Using Data to Inform Municipal Trash Source Control Policies and Improve Water Quality

SMCWPPP 5th Litter Work Group Roundtable – September 1, 2022









Agenda

- 1. Intro/Welcome C/CAG: Reid Bogert
- 2. SMCWPPPP LWG Trash Characterization Study EOA: Chris Sommers
- 3. San Mateo County Plastics Foodware Ordinance CSM: Christopher Slafter
- 4. Half Moon Bay Plastics Foodware Ordinance HMB: Veronika Vostinak
- 5. Reusable SMC Plastic Free Future and Reusable SMC: Alejandra Warren
- 6. Panel Discussion on Litter Source Controls Peter moderating: Chris, Reid, Christopher

EOA: Chris Sommers
CSM: Christopher Slafter
MB: Veronika Vostinak
SMC: Alejandra Warren
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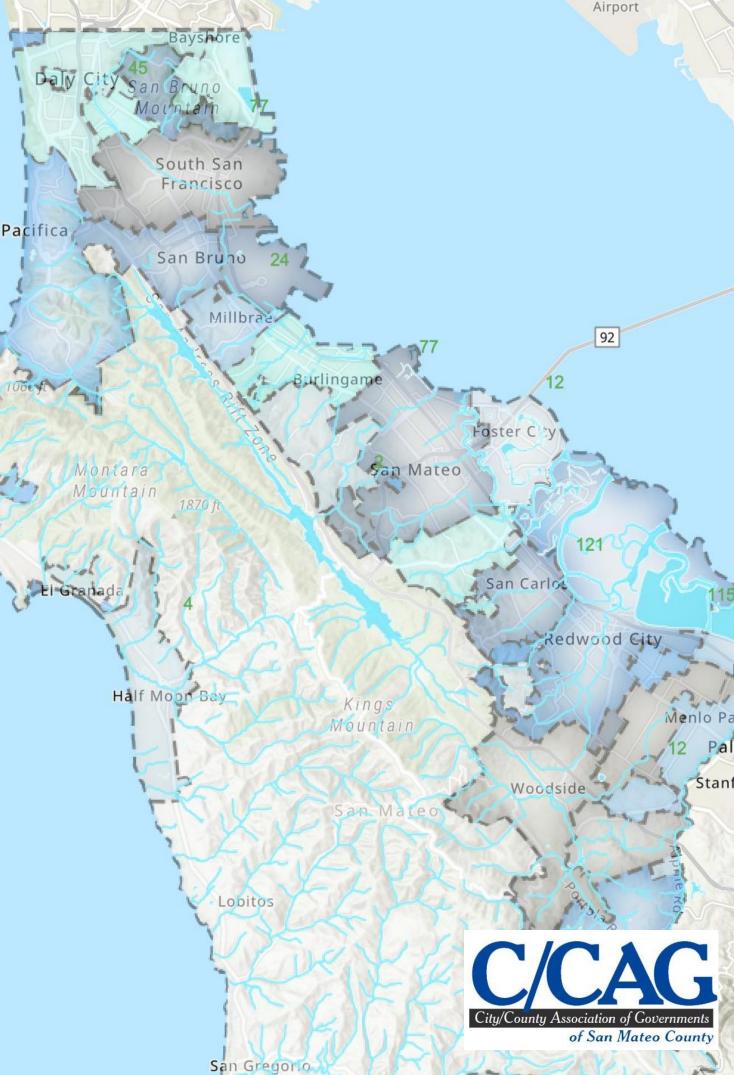


SMCWPPP Background

The Countywide Stormwater Program has provided technical assistance to C/CAG's 21 member agencies and OneShoreline in compliance with statemandated municipal stormwater regulations since the early 1990s

Focus Areas:

- Local, countywide and regional compliance support
- Funded by countywide property fee (\$1.5M) and \$10 vehicle registration fee (\$1M)
- Focus on key pollutants:
 - Trash
 - PCBs/mercury
 - Pesticides
 - Emerging Contaminants



SMCWPPP Litter Work Group

- Work Group of Trash Subcommittee:
 - Initially convened in 2014
 - Brings together municipal staff and franchised haulers
 - Meets several times per year
 - Holds Roundtable Events focused on specific topics

• <u>Work Group goals</u>: to collectively identify opportunities to reduce the contributions of litter generated from disposal, collection-associated sources and illegal dumping; educate the public and those involved with litter control efforts; and to coordinate and share information with the Zero Litter Initiative (ZLI) in Santa Clara County.



