



Minutes

February 4, 2022

Remote via zoom

Attendees:

WAC Members: **Wayne Chouinard** (Chair, Town of Arlington), **Kannan Vembu** (Vice-Chair), **Adrianna Cillo** (BWSC), **Craig Allen**, **Dan Winograd**, **George Atallah**, **James Guiod** (AB), **Karen Lachmayr**, **Martin Pillsbury**, **Mary Adelstein**, **Philip Ashcroft**, **Stephen Greene**, **Taber Keally** (NepRWA) (Members in attendance in **bold**)

Guests: Wendy Leo, Katie Ronan, Sally Carroll, Maret Smolow, David Duest, Denise Ellis-Hibbett (MWRA), Lou Taverna (AB), Cathy Vakalopoulos, Jim Barsanti, Claire Golden, Michele Barden (MassDEP), Bruce Berman (PIAC and SH/SB), Stephen Perkins (MyRWA), Judy Pederson (OMSAP), Katie Webster (PAI)

Staff: Andreae Downs, WAC Executive Director

VOTE: January minutes

REPORTS:

MWRA: Staff is now back in-person for all but snow days. Public meeting on the final CSO performance assessment report Feb. 17th.

Advisory Board: Focus now on the MWRA budgets. MWRA gave the Advisory Board its Capital Improvement budget last month, and the operating budget will soon follow. AB budget hearings scheduled for **March 17th**

New Wastewater meters are now all installed, and MWRA is testing the meters and the SCADA system prior to going live with meter readings.

Director: Wipes bill was reported favorably out of the Environment committee; now before Ways & Means. Rep. Dykema has stepped down, so looking for a new champion.

Now a Responsible Flushing Alliance of wipes manufacturers — to follow the CA wipes labelling law, which has near-identical language to the MA bill. Lots of materials for utilities and educators on what not to flush, all audience-tested:

<https://flushsmart.org/>

NEBRA held a scientific panel 2/3/21 on studies showing how PFAS leaches from non-industrial biosolids applied to land. Looking to raise \$1m for a nationwide study.

COVID testing of wastewater continues to be vital to pandemic monitoring. Supply-chain and labor issues are affecting MWRA construction projects.

MWRA pre-payments of the HEEC cable have indeed saved the Authority money, but reminder that the ONLY reason ratepayers were on the hook for an improperly-laid Boston Edison cable is that MWRA was named a co-permittee — something to keep in mind for the Deer Island permit.

\$6.3 m in pre-payment of MWRA debt (defeasance) so far. Savings is the result of MWRA struggling to backfill many of its positions. Full report is attached.

DISCUSSION:

1. Should WAC be the Boston Harbor nominee to the Advisory Board? WAC ED already attends most meetings of the Advisory Board. The Harbor nominee position has remained open. Governor appoints. If WAC were appointed, the Chair, Vice-Chair or ED could be a voting member — similar to communities, who have elected members who send a designee.

Members asked if there were any downsides to WAC being a member, and whether the appointment would add significantly to WAC ED's responsibilities. Also, whether there would need to be non-disclosure or conflict-of-interest issues, and how WAC would determine who would attend for WAC (which was deferred, since there is no appointment yet). Members generally thought it was a good idea, with the understanding that WAC would want to be fully informed of any votes and that any ethical issues were worked out.

VOTE: to communicate WAC's willingness to be nominated as the Boston Harbor member of the Advisory Board. 12 in favor, 1 abstention (Guido)

2. Deer Island Permit—what data does WAC need and consensus on any comments WAC might make?

Wendy Leo—no firm date on a permit, but know that EPA is working on a new permit. Current permit is from 2000.

The Clinton Permit may be up for renewal also.

The standard draft permit comment period is 30 days.



Process/timeline

- Timeline
 - Permit application, at least 6 months before permit expires
 - Draft permit and Fact Sheet
 - <https://www.epa.gov/npdes-permits/massachusetts-draft-individual-npdes-permits>
 - **30 day** comment period
 - Final permit
 - Appeals (anything not appealed goes into effect)
 - Effective date (~60 days from signature)
- Fact Sheet, Draft permit, comments, responses = the administrative record
- Appeals
 - Within 30 days of receipt
 - Can only appeal provisions on which you commented,
OR if there is something added to final that wasn't in the draft
 - Only organizations which commented can appeal
 - Appeals to EPA's Environmental Appeals Board

EPA usually responds best to technical comments, but WAC could make general comments and could request that some of the unusual parts of Deer Island's permit be modified or eliminated (examples:

- Special – unique to DITP
 - Ambient monitoring requirement, with plan attached to the permit
 - "Contingency Plan" to allow for rapid response in case unexpected adverse impacts occurred from relocating outfall
 - Outfall Monitoring Science Advisory Panel
 - Permit limit for dry-day flow
 - Infiltration/Inflow Task Force and regional I/I plan
 - Water conservation requirements
 - Web reporting and repository library

At the time the last permit was issued (1999), the Boston Harbor Project was not complete; there were leaks in the water pipes (unaccounted for water) and excessive

withdrawals from Quabbin as well as sewer pipe leaks (I/I), as well as several large concerns about what the 9-mile outfall might do in the Massachusetts Bay (which is why OMSAP & ambient monitoring were created).

Contingency Plan was to return to discharging into Boston Harbor, which by now is not something anyone in the region wants.

The hard-copies that must be deposited in a library are also something that MWRA hopes are removed, as people now have access to the online reports via their libraries, and it is much simpler to get reports out online.

Some of the possible issues that may be included in the next permit include:



Potential issues for future permit

- Nitrogen
- Co-permittees
- Dilution for bacteria
- *Enterococcus* limit (seasonal?)
- CSO reporting
- Blending
- Loading limits (weekly TSS/BOD)
- Ambient monitoring
- Contingency Plan

Q: how do we know this?

A: These are items that have been included in other permits in Region 1 (which includes Massachusetts), and EPA seems to like standardization across permits.

Why is this important? **Nitrogen** is likely something MWRA should still track, but limits would be very difficult to achieve and would have no environmental benefit. The issue with **co-permittees** is that MWRA and the communities both become responsible for the actions or inactions of each other—when they don't have direct control over each other (although MWRA provides grants & loans for I/I control & repairs).

Advisory Board: Co-permittees can link MWRA & communities together forever — and of course regulators would like one-stop shopping for any sewer overflows. But AB is leaning against this because communities don't want MWRA dictating the pace of their I/I work **and** MWRA doesn't want to have to police communities. Currently, they cooperate nicely.

