

# The Rapids: US EPA's Trash Free Waters Monthly Update

<https://www.epa.gov/trash-free-waters>

---

## Introduction

The US Environmental Protection Agency's Trash Free Waters (TFW) program proudly presents *The Rapids*, a monthly information resource for interested stakeholders around the country. Below, you will find pertinent information on upcoming funding opportunities, webinars, and conferences. *The Rapids* will also include job postings, microplastics research findings, and informative Web links. *The Rapids* has traditionally been a section of *The Flow*, but the TFW program wanted to get valuable information out to stakeholders on a more timely basis than we are able to do via *The Flow*. Please understand that *The Rapids* is not intended to replace *The Flow*, which will still come out 3-4 times per year.

Be on the lookout for *The Rapids* on the first Monday of each month!

Thank you.

Romell Nandi  
Environmental Protection Agency  
Trash Free Waters Program Lead

---

## EPA Announcements

EPA Administrator Andrew Wheeler recently released a video highlighting the importance of recycling and proper management of Personal Protective Equipment (PPE) during COVID-19. Watch [here](#).

EPA's Trash Free Waters website was recently updated with information on proper disposal tips and waste management reminders during and after the coronavirus public health emergency. The webpage features the aforementioned Administrator's video as well as a Spanish-language video created by the San Juan Bay National Estuary Program in Puerto Rico, which outlines how improperly disposed of Personal Protective Gear (PPE) can impact our waterways. For more information, please click [here](#).

Trash Free Waters regional project highlights and success stories were recently published on the EPA's TFW website. Check them out [here](#):

On Earth Day 2020, EPA's Gulf of Mexico Division released a tentative list of awardees for the Waterway Trash Reduction Grant in the Gulf. This grant will provide over \$7.8 million in funding to 17 recipients for innovative projects focused on reducing the amount of trash in our waterways through trash prevention and/or removal. Awardees can be found [here](#).

The Great Lakes Restoration Initiative received an additional \$20 million in funding in April. A total of \$2 million of these additional funds will be used to continue efforts to provide healthy habitat for fish and wildlife in the region through the Great Lakes Trash Free Waters Grant Program. Read all about it [here](#).

Marine litter and Trash Free Waters efforts have also been recently highlighted on social media, including EPA Instagram posts about what you can do to reduce marine litter (see highlights [here](#)) and information on proper waste disposal practices (found [here](#)). Recent EPA Twitter posts included a poll on the most effective way to prevent marine and aquatic debris can be found [here](#), sharing the Spanish-language video on proper PPE disposal are located [here](#), and a sharing the EPA Administrator Wheeler video asking citizens to "Recycle More, Recycle Right" and to refrain from littering is posted [here](#).

On May 28, Administrator Wheeler visited the TFW trash traps in Atlanta's Proctor Creek, where he noted, "The Proctor Creek Trash Trap Project is a great example of how partnerships between public and private sectors can produce better environmental solutions for Americans." The full story is posted [here](#).

---

## Funding Opportunities

### **The Water Research Foundation (WRF) Research Priority Program**

WRF has funded 12 new Research Priority Program projects with a total funding amount of \$2,125,000. This research allocation will be significantly leveraged with partnership funding and in-kind support. Requests for Proposals (RFPs) for these projects will be released in August 2020. Please track progress [here](#).

### **National Estuary Program Coastal Watersheds Grant Program RFP**

Restore America's Estuaries, in close coordination with and financial support from EPA, is a newly created national competitive grants program which will administer the NEP Coastal Watersheds Grant Program. This grant program funds projects within the NEP geographic areas and supports Congressionally-set priorities including: loss of key habitats, harmful algae blooms, invasive species, flooding and coastal erosion, nutrients, and contaminants of emerging concern such as microplastics. RAE will conduct an annual solicitation with approximately \$1 million awarded each year. Each sub-award will range between \$75,000 and \$250,000.

