

Appendix A: CASQA's Vision at-a-Glance

“BIG THINKING PRECEDES GREAT ACHIEVEMENT.”

—WILFERD PETERSON

The following table provides CASQA's Vision at-a-glance.

The full CASQA Vision document, as well the complete text for each Objective, are available at www.casqa.org/about/vision



Principle 1 – Sustainable stormwater management uses runoff as a resource, protects water quality and beneficial uses, and efficiently minimizes pollution.

Action 1.1 – Develop guidance for integrated management of water resources that promotes stormwater as a resource.

Goal – Develop guidance for Integrated Regional Water Management Plans (IRWMPs) and similar efforts that integrates all of California's water resources to achieve optimum use while protecting the beneficial uses of receiving waters.

(IRWMPs) **Objective 1** – Meet with State Water Board and Department of Water Resources (DWR) staff to discuss the goal of Action 1.1 and develop a problem statement as well as general steps for corrective action. Determine the most appropriate approach to guide the development of the stormwater portion of IRWMPs.

(IRWMPs) **Objective 2** – Work with the State Water Board and DWR to develop a guide (model) for the integrated use of all water sources in California that will serve as a required reference document during the development of IRWMPs. The guide should address the following items: [SEE VISION DOCUMENT]

(IRWMPs) **Objective 3** – Work with the State Water Board and DWR to finalize the guide (model) by adopting it as a required reference document. Develop an implementation plan, including scope of work, schedule, resources, and roles (including lead and support), and responsibilities.

(SGMA) **Objective 1** – Meet with State Water Board and DWR staff to discuss the goal of Action 1.1 and how stormwater agencies can play a significant role in the development of various Groundwater Sustainability Plans (GSPs)—statewide and locally—and incorporate stormwater capture and recharge projects into those GSPs. Furthermore, identify actions to coordinate with those DWR and State Water Board divisions responsible for the Sustainable Groundwater Management Act (SGMA) implementation.

Action 1.2 – Identify constraints and opportunities for maximizing stormwater as a resource.

Goal – Identify existing constraints and opportunities to incentivize use of stormwater as a natural resource.

Objective 1 – Survey agencies and review recently adopted Municipal Separate Storm Sewer System (MS4) permits to identify key conflicts and constraints for identifying and implementing projects that use stormwater. Use the Strategy to Optimize Resource Management of Storm Water (STORMS) Project 1a/1b Report as a starting point to develop the survey. Meet with the State Water Board and DWR to discuss the findings.

Objective 2 – Based on the results of the survey, meetings with DWR and State Water Board in Objective 1, and the STORMS Project 1a/1b Report, develop recommendations for ways in which future regulations and guidance can more effectively support use of stormwater as a resource. Provide the State Water Board with ways to incentivize the use of stormwater as a resource and remove constraints that currently exist to support the State Water Board's STORMS program.

Objective 3 – Work with State Water Board and DWR to incorporate consideration of stormwater as a resource in future regulations and establish a statewide goal.

Action 1.3 – Provide effective and efficient solutions through true pollutant source control.

Goal – Develop a list of pollutants in stormwater that should most appropriately be controlled at the source (true source control). Determine the commercial use of each pollutant, and outline a recommended source control approach.

Objective 1 – Assemble a scope of work for a technical report to identify pollutants in stormwater that impact local receiving waters. This effort will largely be a compendium of MS4 annual reports around the state. Assemble a technical advisory team to oversee the development of the technical report.

Objective 2 – Prepare a technical report per significant pollutant that describes the causes of receiving water impairment in urban areas, defines each pollutant and assesses the degree of pollutant control available to municipalities. As an example, each pollutant may be assessed according to the following categories:

- Source characterization – sources, pathways (e.g., stormwater, air deposition), fate; relative amounts of pollutant / uncertainty per pathway
- Whether removal is available through cost effective treatment controls
- Whether true source control is feasible or cost effective
- Whether a Green Chemistry approach is appropriate, and for what industry

The reports should identify partners for collaboration to implement the control for each of the categories defined above. The reports should also include a prioritized implementation plan.

Objective 3 – Provide State Water Board with recommended actions to support true pollutant source control consistent with STORMS Project 6b. Work with the State Water Board, Department of Toxic Substances Control (DTSC), and other agencies to support development of partnerships and collaboration and other actions identified in the technical reports to support true pollutant source control. Work with the Environmental Protection Agency (EPA) to implement true source control work through education and regulation.

Action 1.4 – Work with DPR to control toxicity in receiving waters from pesticide application.

Goal – Develop a regulatory system implemented by EPA Office of Pesticide Programs (OPP) and California DPR to identify whether urban uses of a pesticide pose a threat to water quality, and then restrict or disallow those uses proactively so that water quality impacts are avoided.

