

Trash: It's What's for Dinner

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Carolynn Box, Environmental Coordinator for 5 Gyres, and Anna-Marie Cook, Regional Coordinator for EPA's Region 9, will report on national and local efforts to better understand marine debris and the related environmental issues. Carolynn will give a quick overview of global distribution of marine plastic pollution based on 5 Gyres research and discuss local efforts to better understand trash inputs to the Pacific Ocean. Anna-Marie Cook will discuss marine debris's potential to hyperaccumulate, transport, and release pollutants within our oceans into marine species.

Keywords: 5 Gyres, Plastic Pollution, Gyres, Marine Pollution, Marine Debris

Session Title: Escape from Trash Mountain

Speaker Biography: Carolynn Box is the Environmental Coordinator for 5 Gyres Institute, where she helps run their environmental and education programs, and has participated in four research voyages to the South Atlantic, North Pacific, Western Pacific, and North Atlantic "Garbage Patches." She received a Master's from University of Rhode Island in Marine Affairs in 2005 and worked in the field of Coastal Management for seven years in San Francisco Bay until she met Anna Cummins and Marcus Eriksen, co-founders of 5 Gyres Institute. After her first voyage, she decided to change the course of her life and apply her science and organizing background to efforts to fight plastic pollution. Carolynn lives in San Francisco and can be found at one of the local beaches.

Speaker Biography: Anna-Marie Cook is the Regional Coordinator for EPA Region 9's Marine Debris Program and part of Superfund's Emergency Response Branch. She has been with the Agency for over 20 years, working in a variety of positions related to water protection and restoration. Prior to her Marine Debris assignment, Anna-Marie served as a Remediation Project Manager for some of the largest Superfund sites in the Southwest US, including the Base Realignment and Closure of Alameda Naval Air Station in the Bay Area. Prior to this she served as an Underground Injection Control inspector, permit writer and project officer in EPA's Groundwater Protection Program.

Getting To Clean: Regulating Trash and Gauging Success

Dale Bowyer, SF Bay Regional Water Board, dbowyer@waterboards.ca.gov

Chris Sommers, EOA, Inc., Managing Scientist, csommers@eoainc.com

Dale Bowyer will discuss the current Municipal Regional Stormwater Permit approach to trash reduction: mapping and verifying high trash generation areas of Permittees' jurisdiction, delineating trash management areas, and developing new trash management actions in key areas. A crucial aspect of this approach will be assessment and verification that progress is occurring in trash management areas. This assessment will take various approaches, including visual/photographic assessment of conditions of the streetscape, curb, gutter, and sidewalk.

Chris Sommers will discuss the actions of 72 municipalities in the San Francisco Bay Area that have begun implementing new and enhanced litter control actions in response to requirements in the municipal regional stormwater NPDES permit to significantly reduce the amount of litter entering local creeks and rivers from stormwater conveyances. To focus these efforts, municipalities conducted trash characterization studies, developed trash generation rates, and modeled trash generation from watershed source areas. As a result, each municipality has identified and mapped trash generating areas and management zones within their jurisdiction. Additionally, an outcome-based strategy for assessing progress towards trash reduction goals is currently under development. The presentation will provide an overview of the actions taken to-date by Bay Area municipalities, illustrate mapping of trash generating areas, describe trash assessment strategies currently under development, and share lessons learned to-date. Comparisons between Bay Area approaches to those taken in the Los Angeles region and via in the State Water Board's proposed Statewide Trash Control Plan will also be presented.

Keywords: Trash Reduction, Assessment of Successful Trash Reduction, High Generation

Session Title: Escape from Trash Mountain

Speaker Biography: Dale Bowyer has worked at the Water Board for 25+ years in varied capacities. He has a background in Chemical Engineering and a P.E. He currently works in the four large Bay Area urban counties on stormwater pollution and wetland and creeks preservation.

Speaker Biography: Chris Sommers, M.S. is a Managing Scientist at EOA, Inc. with 13+ years' experience designing and managing stormwater monitoring and management programs in California. At EOA, he manages the monitoring and assessment component for the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and chairs the Trash Committee for the Bay Area Stormwater Management Agencies Association (BASMAA). Chris has worked with Bay Area cities and counties to develop trash generation rates for stormwater, create and test trash monitoring and assessment protocols, and implement trash controls. Chris received his BS in Environmental Science from Indiana University in 1994 and MS in Natural Resources Management from Humboldt State University in 2000, with a focus on aquatic ecology and indicators of environmental condition of freshwater systems.

Panel Discussion: Trash Reduction: Just Do It!

Moderator: Melody Tovar

Session Title: Escape from Trash Mountain

Panel Members:

Napp Fukuda, City of San Jose

Meri Soll, StopWaste.org

Rinta Perkins, City of Walnut Creek

Rebecca Tuden, City of Oakland

Moderator Biography: Melody Tovar is the Regulatory Division Manager with the City of Sunnyvale's Environmental Services Department. She has a Bachelor's Degree in Civil and Environmental Engineering from Stanford University. Ms. Tovar has been with Sunnyvale for nearly two years, leading compliance programming for wastewater and stormwater and sustainability initiatives. She has 18 years of experience in developing, implementing, and managing environmental programs for municipal agencies and leads a South Bay team of agency representatives collaborating to aim for zero litter in local waterways.

Panel Member Biography: Napp Fukuda is a Deputy Director of the City of San Jose's Environmental Services Department and has provided leadership in environmental compliance programs for San Jose for more than 19 years. He has a Bachelor's Degree in Mechanical Engineering from Santa Clara University and over 22 years of environmental compliance experience. Mr. Fukuda leads the City's Watershed Protection Division, which provides programmatic services that protect water quality in local creeks and the Bay. These services are integral to the City's management of both wastewater and stormwater and are comprised of four key functions: Stormwater Management, Environmental Enforcement, Laboratory Services, Pretreatment oversight, and Pollution Prevention.

Panel Member Biography: Meri Soll is a program manager with StopWaste.org of Alameda County. She joined StopWaste in 1996 with previous environmental experience in both the public and private sectors. Ms. Soll played an instrumental role in the implementation and enforcement of the Reusable Bag Ordinance in Alameda County, including serving as a liaison for the business community. She manages various green building projects including the development of comprehensive residential Green Building Guidelines for the construction industry. Ms. Soll also administers a number of grants and resource assistance programs for businesses.

Panel Member Biography: Rinta Perkins is the Stormwater Program Manager for the City of Walnut Creek. She has 14 years of experience in environmental programs. She has a Bachelor's Degree in Industrial Engineering and a Master's in Business Administration from CSU Fresno, and holds CPSWQ and QSD certifications. Ms. Perkins has worked on stormwater permit compliance, public education campaigns, standard operating manuals, staff training, and program tracking. In Walnut Creek, she leads the development of local watershed education programs. She represents

Walnut Creek and the Contra Costa Clean Water Program on various regional stormwater committees. Most recently, Ms. Perkins contributed to the development of the Long-term Trash Reduction Plan framework as a member of the BAASMA Trash Steering Committee.

Panel Member Biography: Rebecca Tuden is a watershed specialist for the City of Oakland. She has a Master's Degree in Environmental Policy from UC Berkeley. Ms. Tuden has worked on trash assessment and implementation of trash-reduction efforts during her three years with the City of Oakland. She came to Oakland after two years as an environmental conflict-resolution facilitator in the private sector and over 15 years with the US EPA working on wetlands, watershed management and water quality issues.