

EPA Introductory Comments to the ISSC *Spring 2023* Executive Board Meeting, *March 18, 2023*

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(Revisions since 10/25/2022 in red bold italics)

EPA, in addition to implementing the Clean Water Act programs for bacterial pathogen standards, monitoring, permits, assessment, total maximum daily loads (TMDLs) and enforcement; is engaged in these topics:

0. To find on information about COVID-19 (the illness) or SARS-CoV-2 (the pathogen), go to:

<https://www.epa.gov/coronavirus> This is an emerging, rapidly evolving situation and the [Centers for Disease Control and Prevention](#) will provide updated information as it becomes available, in addition to updated guidance. These EPA websites provides key resources on the coronavirus disease (COVID-19). EPA is continually updating our:

[frequent questions related to Coronavirus \(COVID-19\).](#)
[Coronavirus \(COVID-19\) Guidance Documents for Field Activities](#)
[Coronavirus \(COVID-19\) and drinking water and wastewater](#)
[Water utility resources for the COVID-19 pandemic](#)
[Tribal water utility resources for the COVID-19 pandemic](#)

1. Clean Water Act Recommended Water Quality Criteria for Recreational Waters (Swimming) [Katherine Bentley]

- EPA published final recreational water quality criteria in November 2012.
- EPA's implementing guidance discussing alternative indicators and methods is available at: <https://www.epa.gov/wqc/recreational-water-quality-criteria-and-methods#rec2>
- The next review of the 2012 ***Criteria is underway***. The EPA is currently considering the content of the 2022 review and whether or not revisions to the 2012 criteria will be necessary. The use of qPCR and ongoing research in methods and indicators continue to strengthen and augment the tools available to support the current criteria. <https://www.epa.gov/wqc/five-year-reviews-epas-rwqc>

2. Development of Recreational Water Quality Criteria for Coliphage [John Ravenscroft]

- ***EPA is continuing to develop recommendations*** for coliphage, a viral indicator, to ensure public health protection from water sources that have been influenced by fecal contamination or wastewater discharge.
- In April 2015, EPA published a literature review on the state of the science describing the usefulness of coliphage as an indicator.
 - Available on our EPA microbial pathogen website: <https://www.epa.gov/wqc/microbial-pathogenrecreational-water-quality-criteria#coliphage>
- 2019: EPA has validated and posted two microbiological performance-based coliphage enumeration methods on our Clean Water Act Analytical Method webpages (<https://www.epa.gov/cwa-methods/other-clean-water-act-test-methods-microbiological>):
 - 1696: Characterization of Human Fecal Pollution in Water by HF183/BacR287 TaqMan® Quantitative Polymerase Chain Reaction (qPCR) Assay® (March 2019)
 - 1697: Characterization of Human Fecal Pollution in Water by HumM2 TaqMan® Quantitative Polymerase Chain Reaction (qPCR) Assay® (March 2019)
 - For more information, please visit: <https://www.epa.gov/cwa-methods/other-clean-water-act-test-methods-microbiological>
- National Recreational Water Quality Workshop: the week of April 5, 2021
Agenda <https://www.epa.gov/wqc/recreational-water-quality-criteria-and-methods#national>

3. EPA Development of Recreational Ambient Water Quality Criteria (AWQC) or Swimming Advisories for Cyanotoxins [John Healey, Lars Wilcut] also see #5

- EPA published final recommendations for microcystins and cylindrospermopsin in May 2019.

<https://www.epa.gov/wqc/recreational-water-quality-criteria-and-methods#rec3>

- In 2019, EPA produced infographics to help educate the public on the basics of HABs (see <https://www.epa.gov/cyanohabs/infographics-help-educate-public-habs-basics>)
- In 2021, EPA published a technical support document, Implementing the 2019 National Clean Water Act Section 304(a) Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsis, to support states and authorized tribes in implementing the 2019 criteria.