Objective 1 – Respond to the immediate need to participate in EPA pyrethroids, fipronil, and imidacloprid reviews (the only such opportunity for the next 15 years) and to support and encourage DPR steps toward expanded pyrethroids and new fipronil mitigation measures.

Objective 2 – Seek EPA risk mitigation for malathion and carbaryl in urban runoff and the continuation of traditional water quality risk assessments in tandem with Endangered Species Act (ESA) evaluations.

Objective 3 – Continue to leverage successes at the state level as a key stakeholder in the development of statewide Water Quality Control Plan Amendments for urban pesticides reduction.

“A VISION IS NOT JUST A PICTURE OF WHAT COULD BE; IT IS AN APPEAL
TO OUR BETTER SELVES, A CALL TO BECOME SOMETHING MORE.”

– ROSABETH MOSS KANTER



Principle 2 – Policies, regulations, guidance, training, and funding need to support sustainable stormwater management.

Action 2.1 – Clarify regulations.

Goal – Propose rulemaking or legislation that clarifies stormwater as non-point source, and clearly outlines expectations of stormwater as different from wastewater and other point sources.

Objective 1 – Confer with national stormwater organizations (e.g., National Municipal Stormwater Alliance [NMSA], Water Environment Federation [WEF], National Association of Flood and Stormwater Management Agencies [NAFSMA], National Association of Clean Water Agencies [NACWA], Natural Resources Defense Council [NRDC]) to explore ideas about rulemaking or legislation that would redefine stormwater as a non-point source of pollutants, or change how stormwater is permitted as a point source. Develop a consensus strategy with interested stakeholders to accomplish this objective.

Objective 2 – Reach out to state and national governmental organizations (e.g., League of California Cities [LCC], California State Association of Counties [CSAC], County Associations of Government) to educate local and state elected officials on the issue. Coordinate with EPA and environmental non-governmental organizations (NGOs).

Objective 3 – Develop and implement a strategy that would redefine stormwater as a non-point source of pollutants.

Action 2.2 – Articulate stormwater program priorities.

Goal – Ensure the most critical water quality issues associated with stormwater are identified and corresponding strategies developed to address the issues.

Objective 1 – Identify the highest priority issues for the stormwater program as a part of the Triennial Review process or other mechanism (e.g., State Stormwater Policy – see Action 2.4, Objective 4).

Objective 2 – Engage stakeholders in a collaborative effort to prioritize the water quality issues associated with stormwater discharges relevant to the region or State. The effort may be led by any of the stakeholders (e.g., Regional Water Boards, permittees, NGOs).

Objective 3 – Identify priorities of the region or state by considering impacts on beneficial uses, maximum benefit of the water body, water use opportunities, and other considerations that affect prioritization. Prioritize pollutants based on considerations.

Objective 4 – Collectively develop strategies for high priority stormwater program issues. Such strategies may include developing consistent permit requirements, modifying Basin Plans, and providing guidance to support technical and regulatory issues.

Objective 5 – Develop and deliver comments and testimony on technical, regulatory, and legal aspects of priority issues.

Action 2.3 – Augment and implement basin plan amendment process.

Goal – Modify water quality standards to reflect sustainable beneficial uses and the nature and impact of stormwater.

Objective 1 – Initiate the Basin Plan amendment process or equivalent state or regional planning effort based on recommendations and priorities established under Actions 1.3 and 2.2 respectively.

Objective 2 – Assess water quality standards per the California Water Code Section 13241. Working with the State Water Board, develop an assessment method reflective of wet weather conditions that would address the following factors to support a Basin Plan amendment: [SEE VISION DOCUMENT]

Objective 3 – Develop an implementation program consistent with §13242 to support revised water quality standards including a schedule and monitoring program. Working with the State Water Board, develop a framework for defining the implementation program required to support the revised water quality standards.

Objective 4 – Amend Basin Plans consistent with the assessment and framework developed above for wet weather conditions. During the triennial review provide input and data to support the reconsideration of water quality standards including assessment of current beneficial uses and application of water quality objectives during wet weather conditions.

Action 2.4 – Develop policies and permitting framework to support sustainable stormwater management.

Goal – Develop a regulatory framework for stormwater that will provide statewide consistency in permitting and Total Maximum Daily Load (TMDL) implementation and support the implementation of sustainable stormwater programs. Provide definitions and requirements as needed to clarify expectations for MS4 programs. Ensure that the framework is implemented statewide.

