Charles River Stormwater Permitting

Residual Designation Authority Focus Group Sessions Summary

27 October 2020 to November 20, 2020

Prepared by The Consensus Building Institute (CBI)
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Focus Group Process

OVERVIEW

In response to a petition requesting that EPA exercise its residual designation authority within the Charles River watershed, EPA Region 1 staff conducted five (5) focus group sessions to inform their initial deliberations and decision-making process for responding to the petition. The following document briefly describes the information presented at the five focus group sessions and then details the feedback received in each session. All feedback is presented without attribution to focus group members.

EPA PRESENTATION

Focus groups followed a similar format. They began with an opening presentation by EPA Region 1's Ken Moraff, Water Division Director, and Erin Flannery-Keith, Attorney-Advisor, Office of Regional Counsel. Mr. Moraff reviewed the geography and human uses of the Charles River, highlighting that the watershed touches all or part of 35 municipalities within Massachusetts. He addressed the Clean Water Act's history of success in the Charles River watershed, noting that work remains to be done to reduce the amount of phosphorus in the watershed. Mr. Moraff highlighted the consequences of increased phosphorus levels, shared Massachusetts' Total Maximum Daily Load (TMDL) requirements to reduce phosphorus and presented a range of possible additional phosphorus control strategies for private properties. He reviewed ongoing, 20-year municipal efforts to reduce phosphorus through MS4 permits, noting that, while municipalities have plans to address runoff from public lands, how to best address runoff from private properties remains an important question.

Ms. Flannery-Keith reviewed what a Residual Designation Authority (RDA) is ("the agency's authority to require NPDES permits for stormwater discharges not otherwise required to have permits") and the potential forms an RDA permit could take. She shared a high-level overview of the 2019 petition that was received by EPA and highlighted that the core of EPA's consideration of the petition is whether the stormwater discharge from private properties is contributing to violations of water quality standards under the Clean Water Act.

Mr. Moraff then wrapped up the introductory presentation by sharing an overview of EPA's petition review process and stakeholder engagement timeline, noting the involvement of the Consensus Building Institute (CBI) as an independent facilitator to help guide engagement efforts.

FOCUS GROUP DISCUSSION

Following EPA's introductory presentation, CBI Facilitator Patrick Field guided focus group members through a discussion around Charles River water quality, current stormwater management efforts, potential RDA approaches, and future engagement with EPA. This document captures key questions and comments raised by focus group members, without attribution, from each of the five focus groups. While the general questions were similar across all five focus groups, the responses and comments varied. Comments and responses from participants are noted in regular font and EPA's are noted in italics.

NAIOP Focus Group Notes | October 27, 2020

GENERAL QUESTIONS: WATER QUALITY & CHARLES RIVER PROXIMITY

What is your sense of the state of the Charles River and its water quality today?

- Making progress coming back
- Much improved, but not yet swimmable/fishable
- Improving but more work to be done
- Algal blooms may be a complicated problem
- It has improved significantly, but still has a ways to go
- Making progress. Important.
- Transformed waterway - becoming a destination for public use and enjoyment
- The Charles is getting cleaner, I kayaked on it this summer, but it was a bit muddy. It was getting a lot of visitors that day.
- There is activity around it but there could be more

When you think about the properties you or the clients you advise own/manage/develop/work on, how does proximity to the Charles River affect those properties?

- A lot of my clients locate on the river deliberately, often for residential uses, and the proximity to the River is viewed as a very positive thing. That has led to a number of conversions that have probably improved stormwater control. At least for my clients, it's primarily residential uses that regard the river particularly highly, and they view it as an amenity.
- The Charles River is one of the community amenities that makes Boston so attractive to potential residents and businesses.
- Conversely, a lot of the developers we have along the Charles River are looking at it because it is where the available land is, not necessarily because the river is an amenity. Often, it's an additional permit or permit process that we need to go through. Ask any developer – they are probably not looking for more regulations to navigate. For many further upriver, the Charles River is not an amenity but simply where the land is available to develop or redevelop.