4. Ocean and Coastal Acidification (OCA) [Holly Galavotti]

- *Monitoring*
 - ***In 2022, EPA published the report, Using Data Repositories for Ocean and Coastal Acidification Monitoring Data. EPA evaluated the use of public data repositories and shared best practices for management, storage, and sharing of ocean and coastal acidification monitoring data collected by the National Estuary Programs and citizen science groups.***
 - In August 2021, EPA published a journal article: [Integrating high resolution coastal acidification monitoring data across seven U.S. estuaries](#). This detailed analysis of the coastal acidification monitoring data collected at seven National Estuary Program sites demonstrate that high-quality carbonate chemistry observations can be recorded from estuarine environments using autonomous sensors originally designed for open-ocean settings.
 - In July 2021, EPA published the report: [Measuring coastal acidification using in situ sensors in the National Estuary Program](#). This Report details the experiences of ten National Estuary Programs and their partners in conducting high resolution coastal acidification monitoring using autonomous, in situ pH and pCO₂ sensors from 2015 to 2020.
 - In May 2021, EPA published the [EPA Resource Guide for Managers of Coastal Watersheds with Coral Reefs](#). The purpose of this document is to provide a general overview of the most relevant EPA programs and tools that can help watershed managers address land-based sources of pollution that impact coral reefs.
 - EPA added a coastal acidification monitoring research parameter, total alkalinity, to the 2020 National Coastal Condition Assessment.
 - In 2020, EPA held two recorded webinars on [Coastal Acidification Adaptation and Mitigation Strategies and State Legislation on Ocean & Coastal Acidification](#).
 - EPA contributed technical support and analysis for a coordinated single-day total alkalinity citizen science sampling event called “Shell Day” in the northeastern US that occurred on August 22, 2019 & 2022. Check out #shellday on twitter, or <http://www.necan.org/shellday>
 - In 2018, EPA released guidelines for measuring changes in seawater pH and associated carbonate chemistry in coastal environments of the Eastern United States (Adam Pimenta and Jason Grear).
<https://www.epa.gov/sciencematters/guidelines-measuring-changes-seawater-ph>
 - Visit our website: What EPA is Doing to Address Ocean and Coastal Acidification
 - <https://www.epa.gov/ocean-acidification/what-epa-doing-address-ocean-and-coastal-acidification>
- *Research on Ecological and Economic Impacts and Tools for Addressing OCA*
 - ***In 2022, EPA published the paper Economic Impacts of Ocean Acidification: A Meta-Analysis.***
 - EPA funded the *Ocean to Plate to Ocean* pilot study in the Casco Bay National Estuary Program that tests the impact of deposition of shell material on pH and shellfish recruitment in tidal flats and demonstrates the feasibility of a shell collection program in Maine. Check out this video:

<https://www.newscentermaine.com/article/news/shuck-it-then-chuck-it/97-857520b0-b5a9-42a9-afd3-00d671afc824>

- *Interagency and Intra-Agency Coordination*
 - EPA is a member of the Interagency Working Group on Ocean Acidification (IWG-OA). The IWG-OA is developing reports on Coastal Community Vulnerability to Acidification and Monitoring Prioritization. The IWG-OA spearheaded an [Ocean Acidification Information Exchange](#) in collaboration with the Northeastern Regional Association for Coastal Ocean Observing Systems (NERACOOS) to share resources, access up-to-date information, and interact across disciplines and regions.
 - EPA is a member of the Coral Reef Task Force which has dedicated a working group to climate change and ocean acidification.
 - EPA has an Agency-wide Ocean and Coastal Acidification Coordination Workgroup. The workgroup was formed to foster coordination across the Agency to ensure efforts are leveraged, whenever possible.
 - EPA is a member of the Oregon Ocean Acidification and Hypoxia Monitoring Workgroup (Cheryl Brown, ORD).

5. Harmful Algal Blooms (HABS) [Dana Thomas]

- EPA co-chairs with NOAA the Interagency Working Group on HABHRCA (IWG-HABHRCA). The IWG coordinates and convene Federal agencies to discuss HAB and hypoxia events in the United States, and develops action plans, reports, and assessments of these situations. ITRC is excited to host the ITRC Harmful Cyanobacteria Blooms (HCBs) training which highlights key information found in the ITRC Guidance Documents, Strategies for Preventing and Managing Harmful Cyanobacterial Blooms (HCB-1), [Strategies for Preventing and Managing Harmful Cyanobacterial Blooms \(HCB-1\)](#), and [Strategies for Preventing and Managing Benthic Harmful Cyanobacterial Blooms \(HCB-2\)](#). This is an incredible resource free to all attendees to help establish basic understanding of the prevention and management of HCBs. For more information, see ITRC's Upcoming Training & Events: <https://itrcweb.org/home>
- For general information regarding cyanobacteria and their toxins, please go to the Cyanobacterial HABs in Water Bodies website here: <https://www.epa.gov/cyanohabs>

6. Microplastics work with potential implications for shellfish - Trash Free Waters Program [Romell Nandi; Nizanna Bathersfield]

