



SANDRA SHEWRY, MPH, MSW  
Acting Director

State of California—Health and Human Services Agency  
California Department of Public Health



GAVIN NEWSOM  
Governor

December 8, 2020

Wade Crowfoot, Secretary for Natural Resources  
California Ocean Protection Council  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

LETTER OF SUPPORT FOR PRIORITIZING RESEARCH ON CIGARETTE FILTERS

Dear Secretary Crowfoot and Members of the Council:

The California Tobacco Control Program, Department of Public Health (CTCP/CDPH) strongly supports the inclusion of action five, **to assess the health and environmental impacts of cigarette filters and encourage appropriate action**, in the Council's top ten recommended actions to address plastic pollution in California's coastal and marine ecosystems.

Cigarette filters, also known as cigarette butts, are the number one form of plastic pollution found on beaches and waterways in the United States according to the Ocean Conservancy's 2020 International Coastal Cleanup Report. Studies have shown that discarded cigarette filters are toxic plastic pollution that leach nicotine and heavy metals into the environment. To better understand the exact impacts that cigarette filters have on human health and the environment, CTCP/CDPH has commissioned San Diego State University Research Foundation to prepare a white paper that will include research on this topic. This white paper is expected to be released in early 2022. The findings and suggested strategies for remediating the damage caused by the most littered form of plastic pollution will likely add to an increasing amount of published literature that shows that cigarette filters not only do not have any discernable positive health effects but may in fact encourage smokers to smoke more and inhale more deeply, leading to more aggressive types of cancer (Novotny et al, 2014).

Based on the current research on the cigarette filters' detrimental health impacts and the threat that they pose to the environment, CTCP/CDPH strongly supports the Ocean Protection Council's inclusion of research on the health and environmental impacts of cigarette filters as one of the Council's top ten recommended actions to address plastic pollution in California's coastal and marine ecosystems.

Sincerely,

April Roeseler, Chief  
California Tobacco Control Program





February 12, 2020

Mark Gold  
Executive Director  
California Ocean Protection Council  
1416 Ninth Street, Suite 1311 Sacramento, CA 95814

Support: Recommended Actions to Address Plastic Pollution in California's Coastal and Marine Ecosystems- with suggested amendments

Dear Mr. Gold:

We thank you and your talented staff, Holly Wyer, for assembling a thoughtful and comprehensive set of recommendations for addressing plastic pollution in California's coastal environment. It is commendable and visionary and the Council should approve it with the following recommended changes.

We suggest an amendment to the language for item 1-for "source reduction, reuse, refill goals." Here, the OPC could provide a more specific goal. Our suggestion is the following:

"Authorize CalRecycle to set goals such that top generators of single-use packaging littering California's coast attain meaningful rates of transition to reusable and refillable formats, and the state's CRV program enables refillable bottles to participate and scale."

As a primary advocate for source reduction of packaging, UPSTREAM has become increasingly convinced that states must have specific source reduction goals. They should tell producers what to do, rather than what not to do. Source reduction is essentially the top 2 Rs - reduce and reuse- in our solid waste management hierarchy. Reducing packaging is a nebulous, hard to define goal. But transitioning to reusable and refillable packaging is a concrete goal, with clear environmental as well as jobs-creating benefits.

The top producers or generators of single-use packaging should be required to meet a rates and dates approach to transitioning from single-use to reusable/refillable packaging. To date, no agency has identified the top producers of single-use packaging, but we believe that the following sectors are among the top generators: (1) food service: take-out and delivery of prepared meals; (ii) consumer food and beverage products; (iii) consumer cleaning products, (iv) consumer personal care products; and (4) transportation/ shipping of wholesale and retail goods.

However, without a business sector evaluation of top generators of single-use packaging in California, the OPC and/or CalRecycle could tie the targets for reuse to those business sectors that are the top

generators of items most commonly found littering California's coast and inland shorelines, which would be easy to identify using California's Coastal Cleanup data.

Our second recommendation is to add to your list of priorities that the Natural Resources Agency fund a study of the potential climate benefits of state regulations that mandate a transition to reusable packaging. There is ample data available from life cycle analyses to describe the potential climate benefits from reducing the consumption of single-use products and packaging. The state should have a more robust understanding of these benefits in order to guide future product and climate policies.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, reading "Miriam Gordon". The signature is fluid and cursive, with a long horizontal stroke at the end.

