

Marine Debris Management Recommendations for the SAC Management Plan

Katherine O'Dea, Conservation Working Group Chair
Kevin Miller, Conservation Working Group Member



MBNMS Conservation Working Group

Definition of Marine Debris

PER NOAA

Any persistent, manufactured or processed solid material that is directly or indirectly, intentionally or unintentionally, disposed of or abandoned in the marine environment.



Examples of Marine Debris

- Derelict fishing gear
 - Such as nets, traps, lines
- Sunken/grounded vessels
- Lost shipping containers
- Consumer debris
 - Such as plastic bags, bottles, cans, cigarette butts, & microplastics
- Commercial debris
 - Such as agricultural waste, construct



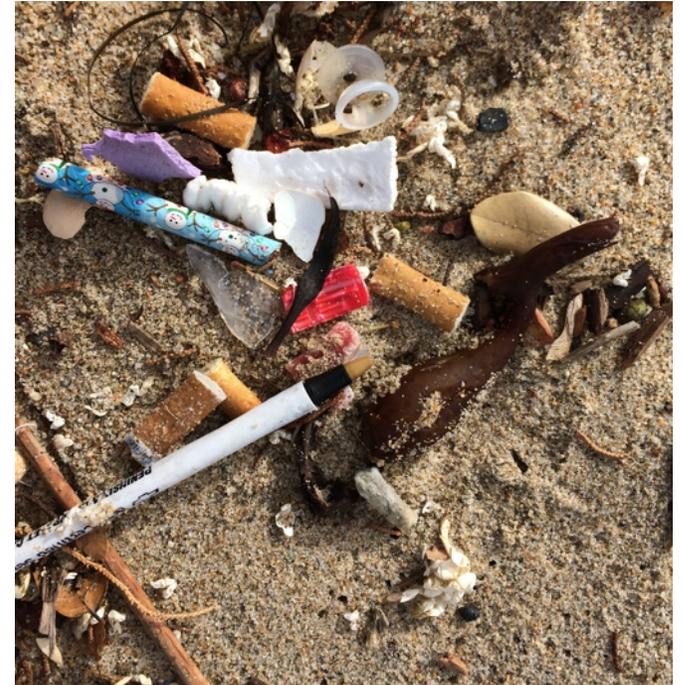
Impacts of Marine Debris

- Ingestion by wildlife
- Entanglement of wildlife
- Hazardous navigation
- Littered habitats and coastlines
- Possible human health impacts
- Introduced species



Sources of Marine Debris

- Mostly land-based and some ocean-based sources
 - Stormwater runoff
 - Landfills
 - Streams, rivers and other waterways
 - Recreational and commercial activities
 - Storm (hurricanes, tsunamis) refuge
 - Beach and street litter



Current MBNMS Marine Debris Mgmt.

- Education and outreach to raise awareness
- Citizen science to collect data
 - First Flush, Urban Runoff
- Removal and clean-up (onshore and in water)
 - Containers, vessels, fishing gear
- Local policies
 - Bag bans
- Project funding
 - Local partners like Ocean Guardian, CHEER



Other Marine Debris Mgmt.

- Coast Guard, NOAA Fisheries, etc.
- State agencies (CDFW, Parks)
- Local/county municipalities
 - Ordinances for bans, etc.
- Non-profit orgs
 - Cleanups, education, outreach, advocacy, policy



Gaps in Marine Debris Mgmt.

- Non-point source pollution generally
- Primarily plastic pollution

NOTE: Other non-point source pollution like chemical contaminants are being managed well by WQPP, and other local organizations

