EPA OFFICE OF WATER PROGRAM ACTIONS ON PLASTIC WASTE

EXISTING LEGAL AUTHORITIES AND EPA PROGRAMS TO ADDRESS AQUATIC TRASH

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**
- **Office of Chemical Safety and Pollution Prevention**
- **Office of Air and Radiation**
- **Regional Offices**

Existing **legal authorities** to potentially address trash/plastics 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**
- **Toxic Substances Control Act**

U.S. EPA

TRASH FREE WATERS

TECHNICAL RESOURCES, OUTREACH, AND NATIONAL STRATEGY

TRASH FREE WATERS PROGRAM (TFW) GOALS

Goals: The TFW program has the following three main goals:

Prevention

- Reduce waste generation at the source and change systems and behaviors that cause trash to get into our waterways.

Removal

- Remove trash from U.S. waterways by supporting trash capture solutions and other remediation efforts.

Research

- Improve understanding of the sources, causes, pathways, and impacts of aquatic trash (including microplastics) to devise solutions that reduce trash pollution and minimize risks

POST CONSUMER MATERIALS MANAGEMENT AND WATER MANAGEMENT STRATEGY (SAVE OUR SEAS 2.0 ACT SEC 301)

- Domestic stakeholder strategy in consultation with stakeholders to address trash loadings into waterways/oceans.
- Strategy will articulate challenges to addressing the problem of trash/plastic waste in waterways and actions to address challenges.
- Roadmap for Trash Free Waters projects/activities going forward.
- Strategy expected to be completed by Summer of 2023.

DATA COLLECTION AND MODELING PROJECT

- To help measure progress on the water management objective of the forthcoming SOS 2.0 Section 301 Strategy, TFW is working on a project to estimate solid waste loadings into US domestic waterways.
- We intend to build a model of what solid waste materials are getting into waterways by total weight, material type, and item type.
- We also plan to provide geographical variations in the distributions of solid waste in waterways.
- Plan is to run this model on some regular time basis (e.g. annually) to ascertain progress over time.
- TFW intends to make this data publicly available.

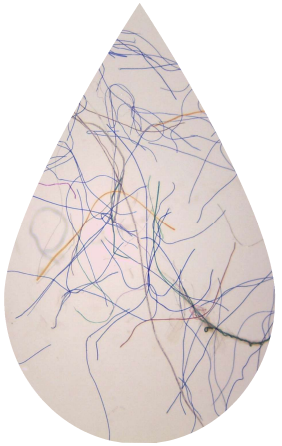
REPORT ON MICROFIBER POLLUTION

- With the Interagency Marine Debris Coordinating Committee (IMDCC), TFW is leading development of a Report to Congress on Microfiber Pollution.

- Major component of Report is a five-year federal plan for reducing microfiber pollution.

- Draft Report public comment period ended Oct. 17, 2022.

- Final report expected by Summer 2023.



Report on Microfiber Pollution

2023 REPORT TO CONGRESS

U.S. Environmental Protection Agency on Behalf of the Interagency Marine Debris Coordinating Committee
1200 PENNSYLVANIA AVENUE NW, WASHINGTON, DC 20460

PRIORITY MICROPLASTICS RESEARCH NEEDS REPORT

TFW published a follow-up report to its 2017 Microplastics Expert Workshop (MEW) report.

