

CALIFORNIA TRASH MONITORING WORKGROUP

CHARTER

May 2020

Mission

The California Trash Monitoring Workgroup (Trash Workgroup) is a workgroup of the California Water Quality Monitoring Council (Monitoring Council). The Monitoring Council was established in 2007 to integrate and coordinate their water quality and related ecosystem monitoring, assessment, and reporting. The mission of the Trash Workgroup is to support current practices and promote advances in trash monitoring while developing data analysis and visualization tools aimed at assessing the effectiveness of policies and practices for minimizing trash in the environment. This mission will be fulfilled by providing a forum for discussion, coordination and technical exchanges by a variety of organizations and stakeholders, including but not limited to government agencies, academic institutions and non-governmental organizations (NGOs), and the production of Trash Workgroup Workplans. The Trash Workgroup serves to review current policies and practices for reducing trash, including the monitoring data that is (and will be) used to improve the knowledge needed to accomplish the Workgroup goals and to inform policy makers and affected stakeholders.

Background and Definitions

Trash on land and in our surface waters has become a focus of policy throughout the state of California, which has included three main areas:

- 1) bans;
- 2) total maximum daily loads (TMDLs); and
- 3) the Statewide Trash Amendments,

Each of these policy issues work at different levels. Bans on specific items include the statewide ban on plastic grocery bags, as well as local bans throughout the state on specific items such as polystyrene, straws and cigarettes. TMDLs have been passed by Regional Water Quality Control Boards on many contaminants and specifically on trash for at least 15 California waterbodies. Established in 2001, the Los Angeles River Watershed trash TMDL was one of the nation's first trash TMDLs, which set a 100% trash load-reduction goal (i.e., zero trash discharge) to be accomplished by September 2016. In efforts to comply with these mandates, many jurisdictions are using full-capture systems (traps items greater than 5 millimeters [mm]) or alternative institutional controls such as increased street sweeping, increased trash bin installation, education, and other similar strategies.

The Statewide Trash Amendments apply the TMDLs to a broader level, as all jurisdictions throughout the state now must either install full-capture systems (i.e., Track 1 compliance) or a combination of full-capture systems, partial-capture devices and institutional controls (Track 2 compliance) in their Priority Land Use Areas [PLUs] (areas commonly associated with higher trash generation such as commercial, industrial, high density residential, mixed urban, and public transportation stations) to comply with these regulatory mandates. For those opting to comply via Track 2, monitoring is required to ensure the State that they are attaining trash-removal levels comparable to those that could be obtained via Track 1 compliance (i.e., Full-Capture System Equivalency) in the same drainage area. In turn, those opting for Track 2

compliance must develop and implement a set of monitoring objectives that demonstrate the selected combination of trash controls are effective in meeting the full-capture system equivalency. This monitoring is therefore used to confirm compliance relative to that which would be achieved under Track 1.

Need for the Workgroup

The need for a Trash Workgroup stemmed from the 2018 Trash Data Dive meeting, held on November 16, 2018 that was hosted by the State Water Resources Control Board (Water Board), San Francisco Estuary Institute, and Southern California Coastal Water Research Project.

The goals of this meeting were to take currently available public trash data and develop data analytics and visualizations around stakeholder needs. Some areas of interest identified include:

- Using machine learning¹ in identifying, quantifying and categorizing trash
- Analyzing trash data to determine the amounts and types of tobacco products captured
- Determining policy effectiveness through analyzing monitoring data
- Providing a regional perspective of trash captured in multiple environments to tell a comprehensive story and guide improvements
- Estimating the trash contribution of the homeless community

At the conclusion of this meeting, the formation of the Trash Workgroup was suggested as a way to further develop many of the ideas presented.

In addition to the policies listed above addressing trash greater than 5 mm, two legislative efforts have also been passed to address microplastics. These include Senate Bill 1422, which requires the Water Board to set a definition for microplastics in drinking water and develop standardized methods to determine their levels within drinking water. The second bill, Senate Bill 1263, requires the Ocean Protection Council (OPC) to adopt and implement a Statewide Microplastics Strategy related to microplastic materials that pose an emerging concern for ocean health. This bill authorizes the OPC (in collaboration with the Water Board, the Office of Environmental Health Hazard Assessment, and other interested entities) to provide funding to research activities that would address gaps in microplastics knowledge and would contribute directly to the development of the Statewide Microplastics Strategy.

Given all of the above, the need for a Trash Workgroup was identified to bring together multiple stakeholders to collectively discuss and help establish standard monitoring methods, assess the resulting trash data collected, and communicate findings and recommendations to policymakers.

Scope and Objectives

The findings and recommendations of the Trash Workgroup will help to characterize trash generation patterns that can inform further policy development based on the following objectives:

¹ Machine learning is an application of artificial intelligence (AI) that provides the ability to automatically learn and improve from experience. Machine learning focuses on the development of computer programs that can use data to learn for themselves.

Objectives

- Support and align programs that monitor for trash and provide public data.
- Promote the development, implementation and continued refinement of standardized trash monitoring methods such that data is comparable and usable among all users.
- Communicate trash monitoring assessment information to decisionmakers at the federal, tribal, state, and local levels.
- Compile information on existing trash monitoring programs and activities and make that information available through the [Trash Monitoring website](#).
- Develop, recommend, and provide guidance for implementation of approaches and/or data standards to improve data collection and sharing among Trash Monitoring Workshop partners—primarily through the development and dissemination of annual and biannual workplans.
- Serve the ongoing purposes of the California Water Quality Monitoring Council through working within our Mission Statement.

Membership and Representation

Representatives from local, state, tribal and federal agencies with authority or interest in trash regulation, management, monitoring, or assessment, as well as non-governmental science support organizations, NGOs or other non-profit organizations are all encouraged to participate in the Trash Workgroup.

The Trash Workgroup, at its discretion, may form standing or ad hoc committees to focus on specific technical or programmatic areas. These committees serve to provide a mechanism for more detailed and comprehensive participation and discussion. Each committee will select a chair to serve as a liaison and report to the Trash Workgroup. Individuals/organizations with relevant expertise may serve on the committees, whether or not they are Trash Workgroup members.

Meeting Frequency and Governance

The Trash Workgroup is based on a spirit of collaboration, open exchange of ideas and respectful dialogue. Members should come to the Trash Workgroup meetings with this philosophy and the intent to advance the science of trash monitoring throughout the state.

Meetings will be open, informal and consensus driven. The Trash Workgroup will be led by two co-chairs, who will be responsible for setting meeting agendas, facilitating discussions during the meeting, tracking action items, and distributing meeting notes. Water Quality Monitoring Council staff may assist in these activities. The co-chairs will be selected annually through a majority vote of the Trash Workgroup members.

The Trash Workgroup will generally meet quarterly, but may elect to change the frequency at its discretion, and will report its findings in Trash Workgroup Workplans.