- *Prospective applicants are encouraged to participate in an informational webinar, which will occur on Wednesday, June 3, 1:00-3:00 pm ET. The webinar will be recorded for those unable to participate. To participate, please register [here!](#)*

### **Wild & Scenic Rivers Community Watershed Science Funding**

River Network and the National Park Service (NPS) are excited to announce a funding opportunity for nonprofit organizations working on community watershed science activities on NPS administered Wild and Scenic Rivers and Partnership Wild and Scenic Rivers. Activities that meet the goals of this funding include, a) Water quality, quantity and habitat monitoring; b) Plant and animal inventory and monitoring; c) Quantification of pollution sources (including trash); and d) Stream restoration activities using green infrastructure (e.g. riparian restoration, habitat improvement). There is currently a total of \$45,000 available. Groups are eligible to apply for one grant of \$3,000-\$10,000. Application due by June 8th, 2020. [Learn more here!](#)

### **Sea Grant Programs Requesting Proposals for 2020 LISS Grant Program**

The Connecticut and New York Sea Grant Programs are soliciting preliminary proposals for the 2020 Long Island Sound Study Research Grant Program. The proposals are invited for the funding period of March 1, 2021 to February 28, 2023. Any investigator seeking support for this period must submit a preliminary proposal via NYSG's electronic submission website by June 8 at 5pm EDT. About \$3 million in funding is expected to be available for one- or two-year projects. The intent of the grant program is to fund research that will support the management of Long Island Sound and its resources. For a copy of the complete RFP please refer to: [this link](#) and [this link](#).

### **National Science Foundation Proposal: Micro- and Nano-plastics**

The National Science Foundation seeks proposals that tackle some of the fundamental scientific questions underlying micro- and nano-plastic characterization, behavior, and reactivity in the environment, as well as their elimination from land and water systems. NSF is considering proposals in a wide range of research having to deal with chemistry, toxicity and the geoscience, ecological and evolutionary science interactions of micro- and nano-plastics as well as solutions regarding engineering, innovation, and education around the topic. [Learn more by clicking here!](#)

### **EPA 2020 Healthy Communities Grant Program**

The Healthy Communities Grant Program is EPA New England's main competitive grant program to work directly with communities to support EPA's "Back-to-Basics" agenda to reduce environmental risks, protect and improve human health and improve the quality of life. Proposals due on June 5th, 2020! [Learn more here!](#)

### **EPA's State Environmental Justice Cooperative Agreement Program – COVID-19 Projects RFA**

EPA is working to improve the environment and public health conditions of low-income and minority communities through our daily efforts to ensure all Americans have clean air, safe water, and access to information to make decisions to protect personal and public health. As part of these efforts, EPA has re-opened the State Environmental Justice Cooperative Agreement Program (SEJCA) and expanded its availability to include states, local governments, tribes and territories. EPA is giving a special consideration to those applications aimed at addressing the impacts of the COVID-19 pandemic on urban and rural low income and minority communities. EPA anticipates making five awards in amounts of up to \$200,000 per award for a two-year project period. The opportunity closes on June 30, 2020 at 11:59 PM (ET). [Learn more here!](#)

---

## Save the Dates/Calendar

**June 1st-5th: Virtual Ocean Dialogues, hosted by the World Economic Forum and Friends of Ocean Action**

The Virtual Ocean Dialogues will connect communities seeking innovative and bold ways to promote a healthy ocean. This virtual conference is open to all and will feature a series of panels on key challenges facing the ocean, including how to stem the tide of marine pollution. The full program and registration details will be available soon [here](#).

**June 2nd-6th: 2020 UN Ocean Conference - POSTPONED UNTIL A LATER DATE (TBD)**

For more information click [here](#).

**June 3rd: (10am EDT) WasteWise webinar on “International Development in Single Use Plastics”**

Markets and legislators worldwide have increasing pressure to develop legislation banning single-use plastics. This panel webinar, moderated by Jonathan D. Cocker of Baker McKenzie and with speakers from Circular-Vision, G A Circular, and Eunomia Research & Consulting will outline the recent developments around the world in single-use plastics restrictions and options for industry in response. For more information, click [here](#).