With the MWRA co-permittee position on the HEEC cable, ratepayers were held fiscally responsible for mistakes made in laying the original cable, although MWRA did not have any role in that work. It is also unlikely that communities want their ratepayers on the hook for repairs made (or not) in another community.

Members: we currently have a wonderful cooperative relationship between communities and the MWRA, and we don't want to complicate that by making MWRA the police. Enforcement should be the role of EPA and DEP.

Director: EPA's interest is in eliminating sewer overflows. And perhaps there is another way that WAC or the Advisory Board can suggest to EPA to address the problem with small communities without the capacity to do I/I repairs. Perhaps a more formalized lending library of expertise, project coordination and equipment for I/I removal, along with the grant & loan money.

Members: Have other communities around the country had similar experiences with EPA and created solutions Boston can use?

MWRA is the region's largest systems, and is overseen directly by EPA (not delegated), so may indeed be unique. Co-permittees is a strictly Region 1 issue.

MWRA is also unique in that its diffuser 9 miles out to sea means that the *Enterococcus* bacteria limits are less relevant, as they are most useful near swimming beaches. EPA uses it widely in most permits now, but there is arguably more harm from the chemical loading, energy usage, and number of trucks that would be needed at DI, versus the relatively minor harm of having higher *Enterococcus* bacteria at the outfall.

CSOs—recent permits have included real restrictions on monitoring, which for MWRA would be very complicated to do.

Blending—because MWRA has a combined system, blending is required to prevent damage to the plant. EPA is inconsistently ruling that some plants have to eliminate all blending instances, others do not. MWRA would prefer to be held to the quality of the effluent, not how it got to that quality.

Ambient Monitoring—has been to MWRA's benefit, but MWRA would prefer more flexibility so it can be updated with an MOU or other instrument.

Contingency Plan—outdated. The treatment process and notifications of any upsets are already required.

Q: Would MWRA prefer OMSAP requirement did not exist?

A: Not sure. MWRA overall is happy to have OMSAP, because it makes us work harder and ensure our scientific efforts are up to snuff.

Members: Quality of MWRA's data for OMSAP is excellent.

OMSAP (Judy Pederson): Has been an excellent partnership—difficult questions about effect of wastewater treatment plants on the bay, and seafood, but a premier program. Made many changes to the monitoring plan since the last permit. Yes, think it adds value.

MWRA feels that over the 22 years of this permit, the effluent has become cleaner, the plant has removed contaminants at levels as low or lower than originally thought. 70x dilution by design.



Receiving water bacteria monitoring in Mass. Bay

- **Fecal coliform** monitoring for **shellfishing** water quality
 - attached to Deer Island permit
 - MA Dept Marine Fisheries and US Food & Drug Admin
 - receiving waters **geometric mean < 14 CFU/100mL**
- Anticipating potential future limit, MWRA added ***Enterococcus***
 - Recreational swimming in Mass Bay is unusual
 - Primary contact recreation standard: **geometric mean < 35 CFU/100mL**



Boston Light Swim
(annual event for
distance-swimming
enthusiasts)

MWRA monitoring data and computer modeling does show that even if the nitrogen released from the outfall were to double, the dissolved oxygen and other effects (algae blooms) remain normal.

Removing nitrogen and *Enterococcus* have real environmental costs without a guaranteed environmental benefit, but that may not factor in to the permit issuance. WAC may want to comment.

Areas of consensus?

- Co-permittees
- *Enterococcus*
- OMSAP and ambient monitoring—is in the current permit, but the details are negotiated with other Federal agencies—MWRA would prefer this model.

Timeline? Michelle Barden: EPA is actively working on this permit. Engaging with National Marine Fisheries on Endangered Species, but that is usually finished after the permit.

Sometime this year? 30 days comment period after that.

But are the fish safe to eat? The monitoring program has shown over & over that the fish are fine to eat. Why not test the effluent? If the effluent quality remains high, the effluent would not be the cause if the fish are not safe to eat.

Andreae will send (by bcc) other areas where WAC might comment to get a sense of where the committee is in agreement so that these can be finalized for a future draft permit.

Next Meeting: March 4, 10:30 am. MWRA CSO final report

Director's Report January-February 2021

WSCAC 1/11

Director's report: DCR hiring, but internal promotions mean vacancies remain.

MWRA has an agreement with CSX, which is buying PanAm Railroad including the stretch over the Wachusett. If realized, this agreement means many improvements for water security: 25 mph, no idling, more of the risk falls on CSX, monthly hazmat reports that are more detailed, notifications of spills or derailments and 24-hour monitoring. Members agree--this is much better and comprehensive.

Members note that Federal law limits train operators' liability to \$5m total. Other concerns are that hazardous materials could cross the reservoir, and extreme weather could still derail those trains.

Sense of meeting: to send a letter to MWRA and join hearings on the railroad safety measures.

Upcoming presentations: DCR access plans for Sudbury and Ware River--had been shelved, but now new director. WSCAC and WAC may also be able to hear from the PFAS interagency Task Force or Combined Heat & Power report on Deer Island's system.

Water quality update--this summer's rain meant more organics were flushed into reservoirs, higher chlorine treatment to fix that, and more chlorine residues--this is WSCAC's March meeting topic

April is budget -- green bonds as possible focus of that

May ?

June a tour--maybe tour site of the prescribed burn in New Salem.

DCR forestry being asked to stop cutting trees & plan for tree planting to offset the Commonwealth's carbon emissions. WSCAC member Bruce thinks legislators are underestimating the climate impacts on the forest, and that the forest needs better management. Heavy logging equipment hurts tree roots and fungal networks in the soils. Thinks DCR should never be cutting high-performing trees. Need thinning instead. He thinks of forestry like sculpture--more important what you leave than what you take.

Sense of meeting--interest in again pushing green certification for the watershed forests. WSCAC will be drafting a letter urging MWRA Board, legislators or others. Also perhaps a one-page explainer for the public, so they understand what good forestry looks like.

STAC report asked for a one-pager similar to what members are asking for--an executive summary that is easier to absorb than the full report.

Advisory Board is looking into "regionalization" or system expansion. Federal, ARPA \$\$ might be used to help communities with PFAS contamination join the MWRA water system.

Paul--case of Sharon--makes sense to connect to MWRA because between drought and local contamination, the town would be more resilient and have better water. ARPA \$\$ that makes the connection cheaper would help. The cost of MWRA water--at about 3x as much (now) as the local wells, may be a political non-starter. But still need to preserve and protect local water systems and ensure that towns prevent contamination, where it's found.