- EPA's [Trash Free Waters program](#) is facilitating Agency efforts to conduct and disseminate research on methods for collection, extraction and identification of nano- and microplastics for surface waters (including in the marine environment) and sediments, as well as quantification, fate, and risk assessment of microplastics.
- The Trash Free Waters Program and NOAA's Marine Debris program, on behalf of the Interagency Marine Debris Coordinating Committee (IMDCC) have published in the Federal Register for public comment a draft report to Congress focused on microfiber pollution, which includes a section on the impacts of microfibers on biota. This effort was undertaken pursuant to a mandate directing the IMDCC to develop a microfiber pollution report under Section 132 of the Save Our Seas 2.0 Act. ***The public comment period for the report closed on October 17, 2022, and a revised version of the document in response to the comments received is being developed, which will eventually be submitted to OMB for review.***

7. Fish and Shellfish Program Newsletter [Sharon Frey]

- The bi-monthly newsletter focuses on current information about shellfish, finfish and crustaceans. The newsletter provides a snapshot of recent advisories, federal agency activities, publications, awarded research, and future meetings and conferences. The newsletter can be found at this link: <https://www.epa.gov/fish-tech/fish-and-shellfish-program-newsletter>
- If you wish to be on the email list to receive the newsletter, please contact Sharon Frey at frey.sharon@epa.gov.

8. 2021 EPA-FDA Advice about Eating Fish and Shellfish [Lisa Larimer]

<https://www.epa.gov/fish-tech/epa-fda-advice-about-eating-fish-and-shellfish>

- EPA and FDA provide advice on eating fish and shellfish that is geared toward helping *people* who are pregnant, may become pregnant, *or are* breastfeeding, and *parents and caregivers who are feeding* children, make informed choices about fish that are nutritious and safe to eat as it pertains to methylmercury.
- Fish and shellfish provide protein, are low in saturated fat, are rich in many micronutrients, and provide certain omega-3 fatty acids that the body cannot make and are important for normal growth and development. However, as a result of natural processes and human activity, fish also contain mercury in the form of methylmercury. Methylmercury can negatively affect the central nervous system, particularly the developing brain of a fetus.
- In October 2021, they released updated advice that has been expanded to *include children less than 2 years old and align with the Dietary Guidelines for American 2020-2025, which was released in December 2020. It clarifies that children should eat 2 servings a week from the “best choices” category.*
- It retains the chart with 36 types of fish and shellfish that are “best choices” to eat 2 to 3 times a week; 19 fish that are “good choices” to eat one serving a week; and 7 fish to avoid if pregnant, breastfeeding, or feeding to young children. The advice still recommends that women eat two to three servings (8 to 12 ounces) of a variety of fish and shellfish each week and still includes answers to frequently asked questions.
- “Best Choices” include clam, oyster and scallop. No bivalves are listed under “Good Choices” or “Choices to Avoid”.

9. Fish and shellfish advisory guidance [Lisa Larimer]

- In December 2020, EPA released an update of the 1995 risk communication volume (Volume 4) of the national Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories (<https://www.epa.gov/fish-tech/develop-risk-communication-programs-fish-and-shellfish-consumption-advisories>). This 2020 update, titled Develop Risk Communication Programs for Fish and Shellfish Consumption Advisories, provides states, territories, and tribes information on how to develop a risk communication program in order to clearly and effectively use risk communication methods for fish advisories, especially for communicating to high-risk groups. The updated guidance is web-based and discusses best practices and the use of modern communication methods such as the Internet and social media.
- EPA is currently updating Volumes 1 and 2 of the guidance: Fish Sampling and Analysis and Risk Assessment and Fish Consumption Limits.

10. EPA International Cooperation Website [Bill Kramer]

Collaborating with global and bilateral partners, EPA is working to promote sustainable development, protect vulnerable populations, facilitate commerce, and engage diplomatically around the world, including Protecting the Marine Environment <https://www.epa.gov/international-cooperation>