Miriam Gordon  
Policy Director  
[miriam@upstreamolutions.org](mailto:miriam@upstreamolutions.org)



# FIBERSHED

Local Fiber, Local Dye, Local Labor

February 14, 2021

Wade Crowfoot, Secretary for Natural Resources  
California Ocean Protection Council  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

Dear Secretary Crowfoot and Members of the Council:

## COMMENTS REGARDING STATEWIDE MICROPLASTICS STRATEGY

Given the Ocean Protection Council's development in 2021 of a Statewide Microplastics Strategy for California, we are grateful for the opportunity to provide the following comments on behalf of Fibershed, a California nonprofit organization dedicated to establishing regionally based fiber and textile systems that build soil and biosphere health.

### Background

**Fiber is a dominant component of microplastic contamination found in marine and freshwater systems both globally and in California<sup>12</sup>.** In the recent three-year study of microplastics in San Francisco Bay by the San Francisco Estuary Institute, fibers were the most abundant microparticle type found in samples of surface water, wastewater and sediment. 74% of the microparticles in surface water samples were identified as fibers, with more than half of the fibers (53%) identified as plastics (although an additional 19% were categorized as "unidentified anthropogenic fibers" and may have included additional plastic)<sup>3</sup>.

**Synthetic fiber and textiles are the source of plastic microfiber pollution.** Trends of growth in the global use of synthetic textiles are reflected in the increase and ubiquity of microplastic pollution observed around the world. In 2019, polyester, polyamide and other synthetic fibers represented about 63% of annual global fiber production, comprising about 66.6 million metric tons of plastic fiber consumption<sup>4</sup>. The predominance of synthetic fiber content in California household wardrobes is echoed in fiber content data collected from an online tool developed in 2020 by Fibershed and EcoCity Builders<sup>5</sup>. In over 800 data samples reported so far, the majority (>54%) of clothing items contained plastic fibers<sup>6</sup>.

**Plastic fibers inherently leak microplastics into the environment through both washing and daily use<sup>7</sup>; recycling programs that produce plastic fibers only exacerbate the proliferation of microplastic pollution.** In the case of converting single use PET bottles to recycled plastic fiber, the generation of microplastic pollution from the same volume of plastic is vastly increased through this transformation. If plastic bottles or other solid plastic products are to be recycled, this should be done within a closed loop that ensures the plastic is not transformed into a textile material that will endure abrasion and shedding as is the case in clothing garments.

**Proposed solutions for filtration at individual washing systems or wastewater treatment may serve to move microplastic pollution into alternate pathways but will not ultimately contain or remove this pollution from our regional landscapes.**

Filtration of microplastics at wastewater treatment plants results in accumulation into biosolids, which are typically applied to terrestrial and agricultural landscapes<sup>8</sup>; accompanied by detrimental effects from microplastic contamination of soil<sup>9,10</sup>. Additionally, daily clothing and textile use releases fibers into the air at a rate that is equal to or potentially greater than the release of microfibers through washing<sup>11</sup>. Airborne microfibers are deposited onto land and into water systems from routes outside of clothes washing, and therefore filtration is an insufficient solution to addressing microplastic microfiber pollution.

**The volume of synthetic textile use and waste has multiplied in recent years,** evidenced by the doubling of clothing production and consumption levels in the past 20 years<sup>12</sup> (referenced in the industry as the rise of “fast fashion.”) The average consumer purchases 60% more clothing than they did 15 years ago and wears each item for half as long. According to CalRecycle’s 2018 Disposal-Facility-Based Characterization of Solid Waste report, more than 644,000 tons of synthetic textiles were disposed in California landfills in 2018<sup>13</sup>. The rise of excessive clothing consumption and waste mirrors the growth of synthetic fiber use and correlates with a trend of decreased clothing quality and longevity.

**Economic and regulatory policy drives incentives for the entire supply chain of synthetic textile manufacture and production, from oil extraction to plastic production to garment design and construction.** The current cheap price of synthetic fibers belies the externalized costs of environmental impacts throughout the supply chain of these products. Leaders in the fashion and textile industry are increasingly recognizing the scope of the microplastics problem stemming from the widespread global use of synthetic textiles<sup>14</sup>, but meaningful shifts in the industry will require significant changes in economic incentives and the regulatory policy landscape. Extended Producer Responsibility (EPR) frameworks alongside strategic incentives and deterrents can guide shifts in the textile industry to more high-quality, long-use, biodegradable natural fiber clothing and textile goods.