Large and Small Full Trash Capture

Long-term Trash Reduction Plans Trash Reduction Goals

Source Controls Creek and Shoreline Cleanups On-land Visual Assessments

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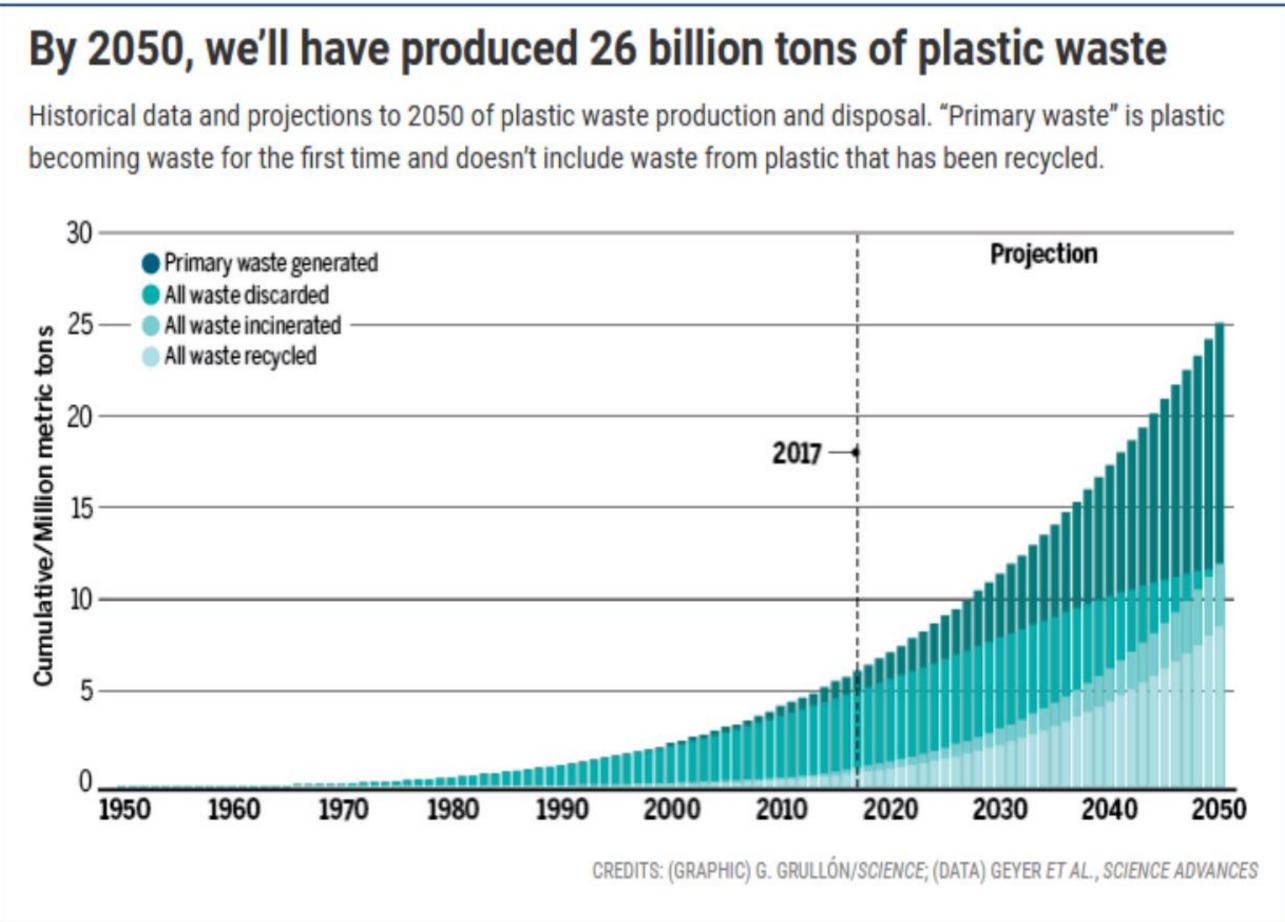


Figure 1. Documented and projected plastic waste between 1950 and 2050 (Geyer et. al. 2017).