11. Per- and Polyfluoroalkyl Substances (PFAS) [Susan Euling, [Carey Johnston](#), [Kathern Gallagher](#)]

- On October 18, 2021, EPA announced the agency’s PFAS Strategic Roadmap—laying out a whole-of-agency approach to addressing PFAS. See: <https://www.epa.gov/pfas>
- The roadmap sets timelines by which EPA plans to take specific actions and commits to bolder new policies to safeguard public health, protect the environment, and hold polluters accountable. The actions described in the PFAS Roadmap each represent important and meaningful steps to safeguard communities from PFAS contamination. Cumulatively, these actions will build upon one another and lead to more enduring and protective solutions.
- *EPA recently released the [PFAS Analytic Tools](#) to integrate data about PFAS reporting, testing, and occurrences in communities. The PFAS Analytic Tools make it easier to evaluate the collective PFAS information from 11 different databases that include relevant information. Consolidating all these data sources in one searchable platform will help the public, researchers, and other stakeholders better understand potential PFAS sources in their communities, including potential exposure pathways in communities with environmental justice concerns. Public release of the PFAS Analytic Tools was a commitment included in EPA’s PFAS Strategic Roadmap ([Link to 2022 Progress Report](#) – see p.8).*
- *On May 3, 2022, EPA published draft ambient water quality criteria for [PFOA](#) and [PFOS](#) to protect waters designated for aquatic life.*
- *In November 2022, EPA released a report documenting the Agency’s first year of progress under the PFAS Strategic Roadmap and highlighting key actions ahead. See: [Link to 2022 Progress Report](#)*
- *On March 14, 2023, EPA announced it is proposing a [National Primary Drinking Water Regulation \(NPDWR\)](#) to establish legally enforceable levels, called *Maximum Contaminant Levels (MCLs)*, for six PFAS in drinking water. These include PFOA and PFOS as individual contaminants, and PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as *GenX Chemicals*) as a PFAS mixture. EPA is also proposing health-based, non-enforceable *Maximum Contaminant Level Goals (MCLGs)* for these six PFAS. Public comments are due 60 days after the date of publication in the Federal Register.*

PFAS Strategic Roadmap Office of Water (selected items)

- Publish the final toxicity assessment for GenX and five additional PFAS—PFBA, PFHxA, PFHxS, PFNA, and PFDA—to better understand their human health and environmental effects. (Expected fall 2021 and ongoing)
- Publish health advisories for GenX and PFBS based on final toxicity assessments to enable tribes, states, and local governments to inform the public and take appropriate action. (Expected spring 2022)
- Restrict PFAS discharges from industrial sources through a multi-faceted Effluent Limitations Guidelines program to proactively establish national technology-based regulatory limits, including progress on the nine industrial categories in the proposed PFAS Action Act of 2021. (Expected 2022 and ongoing)
- Leverage National Pollutant Discharge Elimination System permitting to reduce PFAS discharges to waterways to reduce discharges of PFAS at the source and obtain more comprehensive information through monitoring on the sources of PFAS and quantity of PFAS discharged by these sources. (Expected winter 2022)
- Publish improved analytical methods to enable 40 PFAS to be monitored in eight different environmental matrices, and to update methods for drinking-water monitoring. (Expected fall 2022 and fall 2024)
- Publish final recommended ambient water quality criteria for PFAS for aquatic life and human health to help Tribes and states develop standards, write permits, and assess cumulative impacts. (Expected winter 2022 and fall 2024)
- Enhance data availability on PFAS in fish tissue to better assess the impacts of PFAS on the aquatic environment and to inform federal, state, and Tribal efforts to set PFAS fish advisories. For more information, please go to <https://www.epa.gov/fish-tech/studies-fish-tissue-contamination>

- In some states, pollutant levels in certain types of fish and shellfish collected from contaminated bodies of water have led to health-based consumption advisories for some PFAS, particularly PFOS (State Impact Pennsylvania 2018, State of Michigan 2018). For the most up to date information links to state and tribal fish consumption advisory websites <https://fishadvisoryonline.epa.gov/Contacts.aspx>

12. Beach Sanitary Survey App [Samantha Fontenelle]

- In April 2021, EPA allowed participatory/citizen scientists and all other members of the public access to its improved app to help communities identify potential sources of pollution to recreational waters. Everyone can now use EPA's Sanitary Survey App for Marine and Fresh Waters to collect and share data on potential sources of fecal pollution and information on potential harmful algal bloom (HAB) events in local surface waters. EPA has posted a recording of one of the training webinars on how to use the app and download data.
- EPA has updated the paper versions of the marine and freshwater sanitary surveys to match what is in the app and updated the corresponding user manuals.
- In August 2021, EPA released a [Data Export Tool](#) for the app. This new tool makes downloading data quick and easy because it includes all data and photos for one or more surveys in one file.
- EPA will be releasing soon updates to the marine and freshwater routine surveys which will include several changes suggested by users.
- *For more information, please go to <https://www.epa.gov/beach-tech/sanitary-surveys-recreational-waters> or contact EPA at EPA_SanitarySurveyApp@epa.gov to request training or demo on the app.*