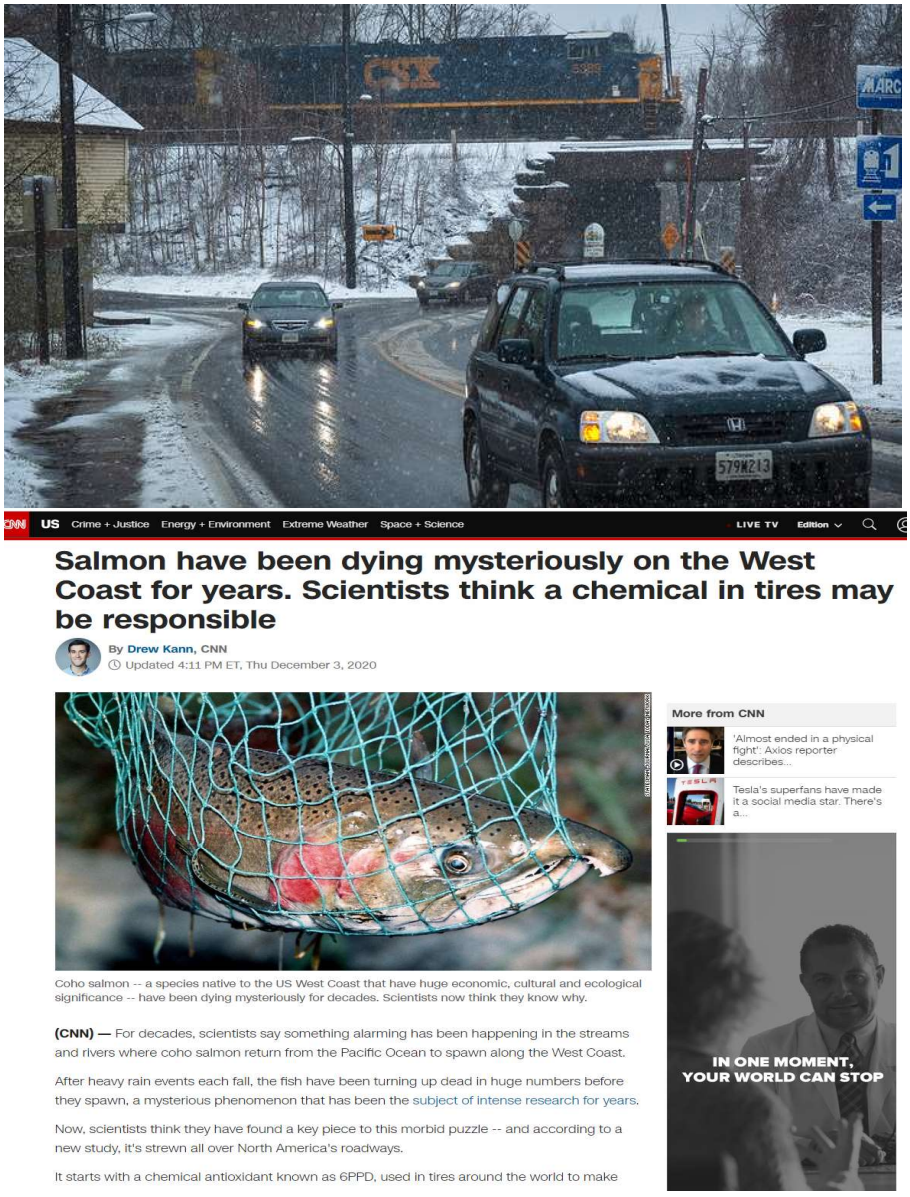
Main Purpose: a resource for microplastics researchers and funders.

Content: Describes research advances since 2017 in: 1) Analytical Methods; 2) Sources, Transport, Fate; 3) Environmental Assessments; 4) Human Health Assessments

1. Identifies remaining research gaps.
2. Identifies emerging areas of interest.
3. Lists major conferences and publications addressing microplastics.