**June 3rd: (6:30pm-9pm EDT) “Story of Plastic” Documentary Screening & Panel (Michigan Clean Water Action)**

Hosted by Michigan Clean Water Action. Includes a link to the “Story of Stuff” documentary and an invitation to a discussion panel conversation. Click [here](#).

**June 4th: (1pm EDT) “Plastics or Planet? Moving Beyond Plastics” Webinar**

Judith Enck of Beyond Plastics will explore the environmental, economic, and health implications of plastic production, use, and disposal, and will discuss the latest plastic reduction laws. The webinar is co-hosted by the EBM Tools Network and OCTO. To register, visit: [here](#).

**June 5th: World Environment Day!**

**June 6th: (3- 5:15pm EDT) “Microplastics Madness” Documentary Screening and Discussion**

For World Oceans Day, Cafeteria Culture is offering free screenings of their award winning documentary, MICROPLASTIC MADNESS. Told through a refreshing urban youth point of view, the movie links youth activism to two of the most critical issues of our time, plastic pollution and the climate crisis. The screening will be followed by a Q&A with world-renowned ecotoxicologist, Dr. Chelsea Rochman, Ph.D Assistant Professor, University of Toronto, who is featured in the movie alongside the movie’s directors. Register [here!](#)

**June 8th: World Oceans Day!**

**June 8th: (6:30pm EDT) “Story of Plastic” Documentary Screening & Panel (Keep Lee County Beautiful)**

Hosted by Keep Lee County Beautiful, Florida. Includes a link to the Story of Stuff documentary and an invitation to a Q&A discussion session with Dr. Maia McGuire, University of Florida Sea Grant Agent and the developer of the Florida Microplastics Awareness Project. Click [here](#) for more information.

**June 9th, 9:00 AM – 6:00 PM, Capitol Hill Ocean Week 2020 (organized by the National Marine Sanctuary Foundation)**

This is a free online event. Check out the link [here](#).

**June 9th: BlueTech Expo 2020**

The BlueTech Virtual Exhibition, the annual trade show of the International Ocean Science & Technology Industry Association, will be held alongside CHOW this year. Attendance is free and will include virtual access to emerging blue technologies and innovations. [Go here!](#)

**June 9th-11th: Association of State Floodplain Managers Annual Conference (Virtual)**

This three-day event includes daily plenary sessions and 54 concurrent sessions for a total of more than 150 presentations. Topics include: Flood mapping, modeling, and mitigation planning; Natural and beneficial functions of floodplains including stream restoration and watershed management; Coastal resilience; and Stormwater management. [Click here for more information!](#)

**June 10<sup>th</sup>: (2pm EDT) USAID & Ocean Conservancy World Oceans Day Online Event: “Local Solutions to the Global Challenge of Ocean Plastic Pollution.”**

A virtual event highlighting local solutions to addressing the global challenge of ocean plastic pollution. The webinar will feature speakers from USAID, Ocean Conservancy, PepsiCo, Inc., and others. More details are available [here](#). Register for the event at [this site](#).

**June 16th: (12-2pm EDT) Environmental Law Institute Summer Series: Basics of the Clean Water Act (CWA)**

Faculty will explore one of the nation's most significant and pivotal environmental laws, including the regulatory and permitting framework for limiting water pollution, the distinction between point sources and nonpoint sources, CWA compliance, and the Navigable Waters Protection Rule. For more information, click [here](#).

**June 18th: (5:30-6:30pm EDT) "People and the Planet"- MIT Environmental Solutions Initiative**  
Republican United States Senator Dan Sullivan of Alaska and Democratic Secretary of State Alex Padilla of California will participate in a virtual fireside chat on "government action on the environment at the federal and state levels." These distinguished guests will share their experiences and views on bipartisan environmental action and the roles of regulatory and legislative approaches. This free event will also serve as the keynote to the two-day "Plastics and the Environment" workshop mentioned [here](#).