But if ARPA \$ used to waive fees for new communities, isn't that unfair to past or future communities that have to pay full freight?

But--if MWRA sources are exposed to contamination because of the freight trains, then back to where we started--that source needs to be better protected.

Another question is just how many more communities can be safely added to the system.

Also--donor basin study might be helpful--the farmland downstream of the reservoir was unusable because of all the rain this summer--the reservoir spilled a lot, perhaps because it had to.

Suggestion that WSCAC return to pushing water conservation--as that is what has saved communities that now have reduced water supplies because of PFAS contamination (like Sharon)

Suggestion that WSCAC lobby to stop PFAS at source, and to examine the sources in municipal water.

Water Resources Commission 1/13

Director's Report: Sewer Notification Law regulations were published ahead of deadline.

Grants for water supply protection--for buying property--up to \$300K/municipality available

Suggestion that WRC craft policy changes before the next Interbasin Transfer request prompted by PFAS contamination

Grants for culvert replacement in light of climate change available

Hydrologic Conditions

December was among the 20 warmest Decembers on record. Everywhere in MA above normal.

Dry month in the northeast, southeast and Cape/Islands. Groundwater supplies in good condition, lakes and impoundments also. Snow only in the western part of the state, between 3-9". No drought developing.

Drought Dashboard--unveiling. Collaboration with Cornell and NOAA

Interactive hydrologic reports, comparison to historic, etc. on the mass.gov website. Can specify time range, also individual site data and more. Much of the data is collected automatically & uploaded automatically.

Includes national precipitation; national drought, long-term forecast, temperature departure map.

mass.gov/info-details/massachusetts-drought-resources

Massachusetts Drought Dashboard

Home

Monthly Updates ----
Precipitation
Streamflow
Groundwater
Lakes/Impoundments

Weekly Updates ----
Precipitation
Streamflow
Groundwater

Daily Updates ----
Cumulative Precip Graph

Outlooks ----
Day Precipitation
Monthly/Seasonal
Monthly Drought
Seasonal Drought

Other ----

This dashboard provides one-stop access to data for monitoring drought in Massachusetts. The [Massachusetts Drought Management Plan](#) (DMP) uses six indices to inform decision makers on whether drought is occurring in Massachusetts and how intense drought conditions are. The six indices are:

1. [Precipitation](#)
2. [Streamflow](#)
3. [Groundwater](#)
4. [Lakes and Impoundments](#)
5. [Keetch-Byram Drought Index \(KBDI\) – an index of Fire Danger/Potential](#)
6. [Evapotranspiration](#) (Note: Data are in development and not currently available)

The DMP divides the state into seven drought regions and specifies the methods for calculating regional values for each index.

Future climate projections across MA

Current models too rough to be useful for MA. Need models to support planning at a finer grain than currently. Concern is with extreme weather

Look at different emissions scenarios, global climate models, take down to a local watershed level. Each link contains significant uncertainty. Challenges specific to climate projections and quantifying future risk

--bias in climate models (historic patterns) may not be true in future, so may mean model inaccuracies.

Product--projected design storms across MA. Intensity-duration.

Complexity--warmer air holds more water--reasonable to expect more water to come down as rain. Two separate studies of observed data confirm this.

Second product--a stochastic weather generator for climate projections across MA
Verified against historic events

Sewage Notification Law—public meeting for permittees 1/14

DEP held zoom meetings on what it expected of permittees (and boards of health—separate meeting) in light of the new law & regulations:

1. to answer questions,
2. present their draft notification plan and get feedback on it,
3. formulate next steps and
4. map out a path for permittees to meet the requirements.

EoEA has issued a tool for identifying environmental justice communities and language minority areas, which have special rules on translations of notifications and additional places where the law requires notifications +/- or signage.

The law says all reporting and notification requirements must be met by **July 6**. DEP interprets “within reason” that this means having a plan to meet the requirements and requests to the Commissioner for any extensions of time needed by a permittee or municipality.



Goals for Preliminary Plan

Meet all reporting and notification requirements due on July 6, 2022

- Be able to report regulated discharges/overflows to MassDEP
- Be able to issue Public Advisory Notifications
- Be able to notify all required entities, i.e state and federal agencies, Boards of Health, etc.
- Be able to identify EJ Populations
- Be able to identify EJ Populations lacking English language proficiency
- Be able to post translated documents



Environmental Justice Population Definition

A neighborhood that meets 1 or more of the following criteria:

- Annual median household income is not more than 65 percent of the statewide annual median household income;
- Minorities comprise 40 percent or more of the population;
- **25 percent or more of households lack English language proficiency;**
 - **Determine where at least 5% of the population has speakers who self-identify as “do not speak English very well”, and identify these languages that notifications must be translated into.**
- Minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income.

DEP is working to construct a data system online that permittees and communities can enter their notifications into.

Online tool for identifying sensitive populations:



Language Translation Links

- <https://www.mass.gov/doc/massachusetts-cities-towns-with-environmental-justice-populations/download>
- <https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=dffdbf9c109647fc9601f7524c1fd9f4>

These links will also be part of the template for plans that DEP will send permittees and communities.

Notifications can use one advisory, with links to translations on a website. Must also go to news organizations that serve an English-limited community.



Events Requiring Notification

- Any Combined Sewer Overflow;
- Any discharge of partially treated wastewater, including blended wastewater;
- Any Sanitary Sewer Overflow (SSO) that discharges through a wastewater outfall, either directly or indirectly, into a surface water of the Commonwealth;
- Any SSO that flows into a surface water of the Commonwealth and is the result of the sanitary sewer system surcharging under high flow conditions when peak flows cannot be conveyed to a POTW due to capacity constraints; and
- Any SSO that flows into a surface water of the Commonwealth and is the result of a failure of a wastewater pump station or associated force main designed to convey peak flows of 1 million gallons per day or greater.

Signs also need translation—that's a lot of language, so DEP will provide infographics and will allow website links to translations.

Lots of questions on signs and where they need to go. DCR knows that signs will go on its land near outfalls

Definition of partially treated:



Partially Treated Definition

- A discharge through an outfall from a treatment works where all or a portion of the flow is not conveyed through all treatment units.
- Where treatment units are bypassed due to a treatment unit failure.
- Discharges by permittees that utilize seasonal treatment, such as seasonal disinfection, are not considered partially treated provided the permittee is operating its treatment in compliance with its NPDES and surface water discharge permits.
- Where a treatment works is designed, constructed, and operated only to treat flows from a combined sewer system prior to discharge through a permitted combined sewer overflow, such discharges shall in all cases be deemed as partially treated.
- For the purposes of 314 CMR 16.00, blended wastewater is considered to be a type of partially treated wastewater.

