existing statewide priority to implement "Complete Streets" to better accommodate bicycles, pedestrians, and transit and reduce greenhouse gas emissions by reducing vehicle miles traveled. Combining Green Streets and Complete Streets creates "Sustainable Streets" that are truly multi-benefit and essential to climate change resiliency in urbanized areas. As such, BASMAA **recommends revising Transportation Recommendation T-4 to include a new "Next Step" that specifically supports implementation of Sustainable Streets** as part of the State's Active Transportation Program and other relevant programs, such as the Natural Resources Agency's recent Urban Greening program. **We also recommend a partner recommendation in the Water section under Recommendation W-8**, with appropriate connections between the two to highlight the inter-related nature of these two sectors.

Similarly, **BASMAA recommends that the Plan recognize as an Ongoing Action in both the Water and Transportation sections** the Association of Bay Area Governments (ABAG) / San Francisco Estuary Partnership *Urban Greening Bay Area* project (http://www.sfestuary.org/our-projects/water-quality-improvement/greenplanning/). *Urban Greening Bay Area* includes a Regional Roundtable series of working meetings where local, regional, state, and federal agencies, elected / appointed officials, and private sector and non-profit partners are developing policy solutions to integrate transportation, climate, and water quality investments.

BASMAA also recommends the following changes to the Changing Climate Conditions Metrics section of Appendix B:

- Include metrics regarding increased urban flooding incidences caused by increased stormwater runoff volume and/or intensity
- Include a metric related to disaster funds distributed to local agencies for flood-related impacts due to increased stormwater runoff volume and/or intensity

BASMAA recommends the following changes to the Resilience Outcomes Metrics Appendix:

- Add a metric related to acreage of impervious area managed by downstream green infrastructure or volume of stormwater managed by green infrastructure – over time, municipalities will be managing more and more runoff to achieve water quality goals that should also be tracked in regard to climate resilience
- Incorporate Green Infrastructure Plans, Stormwater Resource Plans, and Watershed Management Plans in metrics related to planning documents addressing climate resiliency issues
- Change metric related to "Complete Streets features" built into transportation infrastructure projects to "Sustainable Streets features," recognizing the importance and need to incorporate green infrastructure in these improvements to provide enhanced climate change resilience.

Thank you again for the opportunity to comment. If you have any questions, please contact me at 650-599-1419 or our Executive Director, Geoff Brosseau at 650-365-8620.

Sincerely,

Matt Fabry, Chair
Bay Area Stormwater Management Agencies Association

cc: Bruce Wolfe, Executive Officer, San Francisco Bay Regional Water Board
Tom Mumley, Assistant Executive Officer, San Francisco Bay Regional Water Board
Keith Lichten, Watershed Management, San Francisco Bay Regional Water Board
Julie Alvis, Deputy Assistant Secretary, California Natural Resources Agency representative to Urban Greening Bay Area, Sustainable Streets Roundtable
BASMAA Board of Directors

Responses to Comments on the **Safeguarding California Plan: May 2017 Draft Report**

Reviewed for the

SAFEGUARDING CALIFORNIA PLAN:
2018 UPDATE
CALIFORNIA'S CLIMATE ADAPTATION STRATEGY

JANUARY 2018

CALIFORNIA natural resources AGENCY

COMMENT SUMMARY: AT A GLANCE

33 LETTERS RECEIVED

Agricultural Council of California
Alliance of Regional Collaboratives for Climate (ARCCA)
Asian Pacific Environmental Network (APEN)
Bay Area Stormwater Management Agencies Association (BASMAA)
CADMUS Group
California Association of Sanitation Agencies (CASA)
California Forestry Association
California Pan-Ethnic Health Network (CPEHN)
Center for Biological Diversity
City and County of San Francisco
Delta Stewardship Council
East Bay Regional Park District
Greenlining Institute
Gregory Nelson
Heal the Ocean
Human Impact Partners
Joint Environmental NGO Letter
Leadership Counsel for Justice and Accountability (LCJA); Center on Race, Poverty, & the Environment (CRPE); Community Alliance for Agroecology (CAA); Central Valley Air Quality Coalition (CVAQC)
Nature Conservancy
Ocean Conservancy
Pacific Forest Trust
Roy Thun
San Diego County Water Authority
San Diego Unified Port District
Santa Ana Watershed Project Authority
Sid Abma
Sierra Business Council
Southern California Gas Company (SoCalGas)
State Coastal Conservancy
Thomas J. Phillips
Union of Concerned Scientists
William Stewart (1)
William Stewart (2)

Split up and reviewed as:

500+ INDIVIDUAL COMMENTS

- **82** Overall Plan
- **28** Emergency Management
- **60** Energy
- **25** Land Use and Community Development
- **82** Public Health
- **37** Transportation
- **34** Agriculture
- **39** Biodiversity and Habitat
- **55** Forests
- **37** Ocean and Coast
- **43** Water

Resulting in:

OVER 500 RESPONSES
from State Agency Staff;

OVER 300 REVISIONS
to the May 2017 draft; and

2 ADDITIONAL CHAPTERS
included in the final Plan.

Transportation Chapter Comments

Source	*Comment Summary*	*Response*	*Edit Location*
Bay Area Stormwater Management Agencies Association	Incorporating green stormwater infrastructure in roadways, such as through stormwater curb extensions, sidewalk infiltration planters, street trees, and rain gardens that capture, infiltrate, and treat runoff, creates "Green Streets" that improve water quality, reduce urban flooding, recharge groundwater, mitigate urban heat islands, and enhance the bicycle and pedestrian environment.	We agree; this change was made.	T-4
Bay Area Stormwater Management Agencies Association	T-4 should include a new "next step" that specifically supports implementation of Sustainable Streets as part of the State's Active Transportation Program and other relevant programs, such as the Natural Resources Agency's recent Urban Greening Program.	A definition of "Sustainable Streets" would be needed to make this change.	N/A
Union of Concerned Scientists	The Update should clarify which state agency will be taking on each Next Step and Ongoing Action including a specific timeline for initiation and completion.	This is not within the scope of the document.	N/A
Union of Concerned Scientists	Recommendation T-1: The Update should recognize efforts from local and regional groups such as BCDC and MTC's sea level rise mapping for the Bay Area as well as commit to a process to share this data.	T-1.2 was added to mention working with local and regional groups, where applicable; this is also addressed in T-2.4.	T-1.2
Union of Concerned Scientists	Recommendation T-1: "Next Steps" should include the California State Transportation Agency or Caltrans to integrate the various existing and nearly complete vulnerability assessments for different transportation assets and systems.	We agree; this change was added.	T-1.2
Union of Concerned Scientists	Recommendation T-4: State transportation agencies should coordinate with the private sector in addition to local, regional, and federal partners to ensure consistency and compatibility of the solutions being implemented. Caltrans should also review the Highway Design Manual for potential updates based on the results of its vulnerability assessments and other relevant information.	Where private sector adaptation plans are addressed at a local level, the State encourages coordination.	T-2; T-5
Union of Concerned Scientists	Recommendation T-5: This section should identify specific solutions to address equity issues for transportation systems and partner with vulnerable populations in transportation decisions. For instance, differences in transportation access between urban and rural areas, or across vulnerable groups (e.g., elderly, low-income, and disabled communities), could influence just how resilient a community is to climate change.	We agree; this change was added.	T-5.3

TRANSPORTATION

Source	*Comment Summary*	*Response*	*Edit Location*
ARCCA	T-4: We strongly support T-4 and the focus on resilience, mobility, and accessibility – not just infrastructure and concrete. Strategies like T-4.6 can help save lives, and we recommend that transit providers work with public health agencies to develop emergency programs such as free rides during extreme heat days and heat waves. Providing real-time bus arrival information, in combination with passive shading, can also help improve the comfort of riders during hot days.	Acknowledged, thank you.	N/A
Port of San Diego	Due to the location of ports along California's coasts and harbors, they are susceptible to rising sea levels and severe storms. While the Plan identifies policies and strategies to "Improve transportation system resiliency" (T-4), we are concerned the 2017 Update does not adequately distinguish and prioritize water-dependent and water-related uses that are important economic engines for California. These uses may require specific structural strategies to become resilient to climate change impacts. We highly encourage the CNRA to include additional policies and strategies in the Plan that differentiate and prioritize water-dependent and water-related uses from non-water dependent/related uses and the transportation infrastructure, specifically water-based systems, upon which they rely.	Noted; T-1 was edited to include sea ports.	T-1.1
Bay Area Stormwater Management Agencies Association	The update should make a strong connection between the Transportation and Water sectors regarding stormwater management. Currently, the Transportation recommendations seem focused on impacts to transportation infrastructure because of climate change and not on the role transportation infrastructure plays on in both causing and adapting to climate change impacts related to stormwater runoff, flooding, and increased temperature. Transportation infrastructure makes up a significant amount of the impervious surfaces in urbanized areas, with streets and parking lots often constituting 25-50% of urbanized land areas. As such, transportation infrastructure is a major contributor to stormwater runoff and associated pollutants, as well as to urban heat islands.	Language was added to T-4.4a to investigate transportation infrastructure that leads to other benefits such as stormwater management and flood prevention.	T-4.4a

