

# WELCOME

## United States Contributions to Global Ocean Plastic Waste Meeting 4



For Zoom participants, send questions in Q&A feature.

# Committee Members

Margaret Spring, Chair, *Monterey Bay Aquarium*

Mary Donohue, *University of Hawai'i*

Michelle Gierach, *NASA Jet Propulsion Laboratory*

Jenna Jambeck, *University of Georgia*

Hauke Kite-Powell, *Woods Hole Oceanographic Institution*

Kara Lavender Law, *Sea Education Association*

Jay Lund, *University of California Davis*

Ramani Narayan, *Michigan State University*

Eben Schwartz, *California Coastal Commission*

Rashid Sumaila, *University of British Columbia*

# Committee Statement of Task

- 1.) Evaluate US contributions to global ocean plastic waste, including types, sources and geographic variations
- 2.) Assess the prevalence of marine debris and mismanaged plastic waste in saltwater and freshwater United States waterways
- 3.) Examine the import and export of plastic waste to and from the United States, including the destinations of the exported plastic and the waste management infrastructure and environmental conditions of these locations.

# Committee Statement of Task

- 4.) Assess the potential value of a national marine debris tracking and monitoring system and how such a system might be designed and implemented.
- 5.) Develop recommendations on knowledge gaps that warrant further scientific inquiry.
- 6.) Recommend potential means to reduce United States contributions to global ocean plastic waste.

# Agenda

- 12:10 pm**      **NOAA Marine Debris Monitoring and Assessment Project**  
Hillary Burgess, National Oceanic & Atmospheric Administration
- 12:55 pm**      **EPA Trash Free Waters**  
Romell Nandi, Environmental Protection Agency
- 1:30 pm**      **Sample Collection and Analytical Considerations for Environmental Microplastics Studies: The Path Forward Using New ASTM Standards**  
Harry Allen, Environmental Protection Agency Region 9
- 2:05 pm**      **25 minute break**
- 2:30 pm**      **US Interagency Marine Debris Coordinating Committee**  
Nancy Wallace, National Oceanic & Atmospheric Administration
- 3:15 pm**      *Adjourn open session*



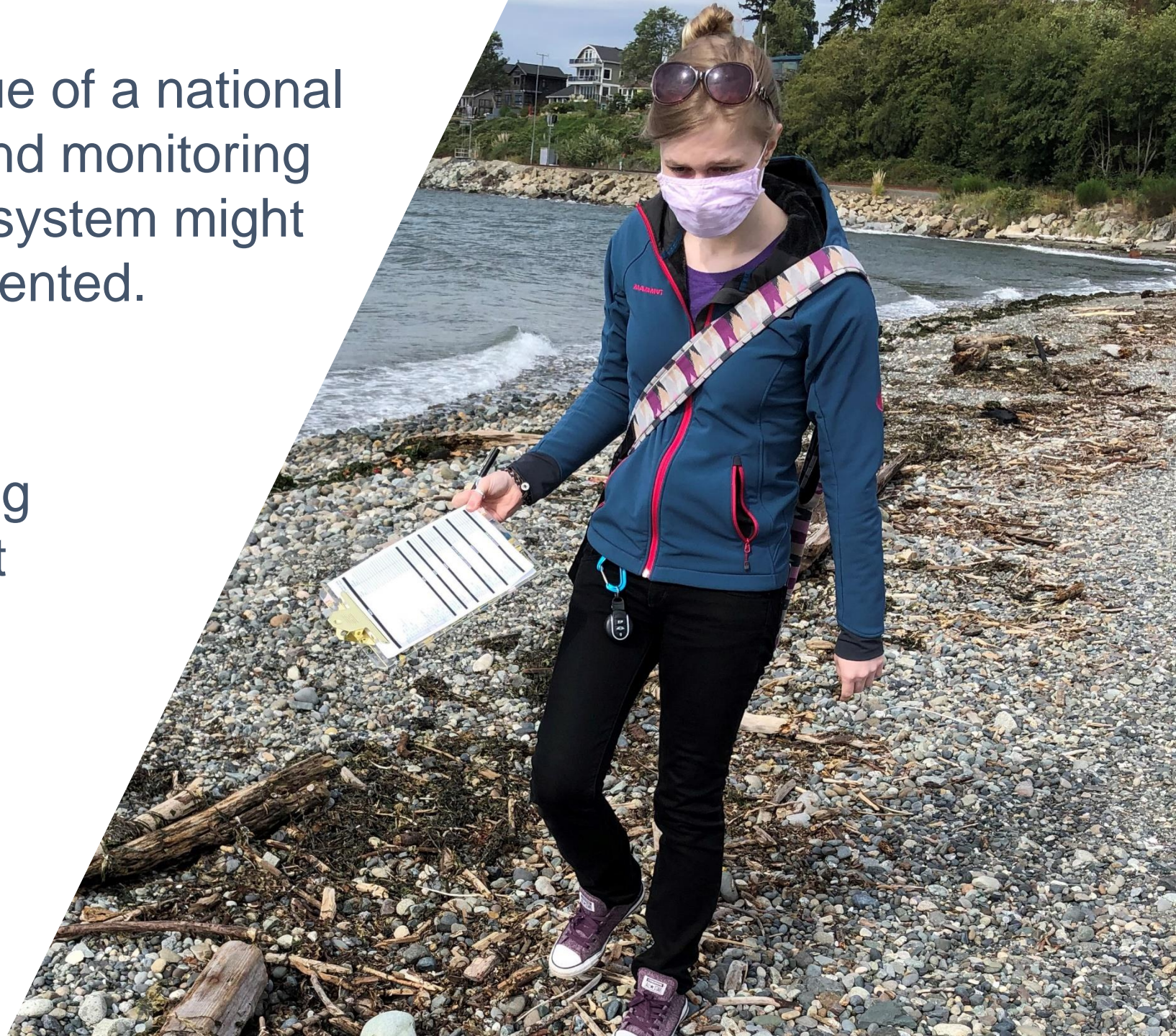
# Marine Debris Monitoring & Assessment Project (MDMAP)

Hillary Burgess  
Hillary.Burgess@noaa.gov



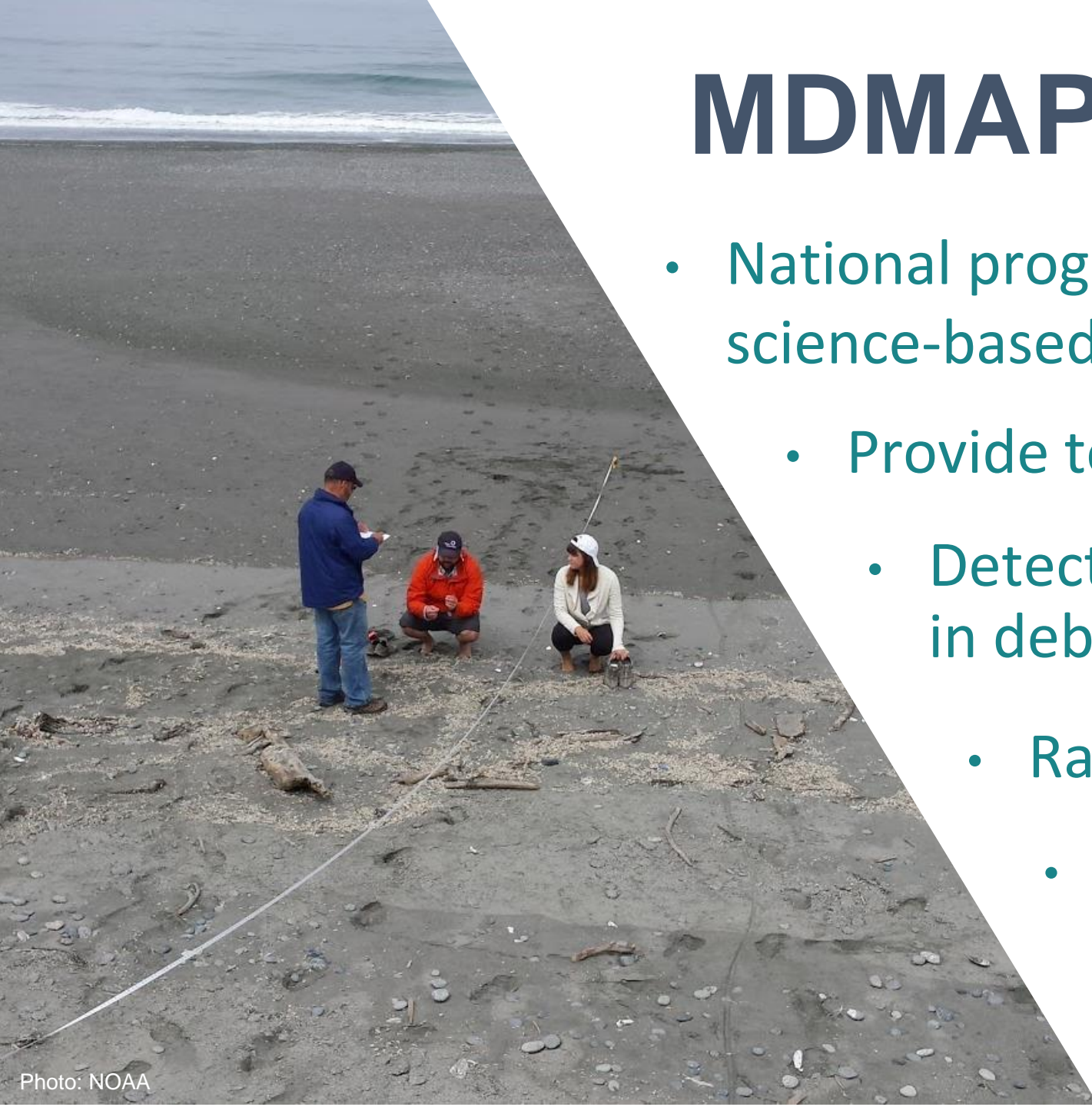
Assess the potential value of a national marine debris tracking and monitoring system and how such a system might be designed and implemented.

b. assess how the Marine Debris Monitoring and Assessment Project protocols can inform a nationwide shoreline monitoring effort when implemented at greater spatial and temporal resolution



# MDMAP GOALS

- National program to support research and science-based policies
  - Provide tools to partners
  - Detect spatial and temporal changes in debris loads by **material and type**
  - Raise awareness
    - Guide and evaluate **prevention**



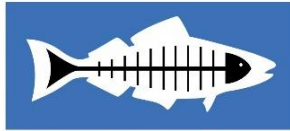
# MDMAP Partners COASST



EBIL SOCIETY, INC.