**Shifts to favor reduced use and waste of synthetic fiber products can be paired with efforts to improve ecosystem health, mitigate climate change and stimulate regional economic recovery through regional natural fiber production and processing.** There are abundant natural fiber resources currently being produced on California farms and ranches, integrated with food production systems, and these products are often undervalued and underutilized. Opportunities to develop regional processing and manufacturing to add value to natural fiber products can reduce the overall environmental and greenhouse gas (GHG) impacts of regional textile consumer goods, provide new industry opportunities and manufacturing jobs, and improve markets for fiber producers who are implementing Climate Smart land stewardship practices. These practices have multiple co-benefits for soil and water system health.

**Setting a new playing field with a commitment to internalize the impacts of textiles regionally can lead to more equitable and just outcomes for workers and communities.** Full environmental impacts of polyester production are rarely considered in the footprint of synthetic textiles, and these costs are disproportionately borne by communities already experiencing environmental and other injustices. The impacts of synthetic plastic fiber production include land and water contamination at oil refineries and chemical contaminants in wastewater from polymer synthesis, even before the ‘raw materials’ of polyester and other synthetic textiles enter a garment production system.

Airborne microfiber release is also predominant during garment construction<sup>15</sup>, with health impacts on vulnerable workers in manufacturing and sewing phases of textile production<sup>16</sup>. Shifts away from synthetic fibers in the textile industry will have health benefits to these workers.

### **Recommendations**

In order to curb the proliferation of microplastic microfibers at their source in synthetic textile production and use, we offer the following recommendations for the California Microplastics Strategy:

- Ensure that recycling initiatives in the state do not support the use of recycled plastic from PET bottles, other packaging, or any other source of plastic, as a source material for polyester fibers.
- Develop Extended Producer Responsibility (EPR) frameworks for clothing and textile products to hold manufacturers responsible for long-term textile impacts on microplastic emissions and textile waste. EPR policies should be designed to incentivize textile product design, use and recycling systems that decrease synthetic fiber impacts and emphasize longevity of textile use with nontoxic, biodegradable natural materials.
- Support programs and community resources that will encourage an overall reduction in fashion and textile waste.
- Align efforts to reduce synthetic textile use and waste with statewide initiatives to support regional natural fiber production, sourcing and manufacturing from biodiverse working landscapes that are engaging practices to sequester carbon, improve soil health, and mitigate the impacts of climate change.

Thank you for the opportunity to submit these comments. We are grateful for your work to address this critical issue for both aquatic and terrestrial ecosystems in our state and look forward to engaging with the development of the Statewide Microplastics Strategy this year.