**June 18th-19th: MIT's "Plastics and the Environment: Science Meets Public Policy" Virtual Workshop**

This workshop will bring together scientists, policy-makers, and other stakeholders (foundations, corporations, startups, NGOs) to examine the current state of science, of public policy and of the economic incentives related to plastic pollution; to promote dialogue; and to suggest avenues for future mutual learning and effective collaboration. Registration fee of \$25-\$100 depending on sector. Click [here](#) for more information

**June 19th: (1pm EDT) Break Free From Plastic Pollution Act**

Please join Beyond Plastics' president, Judith Enck, the bill's co-sponsor, Representative Alan Lowenthal (D-CA), Senator Tom Udall's senior policy advisor, Jonathan Black, and Representative Lowenthal's senior legislative assistant, Shane Trimmer for an informative and interactive webinar on the new Break Free From Plastic Pollution Act (SB 3263/ HR 5845).

**June 22nd-25th: SWANapalooza 2020**

The Solid Waste Association of North America will be hosting a virtual conference this year through a combination of livestreamed keynote presentations and discussions and pre-recorded technical presentations. Sessions include: COVID-19 Impacts on Solid Waste Operations, Ocean Plastics and Marine Litter (led by Dr. Jenna Jambeck), and Overcoming Recycling Challenges and Taking Advantage of New Opportunities (EPA's Kathleen Salyer). Register [here](#).

**June 23rd: (noon EDT) "Stream Health and Stormwater - What Can Municipalities Do"**

Hosted by the Allegheny County Conservation District. Municipalities have a part to play in protecting stream health and reducing stormwater. Learn what steps municipalities can take to improve water quality in your community. Click [here](#) for more information.

**June 24th: (1pm EDT) CWP webcast- "Source Water Impacts, Urbanization and Protection"**

The Center for Watershed Protection is hosting a webcast on Source Water Protection plans and identifying tools to mitigate the effects of development and possible pollutant producing behaviors in drinking water watersheds. This webcast will look at planning level tools and review how some communities have addressed their source water protection requirements. Click [here](#) for more information.

**June 24th-25th: California Ocean Protection Council Litter Strategy webinar (timing TBD)**

The summer 2020 workshop has been postponed due to the coronavirus emergency but please continue to hold June 24-25 for a webinar check-in on Ocean Litter Strategy implementation. The webinar will not be an all-day event on both days, but timing and agenda details will be released soon. Click [here](#) for more information.

**The Our Ocean conference in Palau has been postponed to December 7-8th 2020.**

Keep apprised of news by clicking [here](#).

---

## Job Opportunities

**Plastics and Waste Senior Program Officer - World Wildlife Fund**

Link to [WWF Job Opportunity Link](#)

**Communications Manager – Restore America's Estuaries**

Link to [RAE Job Opportunity](#)

**Policy Advisor on Plastics – Oceana (Europe)**

Link to [Oceana Job Opportunity](#)

**Stream Watch Coordinator – Kenai Watershed Forum**

Link to [Kenai Job Opportunity](#)

**Media Specialist - 4Ocean**

Link to [4Ocean Job Opportunity](#)

**Environmental Health Program Manager (focusing on single-use plastics) - National Caucus of Environmental Legislators**

Link to [NCEL Job Opportunity](#)

**Oceans Campaigner – Center for Biological Diversity**

Link to [CBD Job Opportunity](#)

**Clean Cities Blue Oceans Project Intern – Tetra Tech**

Link to [TetraTech Job Opportunity](#)

**Numerous openings - State Sea Grants**

Link to [Sea Grant Job Opportunities](#)

---

## The Microplastics Breakdown

The section below only includes top takeaways on recent microplastics research. If you'd like to subscribe to receiving the complete Microplastics Breakdown, please contact [Bathersfield.Nizanna@epa.gov](mailto:Bathersfield.Nizanna@epa.gov)

**Microplastics disrupt hermit crab shell selection**

This study used shell selection in common European hermit crabs (*Pagurus bernhardus*) as a model to test whether microplastic exposure impacts essential survival behaviors. The study results indicate that microplastics impair cognition (information-gathering and processing) and disrupt this essential survival behavior in hermit crabs. Read the full abstract [here](#).

