



Photo: Lincoln Chu



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California & Microplastics

Microplastics Health Effects Webinar Series

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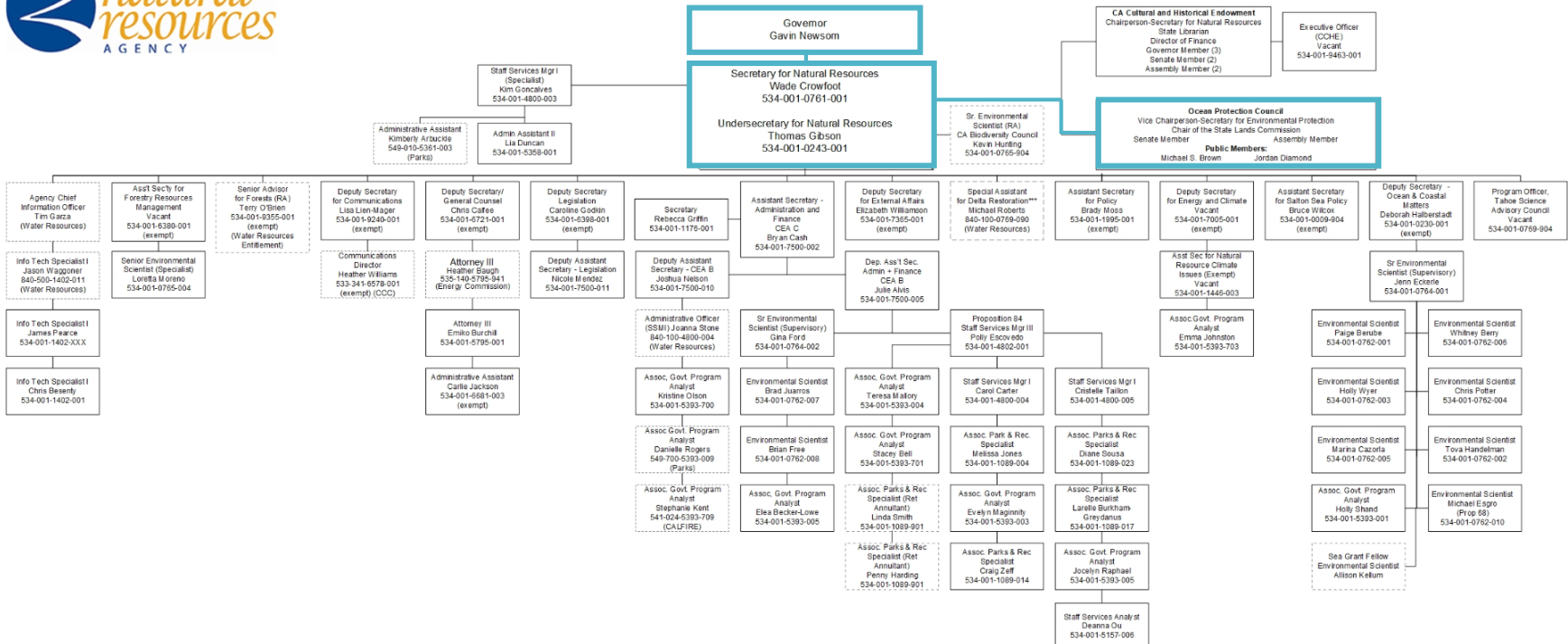
October 19, 2020

Ocean Protection Council

- What we do:
 - Recommend and implement policy
 - Coordinate among state agencies
 - Seek and leverage funding for innovative projects
 - Inform government with the best available science



Ocean Protection Council



OPC is a division of the California Natural Resources Agency



Ocean Protection Council

- Why we're here:

- SB 1263 charges OPC with developing a Statewide Microplastics Strategy by the end of 202.

- This Strategy should:

- Assess the ecological risks of microplastics (Ocean Science Trust facilitating framework development by leading scientific experts)
- Investigate sources and pathways
- Evaluate options to reduce microplastics pollution and recommend policy and include recommendations to reduce sources and loads.



THE BEACHES ARE COVERED WITH PLASTIC PELLETS KNOWN AS NURDLES MIXED IN WITH OTHER TYPHOON DEBRIS

Nurdles – AB 258

- Bill passed in 2007 (Krekorian)
- Required studying the scope of the problem.
- Managing nurdles to ensure there are no discharges to receiving waters. SWRCB is the lead implementation agency.
- SWRCB Trash Amendments apply to all state surface waters.



及其他因颱風引致的雜物覆蓋



SWRCB Trash Amendments to the Ocean Plan, Inland Waters and Enclosed Bays and Estuaries

1. 2015 Amendments include: (1) water quality objective, (2) applicability, (3) prohibition of discharge, (4) implementation provisions, (5) time schedule, and (6) monitoring and reporting requirements.
2. Compliance assessment through stormwater permits (Phase I and II MS4 permits, CalTrans permit). Deadlines on full capture device implementation and other elements by 2030.
3. Narrative objective - Trash shall not be present in receiving waters in amounts that adversely affect beneficial uses or cause nuisance.
4. Priority land uses are developed (i.e., not simply zoned) as high density residential, industrial, commercial, mixed urban, and public transportation stations. Requirement of Full capture devices or equivalent.

OPC helped fund the large scale SFEI SF Bay study that found urban runoff was the major source of microplastics AND tire dust was about half of the particles.