Sincerely,



Rebecca Burgess, Executive Director



Heather Podoll, Partnerships and Advocacy Coordinator

- 
- <sup>1</sup> Ross, P.S., Chastain, S., Vassilenko, E. et al. Pervasive distribution of polyester fibres in the Arctic Ocean is driven by Atlantic inputs. *Nat Commun* 12, 106 (2021).  
<https://doi.org/10.1038/s41467-020-20347-1>
- <sup>2</sup> Mark Anthony Browne, Phillip Crump, Stewart J. Niven, Emma Teuten, Andrew Tonkin, Tamara Galloway, and Richard Thompson. Accumulation of Microplastic on Shorelines Worldwide: Sources and Sinks. *Environmental Science & Technology* 2011 45 (21), 9175-9179  
DOI:10.1021/es201811s
- <sup>3</sup> Sutton, R.; Lin, D.; Sedlak, M.; Box, C.; Gilbreath, A.; Holleman, R.; Miller, L.; Wong, A.; Munno, K.; Zhu, X.; et al. 2019. Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region. SFEI Contribution No. 950. San Francisco Estuary Institute: Richmond, CA.
- <sup>4</sup> Preferred Fiber and Materials Market Report 2020. Textile Exchange. [www.textileexchange.org](http://www.textileexchange.org)
- <sup>5</sup> <https://fibershed-collection.bubbleapps.io/>
- <sup>6</sup> <https://fibershed.org/wp-content/uploads/2020/12/ClosetsforClimateandOceanHealth.pdf>
- <sup>7</sup> Francesca De Falco, Mariacristina Cocca, Maurizio Avella, and Richard C. Thompson. Microfiber Release to Water, Via Laundering, and to Air, via Everyday Use: A Comparison between Polyester Clothing with Differing Textile Parameters. *Environmental Science & Technology* 2020 54 (6), 3288-3296 DOI: 10.1021/acs.est.9b06892
- <sup>8</sup> Gavigan J, Kefela T, Macadam-Somer I, Suh S, Geyer R (2020) Synthetic microfiber emissions to land rival those to waterbodies and are growing. *PLoS ONE* 15(9): e0237839.
- <sup>9</sup> Kirkham, M B. "Water Relations and Cadmium Uptake of Wheat Grown in Soil with Particulate Plastics ." *Particulate Plastics in Terrestrial and Aquatic Environments*, by Nanthi Bolan et al., CRC Press, 2020, pp. 193–207.
- <sup>10</sup> Jacques, O., and R.S. Prosser. "A Probabilistic Risk Assessment of Microplastics in Soil Ecosystems." *Science of The Total Environment*, vol. 757, 2021, p. 143987.,  
doi:10.1016/j.scitotenv.2020.143987.
- <sup>11</sup> Francesca De Falco, Mariacristina Cocca, Maurizio Avella, and Richard C. Thompson. Microfiber Release to Water, Via Laundering, and to Air, via Everyday Use: A Comparison between Polyester Clothing with Differing Textile Parameters. *Environmental Science & Technology* 2020 54 (6), 3288-3296 DOI: 10.1021/acs.est.9b06892
- <sup>12</sup> Global Fashion Agenda & The Boston Consulting Group (2017) Pulse of the fashion industry 2017.  
[https://static1.squarespace.com/static/5810348d59cc68e529b7d9ba/t/596454f715d5db35061ea63e/1499747644232/Pulse-of-the-Fashion-Industry\\_2017.pdf](https://static1.squarespace.com/static/5810348d59cc68e529b7d9ba/t/596454f715d5db35061ea63e/1499747644232/Pulse-of-the-Fashion-Industry_2017.pdf)
- <sup>13</sup> 2018 Disposal-Facility-Based Characterization of Solid Waste in California (DRRR-2020-1666). CalRecycle, 2020
- <sup>14</sup> <https://changingmarkets.org/portfolio/fossil-fashion/>
- <sup>15</sup> Prata JC. Airborne microplastics: Consequences to human health? *Environ Pollut.* 2018;234:115–126.
- <sup>16</sup> Wright SL, Kelly FJ. Plastic and Human Health: A Micro Issue? *Environ Sci Technol.* 2017 Jun 20; 51(12):6634-6647.



**From:** [CNRA COPC Public](#)  
**To:** [COPC Public Distro List](#)  
**Subject:** FW: Item 4: Discussion and Possible Endorsement of Recommended Actions to Address Plastic Pollution in California's Coastal and Marine Ecosystems  
**Date:** Tuesday, February 16, 2021 7:37:09 AM

---

**From:** Eva Cicoria  
**Sent:** Tuesday, February 16, 2021 7:36:44 AM (UTC-08:00) Pacific Time (US & Canada)  
**To:** CNRA COPC Public; Wyer, Holly@CNRA  
**Subject:** Item 4: Discussion and Possible Endorsement of Recommended Actions to Address Plastic Pollution in California's Coastal and Marine Ecosystems

Secretary Crowfoot, Members of the Ocean Protection Council and Staff,

The breadth of the Staff recommendations reflects the complexity and pervasiveness of the plastics problem. After being overwhelmed by the plastic litter I found while kayaking, I launched Paddle Out Plastic to mobilize other paddlers, to model what we can do as paddlers to help protect wildlife while out on the water, and to document and raise awareness about what we are seeing and retrieving.







We certainly can't keep up with the flow. No one solution will be sufficient. We need a significant reduction in single use plastics. We need to transition to a reusable/refillable paradigm. We need extended producer responsibility. We need external costs internalized to product costs. We need accountability. We need monitoring of waterways and measurement of what we Californians are putting into the water. We need fines. We need education programs, including about the ubiquitousness of snack packaging in our waterways.