What goes in notification plans:



What to include in the plan

- The preliminary CSO Public Notification Plan must include:
 - A description of how the permittee will calculate the estimated volume of discharges or overflows using average data from the prior 3 calendar years.
 - A list of the waters and land areas, including names of waterbodies and municipalities, affected by the permittee's discharges or overflows, and a description of how these affected areas were determined.

Discovery of an event triggers the notification plan



Discovery - Metered

- Each time a permittee receives communication of a potential discharge from the meter deployment, the permittee shall take all actions set forth to confirm the occurrence of a discharge.
 - By meter data, site inspection, or other approved methods.
- In no event shall a permittee spend longer than 2 hours to confirm a discharge (24/7 facilities).
- In no event shall a permittee spend longer than 4 hours to confirm a discharge (non-24/7 facilities).
- If a permittee is unable to confirm that a discharge occurred within the timeframes established herein, it shall presume that a discharge has been discovered.

If the discharge is not metered, need DEP approval and the history of the outfall's discharge frequency and likely volumes. All sensors and inclinometers are considered meters for this regulation.

All SSOs are unmetered



Timeline

Issuance of Public Notification: Permittee is required to issue a public notification as soon as possible, but no later than 2 hours after discovery of a discharge or overflow.

Cessation Public Notification: Permittee shall issue a public advisory notification update 8 hours after the initial public advisory notification is issued.

This update:

- (a) shall clearly indicate that a discharge or overflow is ongoing or has ceased;
- (b) if it has ceased, shall indicate the approximate time of cessation;
- (c) shall update any information that has changed since the initial public advisory notification;
- (d) shall be issued to all parties required to receive notifications under 314 CMR 16.04(4).

If the permittee has reported that the discharge or overflow has ceased at the time of the initial public advisory notification, then an update is not required 8 hours later.



Continuation of a Notification

- For any event for which public advisory notification is required and is still ongoing 8 hours after the initial public advisory notification is issued, a permittee shall continue to issue public advisory notification updates every 8 hours if the discharge is still ongoing, and
- Shall issue a public advisory notification within 2 hours after the discharge or overflow ceases or is projected to cease.



Retraction of a Notification

- Within 48 hours of issuing a public advisory notification, if the permittee becomes aware that no discharge or overflow actually occurred, the permittee shall issue a retraction of the public advisory notification to all parties required to receive notifications under 314 CMR 16.04(4).

DEP allows 2 hours for discovery of a continuously monitored CSO outfall, plus 2 hours to notify. So, a 4 am discharge can be notified at 8 am.

If an event stops before the 8-hour limit, a notification of its cessation can be issued, but one would want to be sure that the rainfall and discharge has stopped, to prevent multiple notifications.

If IT personnel are not on duty 24 hours, that goes into the plan for an extension of time to comply. DEP wants to know how reasonable the regulations are.

After 8 hours of discharge, if continues, have to notify the public. If stops, can notify of the cessation.



Subscriber-based Program to Receive Public Advisory Notifications

- Permittee is required to have a subscriber-based program to allow for any interested party to subscribe and receive public advisory notifications by email or text message.
 - Permittee must include overview details on subscriber-based program.
- Website:
 - Instructions and link to subscribe.
- Public Access Signage:
 - Information on how to subscribe.

DEP will also want to be on the above subscription list. They will have a list of other required email recipients (all of which are state agencies). Permittees need to send DEP the local contact email addresses that DEP wants to notify.

News Organizations—two media outlets need to be notified, and any papers serving language minorities. Do not need ads, just press notifications. DEP is not defining news outlets

Wider notifications are needed in some cases (SSOs)

DEP asks permittees to predict downstream impacts in their plans.

Signage:



Public Access Signage

- Permittee shall install and maintain signage at public access points to waters affected by a potential discharge from a permittee's outfall.
 - Locations for the signage must be based on consultation with boards of health or health departments in the municipalities directly impacted by the discharge.
- **Signage shall be developed using a template provided by the Department** and be able to provide timely information about ongoing discharges to allow municipal boards of health and health departments to provide information about risks associated with ongoing discharges.
- For discharges directly affecting neighborhoods identified as environmental justice populations due to lacking English language proficiency, signage shall provide access to translations in the language(s) most appropriate for those neighborhoods and shall utilize universal symbols.
 - Access to translations can be provided by posting the translations on the permittee's website and providing a link to the website on the sign. Permittees may also choose to use a QR code in addition to the website link.



Public Access Signage

Each sign at a public access point shall identify:

- the existence of the outfall;
- the permittee;
- information about weather events that may cause a discharge;
- a warning of the potential threat to public health by recreating in, or using waters and shores affected by a discharge; and
- information for the public to subscribe to notifications about discharges in local area waters.

Boards of Health need to have signs at discharge sites by July 6.

DEP will provide templates and pictographs, will also help identify the specific languages needed in the regulation. Signs will need a mechanism to access text in the locally prevalent language.

Municipalities will have to place signs downstream of their outfalls, even in other jurisdictions—but only those in MA.

Also, will have to post signs on public access points, such as beaches, public boat ramps and fishing piers. But not to private boat ramps—unclear if needed when the private entity allows public access.

Current NPDES required signage (such as along the Charles and Alewife Brook) can meet the state requirements if they have the water contact information required by the state law.

Betsy Reilley of MWRA noted the number of translations to issue will be a challenge.

Questions: John Murphy: 617-352-3375 or John.j.murphy@mass.gov

MWRA Board 1/19

Commissioner's report: Mass Drought dashboard rollout. Thanks MWRA and the Water Resources staff.

Laskey report: COVID: Spike in infections, had over 100 employees out sick. Dropped to 29 today. Biobot numbers show decline in COVID. Laskey reflected back on when Biobot first came to MWRA to measure opioid levels in wastewater & how that became testing for fragments of COVID RNA. Now Biobot has national notoriety. Maybe we have saved some lives with this program.

Wolowicz: explained the biobot numbers to colleagues and they were amazed that excrement could be put to such productive use.

Laskey: May see once-in-a-generation influx of Federal infrastructure money. Advisory Board would like Board to join them in a committee to lobby for particular expenditures.

Favaloro: Opportunity to do community/regional projects with this funding, if we can get it. DEP and the SRF are coming to the AB tomorrow on how to get ready. Trickle in. EPA hasn't yet crafted the regulations. Will be a good exercise to start.