CURRENT STORMWATER MANAGEMENT EFFORTS

How do you and your clients think about managing stormwater on your properties presently?

- Most of my clients over the last ten years have done fairly responsible jobs of infiltrating stormwater and using storm receptors to treat it. This is primarily due to local requirements. There is a fair amount of regulation on new projects or rehabilitation projects with substantial paving.
- Actions are often driven by the Department of Environmental Protection (DEP) or local regulations. New developments certainly get a stronger focus [on stormwater management]. My clients work on a lot of industrial properties, and a concern is that older properties don't often have the same opportunities for infiltration. There are challenges with Activity and Use Limitations (AUL).
- Generally, with sites that have been developed outside of a local conservation commission's purview, stormwater management is typically a reaction to repeated flooding or other water management challenges.
- There are numerous challenges, and we are working to figure out what standards to apply. For the most part, we are trying to work within the new MS4 regulations and working with recharge and phosphorus removal and the like. We are trying to align local stormwater management regulations with the new MS4 permit, but there are challenges implementing some existing techniques. We would like a broader suite of allowance for more inventive or practical BMPs to help with trying to meet those standards.

Looking at long standing properties specifically, what are particular challenges?

- It is important to note that many projects we are involved in are in Boston, heavily urbanized sites where there is very little room to implement more traditional stormwater treatment systems. A lot are projects that have a high percentage of impervious cover; projects tend not to have parking lots, and a lot of what we are dealing with is roof runoff. Options are limited for renovation recharge projects. With some recent projects, we had to negotiate agreements with the city to put recharge within the city street layout, which is expensive and complicated. In our role, if you don't have control over sufficient real estate, then you don't have the right to implement certain measures. At the same time, the city is on top of this issue and encouraging people to find solutions. New construction is still constrained; most major construction projects have big, deep basements with underground parking and extremely little additional external space outside of sidewalks and required setbacks.
- Our properties are usually in a more urban context in Boston. We have always had the challenge of managing stormwater because of limits on the scope of preferred development on the site. We have used many of the design ideas and worked with many of the consultants on the call, pursuing measures like injection wells. We have properties in Boston that need the groundwater levels to keep existing piles in good shape. We also view the

maintenance of these systems very seriously. Our tenants and residents are much more aware of the factors they are living with in the Boston area. Stormwater management remains a concern with regards to water quality and sustainability. It is increasingly challenging to secure open space on properties to implement BMPs.

- Our biggest worry is how to deal with stormwater management regulations on existing sites. The issue isn't as simple as having the space to retrofit BMPs – that space has to be in an appropriate location to facilitate drainage. It may be more beneficial to retrofit BMPs when completing large overhauls to property layouts, but that is not an option for all properties.
- There is a big distinction between built assets and development projects. In a development scenario, a developer will have a consultant team that understands these issues for better factoring. As others have noted, when a property is stabilized (e.g., a mall with surface parking), the owner will have an Operations & Management (O&M) plan for sweeping parking lots and cleaning catch basins. There are other restrictions for how that is being done (e.g., tenants that have rights to park in certain areas). It's unlikely that property owners will upend their existing properties and adversely impact their tenants or other covenants to implement new stormwater management measures.

What interactions have you had, if any, with the municipalities where you have property regarding stormwater management?