The following photo (the frame measures 6'x9') is just one morning's haul of just snack wrappers. All retrieved from the water.



We need everything recommended and more.

New York and others have imposed a statewide ban on single use Styrofoam/EPS. California ought to as well. The following photo (the frame measures 6'x9') is just one morning's haul of just foam pieces--Styrofoam cups, plates, takeout containers, foam fabric, and foam fragments. All retrieved from the water over a few hours.





Thank you to Staff for compiling this list of recommended actions. It gives us hope.  
And thank you all for your efforts.  
Eva Cicoria,  
for Paddle Out Plastic



725 Front Street  
Suite 201  
Santa Cruz, CA 95060



831.854.4630 Telephone  
831.425.5604 Facsimile  
[www.oceanconservancy.org](http://www.oceanconservancy.org)

February 16, 2021

Dear Chair Crowfoot and Council Members,

Ocean Conservancy applauds the recommended actions put forth by OPC staff that represent precisely the level of ambition needed to make measurable progress on reducing plastic pollution in California.

Ocean Conservancy is committed to stabilizing ocean health against the threat of plastic pollution while benefiting marginalized communities and not increasing GHG emissions. Our Trash Free Seas® program portfolio of initiatives are designed to meaningfully prevent and clean up the largest and most impactful pathways of ocean plastic pollution. Our work is predicated on the notion that we need to create less, by cutting out unnecessary single-use plastics; we need to create better, by developing innovative new ways to package and deliver goods; and where plastics are inevitable, we need to drastically improve recycling. The full suite of these solutions is critical for ocean health.

Research co-authored by Ocean Conservancy published in *Science* in 2020 underscored the importance of reducing plastic waste upwards of 40% per capita as the first step in reducing ocean plastic inputs by 2030. Recommendation 1 appropriately prioritizes policies that phase out unnecessary single-use plastics while advancing recycled content standards to create greater demand for recycled plastics; and thus beginning to reduce our dependence on virgin plastics. Similarly, for more than three decades cigarette butts have been the number one item of debris found on beaches during Ocean Conservancy's International Coastal Cleanup and CA Coastal Cleanup Day. Prohibiting filter use in cigarettes would swiftly eliminate this disproportionately abundant form of pollution.

It is also critical that private sector designs for circularity and takes greater financial responsibility for the entire life cycle of the plastic products they produce. OPC Staff Recommendation 5 provides a pathway to determine the most appropriate form of EPR for California.

We appreciate acknowledgment of frontline and environmental justice (EJ) communities; however, we believe the recommended actions could go farther. We recommend adding language to Recommendation 1 to ensure that new recycling and composting facilities are sited such that (a) they do not disproportionately affect EJ communities, and ideally even lift burdens from those communities and (b) provide jobs that pay well. And to actualize the environmental justice goals, we would add language to Recommendation 8 prioritizing monitoring in EJ communities.

Lastly, we cannot overlook the impact posed by lost fishing gear to the health of our ocean. Ocean Conservancy's Global Ghost Gear Initiative launched the Best Practice Framework for the Management of Fishing Gear in 2017, which details best practices to prevent, mitigate and remediate the amount of ghost gear entering our ocean. Since its launch the Framework has been adopted by a range of seafood companies and in national and regional marine litter and fisheries management action plans. We are encouraged by OPC's proposal to work with CDFW to develop best practices for California fisheries, and we look forward to the prospect of being a partner with OPC in this critically important pursuit.

Thank you for your consideration of these comments and for California OPC's continued commitment to ocean health.

Sincerely,

Nicholas J. Mallos  
Senior Director, Trash Free Seas

February 14, 2021

[Re: Agenda Item 4: Actions to Address Plastic Pollution in California's Coastal and Marine Ecosystems](#)

Dear Ocean Protection Council,

I'm a cleanup volunteer with the Sierra Club, a member of the Plastic Subcommittee of Newport Beach Water Quality/Coastal Tidelands Committee, as well as the County-led Orange County Trash and Debris Task Force.

Thank you so much for your continuing leadership on fighting plastic pollution! I'm heartened to see the thoughtful and comprehensive set of nine recommended actions, particularly:

Action 1. Help to advance and inform policies that address the many causes of plastic pollution and prioritize prevention and reduction of plastic pollution.