ANNUAL MEETING -- to elect officers. Same officers.

WASTEWATER SUBCOMMITTEE

Union Park--update to the Memorandum of Understanding with BWSC:

The Union Park Detention/Treatment Facility was constructed to treat CSO flows that are discharged from the Boston Water and Sewer Commission's (BWSC) Union Park Pump Station to the Fort Point Channel. Construction and operation of this facility is part of the court-approved CSO control plan. Some of it is MWRA, and some on BWSC property.

The MoA update streamlines some of the invoice process.

Union Park--management and operation--has been run by Woodard & Curran. New contract executed with W&C for \$6m and 3 years of which MWRA pays 27% and BWSC pays the rest. Also, about \$1m over 3 years for spare parts and maintenance (\$100K MWRA, rest BWSC). Higher cost because of additional maintenance and service.



Theoharides--seeing inflation in staff compensation and materials. Asks for a report to compare costs across several contracts. Laskey--part of the issue here is no real competition--only one bidder. Vitale: BWSC Board approved this, but went through the analysis and felt this contract was in the best interest of BWSC rate payers--increased scope, more employees, pay increases, inflation and life-cycle costs. Walsh--would like to see the breakdown and analysis.

Deer Island Chemical Tank re-lining--change order

Two 1995-era storage tanks--Sodium Hypochlorite and Sodium Bisulfite are getting re-lined. When the old liners were removed, contractor found corrosion. To extend the life of the new liners, patching pockmarked areas with steel-filled epoxy putty for about \$112K and no increase in term.

Headworks design & construction administration

This contract was originally for all 3 headworks, Chelsea Creek, Ward, and Columbus Park, but soon became just Chelsea Creek. Increase of \$150K and no increase in time to give the contractor time to finish request for information documents, additional engineering.

WATER SUPPLY

Wachusett Railroad update

MWRA got everything it wanted from CSX--upgraded tracks, slower speeds (25mph), no stopping in watershed, monitoring equipment, notifications of hazardous materials and derailments.

Surface Transportation Board rules in April whether CSX can buy PanAm.
Laskey: this is a major point of vulnerability for the water system, and feels this plugs that gap.
Thanks Matthew Horan for his tenacity on this issue.

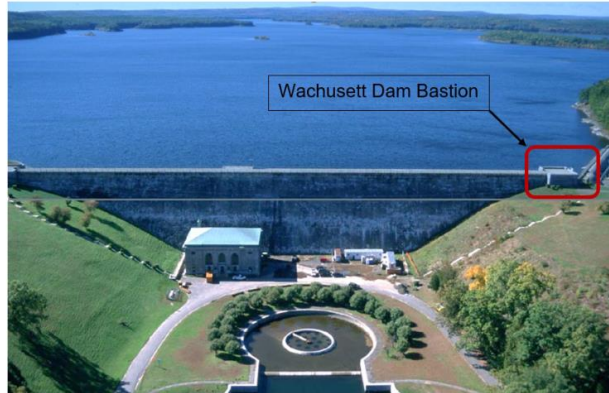
Updates to EPA Lead & Copper Rule 2021 effective October 2024.

Customer communities may want to know:

- Each community will need a complete inventory of all service lines & materials whether public or private.
- Annual notification of anyone with lead/galvanized or unknown material service lines.
- Also need a plan to replace all lead service lines, which may be accelerated.
- Sampling only from lead line homes and changes to methods--more communities will be finding lead.
- New public notification within 24 hours if lead is detected. Less time to prepare & a more difficult message, so will need to prepare in advance.
- Will need to investigate all over-level homes (find and fix).
- 20% of all school and childcare settings will have to be sampled annually. MWRA will do training sessions and provide lab services.
- New federal \$ may help.

Wachusett Dam Bastion--contract award.

This is an historic structure that houses the electrical equipment from the hydropower generator. Addresses interior and exterior cracks and deterioration.



Carroll--contract award

Replacing the chemical feed system. Fluoride and soda ash--15 years old, pipes becoming brittle. Soda ash is corrosive and clogs some of the system. \$2.5 million

Vitale asked about the contractor's record of a fatality--this was a traffic crash with a sister company, and have been doing additional safety training. Foti worries that the bid is so low that there may be future issues.

Contract award--engineer to oversee this. Foti: why the lower hourly rate? The proposed engineer on this contract meets the expertise level needed.

PERSONNEL

Promotion of Maret Smolow to ENQUAL Wastewater Program Manager, environmental compliance and monitoring.

Promotion of Andrea Adams to Program Manager, Structural Engineering

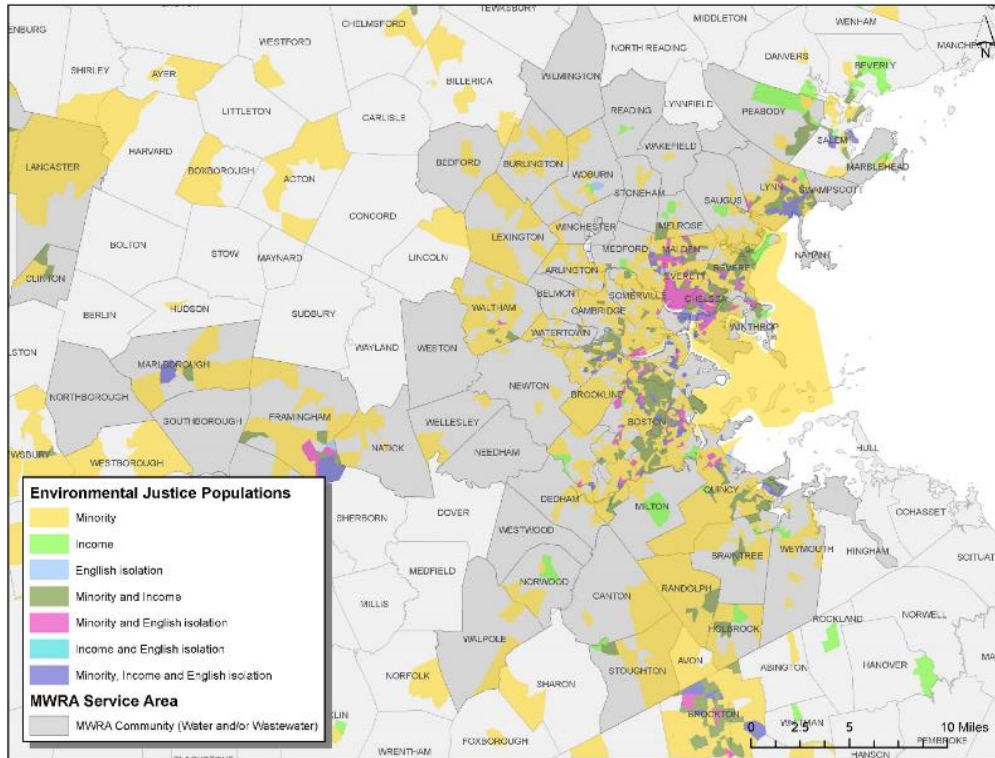
ADMINISTRATION & FINANCE

Contract Award--**Worker's Compensation** administration

MWRA is self-insured for workers' compensation and uses a third-party administrator to process claims, set and adjust claim reserves, issue indemnity payments, review and pay medical expenses, notify and seek payment as needed, and file necessary reports. They maintain an automated web-based claim system. \$196K through March 2025.