- The municipalities that we are dealing with are also looking at their stormwater infrastructure and seeing the aging infrastructure issue and struggling with how they are going to do their improvements. We are engaging with some municipalities working on their Natural Hazard Mitigation Plans, and a recurring issue is stormwater management. Municipalities need to do improvements and don't know where they will find the money. Under the Municipal Vulnerability Preparedness (MVP) program, there haven't many commercial developers in those planning sessions. We have heard from both the municipal and the private sector that preparing for climate change requires dealing with flooding and stormwater problems. This is particularly top of mind with more rain coming. However, an issue that always comes up is how they are going to pay.
    - *EPA: Do you see municipalities connecting these different efforts?*
    - Yes, after completing the Natural Hazard Mitigation Plan, municipalities have to select implementable projects. At the top of that list are areas with recurrent road flooding or backups – critical infrastructure flooding from heavy rainfall puts those projects at the top of the list. Municipalities will most likely apply for a grant to find money for improvements. Some towns have their own stormwater utility fee, but that's not widely prevalent yet.
- The City of Boston is looking at a stormwater utility or fee, as are other municipalities. One concern is the layering effect if the RDA goes into place on top of municipal mechanisms. Any regulation needs to be balanced and aligned across the regulatory levels so that properties are not paying a utility fee in addition to dealing with burdensome new requirements property by property. We would want the RDA to be considerate of how

Boston is approaching the stormwater utility fee so that property owners do not get penalized.

- A good stormwater utility could help overcome some of the difficulties named. In Massachusetts, there's often a temptation to tag that last guy in with all the mitigation efforts. A utility district that covers all new and existing properties at different rates but covers mitigations district-wide could be a solution. Something like a stormwater utility approach or a utility-wide approach would make better sense to my client.

How often do you make improvements to your property's impervious cover areas (e.g., roofs, carports, parking lots and garages, or other hardscapes)?

- 20 years
- +/- 15 years
- Parking lot reconstruction: 20 years
- 15+/- unless other program needs warrant it
- Often driven by large new tenants
- If there are no new tenants or expansion 20 years +

POTENTIAL RDA APPROACHES

How should EPA best approach RDA permit eligibility?

- EPA should approach RDA by targeting sub-watersheds that are the largest contributors. The permit should employ a phased approach, starting with the areas that will have the largest impact and then ending up with all properties taking some action.
- The proposed RDA permit [as described in the petition], would directly conflict with DEP guidance, which gives exemptions to single-family residences or multi-family residences under four units or less. There should be exemption for smaller properties. There should be some idea of phasing and looking at larger polluters first, but EPA should not bring in those smaller residential properties that are currently exempt.
- To be fair, all properties should be addressed in the long-term, but it is challenging for single-family residences. However, only pursuing commercial properties leaves a lot of impervious property behind. An approach similar to the Title V model could help correct these issues in the long term, as the time of a transaction or property transfer could be the best time to incorporate new BMPs.
- RDA permits would have to cover individual homeowners at some point (e.g., fertilizers on lawns). The City of Lowell is implementing a program for charging a city-wide stormwater utility fee to single-family homes that is modest but increases rapidly with large amounts of impervious service.
- RDA permits would need to apply to all property owners given the amount of land relegated to single-family homes. Single-family homes will face different challenges complying

with a permit than commercial properties but designing the permit so it is based on percentage of impervious cover and allows for abatements could be a strong approach.

- Retrofit components of regulations are concerning to members. It is more manageable to complete retrofits at the time of re/development or at the time of transaction when there is money. EPA will need to remain cognizant of layering regulations, recognizing that not all situations are the same. Maybe credit could be given to those communities meeting stricter regulations than those in the RDA permit.
- The targeted sub-watershed approach has potential. Targeting large public infrastructure projects can be the most cost-effective way of reducing phosphorus (e.g., infiltration fields in public roads and parks). It is easier to sell a permit program if the cost is minimized through the leveraging of funds. EPA should look at areas that have the greatest potential for infiltration for large amounts of stormwater, and governments should be implementing those infiltration efforts as capital infrastructure projects.

Which control actions to reduce phosphorus loading seem more or less plausible for your or your clients' properties?