**Global distribution of microplastics and its impact on marine environment—a review**

The findings of this review article suggest that among 192 countries of the world, only 22.9% (44) of the countries have carried out research regarding microplastics. Most studies that have assessed impacts on organisms have mostly targeted fish (38%), studies on other highly affected organisms such as turtles (1%) are not as well documented. The authors suggest expanding research in all the above areas considering that there are several pristine marine environments and organisms that are yet unexplored. Quantifying research in this regard would enable the development of a microplastic threshold level and the formulation of control measures to reduce the use of plastics and its subsequent threat to the marine environment. Read the full abstract [here](#).

**A Review of Microplastics in Table Salt, Drinking Water, and Air: Direct Human Exposure**

The authors reviewed 46 publications concerning abundances, potential sources, and analytical methods of microplastics in table salt, drinking water, and air. The intake of microplastics via inhalation, especially via indoor air, was found to be much higher than intake via other exposure routes. Read the full abstract [here](#).

**Statistical Curvature Change Analysis of Random-Shape Polyethylene Microplastics and their Toxicity from a Physical Perspective**

Microplastics are normally categorized into the following three types: particles, fibers, and random-shape fragments broken down from bulk plastics. This study demonstrated the *in vitro* toxicity of microplastics of two different shapes of polyethylene (PE). The shapes were: high-density PE (HDPE) microbeads and randomly ground low-density PE (LDPE) from bulk pellets. The authors found that random-shape plastics with sharp edges and higher curvature differences may adversely affect human cells. Read the full abstract [here](#).

**Examination of the Ocean as a Source for Atmospheric Microplastics**

It appears that some plastic particles could be leaving the sea and entering the atmosphere along with sea salt, bacteria, virus' and algae via the process of bubble burst ejection and wave action. The authors reviewed evidence from existing literature and followed this with a pilot study analyzing microplastics in sea spray.

The study found evidence of microplastics particles in marine boundary layer air samples on the French Atlantic coast during both onshore and offshore wind scenarios. The results also indicated that there is a potential for microplastics to be released from the marine environment into the atmosphere by sea-spray. Read the full abstract [here](#).

**Microplastics in Wastewater: Microfiber Emissions from Common Household Laundry**

Synthetic fibers released during the washing of textiles are a source of microplastics (also known as microfibers or fiber fragments), which reach aquatic ecosystems from sewer discharges, even when there is retention in wastewater treatment plants. The authors focused on microfiber emissions from washing of textiles in a domestic environment by collecting wastewater from washings of a mix of clothing from a household of four people. Results estimated an average emission rate of 18,000,000 synthetic microfibers for a reference load of six kg of synthetic fibers. Read the full abstract [here](#).

**Macro and Microplastics in Stormwater and Combined Sewer Overflows in Paris Megacity (Conference Paper): Proceedings of the 2nd International Conference on Microplastic Pollution in the Mediterranean Sea.**

Stormwater and combined sewer overflows (CSO) might represent an important source of macro and microplastics in the environment. This paper examined macro and microplastic concentrations in (i) stormwater and grid refusals at the outlet of a runoff water pipe located in Sucy-en-Brie (a suburb of Paris, France) and (ii) in CSO discharges at the Clichy outfall (another suburb of Paris, France). Microplastics were sorted, weighed and classified. Full abstract available [here](#).

**Detection and occurrence of microplastics in the stomach of commercial fish species from a municipal water supply lake in southwestern Nigeria**

The authors screened and detected microplastics in the stomach of a select group of commonly consumed fish species from a Lake Eleyele in Nigeria - a key water supply reservoir. A total of 109 fish samples consisting of eight species were collected between February and April, 2018. Microplastics were present in seven of the screened species. Ecological variables such as habitat, feeding mode, and trophic levels were identified as critical factors that may determine and influence microplastic uptake in the fish population. Read the full abstract [here](#).

**If you'd like to see your posting in this email, please email [Marshall.Layne@epa.gov](mailto:Marshall.Layne@epa.gov) with any suggestions!**