Objective 1 – Identify constraints and inconsistencies. Use the first of two EPA-sponsored Municipal Stormwater Permit Evolution workshops (December 2017) to confer with interested parties to identify the constraints and inconsistencies as well as benefits and challenges of existing policy and permitting efforts. Prioritize the challenges for subsequent attention in Objective 2 below. It is likely that two of the most important challenges will be defining Maximum Extent Practicable (MEP) standards and creating sustainable pathways for achieving TMDL waste load allocations (WLAs) and complying with receiving water limitations (RWLs).

Objective 2 – Define MEP and RWL compliance and TMDL implementation. Stipulate the mandatory requirements for stormwater program implementation to define MEP using the work already completed by CASQA, State Water Board executive management, Regional Water Boards Executive Officers, and EPA Region 9 stormwater staff, (Statewide Stormwater Permit Design Review, 2011-2012). Likewise, develop an adaptive management approach for TMDL development and implementation and compliance with receiving water limitations. Define any additional priorities identified in Objective 1, and develop a scope(s) and schedule(s) to address in subsequent objectives.

Objective 3 – Define baseline monitoring requirements. Use the second of two EPA-sponsored Municipal Stormwater Permit Evolution workshops (March 2018) and follow-up to convene stakeholders to clarify purpose of the monitoring effort, to clarify standard monitoring methods and procedures, and establish mandatory reporting requirements and format.

Objective 4 – Develop a statewide policy for stormwater. The policy should support an approach that incorporates adaptive management, provides a logical and progressive pathway to water quality protection and promotes green infrastructure. As such, the approach should progress from a narrative definition of technology-based effluent limits (TBELs) to numeric based technology based effluent limits to narrative water quality-based effluent limits (WQBELs) and ultimately, if required, numeric WQBELs.

Objective 5 – Incorporate adaptive management as a pathway for compliance with water quality standards and TMDLs into all MS4 permits. This approach would also include the need to provide options for reviewing and modifying TMDLs based on new information, technology, monitoring results, etc.

Action 2.5 – Establish guidance / tools to support sustainable stormwater programs.

Goal – Ensure technical and regulatory guidance is provided to support sustainable stormwater programs.

Objective 1 – Update CASQA BMP Handbooks. As new information becomes available and technical advances take place, the CASQA BMP Handbooks will need to be updated. Such updates should coincide with the updates of the relevant permits and permitting approaches.

Objective 2 – Develop guidance for regulatory priorities. Pending the results of Action 2.2, it may be necessary to provide guidance to develop site specific objectives, develop technology based effluent limits, characterize natural sources, support a high flow suspension, or develop wet weather standards.

Objective 3 – Update CASQA Program Effectiveness Assessment Manual. MS4s are continually trying to improve their stormwater programs both in effectiveness in addressing water quality issues and in efficiency in minimizing program costs. The CASQA program effectiveness assessment provides the basis for such improvements but should be revised to reflect the watershed approach currently being provided for in permits (see Action 2.6 on the following page) that allow agencies to focus their resources on water quality priorities.

Objective 4 – Develop case studies of adaptive management. Adaptive management is as much art as science and the process and form it takes can vary from situation to situation. Case studies improve our understanding of adaptive management by showcasing the ways the process may be used and the results it can generate.

Objective 5 – Develop and host events (e.g., quarterly meetings, annual conferences) on a regular basis to assist stormwater professionals to remain current on the latest issues and developments. Identify and engage high quality and relevant sources of information.

Objective 6 – Create and host information places (e.g., websites, forums) where stormwater professionals can access current, relevant, and high-quality information and interact with like professionals.

Objective 7 – Create and provide training for stormwater professionals. Create curricula from current, relevant, and high-quality information sources. Identify and engage high quality and experienced trainers.

Action 2.6 – Establish watershed-based or equivalent program.

Goal – Develop process for implementing watershed-based approaches for the MS4 program.

Objective 1 – Assess efforts in Los Angeles, Bay Area, and San Diego to identify the benefits, the challenges, and any recommended changes.

Objective 2 – Work with the State Water Board to incorporate watershed based planning into all MS4 permits. The permits should highlight the need to prioritize watershed based water quality issues and encourage implementation of stormwater programs at the watershed level. Review and incorporate the EPA's Integrated Planning Framework into permits.

Objective 3 – Create opportunities for regional solutions. Initial stormwater permits discouraged regional solutions to water quality issues but more recently this approach has been updated and regional approaches are allowed. The State Water Board should be encouraged to find ways to incentivize regional solutions as part of the State's STORMS program. Incorporate recommendations from EPA-sponsored Municipal Stormwater Permit Evolution workshops (December 2017).

Objective 4 – Create a pollutant trading / credit program framework. Water quality trading is an innovative approach to achieve water quality goals more efficiently and is especially suited for projects and programs that are watershed based and subject to a TMDL. A pilot project should be identified and implemented

Action 2.7 – Create funding opportunities.