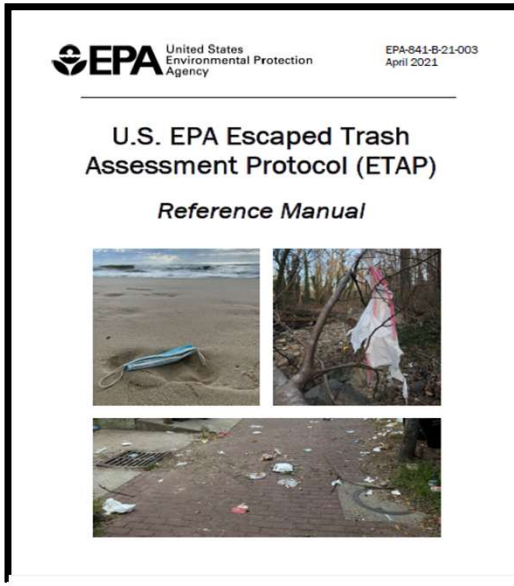
TIRE PARTICLES

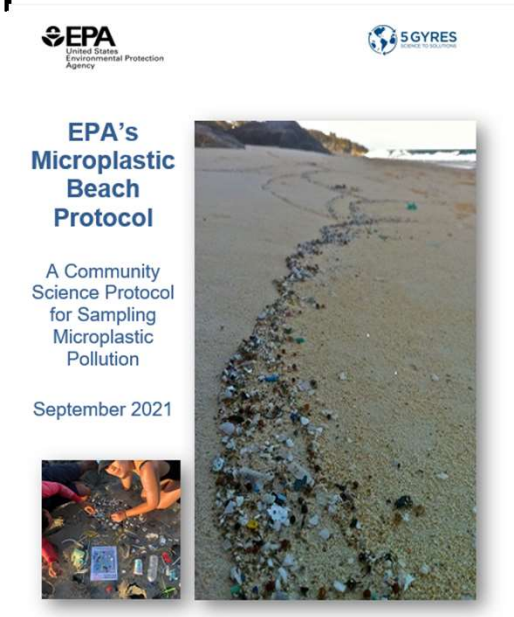
- Collaborating with EPA's stormwater program on a tire particles in waterways project.
- Tire-derived microplastics may cause adverse effects for aquatic-dependent wildlife.
- Two stakeholder roundtables held to identify challenges and needs.
- Summary paper based on learning from roundtables being developed, including recommendations for future action.



ESCAPED TRASH ASSESSMENT AND BEACH MICROPLASTICS PROTOCOLS

- ETAP is a quantitative survey tool providing a standard, yet adaptable method for collecting and quantifying trash.
- ETAP is useful for several purposes, including informing upstream management interventions.
- We are currently developing an app for ETAP (part of Marine Debris Tracker).
- Separate citizen science beach microplastics protocol on the TFW website.

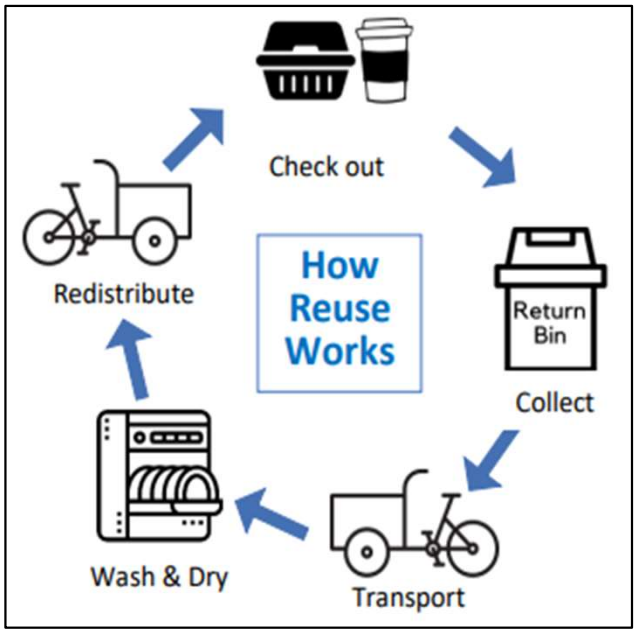




REUSABLE FOODWARE PROJECT

TFW is partnering with the NGO Perpetual to help select municipalities effectively design, contract, and oversee the implementation of a reusable Foodware system at city-scale.

Project goal: Show proof of concept – that reuse can be economically viable, minimize environmental impact, be healthy and safe, aligned with city planning, and equitable and accessible for users. Market results to other cities.



We are partnering with the following cities:

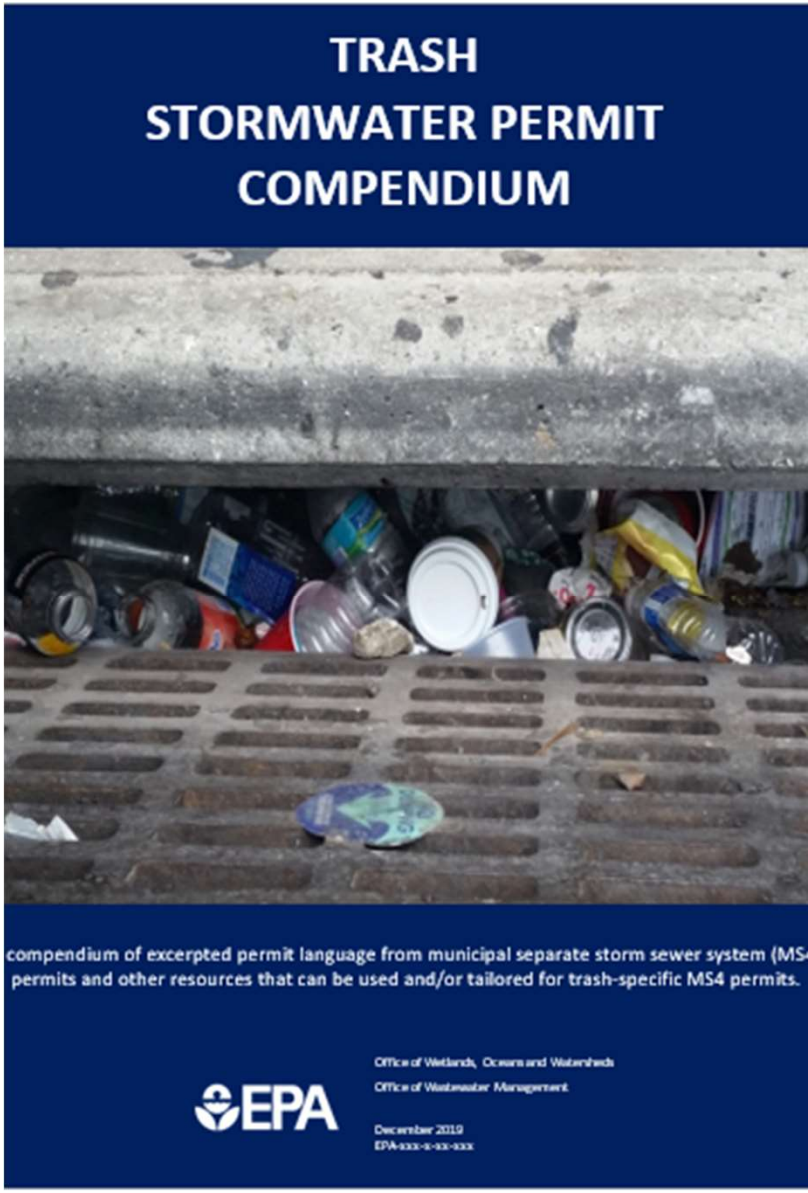
- Ann Arbor, MI
- Savannah, GA
- Galveston, TX
- Hilo, HI

TRASH STORMWATER PERMIT COMPENDIUM

- TFW compiled language from stormwater permits and other resources for use in developing trash-specific permits.

- Best Management Practice effectiveness and cost information is included along with two case studies showcasing trash provisions in permits and stormwater plans.

- Helpful resource for stormwater permit writers, municipal stormwater planners, and others.



STORMWATER-SOLID WASTE DIALOGUES

- Stakeholders in the municipal solid waste and stormwater sectors identified challenges and opportunities for addressing aquatic trash.
- Outcomes: summary report, inventory of resources to support solutions, and new projects from the partners.
- TFW partners: National Municipal Stormwater Alliance, the American Chemistry Council, and KCI Technologies.

OUTREACH ACTIVITIES

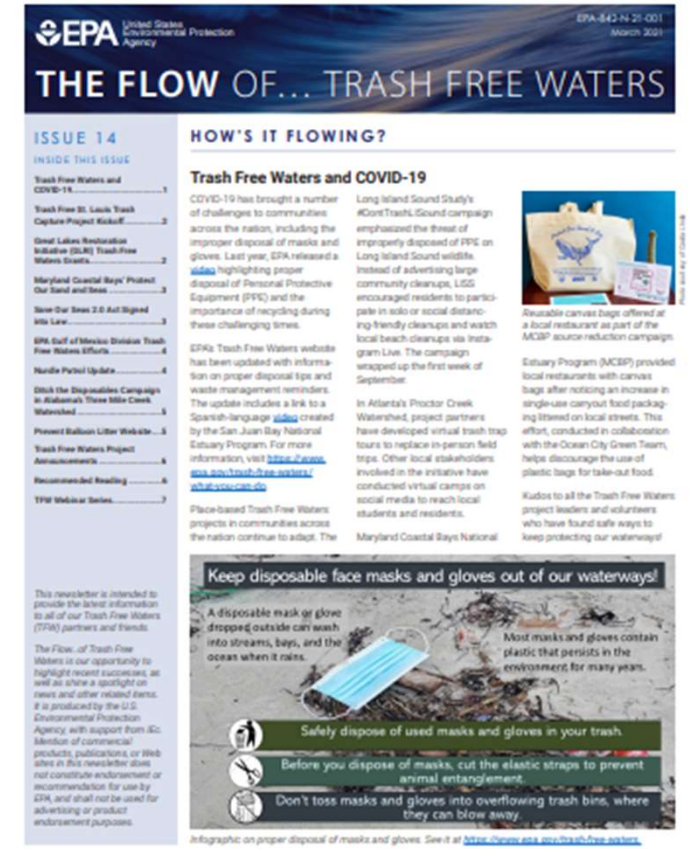
Regular Communications:

- The *Flow* – In-depth newsletter on TFW-related news and projects.