Photo Credit: Xia Zhu
SFEI

Funded Projects: Microplastic



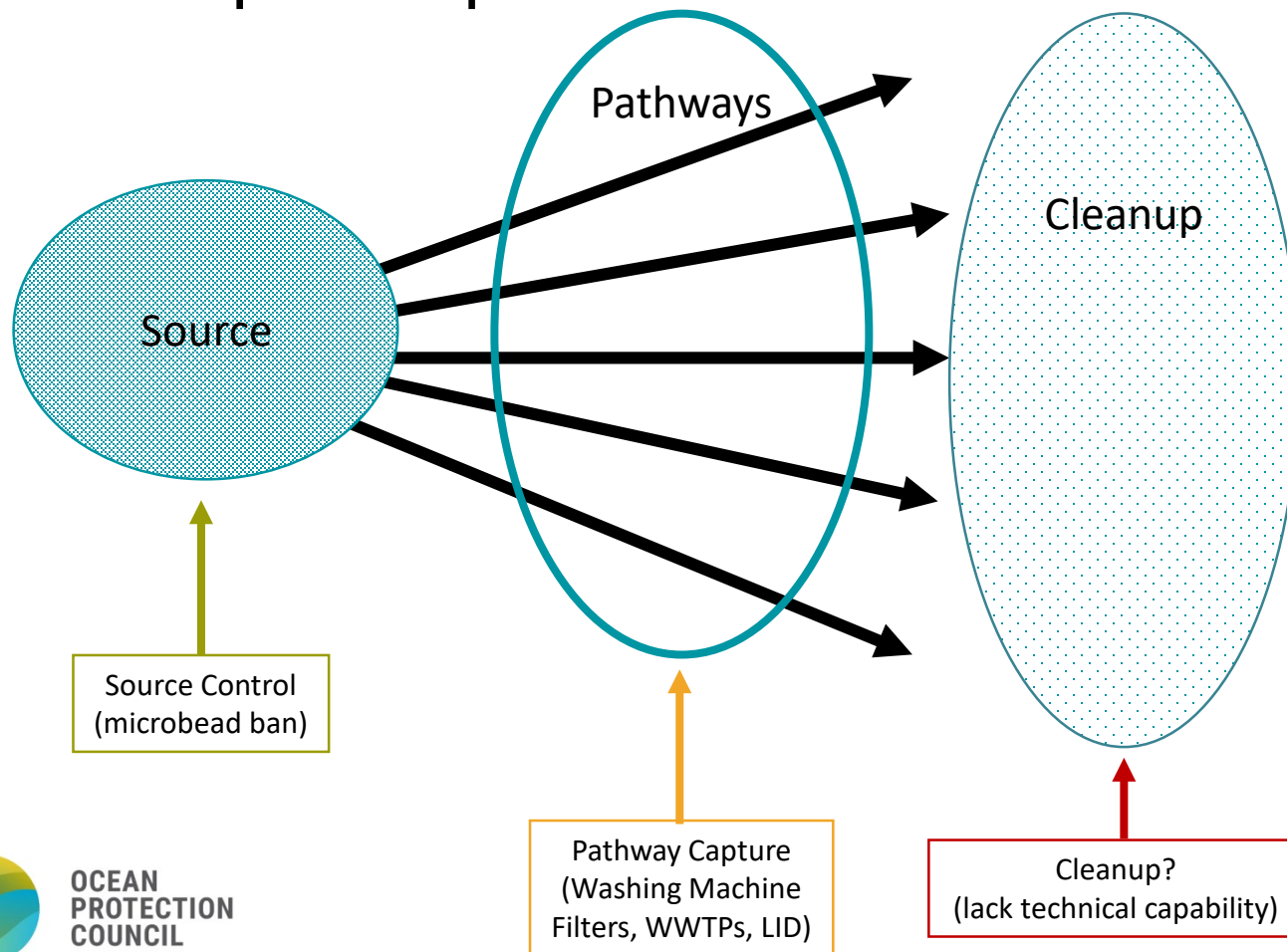
**Efficacy of microplastic removal from
wastewater treatment methods:
\$225,236 SCCWRP**



**Identify potential sources and pathways
of microplastics in stormwater:
\$120,233 SFEI.**

Policy Options

- We have a number of points in the process of microplastic pollution where we can intervene:



LA River/Ballona Creek Trash Total Maximum Daily Loads

1. WLA of zero trash
2. Compliance - MEP – install full capture devices throughout the stormdrain system
3. Full capture device defined as a device that captures 100% of the particles retained by a 5 mm mesh and has the treatment capacity of not less than the peak flow generated from a one year, one hour storm in the subdrainage
4. Over 75,000 catch basin screens and inserts installed LA county wide to date
5. Initial approval for LAR was 2002 and for BC - 2004. Revised TMDL with progressive load reductions (after unsuccessful litigation) was issued in 2007. Full compliance deadline was 2015 for BC and 2016 for LAR



Plastic Bag and Single Use Packaging Bans, SB 54 and AB 1080 , AB 1952 (microfiber filters on dryers), 2022 California Plastic Waste Reduction Regulations Initiative



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LID Can Reduce Microplastic Discharges - Santa Monica and LA Examples as Models

- SM - Approved in the summer of 2010. LA in 2011. 1992 first SM “LID” ordinance for parking lots
- SM and LA - Requires all new and redevelopment to infiltrate or capture and reuse 100% of the runoff generated by the 85th percentile storm.
- SM - Green Streets - Requires LID compliance for all street improvement projects that cost greater than \$500K.
- LA allows compliance off-site. Allows biofiltration - has a multiplier of 1.5 (treat and release)
- Measure W - \$300M/year! Multi-purpose SW projects.



Thank you

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