13. Vessel Discharges, including Ballast Water (see also #18) [Jack Faulk, Holly Galavotti]

- In December 2018, Congress enacted a new law, the Vessel Incidental Discharge Act (VIDA) with a goal to harmonize the patchwork of U.S. and state vessel discharge requirements. VIDA requires EPA to develop new uniform national standards of performance for incidental discharges, including ballast water, from commercial vessels and for the U.S. Coast Guard (USCG) to develop corresponding implementing regulations two years thereafter to ensure, monitor, and enforce compliance with the new EPA standards. VIDA also preempts states from establishing or enforcing more stringent requirements but does give states the authority to inspect and enforce the new federal regulations. EPA proposed new standards for twenty different incidental discharges (e.g., ballast water, bilgewater, graywater, exhaust gas scrubber washwater) on October 26, 2020. *In early 2023, EPAA announced it will be publishing a supplemental notice to the proposed rulemaking in Fall 2023 to provide clarification on the proposed rule, share new ballast water data that EPA is receiving from the US Coast Guard, and discuss additional regulatory options with a goal to finalize the standards in Fall 2024.*
- Pursuant to the Great Lakes and Lake Champlain Invasive Species Program established under VIDA, EPA, *with support from the Department of Transportation's Maritime Administration (MARAD) and the Great Waters Research Collaborative, is in the third year three of* a multi-year R&D plan to evaluate ballast water management *options* for lakers (i.e., bulk carrier vessels operating solely on the Great Lakes). Importantly, this work will include land-based and shipboard testing of *various* ballast water treatment systems to evaluate the practicability of *managing ballast water given the unique characteristics of these vessels in the challenging waters of the Great Lakes*. More details about this work, including a copy of the full R&D plan, are available on the *Lake Superior Research Institute* website at: <https://www.uwsuper.edu/lisri/gwrc/gllcisp/index.cfm>.

14. Federal Waters [Bill Kramer]

- EPA does not have a role under the Clean Water Act in federal waters (generally beyond 3 nautical miles from the baseline) under the NSSP. State Water Quality Standards do not apply beyond the 3-mile limit (except TX, FL 9 mi.).

15. NPDES Permits and Effluent Guidelines (related to Aquaculture) [Kevin Weiss, Carey Johnston] Meghan Hessenauer

- The National Pollutant Discharge Elimination System (NPDES) program was created under the federal Clean Water Act to protect and improve water quality by regulating operations with point source discharges of pollutants into waters of the United States. These operations are required to obtain coverage under NPDES permits (40 CFR §122.2). An NPDES permit, issued by either EPA or an authorized state/territory, contains industry-specific technology-based and/or water-quality-based limits and establishes pollutant monitoring and reporting requirements to protect the quality of surface waters. An effluent guideline (technology-based limit) has been developed for certain concentrated aquatic animal production (CAAP) facilities (40 CFR §451). The CAAP effluent guideline applies to the facilities that produce 100,000 pounds of fish annually. Facilities that are required to seek permit coverage but are not covered by the ELG (i.e., operations that don't produce 100,000 pounds of fish annually), are subject to technology-based limits based on Best Professional Judgement (BPJ) of the permitting authority.
- NPDES and Aquaculture: <https://www.epa.gov/npdes/aquaculture>
- CAAP Effluent Guideline: 16. <https://www.epa.gov/eg/concentrated-aquatic-animal-production-effluent-guidelines>

16. CWA Section 404 Program [Jennifer Linn, Brian Topping]

The CWA Section 404 establishes a permitting program to regulate the discharge of dredged and fill material into waters of the U.S., including wetlands. EPA jointly administers the program with the U.S. Army Corps of Engineers (Corps). Corps is responsible for permit issuance except where EPA has approved a state or tribe to do so.

Proposed discharges are evaluated for compliance with environmental criteria, i.e., the Section 404(b)(1) Guidelines, developed by the EPA in conjunction with the Corps. Among other things, the Guidelines specify that that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation's waters would be significantly degraded. When an entity applies for a Section 404 permit, it must first demonstrate that steps have been taken to avoid impacts to wetlands, streams, and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts.