NATIONAL MARINE  
SANCTUARIES



Heal the Bay



Virginia Coastal Zone  
MANAGEMENT PROGRAM



SAVE OUR  
SHORES



BRITISH COLUMBIA | Ministry of  
Environment

California Coastal  
National Monument

CIMRS



MISSION + ARANSAS



NATIONAL  
ESTUARINE  
RESEARCH  
RESERVE



OREGON COAST  
AQUARIUM  
NEWPORT



BOY SCOUTS  
OF AMERICA

HUMBOLDT  
STATE UNIVERSITY



Oregon Shores  
Conservation Coalition



Pūlama Lānaʻi

# MDMAP Methods

2.5cm+



- 100m section of shoreline
- Count and categorize items by material, type
- Enter data in NOAA database

## Accumulation

- Clean the site
- Search full 100m site

## Standing stock

- Leave debris in place
- Search in four 5m strip transects

# MDMAP HISTORY

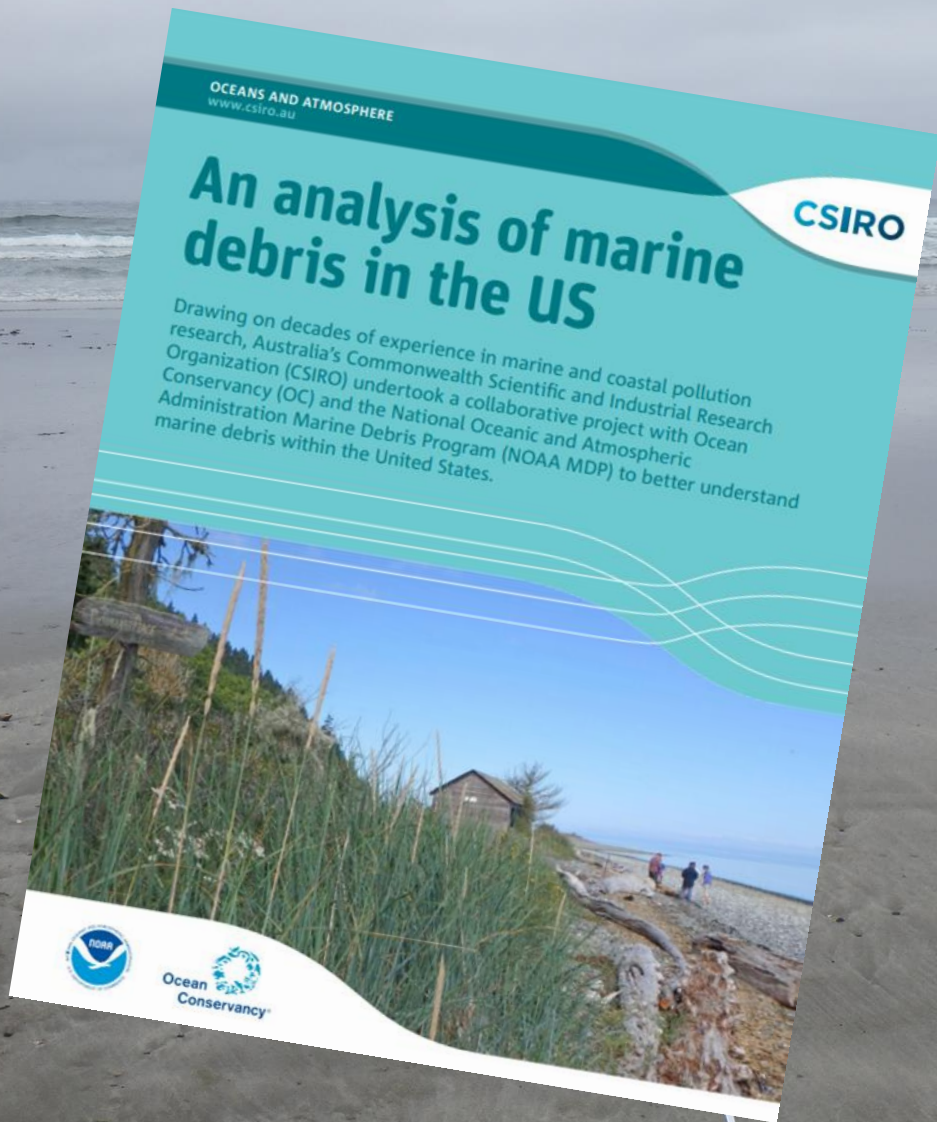


- 2009-2012: development + testing
- 2011: Japan Tsunami
- 2012: *Shoreline Field Guide*, recruited partners, launched database
- 2016: Get Started Toolbox launched
- 2017 OC/CSIRO National Assessment
- 2018: Examining Observer Bias study
- 2019: Partner feedback

2021:  
Iterate

**443 sites**  
**9,055 surveys**  
**21 US States + PR**  
**9 Countries**

# Analysis of Marine Debris Datasets



Partners: Ocean Conservancy, CSIRO

- Total debris loads
- Temporal/spatial patterns
- Policy efficacy
- Comparison of methods
- Recommendations

# What's that noise?

- Partner: UW/COASST
- Number of people, search area, walking patterns, debris sizes, debris colors  
...and more  
influence the data

## Examining influences on observed counts from shoreline surveys of marine debris

A report for the NOAA Marine Debris Program

Version 1.0

Hillary K. Burgess, Timothy T. Jones, Jacqueline K. Lindsey and Julia K. Parrish

June 30, 2020

# Science Recommendations

## Control search effort

- Search time, area, number of surveyors, size classes

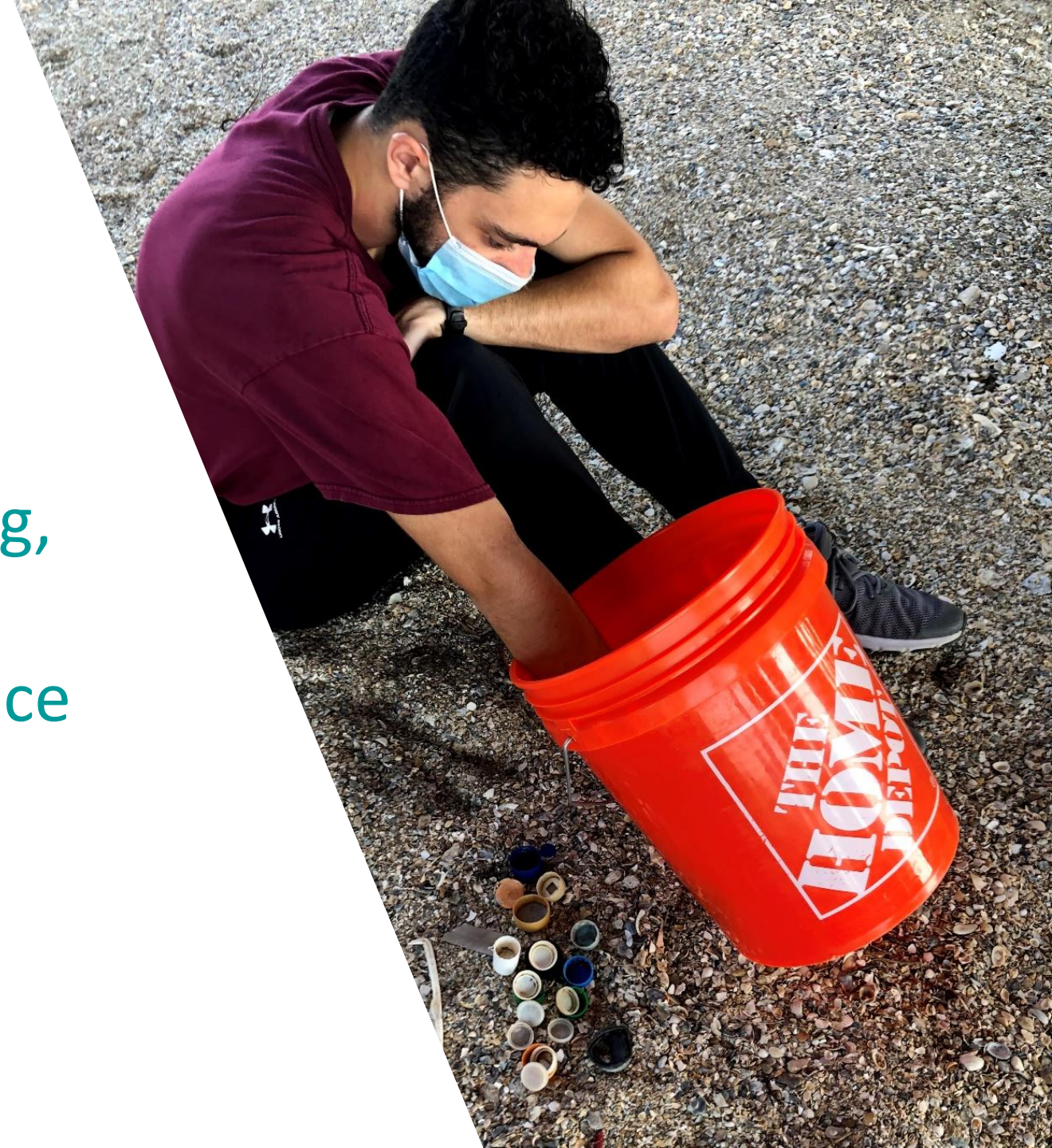
## Sample in the back barrier of the shoreline

**Account for sampling bias** (choose high debris loads, near population centers)

- Supplement self-selection with structured sampling design?