Source: EOA, Inc. 2021





Illegal Dumping

- Many municipalities in San Mateo County grappling with ongoing or increased • incidents of illegal dumping and issues of unsheltered/homeless encampments
- New MRP 3.0 requirements to evaluate impacts of unsheltered populations and develop BMP strategies



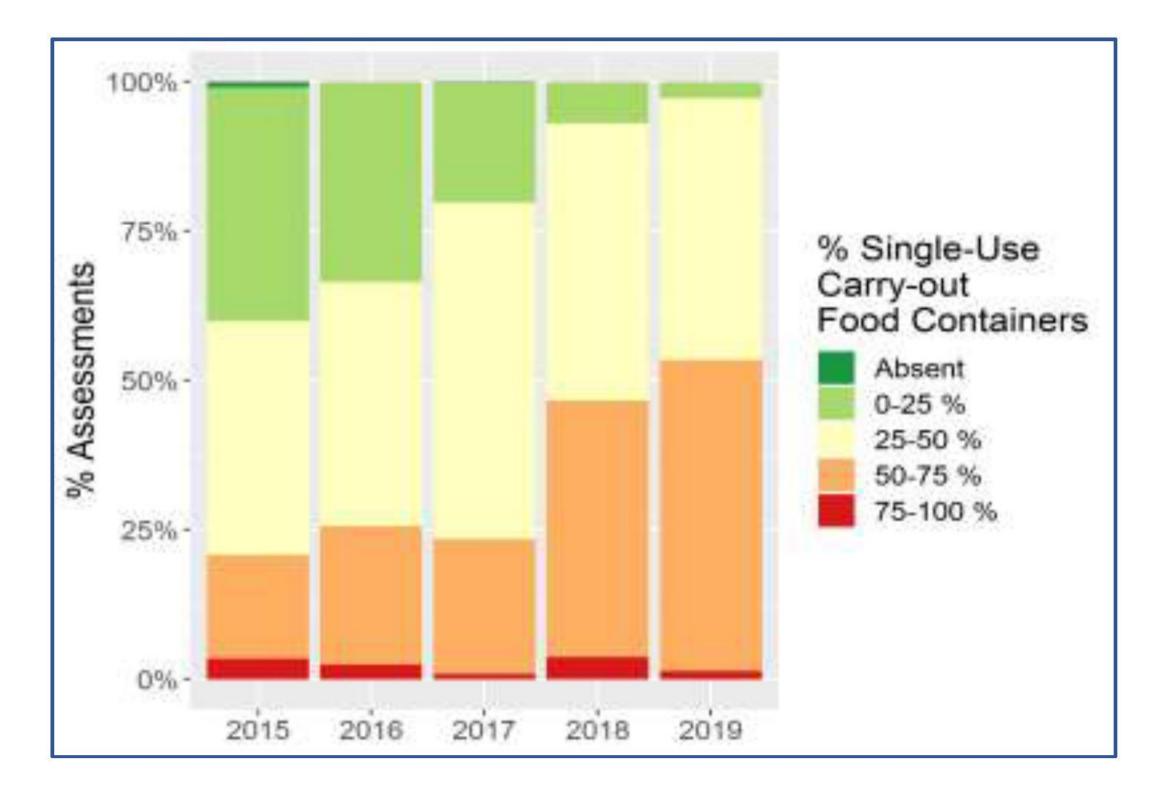
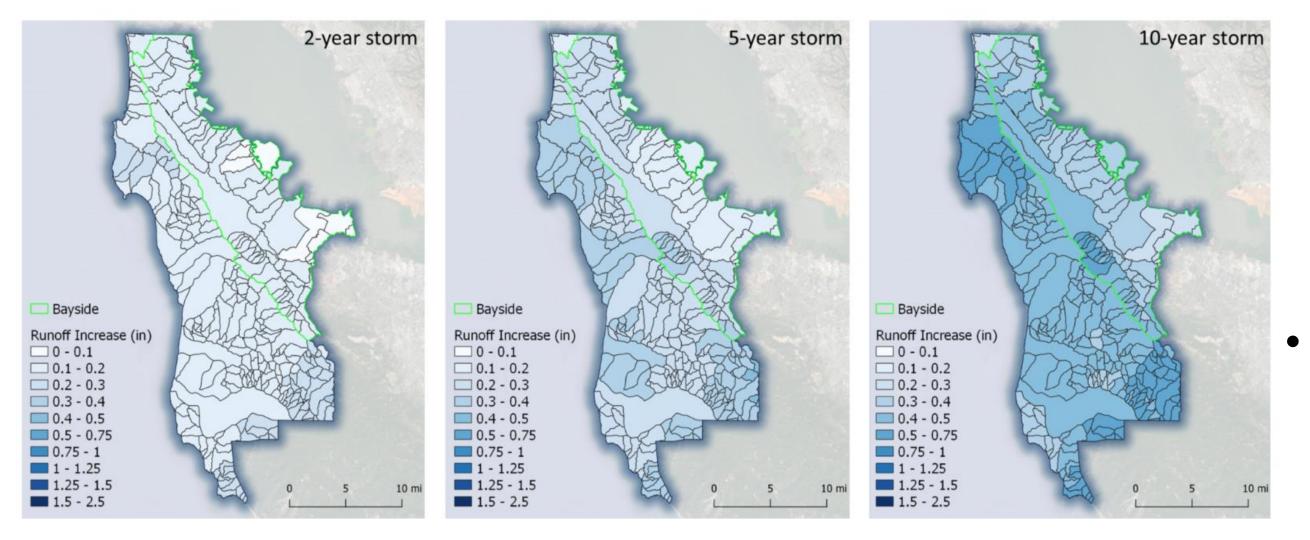
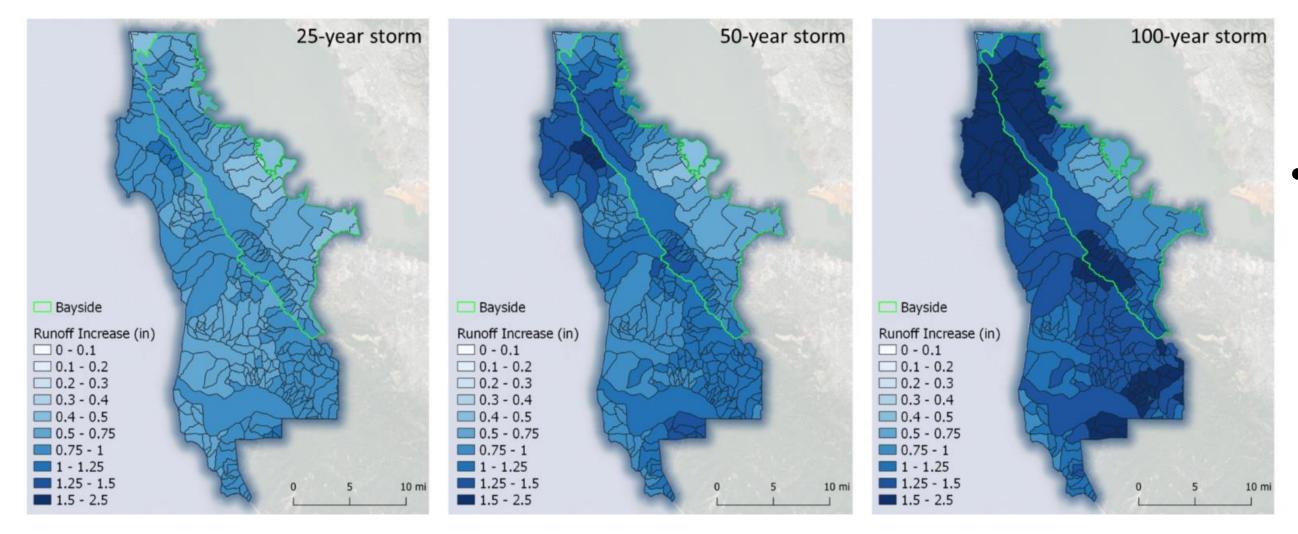