Examples of activities related to aquaculture that may be subject to Section 404 permitting requirements include the discharge of dredged or fill material into open waters, wetlands, or vegetated shallows to prepare the bottom substrate for larval shellfish attachment and growth or to construct fishery impoundments.

On Thursday, February 9th, EPA published "[A Review of Compensatory Mitigation in Estuarine and Marine Habitats](#)" to inform regulators, mitigation providers, and the public about compensatory mitigation in estuarine and marine settings. The report explores four habitats: shallow water, seagrass, oysters, and tidal flats (mudflats); it describes each of the habitats' importance and provides examples of mitigation and restoration projects. A comprehensive list of third-party mitigation providers (as of 2021) with estuarine and marine sites and a subset of permittee-responsible mitigation projects from five coastal states is included.

CWA Section 404 Program: <https://www.epa.gov/cwa-404/section-404-permit-program>

17. Marine Protection, Research, and Sanctuaries Act (MPRSA) with the USACE

EPA Ocean Dumping Management Program [Dave Redford]

- The Marine Protection, Research, and Sanctuaries Act (MPRSA), also known as the Ocean Dumping Act, regulates the disposition of any material into the ocean, unless expressly excluded under the MPRSA. Note: the MPRSA applies seaward of the baseline, which includes state ocean water. Generally speaking, the baseline is the mean lower low water line (ordinary low water mark) along the coast or “closing lines” that are drawn on maps across rivers mouths and openings of bays and that are depicted on official United States Nautical Charts (i.e., National Oceanic and Atmospheric Administration (NOAA) nautical charts for a region).
- Section 101 of the MPRSA generally prohibits the transportation of any material for the purpose of dumping in the ocean, unless authorized by permit. The MPRSA prohibits or restricts (primarily in terms of material type, amount and location) ocean dumping that would adversely affect human health, welfare, or amenities, the marine environment, ecological systems, or economic potentialities. In the United States, the MPRSA implements the requirements of the London Convention, an international treaty of global application to protect the marine environment from pollution caused by the dumping of wastes or other matter into the ocean.
- Under the MPRSA, EPA is responsible for establishing criteria for reviewing and evaluating permit applications.
- EPA's ocean dumping criteria consider, among other things: the environmental impact of the dumping on fisheries resources, including but not limited to shellfish, fish, plankton, shorelines and beaches; the need for the dumping; the effect of the dumping on esthetic, recreational, or economic values; the impact on marine ecosystems including potential changes to marine ecosystem diversity, productivity and stability; land-based alternatives to ocean dumping; and the adverse effects of the dumping on other uses of the ocean.
- Regarding who might be subject to MPRSA, the law states:
 - (a) Except as may be authorized by a permit issued pursuant to section 1412 or section 1413 of this title, and subject to regulations issued pursuant to section 1418 of this title,
 - (1) no person shall transport from the United States, and
 - (2) in the case of a vessel or aircraft registered in the United States or flying the United States flag or in the case of a United States department, agency, or instrumentality, no person shall transport from any location any material for the purpose of dumping it into ocean waters.
 - (b) Except as may be authorized by a permit issued pursuant to section 1412 of this title, and subject to regulations issued pursuant to section 1418 of this title, no person shall dump any material transported from a location outside the United States (1) into the territorial sea of the United States, or (2) into a zone contiguous to the territorial sea of the United States, extending to a line twelve nautical miles seaward from the base line from which the breadth of the territorial sea is measured, to the extent that it may affect the territorial sea or the territory of the United States.
- EPA is responsible for issuing ocean dumping permits for materials other than dredged material. In the case of dredged material, the U.S. Army Corps of Engineers (USACE) is responsible for issuing ocean dumping permits and for authorizing federal projects involving ocean dumping, using EPA’s environmental criteria. Permits for, and federal authorizations involving, ocean dumping of dredged material are subject to EPA review and written concurrence.
- EPA is also responsible for designating and managing ocean disposal sites for all types of materials. EPA designates ocean disposal sites through rulemaking and sites are published at 40 CFR 228. EPA bases the designation of an ocean disposal site on environmental studies of a proposed site, environmental studies of regions adjacent to the site, and historical knowledge of the impact of disposal on areas similar to the sites in physical, chemical and biological characteristics. EPA must consider the ocean disposal criteria published in the 40 CFR 228.5 and 228.6, which include, among other things, avoiding areas of existing

fisheries or shellfisheries when selecting a site for designation. In general, sites are selected in areas where disposal will not have a significant impact on various amenities such as fisheries, shellfish resources, coral reefs, endangered species or other legitimate uses of the ocean. By critically analyzing the site selection criteria, EPA assures that the site selected for designation will not likely cause significant adverse impacts to the surrounding marine environment, including shellfish areas. EPA analyzes these impacts through environmental assessments or environmental impact statements for site designations.