- **Reducing impervious cover**. However, parking and land use regulations are driven by zoning, which doesn't always reflect stormwater management best practices. Some zoning laws do enable property owners to conduct parking studies and pursue shared-use parking. On top of zoning numbers for parking, dimensional requirements for parking spaces and lots are also important components.
- **Non-structural**: In any sort of permit environment, the easiest things to do are nonstructural, but proportionally, you get almost no credit for taking those actions. The way the credit is written, it drives you to bigger and more costly interventions.
- **Regionalized**: EPA should employ more of a regional approach than a town-by-town approach in order to avoid varying regulations between neighboring locales and increase coordination between communities in the watershed.
- **Phased**: EPA should explore a phased approach with an optional credit system that allows property owners, at a larger scale (sub-watershed, municipal or multi-municipal wide), to contribute to more impactful solutions on other properties. Private property owners would require the same slow buildup phasing to regulations as municipalities received with the MS4 permits. Efforts to maintain and clean stormwater systems watershed-wide will also lead to reductions in phosphorus.
- Property owners face numerous challenges employing these strategies, including costs of modifying large structures, lack of space on properties, balancing green roofs with solar power, etc. Phasing toward the targets is an interesting strategy to employ – starting small and building up efforts for greater impact. These control strategies should be promoted on both smaller and larger sites.
- One elegance to the Lowell approach is that it allows single family homeowners to buy out of the stormwater management utility fee if they install a raingarden. If you own a larger site,

and you can control stormwater on your site, you also don't have to pay in Lowell. Their utility fee applies to nonprofits as well as single-family homes and businesses.

Under federal law, permits are issued for terms of up to five years. If a permit required you to implement stormwater control measures, is five years long enough for you to plan, fund, and build such measures? In other words, when you think about time horizons you generally consider when maintaining or upgrading your property (repaving, reroofing, gutter replacement, etc.), what are those typical time frames for you, and can they fit within a 5-year window?

- It depends on what "everything" is.
- There is concern that, on the fifth year, properties would start going into panic mode. Properties will need interim steps, like a feasibility analysis, before moving towards effective implementations. Five years is likely not enough time to make judgments about how stormwater management could best work on their properties.
- Five years is way too short. This will require at least 10 and perhaps 20 years.
- Five years may be sufficient for planning out what options are available, but, beyond that, any action should likely be part of redevelopment work over many years, not within 5.
- "Everything" in five years is a challenge. "Something" in five years, including having a plan for future work, seems more feasible.
- One challenge if EPA pursues a window approach would be determining how obligations transfer during property transactions.

FUTURE ENGAGEMENT

What is your preferred level of engagement in this process going forward? And how would you like to be engaged?

- Eleven focus group members indicated that they would like to be "really engaged" in this RDA process moving forward.
- Members indicated that they would like to be engaged through a variety of means, including general public sessions and small focus groups through NAIOP.

Hospital, University, and College Focus Group Notes | October 28, 2020

GENERAL QUESTIONS: WATER QUALITY & CHARLES RIVER PROXIMITY

What is your sense of the state of the Charles River and its water quality today?

- Improved
- Improving
- Much better
- Finally swimmable, improved.
- Lots of improvement
- Better than it was.
- Steady improvement
- Improved
- Much improved but still fragile

How does a clean Charles River affect you and your institution?

- **The Charles River is an integral component of our campus.**
    - Our campus is completely bordered by the Charles River, and it's a part of how everyone thinks of the campus. While we don't market the River, it is part of campus life. We have important sports facilities that have permits from DCR to operate on the river -- we just had a big project renovating one of those facilities. The Charles River is substantially under-utilized by our community. The Kendall Square area and other parts of East Cambridge don't utilize the Charles as much as everyone would like.
    - Our university borders the Charles River on both sides and relies on it heavily for a variety of services. It's a critical amenity, and we view the health of the river as an important issue for campus life.
    - The Charles River is "part" of our landscape, and we have to protect it.
- **The Charles River is not viewed as part of our campus.**
    - The Charles River is really not that close to our institution, so it is not identified as part of our environment.