Environmental Justice Initiatives-update

This is a new EoEA program, and MWRA facilities are mostly located in environmental justice communities.



Developing additional initiatives, mostly around communication & outreach.

Change Order and Amendment Analysis

Overall Change Order Percentages

	Total Contracts	Chapter 30	Chapter 149
Number of Contracts	134	51	83
Contracts w/change orders	91	28	63
Original Contract Value	\$757,994,674	\$271,601,738	\$486,392,936
Change Order Amount	\$44,881,539	\$15,150,908	\$29,730,630
% Change Order	5.92%	5.58%	6.11%

* This staff summary was not presented as planned last month and was updated to include data to January 2022.

Examples of reasons for change orders are unknown conditions, unforeseen conditions--leaking valves, corrosion not seen when tanks were full, or the condition of walls under the siding at Chelsea Creek Headworks--below



Figure 2 - Headworks Siding Removed

Most contracts do not have change orders. MWRA regularly pursues cost recovery. Some things MWRA adds on--like making the Wachusett Pump Station Net Zero, or adding stop logs to a project underway.



Figure 4 - Headworks Flood Barrier

HEEC Cable financial update



MWRA paid 50% upfront to decrease the cost of the new cable. Now know final numbers, and know that the payments can be smoothed over several years, with no year-over-year shocks.

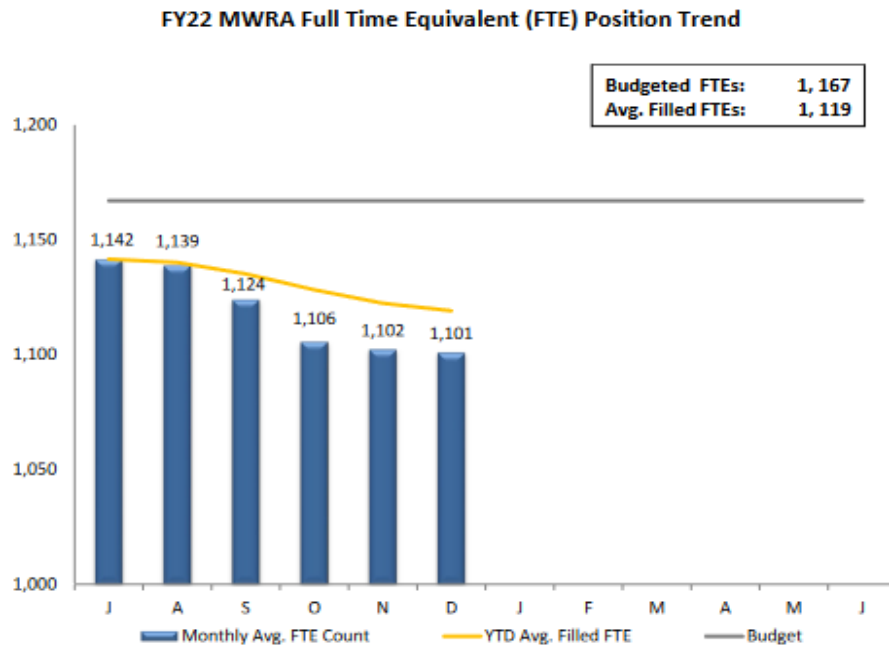
The dredging is now also complete and a PanaMax (really big) cargo ship arrived this week.

Walsh: What is the useful life of cable? About 40-50 years. Includes fiber optic cable to give Deer Island redundancy there. This one is also not oil-filled, so less of an environmental risk.

Financial Update--

Through December \$6.3m put into defeasance. Direct expenses under budget by 9%, mostly because hiring is difficult.

Laskey--MWRA seeing retirements, resignations and a deficit because it's hard to hire back. May need to pay more.



Current budget variance is nearly \$12m.

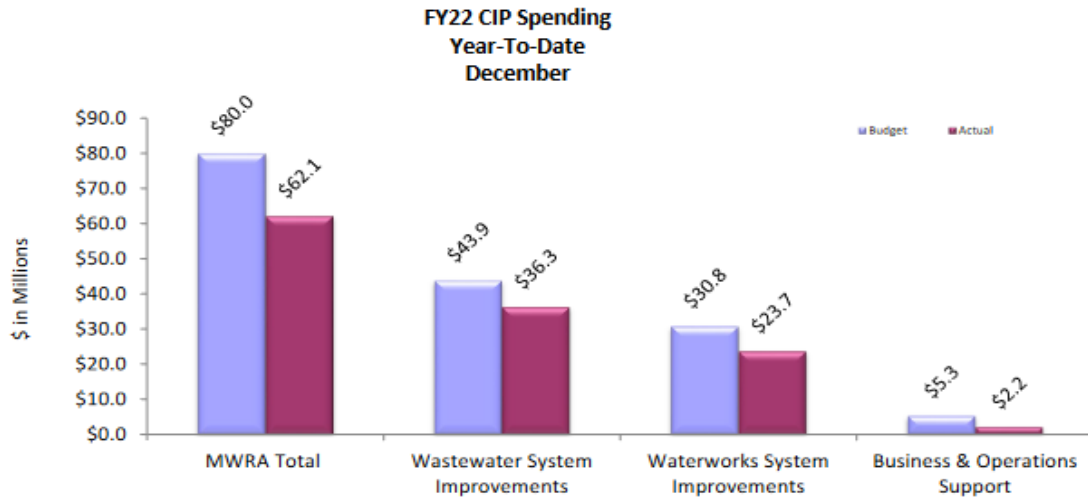
Pension fund is paid up, now funding OPEB.