- EPA and USACE together develop site management and monitoring plans for each designated ocean dredged material disposal site. EPA's Ocean Dumping Management Program, often in coordination with USACE, conducts oceanographic surveys at these ocean disposal sites to evaluate environmental conditions at the site and to determine what management actions may be needed.
- In the past, chemical and industrial wastes, radioactive wastes, trash, munitions, sewage sludge, and contaminated dredged material were frequently dumped into the ocean. Today, the ocean is no longer considered an appropriate disposal location for most wastes. The vast majority of material disposed in the ocean is uncontaminated sediment (dredged material) removed from our nation's waterways to support a network of coastal ports and harbors for commercial, transportation, national defense and recreational purposes. Other materials disposed in the ocean include human remains for burial at sea, vessels, man-made ice piers in Antarctica, and fish wastes.
- In the MPRSA permitting, site designation and site management processes, EPA carefully considers potential impacts to shellfisheries from proposed ocean dumping and strives to take all possible precautions to protect these valuable areas in all regulatory decisions. To learn more about how EPA's Ocean Dumping Management Program protects human health and the environment from pollution caused by ocean dumping, please visit: <https://www.epa.gov/ocean-dumping>.

18. Vessel Sewage Management (Kelsey Watts-FitzGerald)

- <https://www.epa.gov/vessels-marinas-and-ports>
- Under Clean Water Act (CWA) section 312, EPA promulgates national standards of performance for vessel sewage discharges from marine sanitation devices (MSDs), the devices installed onboard vessels with toilets that either retain sewage onboard in a holding tank or passively treat and discharge sewage to surrounding waters. Within three miles seaward from shore, it is illegal for vessels to discharge raw/untreated sewage. While states are preempted from adopting or enforcing any statute or regulation with respect to the design, manufacture, installation or use of an MSD, the CWA authorizes states to apply to EPA for designation of vessel sewage no-discharge zones (NDZs) for some or all of a state's waters. An NDZ is an area where the discharge of both treated and untreated sewage from vessels is prohibited. The CWA authorizes three types of NDZ designations and EPA's implementing regulations (40 CFR Part 140) identify the information requirements for a state's application based on the type of designation for which the state is applying. The presence of shellfishing waters is an important factor in considering the need for a complete prohibition on vessel sewage discharges. There are currently 97 designated vessel sewage NDZs across 27 states.
- EPA is in the process of updating guidance for state officials interested in applying for vessel sewage NDZs. In June 2022, the Agency published a Federal Register Notice to solicit public comments on the draft guidance. ***EPA anticipates issuing the guidance in Summer 2023.***

19. WWTP Outfall Locations (Carey A. Johnston, P.E.)

- NPDES permitting authorities (EPA Regions and states) must share permit feature lat/long data with EPA's national NPDES data system (ICIS-NPDES). This was codified in the 2015 NPDES Electronic Reporting Rule ("NPDES eRule") and covers all NPDES-permitted facilities (majors and non-majors). We have a dashboard that shows how well EPA Regions and states are doing at sharing these data for individually permitted facilities (majors and non-majors). Facilities covered by general permits are not on this dashboard as we are still implementing the NPDES eRule for these facilities.
- **See:** https://edap.epa.gov/echo/extensions/NPDES_Data_Sharing/NPDES_Data_Sharing.html (ECHO Gov login required). Note: Set the 'Data Selector' to "Permitted Feature Lat/Lon".
- The actual average flow (at the permit level) is recorded on the NPDES permit application. Usually this is only updated when the permit is issued (or renewed once every five years). See: https://www.epa.gov/sites/production/files/2019-10/documents/form_2a_epa_form_3510-2ar.pdf
- You can use the DMR data to track peak flows as permittees are most often required to report their flows on their Discharge Monitoring Reports (DMRs), which are usually filed monthly. <https://echo.epa.gov/effluent-charts#VA0025143>
- We are just getting started to document requirements from EPA Regions and states to start electronically collecting these data (as required by Phase 2 of the NPDES eRule). It will be a few years before we have a handle on the inventory of SSO/CSOs.