Action 2. Fund analysis on the feasibility of widespread implementation of reuse, and refill systems in California by Summer 2021, for both takeout/delivery and retail sales applications, and recommend necessary regulatory or policy changes to promote reuse by Summer 2022.

Action 6. Partner with local governments, state agencies and nonprofit organizations to provide technical assistance and tools that assist with implementation of local comprehensive food serviceware ordinances by Winter 2021.

These actions are urgently needed. Pre-COVID, we thought the plastic fight was difficult. Then, COVID became another reason for political inaction.

[Newport Beach started working on single use plastic ban in 2017](#) when the Santa Ana Regional Water Quality Control Board ordered the Trash Provisions. Meantime, the City was pursuing a water wheel in San Diego Creek, just south of the Irvine border, to capture upstream trash entering Upper Newport Bay. In 2018, [you approved the Proposition 1 funding of up to \\$1.68 million for the project](#). Unfortunately, this weakened the political will for the ban. In 2019, we were able to finally start drafting a trash and toxic reduction ordinance. And in Jan. 2020, the water quality committee approved it, though the chair/councilman voted no and cited a comment letter asking "[if the City is going to follow the lead of Sacramento and dictate how residents will live](#)." Then, COVID added an obstacle to the process. In Nov., the city attorney finally approved the draft ordinance. Then, the committee meetings for Dec., Jan. and Feb. were cancelled. As of today, the City website shows [all committee members' term have expired](#).

Since Newport Beach is a leader in Orange County, some councilmembers in other cities told me that they would not pursue the ban before Newport Beach does it.

The water wheel is in design phase, construction will start in Dec. 2021. Does it need any review or approval from you under the Proposition 1 guidelines? I hope you can require source reduction and reuse to be integrated with this trash capture project.

Please let me know how I can assist your work on plastics. On behalf of many people in Orange County, thank you!

Sincerely,

Hoiyin Ip  
Sierra Club California Zero Waste Committee  
[hoiyin.ip@california.sierraclub.org](mailto:hoiyin.ip@california.sierraclub.org)

February 15, 2021

VIA Electronic Transmission to: [COPCpublic@resources.ca.gov](mailto:COPCpublic@resources.ca.gov)

Wade Crowfoot, Secretary for Natural Resources  
Chair, Ocean Protection Council  
California Natural Resources Agency  
1416 9th Street, Suite 1311  
Sacramento, CA 95814

**Re: Support for Authorization to Disperse Funding for Agenda Items 4, 5, 6**

Dear Chair Crowfoot and Members of the Ocean Protection Council:

The California Marine Sanctuary Foundation submits this letter in support of three items under consideration by the Ocean Protection Council at your February 16<sup>th</sup>, 2021 meeting.

First, we encourage the Council's approval of actions to address plastic pollution in California's coastal and marine ecosystems. The proposed items will advance and inform policies that address the many causes of plastic pollution and prioritize prevention and reduction of plastic pollution. We would suggest that a statewide communications and education campaign can complement the state's efforts and build support with the public. Increasing awareness of and solutions for dealing with microplastics, that target specific communities, can empower the public to become part of the solution.

Secondly, we encourage approval of using Prop 68 funding to build resiliency to sea-level rise, coastal storms, erosion, and flooding across the state. These projects set aside needed funding to start taking necessary actions for SLR planning. This helps reduce long term costs and targets critical wetlands, waterfront areas and disadvantaged communities. We also recommend that these projects and efforts by the state can be highlighted in the OPC's sea level rise communications campaign underway.

Finally, CMSF strongly supports dedicated ongoing funding for MPA monitoring, which is critical given the upcoming decadal review. CMSF works closely with recreational anglers across the state, who are eager to learn more about the health of our ocean and the effectiveness of our actions in protecting them. We suggest that a complementary communications effort is dedicated to translating scientific findings into simplified graphics and visual summaries that can be easily understood. In addition, results should be shared through existing recreational angler communications channels, such as Fish

Sniffer, Western Outdoor News and through many of the fishing clubs with whom CMSF works. There is growing interest in protecting both recreational fishing and the ecosystems upon which it depends, and it will be critical to continue to build relationships with this eager audience.