# Volunteer Recommendations

- Make data trends more accessible
- Provide resources for training, participating (supplies)
- Improve data entry experience
- Ensure compatibility with clean-ups



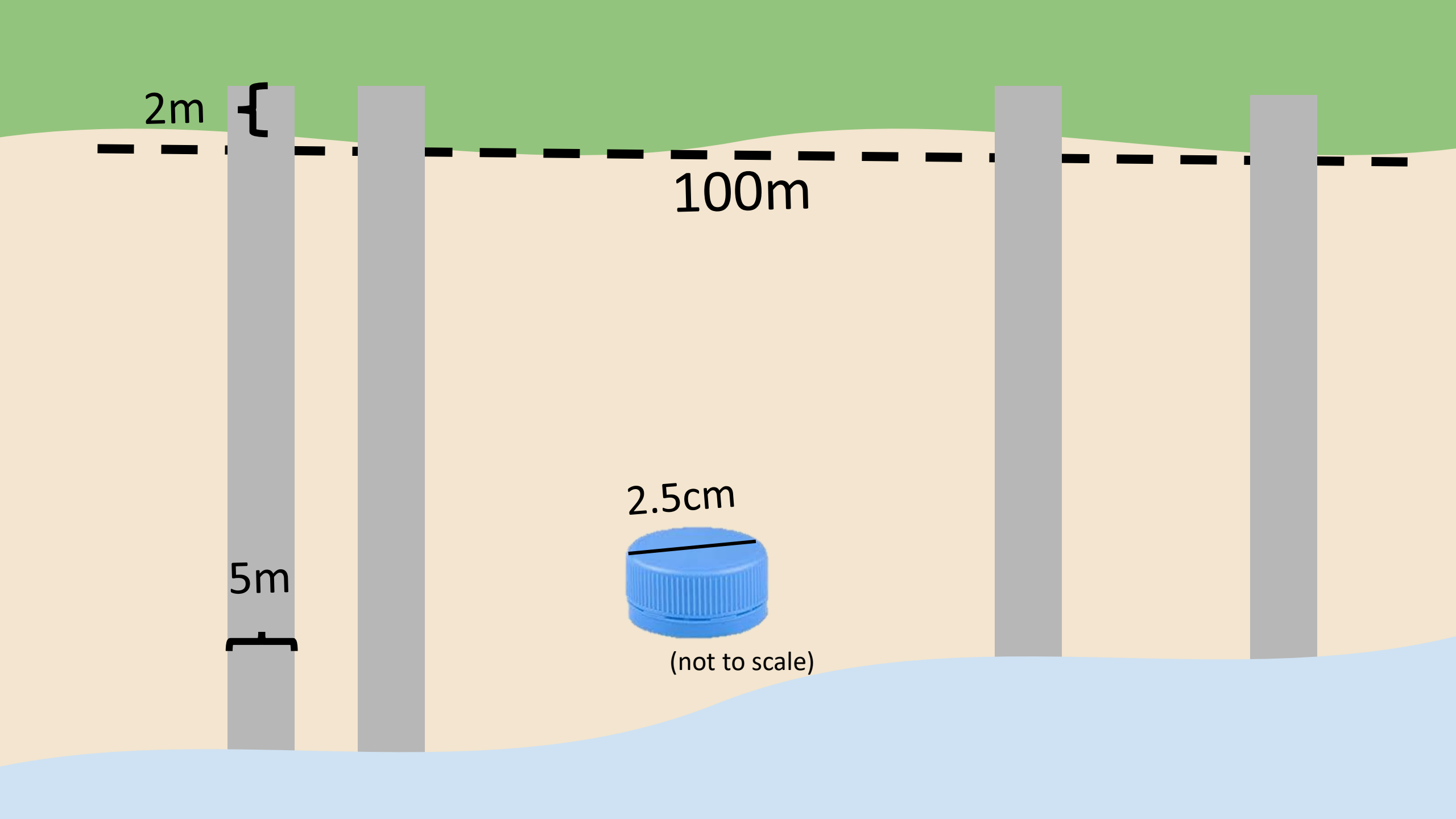
2.5cm+



# UNIFIED Method

- 100m section of shoreline
- Search in four random 5m strip transects
- Count and categorize items by material, type
- Debris removal optional, reported
- Enter data in NOAA database





# One Protocol, Two Approaches



## Citizen/ Community Science

- Volunteer, partner led
- Monthly
- Sites self-selected
- Assess local trends



## National Survey

- Potentially contracted
- Every ~5 years
- Stratified sampling design to fill spatial gaps

# Thank You!



Photo: NOAA



## EPA'S TRASH FREE WATERS PROGRAM

## EXISTING LEGAL AUTHORITIES AND EPA PROGRAMS TO ADDRESS AQUATIC TRASH

Existing **legal authorities** to address aquatic trash include:

- **Clean Water Act**
- **Pollution Prevention Act**
- **Resource Conservation and Recovery Act**
- **Marine Debris Act, amended by Save Our Seas Act of 2018**
- **Save Our Seas Act 2.0**

**EPA offices** that are working on various aspects of the aquatic trash problem include:

- **Office of Water**
- **Office of International and Tribal Affairs**
- **Office of Land and Emergency Management**
- **Office of Research and Development**
- **Regional Offices**

## TRASH FREE WATERS PROGRAM: WHAT IS IT AND HOW DOES IT WORK?

- The Trash Free Waters (TFW) program is a voluntary, non-statutory program that work through partnerships in locations around the country to prevent or reduce trash loadings into the nation's waterways.
- Our place-based efforts are typically led by our Regional offices.
- In other cases, Headquarters has led place-based projects.
- Headquarters provides funding and technical assistance for select place-based projects.
- Headquarters also leads national scale projects.

# TFW PROGRAM PRIORITIES

- The program has the following priorities:
  1. Support effective regional, state, and local projects.
  2. Leverage public and private partnerships.
  3. Support research and education/outreach efforts.
  4. Provide tools and resources that support high-impact voluntary trash prevention actions.



## TFW PROGRAM RESPONSIBILITIES



- All ten EPA Regions plus three geographic programs have a TFW Coordinator or TFW team who are responsible for:
  1. Developing an annual TFW workplan
  2. Developing and implementing TFW projects in partnership with stakeholders
  3. Reporting against program metrics to HQ each year
- The TFW team in HQ is responsible for:
  1. Defining and guiding TFW program strategy
  2. Coordinating with TFW Regional Coordinators and interagency and intra-agency partners
  3. Providing technical and financial assistance
  4. Maintaining website
  5. Leading national TFW projects
  6. Developing tools and resources

## INTERAGENCY COORDINATION

- The TFW national program lead sits on the Interagency Marine Debris Coordinating Committee (IMDCC), which acts as an information-sharing body for US government activities with respect to marine litter.
- TFW also sits on the federal interagency micro/nanoplastics workgroup, which shares information on federal agency research specific to that topic.
- TFW has worked selectively with other Agencies on particular projects or efforts.