- The *Rapids* – Monthly TFW email including upcoming webinars and conferences, funding opportunities, news & announcements, and the latest in microplastics research.

TFW Webinar Series:

- Quarterly webinars with experts on TFW topics.



EPA United States Environmental Protection Agency

EPA-842-N-21-001
March 2021

THE FLOW OF… TRASH FREE WATERS

ISSUE 14

INSIDE THIS ISSUE

HOW'S IT FLOWING?

Trash Free Waters and COVID-19

COVID-19 has brought a number of challenges to communities across the nation, including the improper disposal of masks and gloves. Last year, EPA released a video highlighting proper disposal of Personal Protective Equipment (PPE) and the importance of recycling during these challenging times.

EPA's Trash Free Waters website has been updated with information on proper disposal tips and waste management reminders. The update includes a link to a Spanish-language video created by the San Juan Bay National Estuary Program. For more information, visit https://www.epa.gov/trash-free-waters/what-you-can-do.

Place-based Trash Free Waters projects in communities across the nation continue to adapt. The Long Island Sound Study's #DontTrashLISound campaign emphasized the threat of improperly disposed of PPE on Long Island Sound wildlife. Instead of advertising large community cleanups, LISS encouraged residents to participate in solo or social distancing-friendly cleanups and watch local beach cleanups via Instagram Live. The campaign wrapped up the first week of September.

In Atlanta's Proctor Creek Watershed, project partners have developed virtual trash trap tours to replace in-person field trips. Other local stakeholders involved in the initiative have conducted virtual camps on social media to reach local students and residents.

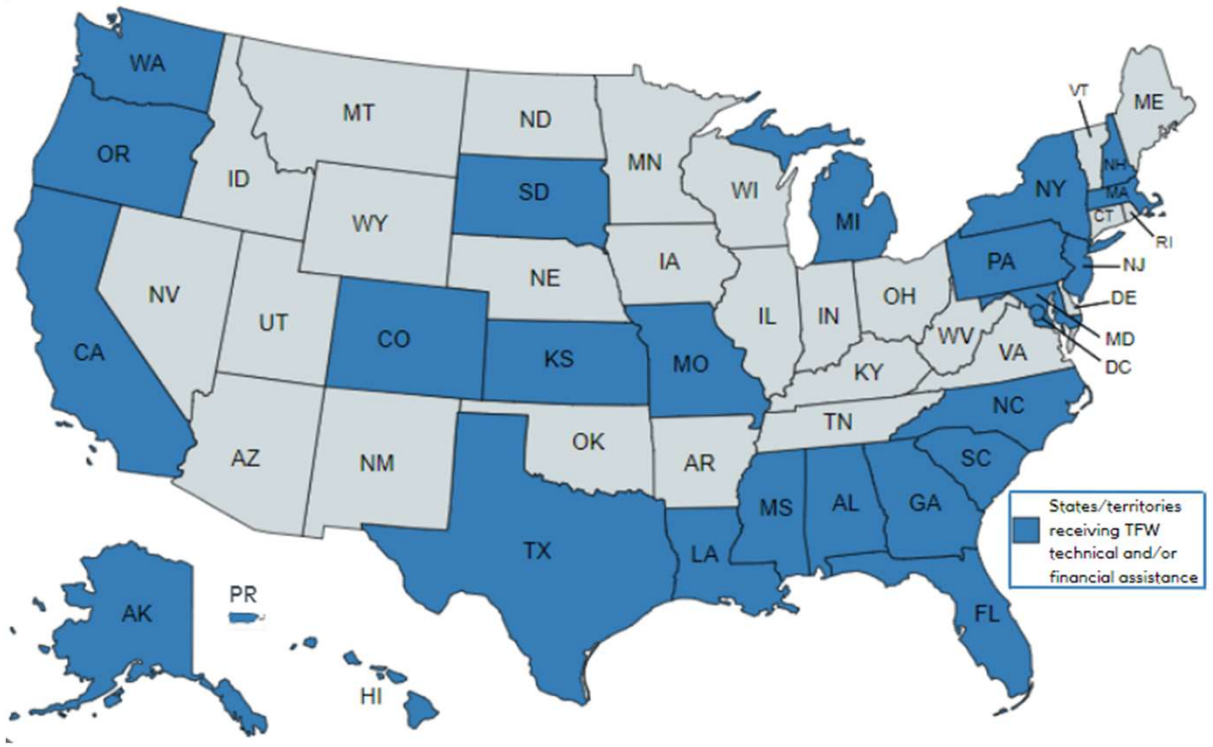
Maryland Coastal Bays National Estuary Program (MCBP) provided local restaurants with canvas bags after noticing an increase in single-use carryout food packaging littered on local streets. This effort, conducted in collaboration with the Ocean City Green Team, helps discourage the use of plastic bags for take-out food.