We appreciate the Ocean Protection Council's consideration of these projects and strongly support approval.

Sincerely,

Rikki Eriksen, Ph.D. on behalf of the CMSF Marine Program





Win Cowger, Samiksha Singh, Clare Murphy-Hagan, Andrew Gray  
University of California Riverside  
Department of Environmental Sciences  
Watershed Hydrology Lab  
900 University Ave.  
Riverside, California 92521  
Email: [wcowg001@ucr.edu](mailto:wcowg001@ucr.edu)

February 15<sup>th</sup>, 2021

Dear Ocean Protection Council,

Our research group at UC Riverside studies the transport of trash in rivers and has been leading action items 4.1.4 and 4.1.2 on the Ocean Litter Prevention Strategy. Both action items focus heavily on monitoring and laboratory method development for anthropogenic litter. We appreciate the opportunity to provide our comments and feedback on “The Staff Recommendation on Endorsement of Recommended Actions to Address Plastic Pollution in California’s Coastal and Marine Ecosystems.” Overall, we support the staff’s recommendation to endorse this document and request the consideration of the following additions that we believe will strengthen its impact.

The extended producer responsibility recommendations are succinct and suggest some of the most critical advancements needed for addressing plastic pollution. Extended producer responsibility (EPR) is an essential step in reducing plastic pollution. Producer supply usurps **consumers' decision-making because consumers can only choose between the options** provided to them by producers. We applaud the recommendation to move away from consumer responsibility initiatives and toward producer responsibility. We think that this can increase the reductions that have resulted from consumer responsibility initiatives. For example, the plastic bag fee, has shown to reduce plastic bags in the environment (reference SCCWRP 2013 and preliminary results from follow up in 2018), but it has not eliminated bags from the environment entirely. **We recommend that language be added to underscore the success of previous EPR initiatives specifically and suggest broadening the research objectives for Recommendation 5 to include EPR initiatives beyond food service ware, particularly packaging.**

We encourage working with the Water Quality Monitoring Council to develop a statewide monitoring program (Recommendation 8). We have heard a lot about the “playbook” and are excited to read it and implement it. However, we are not aware of it being publicly available yet and are concerned about the implications of OPC endorsing a document that the public cannot access. **We recommend that OPC make the “playbook” document available before endorsement of that specific document unless it is available somewhere already.** We also recommend that Recommendation 8 specifically draw attention to the fact that a lot of trash monitoring and research is already happening in the state. Some examples include trash amendment monitoring from municipalities, coastal cleanup day, Caltrans Adopt a Highway, and Keep America Beautiful, SCCWRP, SFEI. Rather than beginning another initiative, we encourage bringing together and leveraging the experience, knowledge, and networks of these active groups throughout the state to



conduct translational work to optimize monitoring and harmonize across monitoring approaches. **We recommend language be added here “There are many active trash monitoring programs in California. The state would benefit from a statewide harmonized monitoring program that leverages ongoing work to create comparable metrics on trash throughout the state.”**

#### References

Moore, S. *et al.* 2016 ‘Southern California Bight 2013 Regional Monitoring Program: Volume III. Trash and Marine Debris’. Available at: [http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/928\\_B13\\_Debris.pdf](http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/928_B13_Debris.pdf).

Sincerely,  
Win Cowger

A handwritten signature in black ink, appearing to read 'WC'.

PhD Candidate

Samiksha Singh  
PhD Student

Clare Murphy-Hagan  
Graduate Student

Andrew Gray  
Professor

**From:** [CNRA COPC Public](#)  
**To:** [COPC Public Distro List](#)  
**Subject:** FW: OPC Agenda Item 4: Recommended Actions to Address Plastic Pollution  
**Date:** Monday, February 15, 2021 8:00:25 AM

---

---

**From:** Simone Kuhfal  
**Sent:** Monday, February 15, 2021 8:00:00 AM (UTC-08:00) Pacific Time (US & Canada)  
**To:** CNRA COPC Public  
**Subject:** OPC Agenda Item 4: Recommended Actions to Address Plastic Pollution

Dear Ocean Protection Council,

Thank you so much for your work on microplastic! and Senator Allen, I'm very proud that you're my Senator!