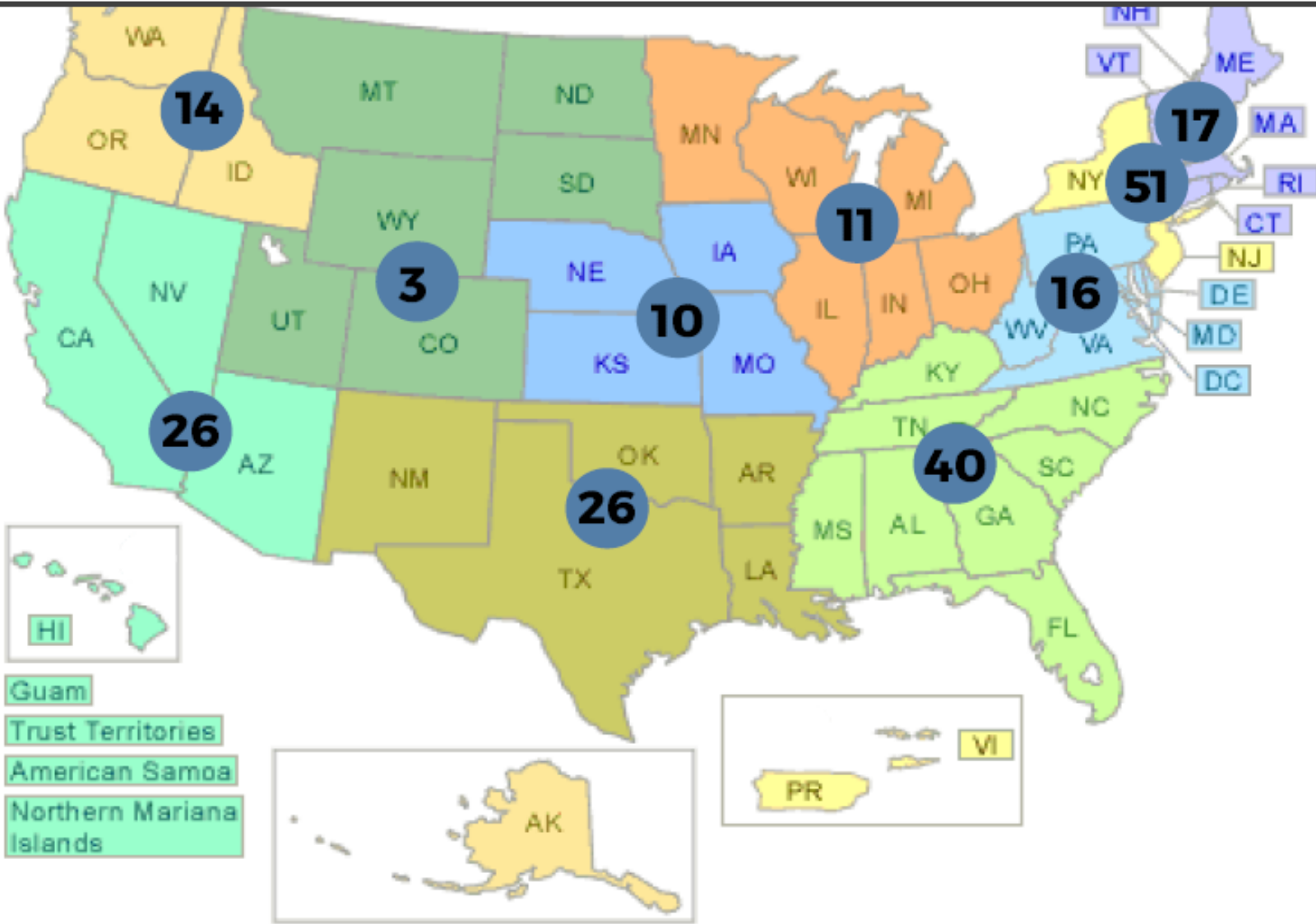


## PLACE-BASED EFFORTS

# TFW PLACE-BASED PROJECTS AT A GLANCE

**214\***  
total projects  
with EPA  
touches

**432**  
partners  
nationwide



## PLACE-BASED PROJECT EXAMPLES



- **Trash Free Gulf** - R4, R6, and Gulf of Mexico Division are working collaboratively to develop a geographically-focused TFW initiative to establish a trash-related event database, create an outreach toolkit resource database, and gather and display data on trash removed during cleanup events in the Gulf region.
- **Trash Free St. Louis** - R7 is partnering with the Missouri Confluence Waterkeeper to install 3 different in-stream trash devices on hotspot urban streams outside of St. Louis, MO.
- **Trash Free Mystic** - R1 is working closely with the Mystic River Watershed Association, the Consensus Building Institute, and local stakeholders to develop 2-3 priority trash mitigation projects to inform eventual implementation.
- **Trash Free Texas** - Continued expansion of the "Adopt a Spot" online mapping tool which enables community leaders to identify, promote, and track trash removal activities in their region.

## PROJECT SPOTLIGHT I: PROCTOR CREEK TRASH CAPTURE

- EPA Region 4, The Coca-Cola Company, the National Recreation and Park Association (NRPA), the City of Atlanta, West Atlanta Watershed Alliance, Groundwork Atlanta, and Park Pride partnered to install several innovative trash-trap systems along Proctor Creek.
- In 2019, EPA facilitated a Proctor Creek Stakeholder Investment Meeting with leaders from local government, foundations, non-profits, and businesses to identify resource needs and secure funding for source reduction efforts and trash traps.
- As a result of this meeting, the Coca-Cola Company invested \$350,000 in the project through their World Without Waste Initiative.
- As of March 31, 2020, EPA-supported trash capture devices within the Proctor Creek watershed have collected more than 900 pounds of trash.



## PROJECT SPOTLIGHT II: SANTA MONICA BAY NATIONAL ESTUARY PROGRAM'S RETHINK DISPOSABLE PROJECT

- With financial support from EPA's Trash Free Waters Program, the Santa Monica Bay National Estuary Program (SMBNEP) implemented a one-year pilot project in partnership with Clean Water Action and Clean Water Fund to reduce single use disposable packaging at four Los Angeles restaurants.
- After the project's first year, these four restaurants eliminated 247,570 pieces of single-use disposables resulting in an annual waste reduction of 2,637 pounds.
- The project has since been expanded to other area restaurants.





### URBAN WATERS

Trash Free Waters partners with the Urban Waters Program to support waterfront revitalization in major U.S. cities and urban communities across the U.S.



### WETLANDS

Trash Free Waters partners with the Wetlands Program to ensure that trash prevention is an element of wetlands protection and restoration projects.



### STORMWATER

Trash Free Waters partners with the Stormwater Program to help reduce the huge amount of trash that enters U.S. waterways via stormwater outfalls.



## TRASH FREE WATERS PROGRAM

Trash prevention is an important part of many other EPA programs that work to create cleaner and healthier waterways.



### ESTUARIES

Trash Free Waters partners with the National Estuary Program to support trash prevention and clean-up efforts in major estuarine ecosystems.



### HEALTHY COMMUNITIES

Trash Free Waters partners with community-based programs to provide help for trash prevention and recycling efforts in rural and suburban communities.



### SUSTAINABLE MATERIALS MANAGEMENT

Trash Free Waters supports innovative programs to reduce, recycle, and reuse plastic packaging, and thereby prevent littering and improper disposal of trash.



### INTERNATIONAL

The Office of International and Tribal Affairs works with other countries and international organizations to pursue Trash Free Waters goals outside the U.S.



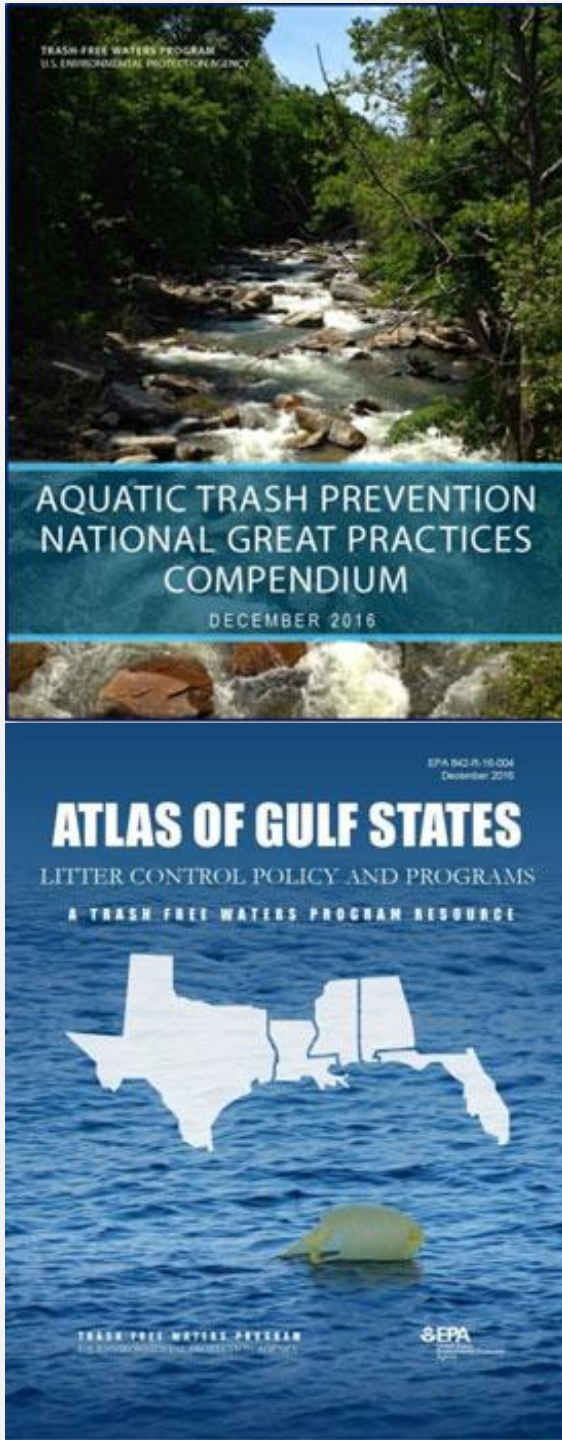
### RESEARCH

Trash Free Waters partners with EPA researchers to share information and support new research to better understand the impacts of aquatic trash.

# HQ-LED EFFORTS

# SELECT HEADQUARTERS TFW PROGRAM ACCOMPLISHMENTS

1. Brought together world-renowned microplastics experts for a Microplastics Expert Workshop leading to a report on remaining key research needs.
2. Developed a Great Practices Compendium, an Atlas of litter policies and programs for the Gulf region, and a number of other technical assistance documents.
3. Continuing to distribute a newsletter and monthly news round up to a mailing list of over 2,000 people.
4. Hosted 12 technical webinars (series ongoing on a quarterly basis).
5. Initiated and led a number of place-based projects.



# OUTREACH ACTIVITIES

- **Regular Communications:**
  - The Flow – our newsletter, which shares information on TFW projects and relevant news stories.
  - The Rapids – a monthly email with information about TFW-related events, funding opportunities, news & announcements, as well as a summary of the latest research on microplastics.
- **TFW Article Series:** An ongoing series of educational articles to teach the public about various dimensions of the aquatic trash problem and what they can do to help.
- **TFW Webinar Series:** Quarterly webinars, in which experts around the country speak about specific topics of interest and a focus on what stakeholders themselves can potentially do.

EPA United States Environmental Protection Agency

EPA-842-N-20-001  
May 2020

## THE FLOW OF... TRASH FREE WATERS

### ISSUE 13

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*This newsletter is intended to provide the latest information to all of our Trash Free Waters (TFW) partners and friends.*

*The Flow...of Trash Free Waters is our opportunity to highlight recent successes, as well as shine a spotlight on news and other related items. It is produced by the U.S. Environmental Protection Agency, with support from IEC. Mention of commercial products, publications, or Web sites in this newsletter does not constitute endorsement or recommendation for use by EPA, and shall not be used for advertising or product endorsement purposes.*

### HOW'S IT FLOWING?

#### Administrator Wheeler Discusses Marine Litter During Visit to Brazil

In February, U.S. Environmental Protection Agency (EPA) Administrator Andrew Wheeler became the first Administrator to visit the Amazon. He participated in a variety of events in Manaus, Brazil to increase awareness around recycling and projects that address marine litter. "Building partnerships to reduce marine litter is one of my priorities. EPA looks forward to developing collaboration with Brazil to reduce marine litter through the sharing of information and best practices," said Administrator Wheeler.



Among other activities, Administrator Wheeler met with Minister of the Environment Ricardo Salles and Amazonas State Governor Wilson Miranda Lima to discuss shared environmental challenges including marine litter. He joined them to witness the

signature of a Brazilian decree to implement a national agenda on urban environmental quality, in partnership with the Amazonas state government. This program promotes stakeholder engagement to reduce the volume of

plastic waste transported by the rivers to the oceans.

Following the signing, Administrator Wheeler volunteered with other dignitaries and community members to clean up trash at Ponta das Lajes beach.