20. Question on Freshwater in the NSSP (from Lars Wilcut)

A question from the context of the EPA Water Quality Standards (WQS) Program):

Does the NSSP have anything for shellfish harvesting criteria in fresh waters?

- Bill Kramer's short answer – not specifically – but I've asked Keith to respond.
- I looked over the 2019 NSSP: <https://www.fda.gov/media/143238/download> - and noted a few points that could inform fresh water WQS criteria.
- The scope of the NSSP is interstate commerce of defined shellfish species (including "clam"). The states (SSCA) define the harvesting areas.
- For states that harvest freshwater shellfish species (e.g., clam), to the extent the harvest is in interstate commerce the NSSP would seem to apply.
- In the NSSP, the pathogens tested for in growing areas include total or fecal coliform, MSC, V.v, V.p., ("natural marine pathogens")
- For recreational waters for primary contact, EPA recommends E. coli and enterococci, but EPA still cites the Gold Book's 14 MPN fecal coliform for shellfish.
- The NSSP says to include pathogens for which tolerance levels are not known (at all or in the NSSP (?) see @.04 D. 3) which could perhaps include freshwater pathogens.
- Table 1 - Poisonous or Deleterious Substances (pp. 243 ep. 254) Note: the term "fish" refers to fresh or saltwater fin fish, crustaceans, other forms of aquatic animal life other than birds or mammals and all mollusks as defined in 21 CFR 123.3(d).
- d) Fish means fresh or saltwater finfish, crustaceans, other forms of aquatic animal life (including, but not limited to, alligator, frog, aquatic turtle, jellyfish, sea cucumber, and sea urchin and the roe of such animals) other than birds or mammals, and all mollusks, where such animal life is intended for human consumption.

- (h) Molluscan shellfish means any edible species of fresh or frozen oysters, clams, mussels, or scallops, or edible portions of such species, except when the product consists entirely of the shucked adductor muscle.
- The NSSP does limit HABs to marine species. (@.04)

21. National Forum on Contaminants in Fish (Fish Forum) (Sharon Frey)

- *The 13th National Fish Forum was held, virtually, on February 28 and March 2, 7, and 9. EPA sponsors the National Forum on Contaminants in Fish to bring together states, tribes, federal agencies, local governments, academia, industry, environmental groups, and healthcare organizations to discuss the many issues related to contaminants in fish. This year's Fish Forum included a day and a half dedicated to PFAS, sessions on other contaminants in fish (e.g., mercury), fish consumption and equity, fish data tools, and risk communication. This was the largest Fish Forum, ever with more than 700 in attendance including 62 presentations and 15 posters.*
- For more information, visit <https://www.epa.gov/fish-tech/2023-national-fish-forum>

22. Improving Response and Tracking of Sewer Spills (Carey A. Johnston, P.E.)

- Sewer systems are a hidden, but critical component of our country's infrastructure that transport domestic and industrial wastewater to treatment facilities. Occasionally, these sewer systems overflow and release sewage into the environment and into homes. Federal regulations under the Clean Water Act National Pollutant Discharge Elimination System (NPDES) program require basic data reporting about these releases to their permitting authorities, but these reports are most often done on paper or in non-standard formats, which limits the availability and utility of these data on a national scale. EPA has recently developed and deployed a new electronic reporting tool, NeT-SewerOverflow, so that facilities can submit these data to EPA. EPA deployed the new electronic reporting tool for facilities in New Hampshire and District of Columbia in FY22 and will be onboarding the remaining EPA Regions and 11 states that have elected to use NeT-SewerOverflow in FY23.
- Upon full implementation of NPDES electronic reporting for this sector, EPA, states, tribes, and territories will be able to better estimate the location, frequency, magnitude, and duration of sewer overflows, the environmental and public health impacts, and the potential causes. These sewer overflow data can provide the public with meaningful information on the number and frequency of sewer overflows in their communities. These data can also be used to prioritize decisions on how best to upgrade aging infrastructure and could be integrated with health warnings by local municipalities to protect public health. NeT-SewerOverflow automatically detects and records noncompliance based on the information provided by the facility. This is the same approach used for the Federal biosolids annual report. EPA and states collaborated on defining requirements for NeT-SewerOverflow forms as well as how to configure these forms to detect noncompliance.
- A test version of the application is available at: <https://test.epacdx.net/>. Please contact Carey Johnston (johnston.carey@epa.gov) for more details or training on how to use this application. Please also contact Carey if you would like to provide comments or suggestions on how EPA can make these data available to other Federal, state, and local agencies as well as to the public.