Source	Comment Summary	Response	Edit Location
	drinking water augmentation," are already in use in proposed potable reuse projects.		
Bay Area Stormwater Management Agencies Association	W-8 Include other state agencies in support of implementing green infrastructure solutions, such as the Department of Water Resources Integrated Regional Water Management program and associated bond funds. Similarly, the Strategic Growth Council and State Coastal Conservancy have been on the forefront of efforts to integrate green infrastructure with other state priorities. Revise this section to address programs and efforts that are already or will be implemented by all relevant state agencies, not just the State and Regional Water Boards.	A bullet was added to W-8 on Strategic Growth Council and State Coastal Conservancy Programs for natural infrastructure.	W-8 ongoing actions
San Diego County Water Authority	W-3 Include Next Step that promotes holistic water supply diversification through potable reuse and ocean desalination permit streamlining. The Plan Update should identify all viable local supply sources including ocean desalination and potable reuse as diversification strategies. "The State Water Resources Control Board will provide efficient permitting of ocean desalination facilities under the California Ocean Plan (and potable reuse facilities).	The introductory text to W-3 and its first ongoing action are general to include all viable local sources, including desalination and potable reuse. A sentence was added to the W-3 opening paragraph to better emphasize this.	Introduction to W-3
San Diego County Water Authority	W-3 Include Next Steps that elevate, promote and sustain Integrated Regional Water Management. The diversification strategy fails to recognize ongoing actions in IRWM that have been vital in making regions across the state more resilient to changing climate. a) DWR will publish findings of the "Draft 2015 IRWM Strategic Plan" and implement recommendations included within. b) DWR shall integrate the recommendation of the IRWM Strategic Plan and recommendations into the California Water Plan Update 2018 and the California Water Action Plan c) DWR, the State Water Resources Control Board, the legislature, and the Governor should work together to address long-term funding support for IRWM.	Noted; IRWM is mentioned in W-8. For brevity, these changes were not included; please refer to the IRWM program.	N/A
San Diego County Water Authority	W-3 Recognize individual agencies' or regions' unique water supply conditions and differences. The Water Authority urges state agencies to provide a mechanism for a thoughtful and deliberative process inclusive of broad stakeholders and regional experts to develop water use targets that account for differences in local conditions.	W-3 is meant to be general to respect these differences and unique water supply conditions. The introduction to W-3 was revised to better emphasize this point.	Introduction to W-3

Source	Comment Summary	Response	Edit Location
Santa Ana Watershed Project Authority	W-2 and L-3 are closely related. Emphasizing this connection and drawing attention to CA-6 could make for a stronger draft.	The cross-sector icons in the final version of Safeguarding California aim to better emphasize connections between recommendations.	Cross-sector icons
ARCCA	W-4: We recommend a greater consideration of saltwater intrusion in the Delta and its effects on drinking water, Delta residents, and agriculture.	The introductory text to W-4 mentions the threat of saltwater intrusion to drinking water.	N/A
The Nature Conservancy	Hotter and drier conditions may result in increased water demand being met from groundwater supplies, which requires electricity to pump. It may also result in less available hydropower, with the expectation that power plants will fill the energy gap at a time when higher temperatures could reduce their efficiency. The Plan briefly mentions this nexus in the Energy chapter, by highlighting the need for more research in this area, and in the Water chapter, by mentioning the Water-Energy grant programs. A more coordinated discussion of how the sectors and respective departments are, and plan to enhance working together and the anticipated benefits of closer collaboration would be helpful.	Noted; although this issue is mentioned in the Water and Energy chapters, it may be better addressed collaboratively in conversations between state agencies and not within Safeguarding California.	N/A
Santa Ana Watershed Project Authority	W-5 and P-5/P-9 are closely connected. This connection should be emphasized in the text while also calling attention to CA-6.	The cross-sector icons in the final version of Safeguarding California aim to better emphasize connections between recommendations.	Cross-sector icons
Delta Stewardship Council	The Delta Stewardship Council is committed to the development of a Delta governance strategy for climate adaptation projects; providing policy leadership on resilient infrastructure; creating new funding sources for adaptation and resilience; establishing and providing a resilience technical services team; and expanding of the Delta's network of natural infrastructure.	Noted; thank you for your comment. Edits were made to the ongoing actions for W-4 to reflect the work of the Delta Stewardship Council.	W-4 ongoing actions
Bay Area Stormwater Management Agencies Association	Ongoing actions should include the Association of Bay Area Governments (ABAG)/San Francisco Estuary Partnership Urban Greening Bay Area Project. Urban Greening Bay Area includes a Regional Roundtable series of working meetings where local, regional, state, and federal agencies, elected/appointed officials, and private sector and non-profit partners are developing policy solutions to integrate transportation, climate, and water quality investments.	We commend this effort, but this plan is focused on what State Agencies are doing to adapt to climate change.	N/A