#### Philadelphia "Community Cans" Ribbon Cutting Event

On December 12th, 2019, a ribbon cutting press event was held in recognition of the ongoing Philadelphia Community Cans project. Community Cans is a public-private partnership program through which the City of Philadelphia partners with community organizations, commercial corridor managers, and businesses to increase public trash can coverage along Philadelphia commercial corridors. Community partners take responsibility for maintaining the cans, which are strategically

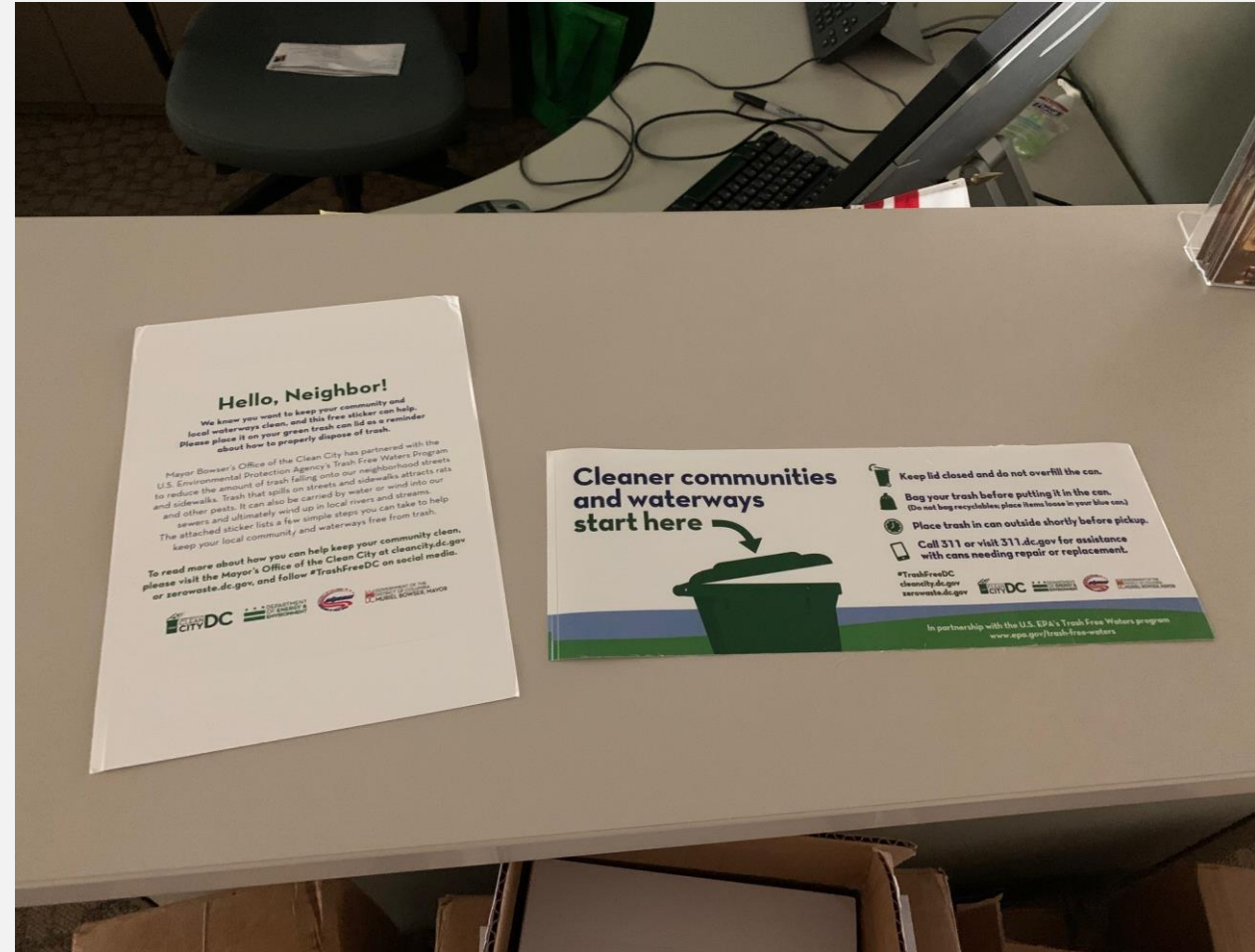


(continued on p.2)

Tiden Middle School students painting can lids for Southwest Philly.

# OUTREACH ACTIVITIES

- **Curbside Disposal Pilot Project:** TFW is working with the Washington DC Mayor's Office of the Clean City and other DC partners to urge residents to take steps to ensure that trash does not spill from their bins on collection day.
- **Transportation Hub Project:** TFW will be creating a toolbox on its website of the best messaging campaigns put out by State Departments of Transportation and Municipal Transit Authorities on mitigating trash pollution from and on roads and transportation hubs.
- **Project Highlights:** The TFW website contains a growing list of project descriptions and accomplishments.



# TRASH COMPENDIUM

- TFW has compiled select excerpted permit language from stormwater permits, best management practice effectiveness information, and case studies into a document that should be published by Spring 2021.
- The compendium will be a very helpful resource for stormwater permit writers, municipal stormwater planners, and other audiences.



## ESCAPED TRASH ASSESSMENT PROTOCOL (ETAP)

- The ETAP tool was designed to help communities characterize and quantify trash pollution and identify tailored management practices to mitigate trash loadings into waterways.
- ETAP will be published sometime in early Spring 2021.
- Future plans include creation of an app version of ETAP and incorporation of ETAP into the forthcoming California Trash Monitoring Playbook.

## STORMWATER-SOLID WASTE DIALOGUES

- Stakeholders in the municipal solid waste and stormwater sectors will participate in a series of discussions in order to identify challenges and opportunities related to addressing aquatic trash through solid waste and stormwater management.
- Through a remote stakeholder engagement process, participants will transfer knowledge and identify product needs.
- Partners include American Chemistry Council, the National Municipal Stormwater Alliance, and KCI Technologies.

# MICROPLASTICS RESEARCH

- TFW is coordinating with EPA's microplastics researchers to amplify EPA's work in this area, and to develop projects to further the understanding of microplastics pollution and its impacts.
- The program is currently developing a progress report on based on the 2017 Microplastics Expert Workshop.
- Scoping the possibility of including microplastics in the next EPA National Rivers and Streams Assessment.

# REPORT ON MICROFIBER POLLUTION

- In coordination with the IMDCC, EPA TFW is planning to develop a Report to Congress on microfiber pollution, which is a requirement under Section 132 of the Save Our Seas 2.0 Act.
- In addition to an assessment of the existing knowledge about the microfiber pollution problem, the report will include a 5-year plan for how Federal agencies can work to reduce microfiber pollution.



# NEW TFW LEGISLATIVE DRIVER

## Save Our Seas 2.0 Implementation

- Stand up a new Trash Free Waters national grant program.
  - Legislation says that EPA may create a new national TFW grants program.
  - Authorization is for \$10 million/year from FY21-25.
  - Grants will be support source reduction projects, enforce local materials management ordinances, implement solid waste state or local policies, install trash capture devices, provide education and outreach, and monitor or model reductions in waste flows due to BMPs for the reduction of plastic waste and other post-consumer materials in sources of drinking water.
- Lead office for EPA public strategy on post-consumer materials management and water management.
  - Strategy is to be completed “in consultation with stakeholders.”
  - Strategy is to be distributed to states and made publicly available for use by for-profit entities and NGOs
  - Strategy due by December 2021.



Romell Nandi

US EPA

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# Microplastics Pollution – The Legacy and Sentinel of Mismanaged Plastic Waste

**NO DUMPING**



**DRAINS  
TO THE OCEAN**

**Harry Allen**

**Emergency Response Office, Superfund Division  
U.S. Environmental Protection Agency Region 9**

**[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)**

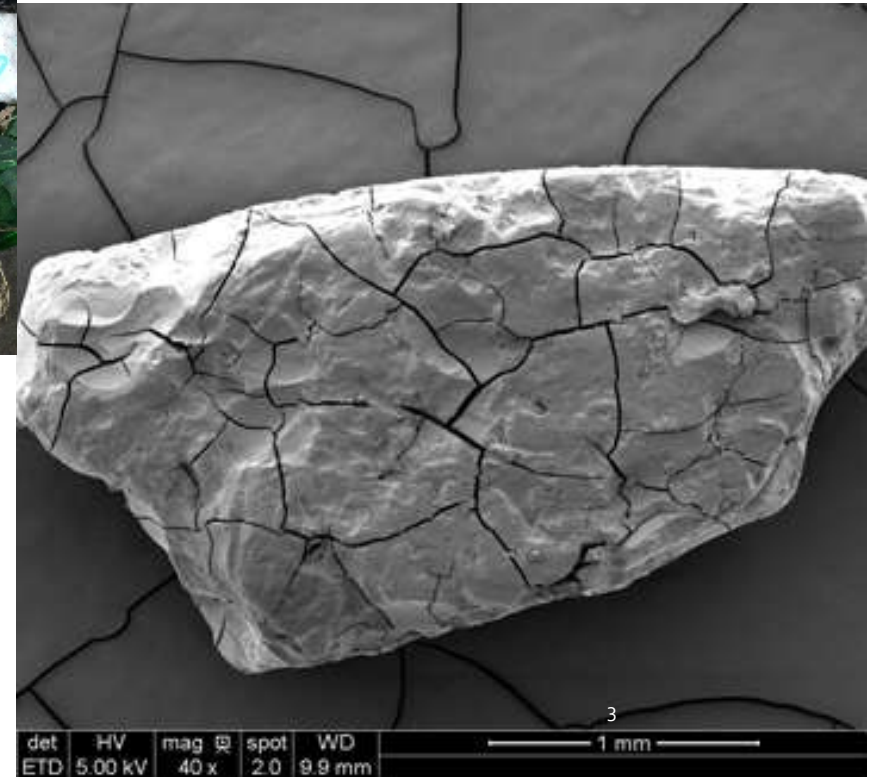
# Breadcrumb-Sized Microplastics in our Oceans

- ❑ Majority of plastic pollution originates from land-based sources
- ❑ ‘Macro’ plastics fragment into smaller plastic pieces and microplastics
- ❑ Plastics are ingested by birds, fish and other wildlife or become bio-fouled and sink to the bottom
- ❑ Samples from all rivers, lakes, harbors, seas, oceans and even the polar ice caps have demonstrated the presence of plastic particles.