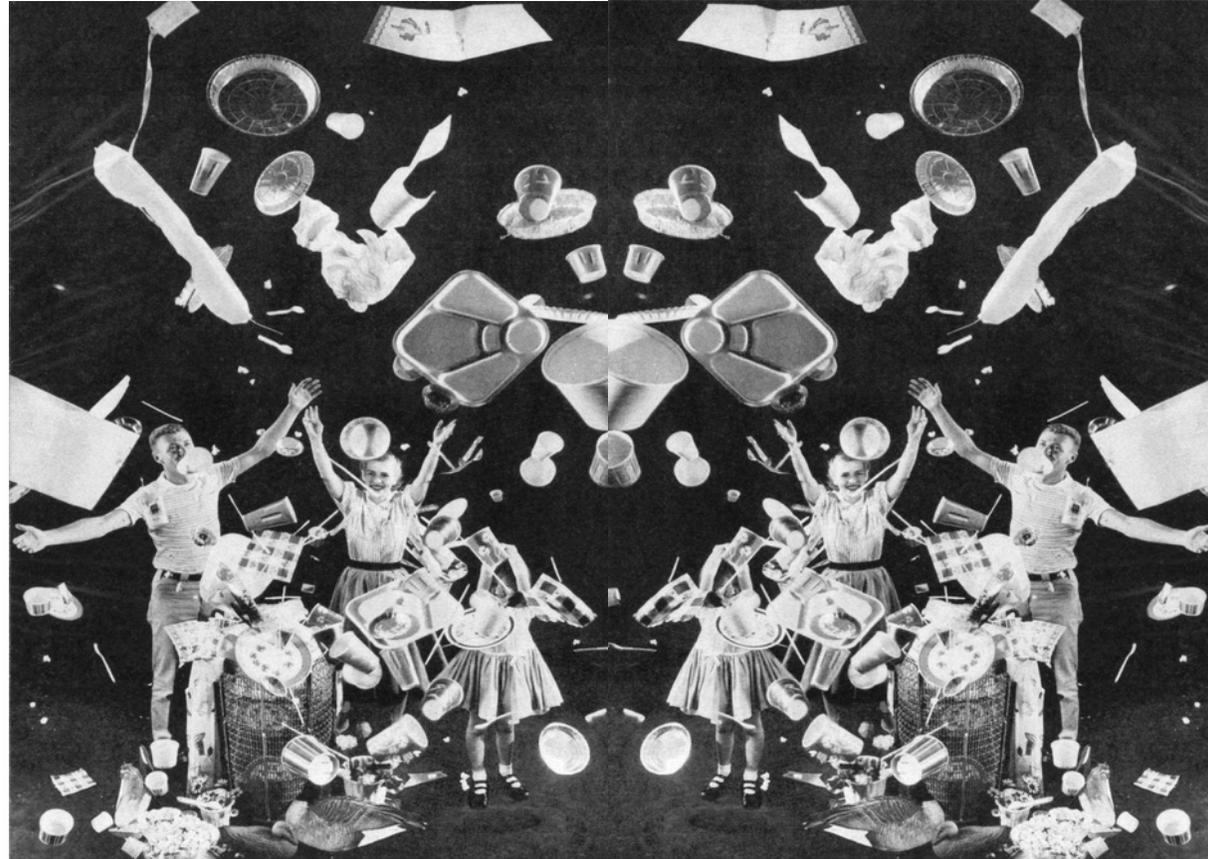


Focus of Recommendations

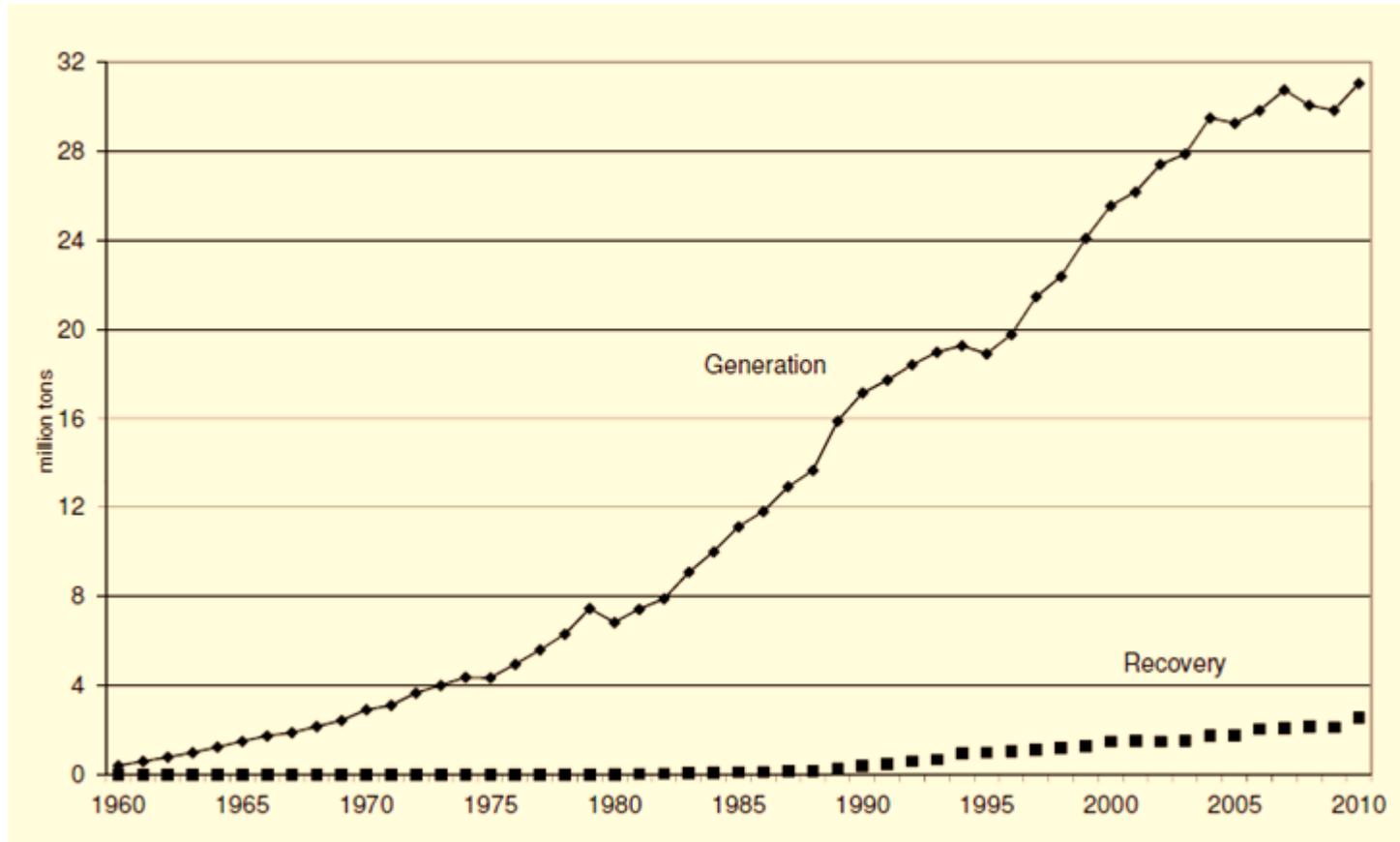
Non-point Source Plastic Pollution



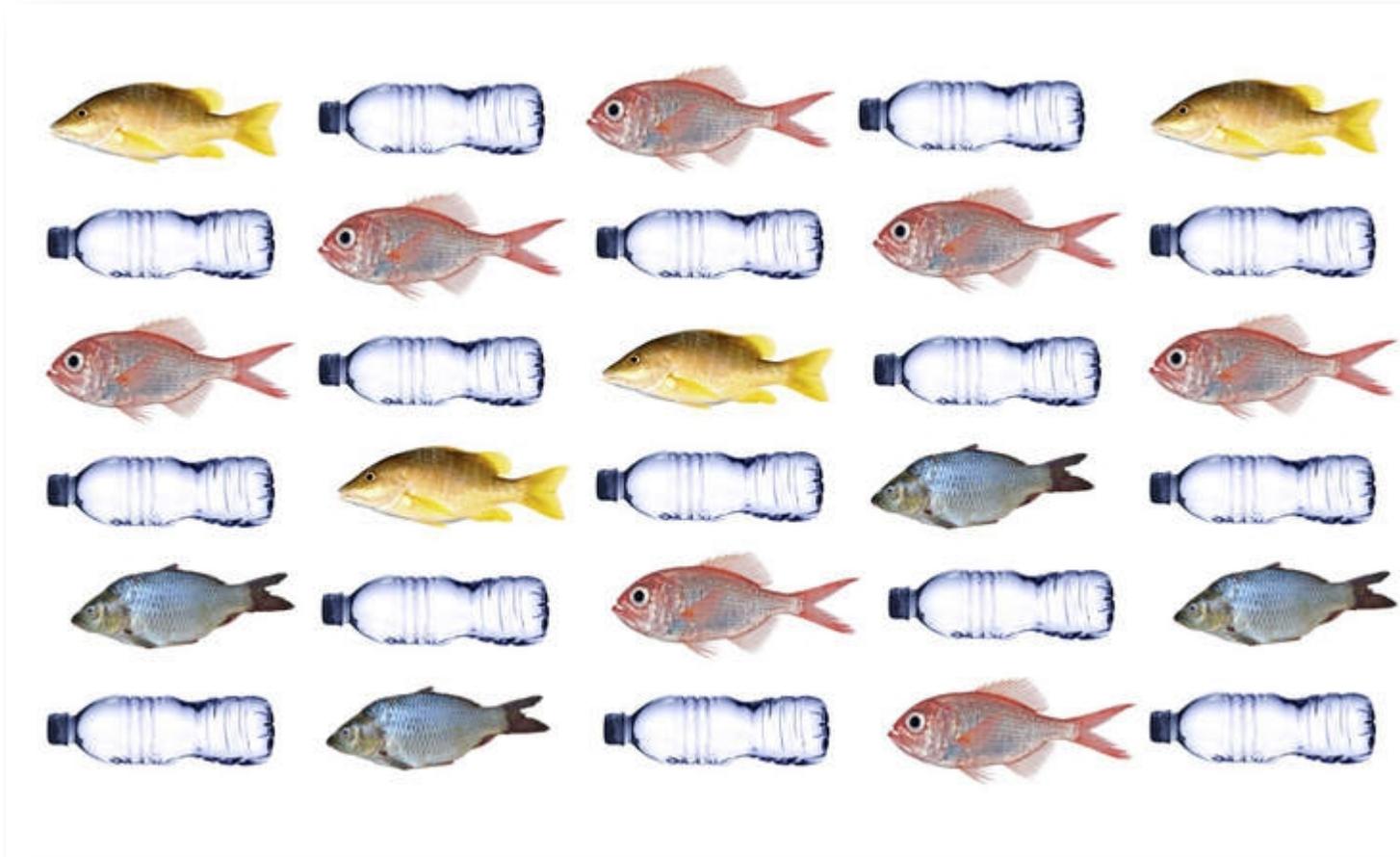
Our Throw-away Lifestyle



Plastic Generation and Recovery



A Look at 2050



Primary Goal

To reduce the amount of plastic pollution that enters the Sanctuary

Plastic pollution is a unique category of marine debris. (Insert a definition?) Therefore, the CWG recommends the MBNMS management plan has a section focused on plastic pollution management.



Four Proposed Strategies

- Policy
- Data Aggregation
- Education and Outreach
- Research and Monitoring



Policy Strategies

- Work in tandem with communities' efforts to comply with storm drain runoff regulations
 - EXAMPLES
- Collaborate with water quality programs and efforts
- Work with various discharge permit holders