Figure 7. Upward trend in levels of single-use foodware in OVTAs (2015-2019) (Sommers and Fons, 2019)

Single-use plastics remain a challenge

- Increasing presence of sup foodware during visual assessments
- Plastics (food packaging and containers) are a uniquely challenging stormwater pollution problem





Climate Change

- Modeled countywide changes in precipitation using 10 Climate Change Models from CalAdapt at an 8.5 RCP and downscaled to county grid
- 24% increase in storm depth for a future 10-year storm on bayside



COVID Impacts

- Overall ~30% increase in average scores from FY18/19 to FY19/20
- Reduced street-sweeping freq. or effectiveness
- Reduced property management efforts/businesses closed
- Other behavior change ullet

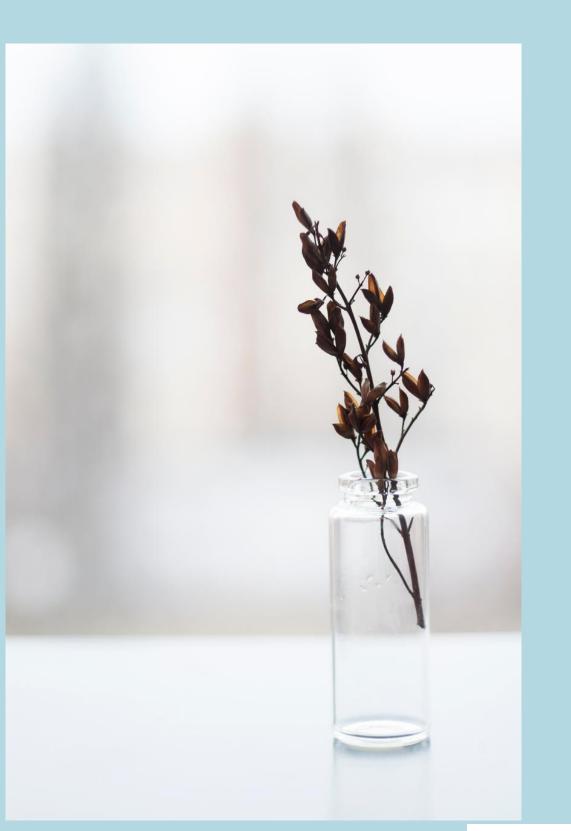
to 4 - Very High) on a Permittee and Countywide level in FY 2019/20.