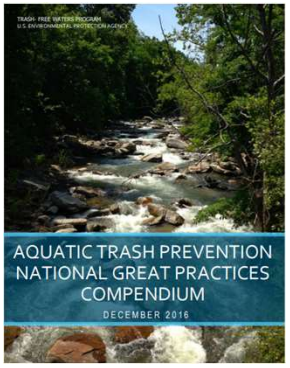
Kudos to all the Trash Free Waters project leaders and volunteers who have found safe ways to keep protecting our waterways!

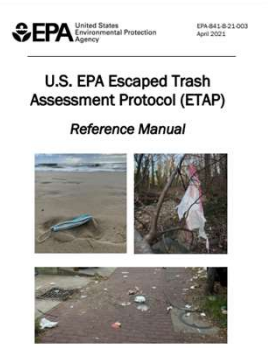
Reusable canvas bags offered at a local restaurant as part of the MCBP source reduction campaign.

Infographic on proper disposal of masks and gloves. See it at https://www.epa.gov/trash-free-waters.

PLACE-BASED PROJECT EXAMPLES







80+ place-based projects across all 10 EPA Regions received TFW technical and/or financial support since 2013

200+ additional trash related projects totaling $24.2 Million implemented through other EPA programs

20+ published TFW technical reports, tools, and resources

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.

SANTA MONICA BAY RETHINK DISPOSABLE

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.

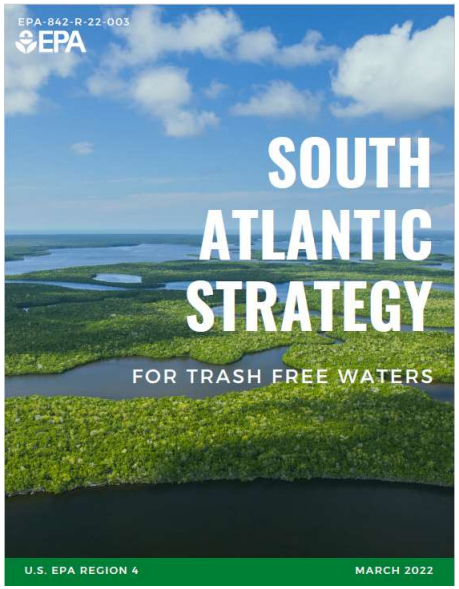
The project has since been expanded to other area restaurants.

SOUTH ATLANTIC STRATEGY

- Intention: Help stakeholders in NC, SC, GA, and FL explore more effective ways to reduce litter, mismanaged waste, and microplastics from entering regional waterways and eventually the Atlantic Ocean.

- Hosted 8 state-specific and regional stakeholder engagement workshops over the past few years, leading to the development of the SAS – a compendium of >70 project concepts falling under 6 agreed-upon priority goals.

- Complementary efforts: SAS Funding Compendium, SAS Online Implementation Tool, and ongoing regional discussions



BARNEGAT BAY REUSE CAMPAIGN

- Outreach campaign: posters, radio ads, digital boat ads, social media posts, website.
- Message: encourage residents and tourists to transition away from single-use plastics with reusable swaps.
- Impact measurement: interviews and litter surveys.
- Next steps: analyze results and summarize in case study

CURBSIDE DISPOSAL PILOT PROJECT

- Pilot project with Washington DC to improve resident trash disposal behavior to minimize unintentional spillage of trash.
- Goal: educate residents about proper waste containment and encourage reduced unintentional leakage associated with curbside trash collection.
- Findings suggest the program had a positive impact.
- A case study narrative outlining data collection methodology, findings, and lessons learned has been posted for other municipalities.

OTHER OFFICE OF WATER ACTIVITIES

- Integrated Report memorandum incorporating trash directives and providing examples of trash water quality standards.
- Stormwater permit program Sector Specific Fact Sheets.
- Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.
- Other potential actions with Nonpoint Source Program, Effluent Limitation Guidelines, and Pretreament Standards.

Romell Nandi

US EPA

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www.epa.gov/trash-free-waters