- Our institutional focus remains on caring for patients. There is awareness of our proximity to the Muddy River, but it is not considered within the scope of our institutional operations.
- I'm sure that most people in our area aren't even aware that we're in the Charles River watershed.

CURRENT STORMWATER MANAGEMENT EFFORTS

How does your institution think about managing stormwater presently?

- Our institution currently employs some stormwater BMPs.
  - Our college has roughly 450 acres, which includes a golf course near the Charles River. We manage stormwater through following some of the BMPs, especially when undergoing new construction or renovations. Some non-structural practices employed include rain gardens and street cleaning. Our landscape is extremely important to us, so we keep a close eye. We sit on a lake that drains to the Charles, and we also have an old disposal site that is involved there.
  - Our institution, an older facility, is currently using a lot of dry basins. A lot of the existing stormwater infrastructure ties into runoffs that feed into the golf course across the street. It's an aging infrastructure that probably should be addressed at some point in the near future. Our institutional focus remains on ensuring that we are caring for our patients and have a safe environment for customers, staff, and physicians to enter every day. Stormwater is not a high priority, but it is not lost on the campus.
- Stormwater management efforts have been prioritized: roughly 90% of our stormwater discharges into underground chambers. Over the last 12 years, we have done quite a bit of construction, and we design underground chambers each time. It's worked beautifully, with less heavy flow from rains going into street. We have benefitted from good engineers and a forward-thinking approach.
- We did have previous inter-institutional collaboration on stormwater management: Roughly 8 years ago, there was a group called the Campus Consortium for Environmental Excellence that organized a convening on stormwater management and developed a white paper. Many colleges and universities have been working on these issues for a long time and have helpful resources to inform these discussions.
- Awarding past credits: would institutions receive credit in a new regulatory program for stormwater management efforts already undertaken?
  - *EPA: That is an important consideration, and EPA has seen it addressed in different ways. A related question is determining how far back the regulatory program should look backwards to award credit. EPA welcomes any specific ideas institutions would like to share on the potential design of a regulatory program.*

- Alignment with municipal and state efforts: how is EPA thinking about how climate change and resiliency relate to existing stormwater management through municipal and state systems?
    - *EPA: EPA is considering how it would align a potential RDA permit with what municipalities are already undertaking through the MS4 permit. There may be communities where the municipal and private actors feel that they would rather handle stormwater issues at a local level, with municipalities taking the overall responsibility for all properties within their bounds. Other communities may prefer to have municipalities be solely responsible for their public properties and address private properties through separate permits. EPA is engaging municipalities to determine what they think about this question but would also like the views of institutions. EPA is looking for the most practical way to design a potential RDA permit, and collaboration at the local level would be helpful.*
- Impacts of golf courses: are golf courses considered a significant source of phosphorus? Would they be part of this discussion and permitting process? There are many along the Charles Watershed.
    - *EPA: EPA cannot answer the technical side of that question right now, but those questions are what EPA will be exploring as we think about permits and property designs. If the golf course was an entity with acreage within the limit of the RDA permit, it would be included in the regulation.*
    - Athletic fields could be a significant contributor in the watershed also.

How often do you make improvements to your property's impervious cover areas (e.g., roofs, carports, parking lots and garages, or other hardscapes)?

- All of our parking lots have been redone in the last ten years.
- Almost no surface parking remains in our area. We complete roughly 1-5 building construction projects per year.

What barriers are there preventing you from doing more on-site stormwater management?

- Multiple focus group members named the challenge of prioritizing resources for stormwater management in the face of other institutional needs more closely aligned with mission.
    - Going forward with BMPs, our college is looking at a baseline compliance with rules and then has an active sustainability group of interested students and faculty/staff. When you look at reconstructing something, it falls to prioritizing against other needs of universities at this time and dealing with resources, be it personnel or funding.
    - Times are difficult for colleges, universities, or hospitals. Colleges are investing tens of millions of dollars into surveillance testing, and those costs will continue through the next semester.
    - There are so many programs that are demanding employee and capital bandwidth. There are so many programs that institutions will have to pick and choose between.