Permittee	FY 2018/19 Average Score	FY 2019/20 Average Score	% Change
Atherton	0.26	0.25	-2%
Belmont	0.31	0.36	14%
Brisbane	1.00	1.25	25%
Burlingame	0.33	0.33	1%
Colma	0.63	0.49	-23%
Daly City	0.96	1.01	5%
East Palo Alto	0.92	1.20	30%
Foster City	0.23	0.38	60%
Menlo Park	0.31	0.55	80%
Millbrae	0.55	0.63	14%
Pacifica	0.43	0.40	-7%
Portola Valley	0.08	0.67	700%
Redwood City	0.70	0.90	27%
San Bruno	0.41	0.71	73%
San Carlos	0.37	0.41	12%
San Mateo	0.49	0.66	35%
San Mateo County	0.47	0.55	18%
South San Francisco	0.51	0.83	63%
Countywide	0.50	0.64	29%

Table 10-2. Changes in average OVTA scores (0 to 1 – Low, 1 to 2 - Moderate, 2 to 3 – High, and 3

Tools in the Box

- Remaining full trash capture opportunities are limited
- Ongoing coordination with waste haulers (right size right service, illegal dumping, communication with/outreach to property owners/managers, business inspection programs)
- Enhanced streetsweeping/enforcement
- Ongoing creek and shoreline cleanups
- Source Controls







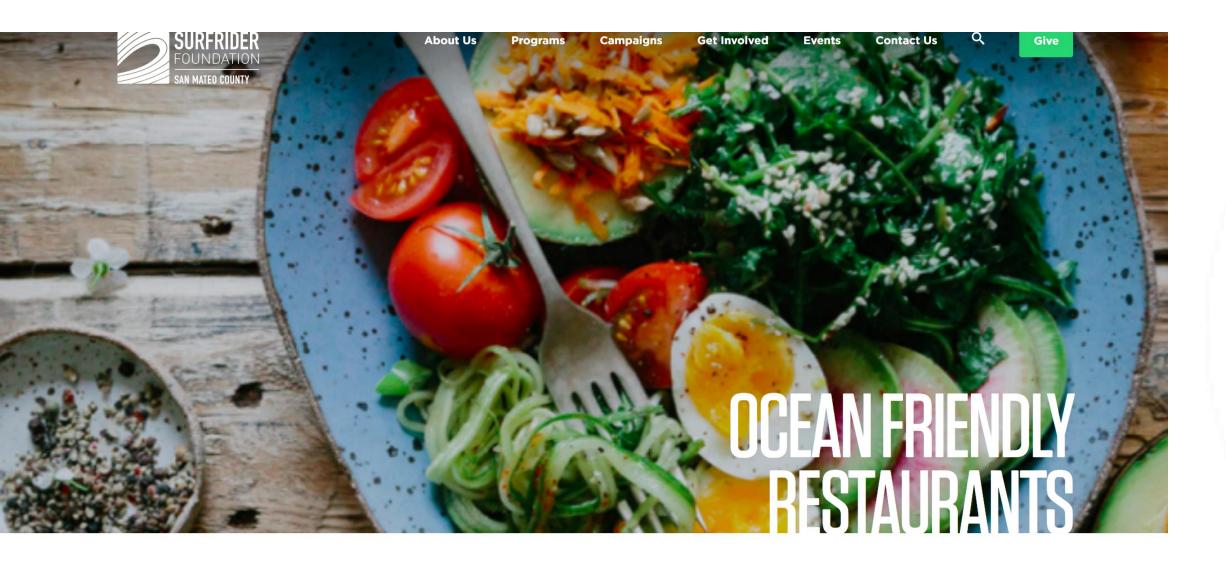
Source Controls Work

- plastic bags
- stormwater

• Since early 2010s over 100 ordinances have been adopted around the Bay to reduce Expanded Polystyrene (EPS) and single use

• As a result, we've seen reductions of greater than 65% from 2009 baseline levels in single-use plastic grocery bags and expanded polystyrene (EPS) foodware in







THE ALBATROSS

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Outreach and Partnerships are Critical