Interest rates may rise--but not seeing that yet. Still paying 4 basis points on variable rate debt.

Vitale: actual utility costs? 8% higher than budget, mostly electricity, for these 6 months.

Vitale: thoughts on inflation? Durkin thinks it's here to stay, may not be at 2½%, probably higher.

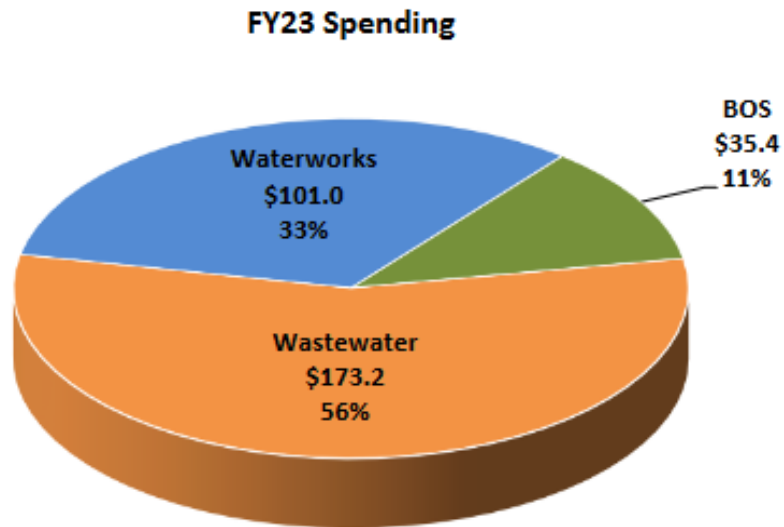
Capital budget is also underspent, mostly because of time delays



Transmittal of Capital Budget

Capital Budget for FY23 set at \$309.7 million spending, of which \$173.3 million supports Wastewater System Improvements--most of this is asset protection. Waterworks is mostly redundancy.

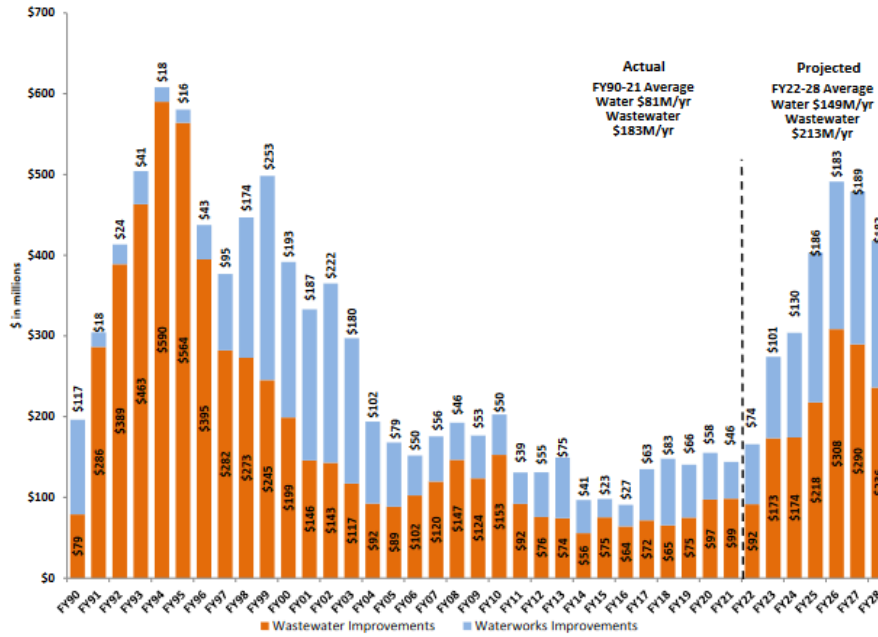
Construction costs increased 12%; materials 44%.



Biggest projects: Clarifier Rehab on Deer Island (\$31m), Prison Point \$18m, Nut Island Odor Control \$15m--three largest. Other large wastewater items--fire alarm system at Deer Island, \$5m to rehabilitate siphons.

Unexpected expenses--relocating the Charlestown offices to Deer Island and Chelsea.

Annual CIP Spending by Utility



Will continue to learn from Chelsea Creek Headworks, monitor impacts of COVID, inflation and supply chain issues. Hoping for federal funds.

Proposed amendments to board policies

This is mostly to allow the Executive Director to authorize up to \$15m in chemicals, and increase the amount at which Board votes are necessary, from \$1m to \$2m. Discussion over whether to increase the ceiling for sub-administrators. Board tabled item to get higher numbers from staff to be voted next meeting.

Increase in hourly pay for attorney--Foley, Hoag is getting \$700/hour for any Boston Harbor case legal matters it handles for MWRA. That increases under this contract to \$950/hour by the end of the contract--which is still a discount over the attorney's non-discount fee (\$980/hour 2021).

Purchase of Cisco switches--single-bid. Objections by Joe Foti. Consensus that this should be taken care of by Laskey with a procurement team.

Delegating authority to Executive Director on energy purchases (not Deer Island's, which are 66% of MWRA's electrical costs)

Advisory Board 1/20

Director:

- MWRA anticipates a spring permit draft for Deer Island. AB still concerned about co-permittees.
- MWRA has filed its final report on CSO compliance. Still some areas where MWRA did not hit hoped-for measurements. Most have met or exceeded. MWRA requested judge to extend period to evaluate their plan.
- Wachusett railroad agreement with CSX
- Future meetings on DCR staffing and the new permit

Federal Funds for Infrastructure

Mass Clean Water Trust-SRF & Mass DEP

Notes that everything still in flux.

Clean Water Trust--established 1989 to finance projects to improve water quality & protect public health. Annual grants from EPA, go to every community in MA.

Fund wastewater treatment, CSO management, stormwater, I/I, planning. Loans, loan forgiveness

Drinking water SRF (loan) focus now on PFAS.

The trust has fixed, low, interest rate, for example 20-year 2%, or over 20 years at 2.4%. Some projects reduced or 0%. Also, quickly-approved interim (construction) loans. Can be flexible. Program for disadvantaged communities--extra loan forgiveness.

Also:

- Asset Management planning grants (60%)
- Housing Choice Loan--50% reduction in interest
- 0% loans for nutrient removal
- 0% PFAS mitigation loans for DW

Lead in School drinking water:

- Sampling program grants
- School water improvement grants (SWIG)

Bipartisan Infrastructure Law (BIL_--additional SRF funds for the next 5 years ARPA--more to the CWT, but some earmarked. Report pending.