- Members also named the benefits and drawbacks of top-down guidance for how to address stormwater issues.
    - Changes in administration can lead to changes in budget allocations and priorities. A permitting process can guarantee best practices.
    - We are in a residential-zoned area, and there are several local restrictions on our ability to change certain aspects of our facility here in Newton.

POTENTIAL RDA APPROACHES

How should EPA best approach RDA permit eligibility?

Focus group members posed the following key questions and comments to EPA. Responses from EPA are in italics.

- **Determining phosphorus sources**: is there a way of determining where the phosphorus is coming from in the watershed? Institutions in urban environments are tied into municipal systems and may not have the space or regulatory flexibility to implement appropriate measures. It would make sense for EPA to determine areas where there are the greatest nutrient loads and start regulating there.
    - *EPA: EPA is relying on literature and data about loads from different types of properties rather than measuring directly from each property. Traditionally, it is hard to monitor for stormwater because of variables like the timing of the samples, storm intensity, etc. EPA is interested in the approach of targeting the effort to get the biggest payoff.*
    - The people on this call represent numerous institutions – would it make sense to do a pilot analysis with 1 or 2 to have the best ideas for the types of campus and developing recommendations for different types of properties and environments?
- **Geographic impacts and fairness**: are specific geographic sections of the watershed contributing more to water quality depending on location?
    - *EPA: EPA does see too much phosphorus loading all the way through the watershed. There is a difference in the impact of where phosphorus enters. For example, if it enters in the upper part of the river, it's in the river all the way down and contributes throughout. EPA is not seeing sections of the watershed that don't require concern.*
    - There are serious concerns about fairness from EPA's 2008 three-town pilot program in the upper watershed. That program received strong opposition that it was unfair to pick a specific geographic area within the watershed to take action.
- **Property size**: what is being considered a "large" property by EPA?
    - *EPA: That is part of the question that EPA is working to answer through this process. The petition asks for the permit to include any property that is 1 acre or larger. EPA hasn't yet made any judgments on what size properties could be included and is interested in input from this focus group.*

- One acre is really a postage stamp in the larger scheme of things. One hundred or 50+ acres could be a considerable contributor, especially with large amounts of impervious surfaces. Golf courses are still a concern for our institution, given the proximity of many and their use of fertilizers. If phosphorus is the main problem, why isn't EPA talking to other areas that use large amounts of fertilizers?
- *EPA: EPA is analyzing impacts by scale of properties that could be included in the permit. It would be easier to deal with fewer, larger facilities in a permitting program. Questions remain about how much of the problem is solved by narrowing, and how can the permit address fairness issues. We are doing that analysis – but that info depends on those types of judgments. EPA also has a technical team looking at the amount of phosphorus runoff that each kind of property might be producing. The question of impacts from golf courses would be a good consideration. If EPA makes a decision to pursue an RDA permit, it's possible that golf courses would be included.*

- **Permit scale**: which permit scale would be most effective – general, individual, or a combination?
  - *EPA: That's a really important and complex question that EPA is working to gather feedback on through these focus groups. This question is especially relevant to institutions because they have such varied facilities. There are a lot of strip malls that also have similar circumstances. The question is if the EPA tailors permits to specific situations or has a general permit with flexibility? It's easier for EPA to administer a general permit, and it may be easier for institutions to comply with a general permit, but EPA hasn't made a decision.*
  - How would EPA have the capacity to manage individual RDA permits for so many different actors?
    - *EPA: Administrative capacity is one of the considerations factoring into discussions of potential permit scale. If EPA were pursuing a permit size of that frequency, then we would be looking more to a general permit, which EPA administers, for instance, for construction and vessels.*
- **Municipal role:**
  - What roles would municipalities play in the permitting of institutions?
    - *EPA: This is a critical question, and EPA has engaged municipalities on this question. If EPA decides to pursue an RDA permit, it will be essential to determine how the RDA permit aligns with existing MS4 efforts at the municipal level.*
  - Is the petition suggesting that municipalities' existing requirements of people redeveloping or developing their properties are not sufficient?
    - *EPA: The petitioners would probably agree that existing municipal requirements are not stringent enough. There are a couple ways to address that concern: municipalities could regulate further, or EPA could regulate further and set up requirements that will achieve water quality goals.*
  - Has EPA already explored which municipalities are more or less strict? Is their equitability up and down the watershed?