You may have heard that on Feb. 10, the Coastal Commission approved a new hotel in Dana Point as a model of sustainability. [Orange County Register](#) reported, "the requirement for microfiber filters for any on-site washing of linens leapfrogs similar efforts in Sacramento, so far unsuccessful."

Microfiber is one of the most dangerous forms of microplastic. They're responsible for 85% of shoreline pollution. Every wash of synthetic fabric releases them, which end up in waterways, marine animals and the food chain.

Without a mandate, individuals' actions, such as using Guppyfriend washing bags, create very little results. Every washing machine should have a microfiber filter attached and this should become part of the building code. I hope you can promote these kinds of policies.

Thank you,  
Simone Kuhfal, Palos Verdes



February 16, 2021

Wade Crowfoot, Secretary for Natural Resources  
Chair, California Ocean Protection Council  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

**SUBJECT: Agenda Item #4 – Recommended Actions to Address Plastic Pollution in California’s Coastal & Marine Ecosystems**

Dear Chair Crowfoot,

On behalf of the California Association of Sanitation Agencies (CASA), thank you for the opportunity to provide comments on [the recommended actions](#) to address plastic pollution in California’s coastal and marine ecosystems, which is before the Ocean Protection Council (OPC) for discussion and possible endorsement. CASA represents more than 125 public agencies and municipalities that engage in wastewater collection, treatment, recycling, and resource recovery, and our vision is to advance public policy and programs that promote the clean water community’s efforts in achieving environmental sustainability and the protection of public health.

With very limited time to review these recommendations, we commend the OPC for such bold, holistic, and comprehensive initiatives from a source control paradigm for preventing plastic from entering the environment. The San Francisco Estuary Institute (SFEI) released its seminal microplastics study in 2019, and observed, *“It is likely far more cost-effective to prevent pollution in the first place (e.g., bans on sources of microplastic pollution, such as microbeads) or to control it directly at the point of entry (e.g., providing filters for washing machines),”* (p. 115/402), and indeed, the OPC’s recommendations will advance critical efforts that will reduce the presence of plastic in the environment.

Insofar as recommendation #8 pertains to developing a statewide monitoring program for microplastics, this has the potential to directly impact CASA’s coastal members, and we encourage its pursuit in conjunction with the OPC’s endeavors under Senate Bill 1263 (Portantino, 2018), which CASA sponsored, and entails the “development of standardized methods,” “investigation of sources and relative importance of significant pathways,” and the “development of a risk-assessment framework.”

As is, critical questions will remain for recommendation #8 without the resolution of these milestones, such as the purpose of a statewide monitoring program, the questions it would seek to answer, and the ultimate needs of the statewide strategy, and it otherwise leaves unknown (1) the types of microplastics to monitor based on their impacts (e.g. size ranges, shapes), (2) where they are coming from and where they are going (i.e. sources, pathways, sinks), and (3) the appropriate collection methods and measurement techniques. Moreover, it will be difficult to enact a successful monitoring program before there is access to the measurement methods and tools that will be provided by SB 1263. Thus we encourage the OPC to not rush this process or get ahead of the science, but rather for this recommendation to be pursued sequentially with the attainment of SB 1263 objectives, so that monitoring goals are clear on the intended use of data and based on a conceptual model grounded in scientific principle.

Finally, we advise that the monitoring of pathways of plastics to the environment be proportional to their contribution to the overall loading, so that efforts to address plastic pollution in the coastal and marine environment remain focused on root causes. For example, given that SFEI found that *“a plastic polymer that is 1% of the stormwater microplastic load would be three to five times greater than the entire wastewater microplastic load”* (p. 72/402), targeted monitoring (e.g., in collaboration with regional surveys) may be more appropriate than routine, frequent monitoring by POTWs.

To close, we observe these materials were released on a holiday and with no business days before their scheduled hearing when Action by the Council may possibly be taken, and we respectfully request for a timelier process in the future for such significant policy recommendations. Nevertheless, we are grateful for the extension of the comment period to 9 AM on the day of the hearing. We appreciate your consideration of these remarks, and if there are any questions about these comments, please do not hesitate to reach me directly at (916) 694-9269 or [jvoskuhl@casaweb.org](mailto:jvoskuhl@casaweb.org).

Thank you,

Jared Voskuhl  
Manager of Regulatory Affairs

Cc: Mark Gold, OPC Executive Director