# Weathering of Plastics into Smaller Pieces

- As plastics weather in sun, wind and water they break up and change in size and shape
- These particles migrate to waterways and eventually receiving waters (rivers, lakes, oceans).
- The study and understanding of microplastics is essential
- Need for standardization in studies and data
- Risk = Exposure x Toxicity



# Moving toward microplastic monitoring

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- Integrating plastic particle analysis with water monitoring
  - Oceans and estuaries, rivers, lakes and source waters
  - Includes point-source and non-point source monitoring
  - Repeatable and of high quality
- SFEI SF Bay 2018-19
- SCCWRP-UCR SoCal Bight 2020-21



# US EPA Region 9 - TMDL

EPA identified two waterbodies that were not included in Hawaii's 303(d) List.

EPA has identified the waterbodies of Kamilo Point Beach on Hawaii and Tern Island in French Frigate Shoals NWHI as impaired by trash and requiring Total Maximum Daily Loads (TMDLs) under Clean Water Act, Section 303(d).



**The Islands Of Hawaii Hold One Of The Dirtiest Places In The World  
Kamilo Point shows just how dire the world's plastic pollution problem really is.**

[https://www.huffpost.com/entry/kamilo-beach-hawaii-dirtiest-beach-america\\_n\\_58e99a38e4b05413bfe3792d](https://www.huffpost.com/entry/kamilo-beach-hawaii-dirtiest-beach-america_n_58e99a38e4b05413bfe3792d)



Princeville

Kapa'a

Koloa

Kailua

Kapolei

Honolulu

Lahaina

Kihei

Waimea

Waikoloa Village

Kailua-Kona

Hilo

Volcano

Island of Hawai'i

HAWAII

HAWAIIAN ISLANDS

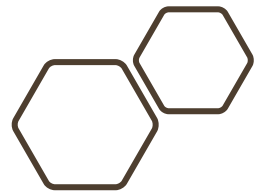
Google



**Tern Island -  
Papahānaoamuakea,  
Marine National Monument**



- Views of plastic detritus on Tern Island's "South Beach" (2018)
- Plastic bits are especially visible in turtle nests and tracks.
- Plastic collects at the Wrack line and at the base of vegetation.



# State of CA Policy Direction on Microplastics

In July 2020, the State Water Board adopted a definition of microplastics in drinking water pursuant to section 116376 to the Health and Safety Code (as directed in Senate Bill No. 1422).

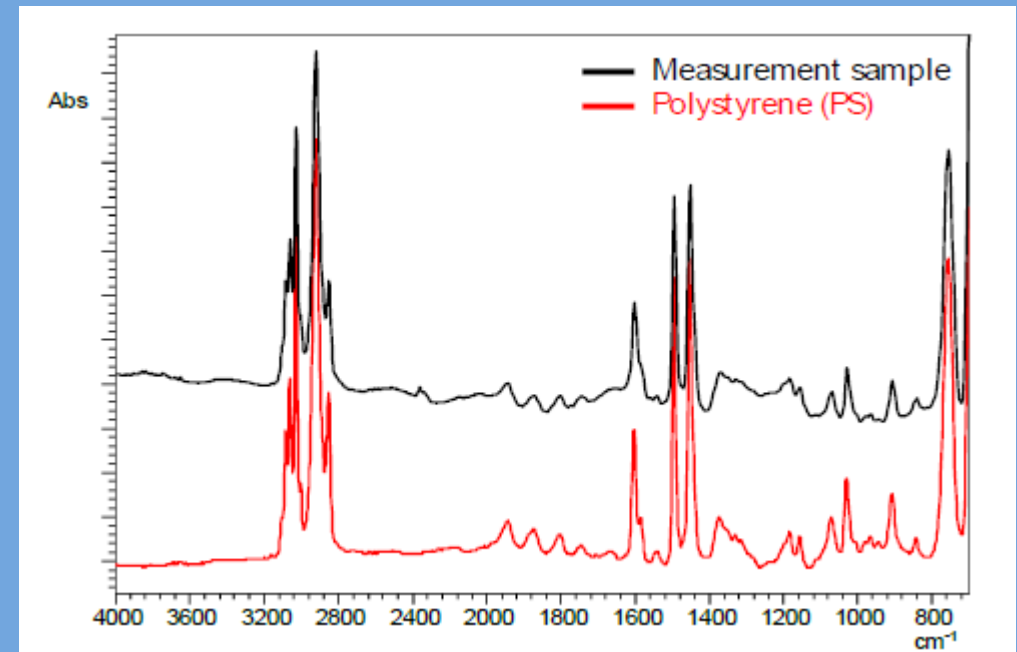
The law requires the State to adopt a standard methodology for the testing of drinking water for microplastics and requirements for four years of testing and reporting of microplastics in drinking water.

- **On or before July 1, 2021:**

- Adopt a standard methodology for testing of microplastics in drinking water;
- Adopt requirements for four years of testing and reporting of microplastics in drinking water, including public disclosure of those results;
- Consider issuing quantitative guidelines (e.g., notification level) to aid consumer interpretations of the testing results, if appropriate;
- Accredite qualified laboratories in California to analyze microplastics in drinking water.

# Sampling/Extraction/Identification & Analytical methods remain variable

- Sampling approach – Neuston nets 333um allowed particles to be missed, also shed particles into the samples
- Extraction challenges – Peroxide (WPO), KOH, enzymatic digestion is time-consuming
- Polymer identification
  - Microspectroscopy (Raman/FTIR)
  - Py-GCMS – emerging technique
- Quality Control and Standardized Methods



# FTIR Identification fish stomachs

Rapid spectral identification with  
mapping:

Thermo Scientific Nicolet iN-10MX  
FTIR Microscope

MCT-A detector used for manual  
acquisitions

FPA detector used for mapping  
acquisitions

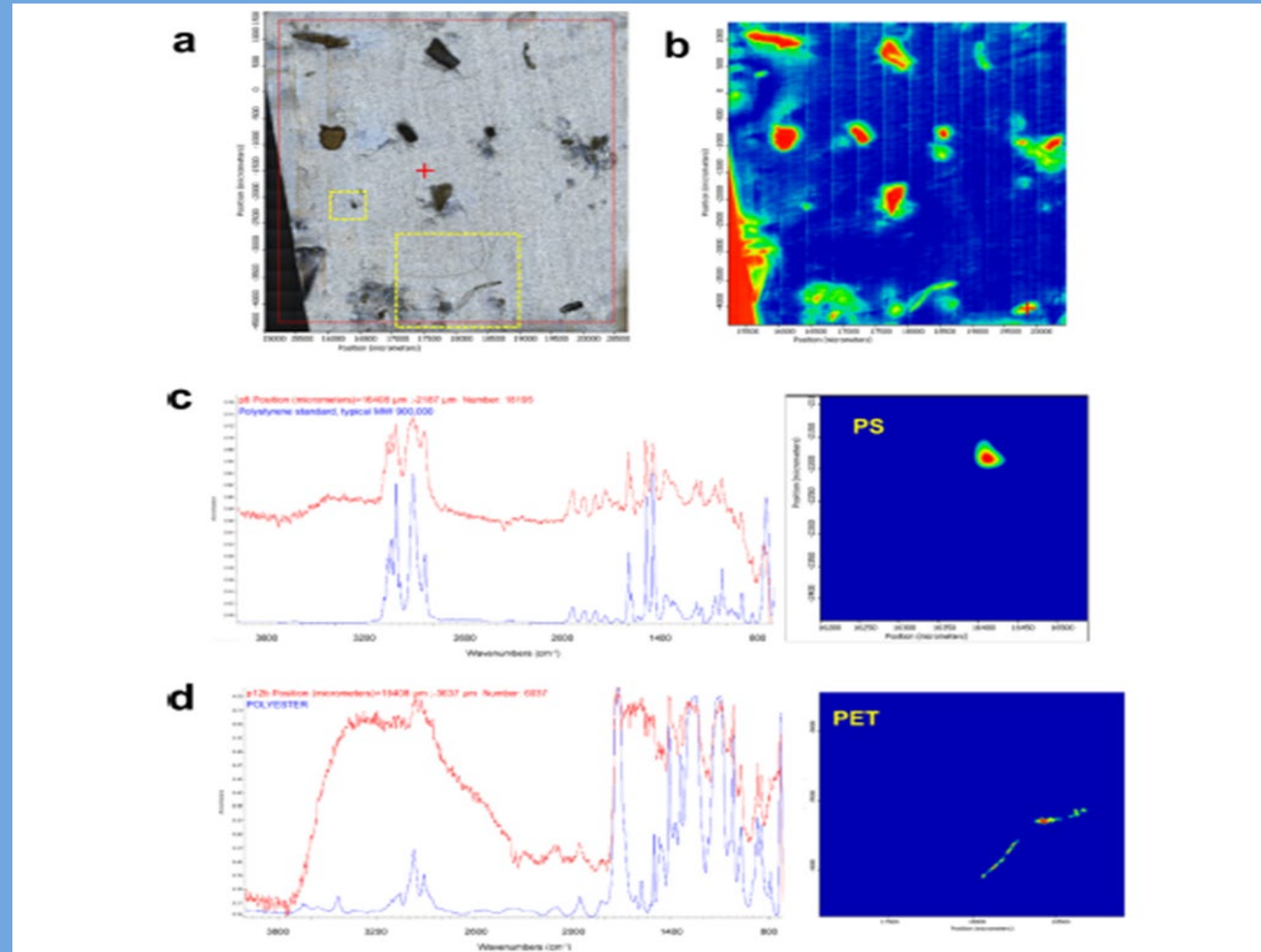


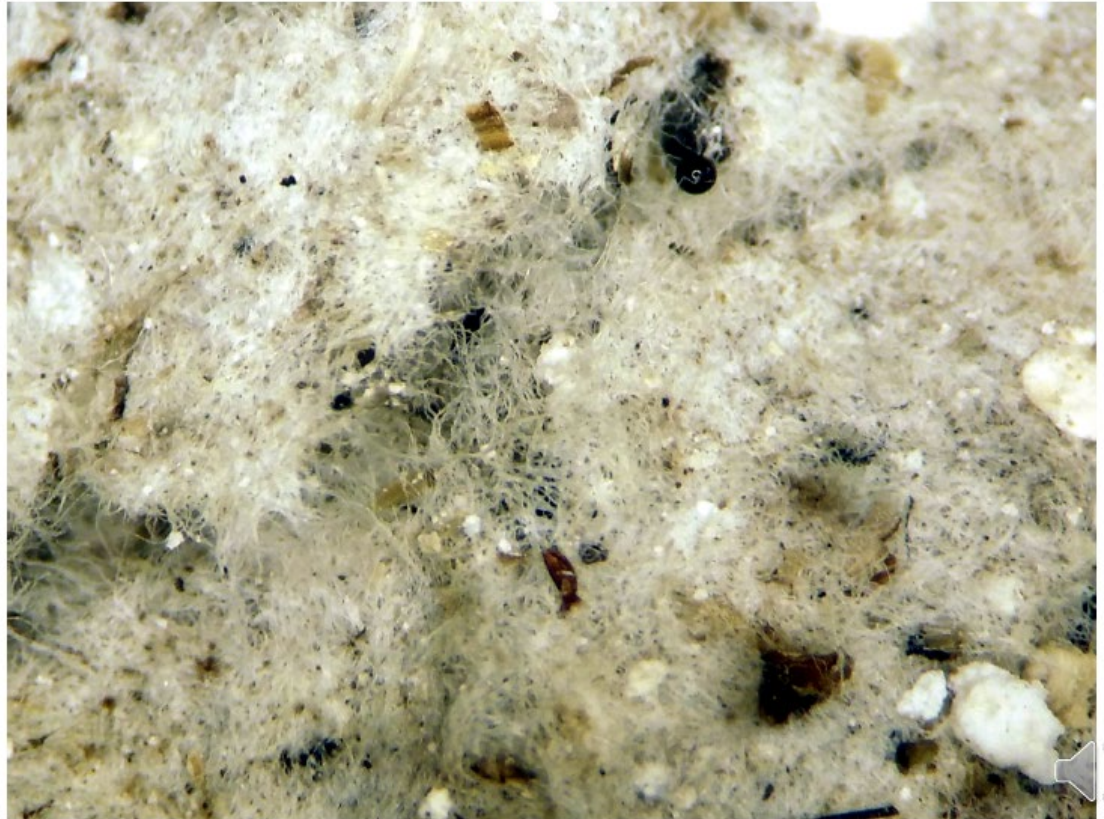
Figure 2. (a) Mosaic of reflected-light images generated from automated FTIR reflection mapping of microplastics extracted from fish stomach L3b. (b) IR intensity map corresponding to (a). (c,d) Details of spectral imaging correlation maps for 75  $\mu\text{m}$  PS and 20  $\times$  700  $\mu\text{m}$  PET fiber, respectively, from areas shown in (a). Manual FITR confirmations are shown next to each.

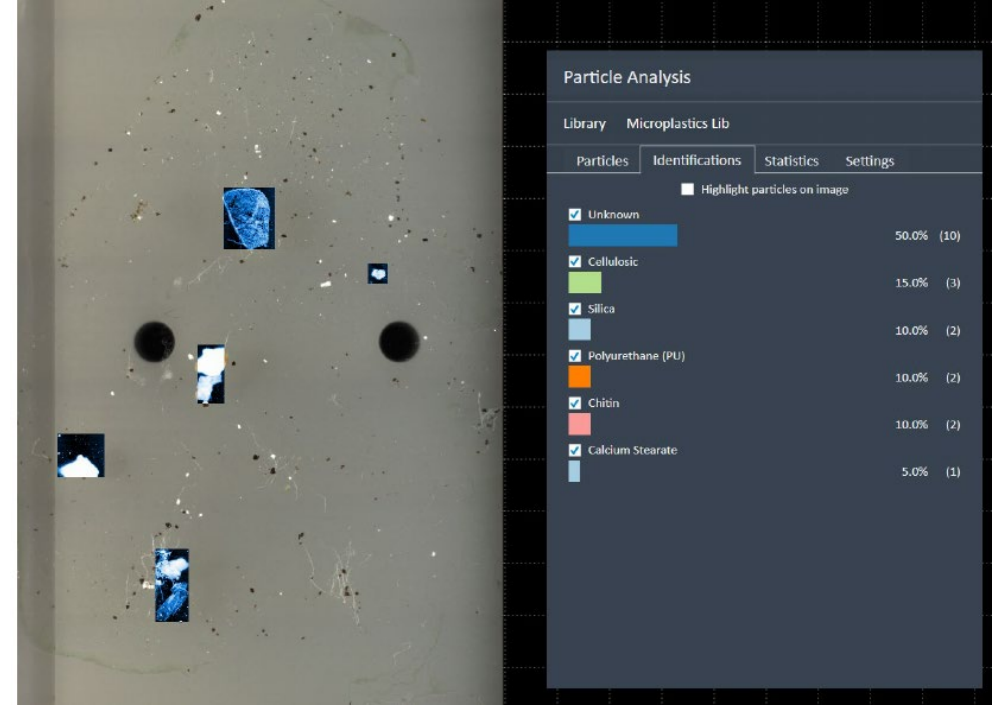
Wagner et al. 2019. Nondestructive Extraction and Identification of  
Microplastics from Freshwater Sport Fish Stomachs. ES&T

# Wastewater Influent Sample

East Bay MUD, Oakland, CA

~20x magnification



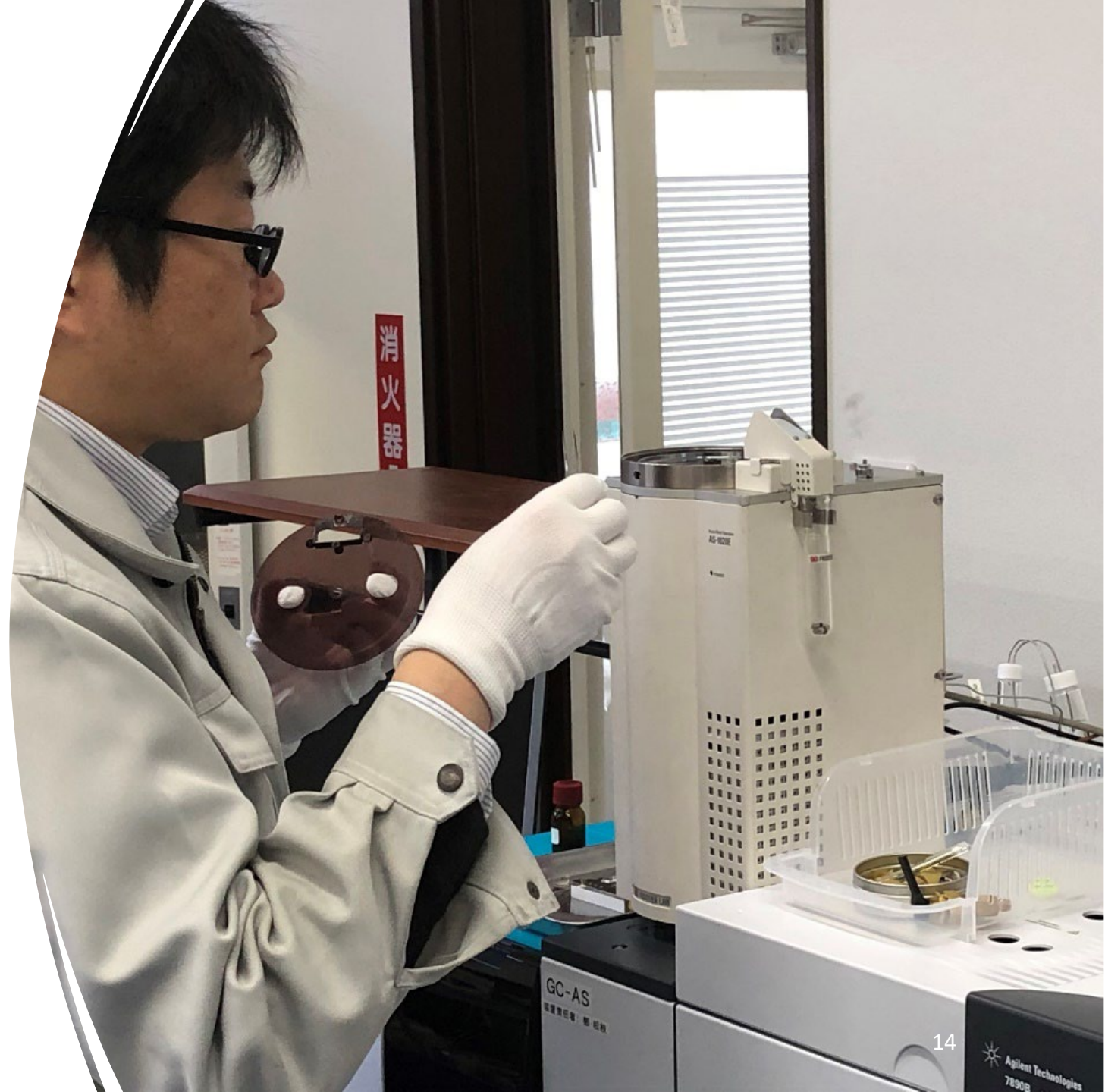


## Agilent LDIR

- The Laser Direct Infrared Imaging detector provides compositional analysis of substances using spectral matching
- This helps us get positive plastic counts by polymer type with lots of supporting information.
- Rapid automation – simultaneous analysis