 - Businesses, cities, others
- Lead by example, creating and sharing MBNMS best practices
- Write letters of support for local advocacy efforts, e.g., bag ban letter
- Meet and discuss the issue with community and government leaders.



Data Aggregation Strategies

- MBNMS helps facilitate aggregation of marine debris data through the creation of a 3 to 5 year pilot program
 - Standardize type of data collected (Is there example of template?)
 - Standardize reporting protocols
 - Decide how data will be used
 - Assessment of ongoing efforts
 - Public reporting
 - Inform research, model strategies and policy development
 - Identify, illustrate trends



Education & Outreach Strategies

- Incorporate plastic pollution information including impacts on Sanctuary into existing education programs
- Work with business and tourism to reduce plastic pollution
 - Info packets in hotel rooms
- Include education and outreach criteria in Sanctuary business certification program
- Provide resources for partners/businesses to reduce their uses
 - Create a best practices guide



Research & Monitoring Strategies

- Suggest RAP and/or other research entities look into level of persistence of plastic pollution in the Sanctuary
 - How does plastic pollution enter the Sanctuary
 - How is plastic pollution distributed in the Sanctuary



Apply to Management

- Make a targeted segment in the plan to focus on the issue because plastic pollution is so ubiquitous



Summary

- Clearly differentiate plastic pollution from other marine debris
- Source reduction is the goal
- Heavy on policy
- Data creates a solid foundation for policy
- Education and outreach builds continuity