Goal – Assist with the development and dissemination of the strategy to use one or more funding options for municipalities to support their stormwater programs to completely or partially eliminate reliance on general funds.

(SB 231 Implementation) Objective 1 – Participate in SB 231 Implementation Working Group and the planning and development of the strategy.

Objective 2 – Develop and disseminate information regarding the strategy and its implementation.

(Joint Powers Authority) Objective 1 – Assist formation of a Joint Powers Authority (JPA), including authorization of State Water Board participation, execution of JPA formation documents, constitution of governance (e.g., Board of Directors), development of governance documents (e.g. Bylaws, Policies and Procedures), and establishment of Administering Entity.

Objective 2 – Assist with securing funding and implementation of first JPA project.

(Funding Information Online Portal) Objective 1 – Develop in collaboration with the State Water Board and as an initiative associated with the STORMS Funding Subcommittee a stormwater funding information online portal.

(Sustainable Streets) Objective 1 – Update Proposition 1 Stormwater Grant Guidance. In the 2018 Stormwater Grant Program solicitation, provide guidance on how to demonstrate the eligibility of transportation elements, including pervious paving and active transportation and transit improvements that reduce greenhouse gases (Roadmap Specific Action 1.3).

Objective 2 – Clarify green infrastructure eligibility in the local streets and roads program. As guidelines are developed in accordance with SB 1 (2017) clarify the eligibility of green infrastructure elements in pavement rehabilitation and other applicable projects (Roadmap Specific Action 1.4).

Objective 3 – Prepare guidance for packaging projects. Prepare statewide guidance on how to package Sustainable Streets projects for specific grants (Roadmap Specific Action 2.4).

“VISION ANIMATES, INSPIRES, TRANSFORMS PURPOSE INTO ACTION.”
– WARREN BENNIS



Action 2.8 – Survey needs and identify costs.

Goal – Identify or develop a system for collecting and analyzing information on needs and costs of compliance for stormwater permittees (construction, industrial, and municipal), and implement it in California.

Objective 1 – Research the EPA and WEF surveys and determine the extent to which they address municipal stormwater in California. Identify any gaps.

Objective 2 – Dependent on the results and recommendations from Objective 1, develop and conduct a survey for MS4s in California, and analyze the results.

Objective 3 – Develop and conduct a survey for construction stormwater permittees in California, and analyze the results.

Objective 4 – Develop and conduct a survey for industrial stormwater permittees in California, and analyze the results.

Objective 5 – Determine the management questions and utility of conducting the surveys on some regular basis.

Principle 3 – Public awareness, understanding, and appreciation of the value of stormwater is essential to sustainable stormwater management.



Action 3.1 – Create opportunities for multiple agency and collaborative efforts to demonstrate the value of stormwater to the public.

Goal – Establish and define a basic set of multi-benefit projects and programs that a stakeholder agency can initiate.

Objective 1 – Identify stakeholder agencies to participate in this action. Potential candidate projects and programs to consider: [SEE VISION DOCUMENT]
Identify funding sources that each agency uses for capital improvements, programs, maintenance, and land acquisition and the limitations on the use of those funds.

Objective 2 – Identify at least one multi-benefit project type or program that includes two or more agencies listed in Objective 1 that can be implemented by municipalities or other stakeholders. Create or document demonstration projects that can be implemented by permittees statewide. For each multi-benefit project or program, develop a detailed “road map” or model manual for the project describing: [SEE VISION DOCUMENT] Multi-benefit projects should focus on urban infrastructure and include the following: [SEE VISION DOCUMENT]

Objective 3 – Publish a report on the findings of this action with completed project scenarios.

Objective 4 – Track plans for STORMS Project 2a. Increase Stakeholder Collaboration to Promote Stormwater as a Resource, and depending on the circumstances, scope out a task(s) to coordinate with, support, or help implement STORMS Project 2a.

Action 3.2 – Create statewide message that establishes stormwater as a resource.

Goal – Within the context of the “Protect Every Drop” campaign, develop a message and outreach materials promoting stormwater as a resource for use in public education.

Objective 1 – Convene a steering committee to agree on the concept framework and direct the development of the “stormwater as a resource” message. The steering committee will be comprised of members from the following entities: [SEE VISION DOCUMENT]

Objective 2 – Draft a work plan. The steering committee will draft a work plan to develop the “stormwater as a resource” outreach message, any materials, and method of dissemination to the public. The work plan will include an action to identify the appropriate and unique target audiences, and messages and delivery customized to each target audience. Work will also include a public outreach plan that uses all traditional and social media formats.

Objective 3 – Implement the public outreach plan. Coordinate outreach statewide with all cooperating agencies.