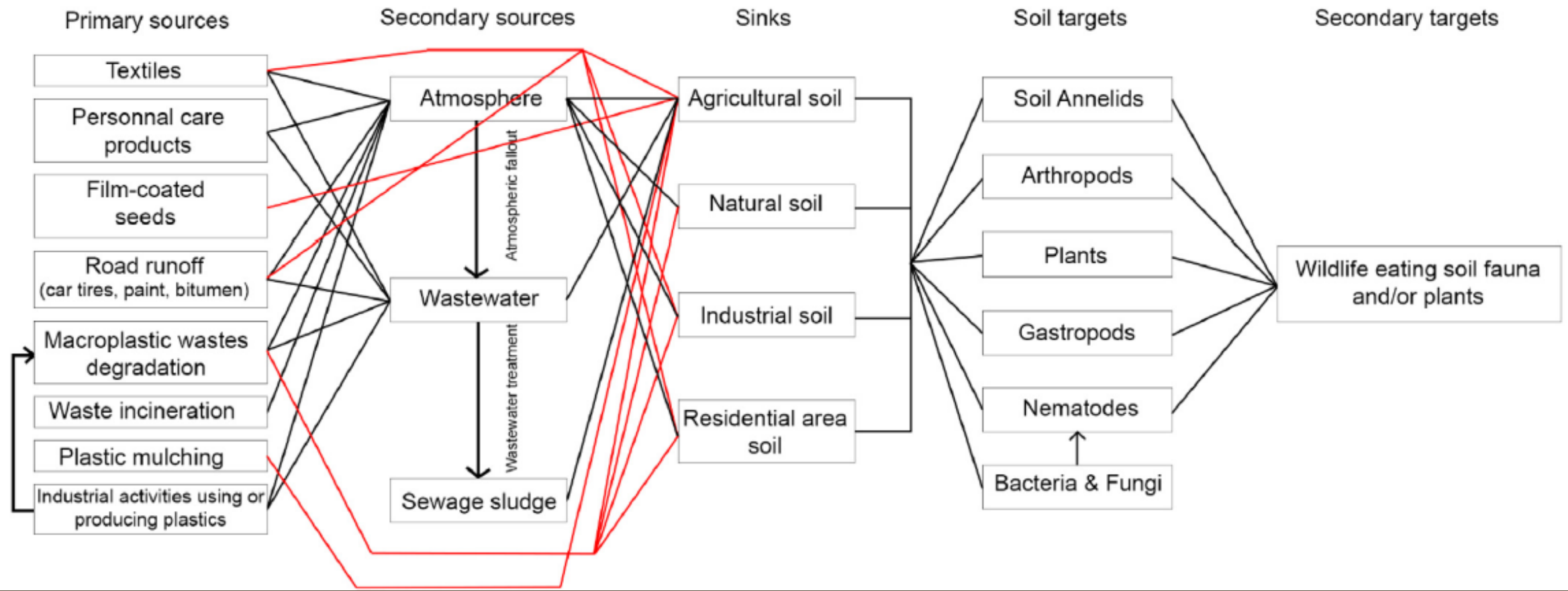
# Mass-based Methods – Pyrolysis/GCMS (Frontier Analytical)

- Flash pyrolysis (between 500-600°C) of a sample yields pyrolyzates which evolve into the GC column.
- A mass spectrometer detects the pyrolyzates and produces a pyrogram
- Plastic polymer contents are identified by peak height and retention time and their mass is estimated.



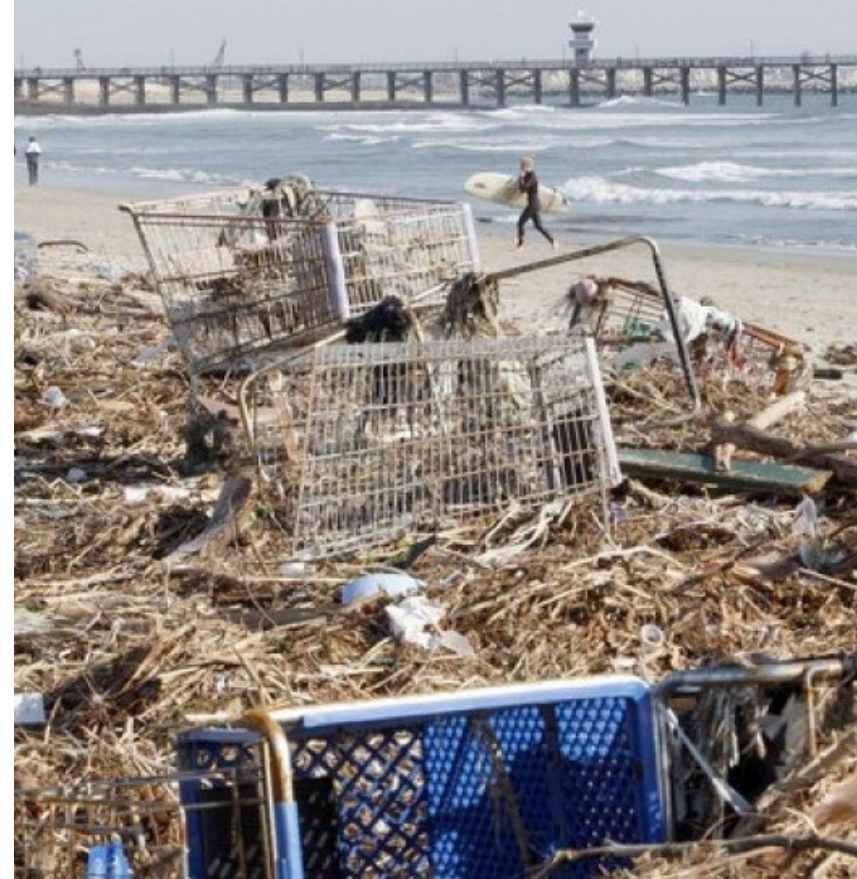
# EPA Region 9 & ASTM International D19

- Began a microplastics method development in “all waters” and funded significant research (June 2016).
- Multiple partner organization to develop standardized methods and practices for identifying microplastics in water.
  - Published methods for collection and sample preparation
  - Pending: reference sample preparation, analysis with Pyrolysis-GCMS and FTIR microspectroscopy.
  - Partners include: CA Department of Public Health, Pima County Wastewater, Agilent Technologies, Shimadzu Corp., Easy Bay MUD, LA County Sanitation and Frontier Analytical (Japan)



# Example Conceptual Model

- Land-based environmental exposure estimation conceptual model from (Jaques & Prosser, STOTEN 2021)



# Stormwater discharge, Los Angeles, CA

# Web Resources

- Opportunity Project StoryMap:  
<https://storymaps.arcgis.com/stories/df9267f53b284f138cacdb6b9db8038d>
- Draper Microplastics: <https://www.draper.com/business-areas/global-challenges/planet/microplastics>
- “Plastic Wars” PBS Frontline  
<https://www.pbs.org/wgbh/frontline/film/plastic-wars/>
- Microplastics Health Effects Webinars:  
<https://www.sccwrp.org/about/research-areas/additional-research-areas/trash-pollution/microplastics-health-effects-webinar-series/>



# **United States Contributions to Global Ocean Plastic Waste Meeting 4**

**BREAK**

**Please return at 2:30 pm EST / 11:30 am PST**

# INTERAGENCY MARINE DEBRIS COORDINATING COMMITTEE

Nancy Wallace, Director  
National Oceanic and Atmospheric Administration  
Marine Debris Program  
Interagency Marine Debris Coordinating Committee Chair  
The National Academies of Sciences, Engineering,  
and Medicine  
February 2021



## INTERAGENCY MARINE DEBRIS COORDINATING COMMITTEE

“There is established an Interagency Marine Debris Coordinating Committee to coordinate a comprehensive program of marine debris research and activities among Federal agencies, in cooperation and coordination with non-governmental organizations, industry, universities, and research institutions, States, Indian tribes, and other nations, as appropriate”



# ORIGINAL IMDCC MEMBERS

National Oceanic and Atmospheric Administration (Chair)  
Environmental Protection Agency (Vice- Chair)  
United States Coast Guard  
United States Navy



# 2018 IMDCC MEMBERS

- National Oceanic and Atmospheric Administration (Chair)
- Environmental Protection Agency
- United States Coast Guard
- United States Navy
- Department of State
- Department of the Interior
  - *National Park Service*
  - *Bureau of Safety and Environmental Enforcement*
  - *U.S. Fish and Wildlife Service*



# CURRENT IMDCC MEMBERS

National Oceanic and Atmospheric Administration (Chair)  
Environmental Protection Agency  
United States Coast Guard  
United States Navy  
Department of State  
Department of the Interior

- *National Park Service*
- *Bureau of Safety and Environmental Enforcement*
- *U.S. Fish and Wildlife Service*

Marine Mammal Commission  
United States Agency for International Development  
Department of Justice  
White House Office of Science and Technology Policy  
United States Army Corps of Engineers



# REPORTS TO CONGRESS

Biennial report to Congress

Includes:

- Status of recommendation implementation
- Summary of NOAA marine debris inventory
- Review of NOAA Marine Debris Program
- Review of U.S. Coast Guard programs
- Estimated federal and non-federal funding

FY 2018-2019 report under review



# PURPOSE OF THE IMDCC

Coordinate marine debris activities among  
federal agencies

Quarterly meetings

Opportunities for information sharing



# INFORMATION SHARING

Useful platform for sharing information on agency activities

EPA Gulf of Mexico Grants

BSEE and U.S. Coast Guard using marine debris calendars

Department of State participating in GIANT OCEAN Consortium



# COLLABORATIVE AGENCY PROJECTS

NOAA-National Park Service developing  
marine debris displays

Microplastics study on National Park  
beaches

Joint proposal to APEC between NOAA,  
Department of State, and USAID



# MOVING FORWARD

Updated IMDCC Charter

New process for formal membership

Increase membership among federal agencies



# UPDATING 2008 RECOMMENDATIONS

Biennial report focuses on addressing 2008  
recommendations to IMDCC

Recommendations now out of date

IMDCC looking to update





# PLASTICS AND THE IMDCC

- Removal
- Prevention
- Outreach and Education
- Research
- Monitoring and Detection
- Emergency Response
- Regional engagement
- International engagement
- International grants
- Recycling
- Waste Water/Storm Water
- TMDLs
- Place-based management
- Enforcement
- Port Reception
- Innovate material design



# THANK YOU

Nancy Wallace, Director  
National Oceanic and Atmospheric Administration  
Marine Debris Program  
Interagency Marine Debris Coordinating Committee Chair  
The National Academies of Sciences, Engineering,  
and Medicine  
February 2021



# THANK YOU

## United States Contributions to Global Ocean Plastic Waste Meeting 4