DW supplemental \$\$--

- Lead service lines \$15b

- All drinking water SRF projects 11.7b
- Emerging contaminants \$4b

Wastewater

- \$11.7 for all SRF projects, 49% grants, 51% loans with state match reduced for 2 years
- \$1b for emerging contaminants 100% subsidy

MA will get about \$189m of all that:

- \$61m wastewater SRF
- \$3.2 m wastewater emerging contaminants
- Rest in DW

Questions: communities feel in competition for the funds, which is discouraging some applications,

With more funds, should be more to go around. Priorities are to avoid or mitigate violations.

Can the process be further streamlined for communities that don't have dedicated teams of grant-writing staff?

(unfortunately, no) MCWT pushes back on idea that process difficult

Will you have difficulty getting the \$\$ out?

No--run efficiently

Will be distributing for 5 more years

Joe asks about regional water supply expansion--DEP would prefer helping with that.

Advisory Board Retail Rate Survey

Wholesale: 2.95%, average retail rate increase: 2.92%

Average MWRA service are combined retail cost (120HCF): \$1,709 in 2020, \$1,760 in 2021

Adjusted average (last year 60HCF, this year 70HCF): \$870 in 2020, \$911, 2021.

Average National combined bill--4% increase, \$1,520

Highest rates in San Francisco, Seattle, Flint

System expansion--lobbying legislature for regionalization \$\$.

Committee updates

Infrastructure committee--MWRA & Advisory Board members. Pushing regionalization. Contact Advisory Board staff if you want to be part of the committee. Meetings as needed.

Finance committee--annual budget review is started, Capital plan advanced to AB yesterday. Just under \$310m, significantly more than projected, but still under the 5-year projection because of underspending in the first years (pandemic). March meeting on the budget.

Operations--wastewater metering: Jan. 1 new meters started collecting data. It will hit communities over next 3 years, because of averaging. Starting in FY24 will see higher/lower rates. Data is now coming in. Authority will be providing access to the new data soon.

Responsible Flushing Alliance 1/25

Becky Johnson, Chair of Responsible Flushing Alliance, Kimberly Clark. Worked with Michelle Obama and the food industry on healthy food choices. Feels this is similar work.

RFA year-round campaign that goes beyond PR. Looking at the food industry model. Separating public information from lobbying. Demonstrating industry's commitment to this effort--large PR firm.

Consumer education vs. PR. Includes most of the wipes manufacturers. Demonstrate their placement of articles in newspapers.

Also have coloring books, infographics, blog posts, social media. Video showing many new wipe use examples.

The image shows a presentation slide for the Responsible Flushing Alliance. On the left, there is a video feed of a woman named Lara Wyss. The main content of the slide is a collage of educational materials. On the left side of the collage are three vertical infographics: 'What's a Fatberg?', 'How BIG are we talking?', and 'WIPES 101'. In the center, there is a white box with an orange header that says '4 Educational Infographics'. Below this header is a list of four items: 'Wipes 101', 'What's a Fatberg?', 'How to #FlushSmart?', and 'NYC Collection Study'. At the bottom of the collage, there is a yellow bar with the text '8 Infographics'. The Responsible Flushing Alliance logo is visible in the top right of the collage area.

President of RFA--Lara Wyss.

About -- formed to communicate about what not to flush, particularly CA law.

Who is the Responsible Flushing Alliance?

Contributing Members

Albaad	Kelheim Fibres
ANDRITZ Nonwovens	Kimberly-Clark
Dude Products	Nehemiah Manufacturing
Essity	Nice-Pak and PDI
First Quality	Procter & Gamble
Glatfelter	Rockline Industries
Johnson & Johnson	Sellars Nonwovens
Papel Aralar	Suominen Corporation

The slide features a video inset on the left showing Lara Wyss, the President of RFA, speaking. The main content is a list of contributing members organized into two columns. The title 'Who is the Responsible Flushing Alliance?' is prominently displayed at the top. A blue oval with the text 'Contributing Members' is positioned above the list. The list includes 14 companies: Albaad, ANDRITZ Nonwovens, Dude Products, Essity, First Quality, Glatfelter, Johnson & Johnson, Papel Aralar, Kelheim Fibres, Kimberly-Clark, Nehemiah Manufacturing, Nice-Pak and PDI, Procter & Gamble, Rockline Industries, Sellars Nonwovens, and Suominen Corporation.

--advisory board includes CASA and NACWA

National media campaign--2021 foundational year

- Privately owned content: website, blog, etc. (flushsmart.org); monthly infographics--different use cases, educational materials (coloring books, activity sheets, books--all downloadable from flushsmart.org) social media--on Facebook, Twitter, Instagram
- Earned coverage (in newspapers, etc.) 13 press releases on formation & supporting labeling laws in states. Thinks people are interested.
- Paid strategy--paid social media on Facebook. Lots of responses to the “clog monster” and toilet not a trash can or cost of clogs (to you). Not so engaging: sewer clogs affect everyone (but not animated) and not animated helpful tips. Similar results on Twitter.

CA wipes law & 6 requirements--have summarized them in a flyer.

1. Statewide educational campaign English & Spanish--geared PK-8th grade
2. Multimedia campaign to promote awareness of “Do Not Flush” symbol
3. Participate in a sewer collection study--planning with CASA
4. Consumer opinion surveys assessing behavior & awareness--comparing state to state (CA, WA) and nationally
5. Provide wastewater agencies with consumer education messaging for the DNF symbol and label notice

Don't feed the Clog Monster! Do your part to prevent him from terrorizing your community sewer by not flushing the things it feeds on. A smart, flushing healthy home keeps the clog monster away! #flushsmart #clogmonster <https://bit.ly/3ga33MH2>



The “clog monster” ad drove traffic to the RFA website.

RESPONSIBLEFLUSHINGALLIANCE.COM
Introducing the Clog Monster [Learn More](#)

Flight: 1/2/2020-9/30/2021

2022 plans

1. Fulfill all legal (CA) mandates
2. Educate public on DNF (do not flush) symbol--all of the tools above
3. Increase awareness of DNF and flush smart habits
 - a. Social media
 - b. News stories
 - c. Website
 - d. Letters to the editor, opinion,
 - e. Press releases, infographics

Jessica Gauger, CASA

Relationship of wipes and sewer clogs. Impacts are huge \$440m nationally--very conservatively.

During work on a bill, unanimous agreement that messaging around flushing could be better. Developed universal DNF label and marketing, above.

Edelman (the high-priced PR firm):

About disruptive content--what gets you to stop scrolling and engage