        - *EPA: EPA knows that there are differences in what communities are doing now – some that have moved forward and some that have not moved so quickly. Any permitting process would ensure that all communities are getting their equitable share of the reduction. To get municipalities to reach their reduction targets, it's not enough to just focus on redevelopment. The question is how to best address the share of the load that is not tied to new or redevelopment – which is a pretty big part of the load.*

- Citizen enforcement suits: would the creation of an RDA permitting program open institutions up to the risk of citizen enforcement suits?
    - *EPA: When a citizen group files a citizen suit under the Clean Water Act (CWA), they step into the enforcement role. Citizens could bring an action for discharging pollutants into a water of the US without or in violation of a permit. EPA will think about the implication of citizen suits, just like for the small MS4 permit.*

Which control actions to reduce phosphorus loading seem more or less plausible for your institution?

- **Importance of municipal context:** Our institution is restricted by our municipality on the types of actions we can take. We are mostly impervious surface (e.g., two large parking garages, lots of surface parking), but we are located in a very green residential area. For our institution, stormwater capture would be the best control option, so that we could reuse that capture for irrigation needs. I don't think that many other options or strategies listed here would apply.
- **Flexibility and phasing of actions.**
    - Flexibility of the techniques is important, as, depending on the scale, many actions can prove to be important and effective. Our institution focuses on these strategies primarily in large redevelopment projects where we work closely with the City of Cambridge. We are focusing on redevelopments because employing best practices is straightforward in that context, as opposed to looking at every 100-year-old building on campus and requiring it to drain differently than it has in the past 100 years. If we are doing something small, many of these actions don't make sense.
        - *EPA: That's one of the questions to factor into this conversation. Pursuing control actions is not necessarily an all or nothing endeavor. The permit could be based on a phased approach. For new or redevelopment, requirements could go into effect right away. For older retrofits, there could be phasing.*
    - When it comes to capital improvements, a control strategy for runoff will compete against a new MRI, CT scanner, etc. – things that are directly affecting patients' lives and our abilities to treat those patients. It's not realistic to think a hospital is going to earmark $2 million to tear up our campus to counteract phosphorus that may or may not be emanating from our facility.
        - *EPA: EPA realizes that, for any institution or municipality, the phosphorus reduction requirements that the TMDL calls for will not be an easy or quick fix. EPA has*

compliance schedules in the small MS4 that go out 20 years. We have the authority to put in compliance schedules that are longer than the permit, a model of phased improvements over a long period of years. If we were to make initially an RDA permit for commercial, industrial, and institutional facilities, we would consider longer timelines.

- **Demonstrating impact of control actions:** does EPA have any metrics on the impacts of these types of control actions? When we bring a capital project forward, we have to be able to show the value. This is easy to do with renewable energy projects.
    - *EPA: With the municipal stormwater permit, which has reduction targets set, we made a decision that we would measure phosphorous removal performance not by monitoring actual stormwater at the end of pipe, as it is complex to do so accurately. Instead, EPA evaluated the performance of a whole range of different technologies and then assigned credits to those technologies so that a municipality could look at a performance curve and make judgments about which practices to implement to reduce phosphorous in accordance with the permit's requirements.*
- **Defining the scope of reduction:** When EPA speaks of reduction, is it on a macro scale or an individual property scale? Should the percentage reduction be the same?
    - *EPA: There is an overall reduction watershed-wide target and targets at the community scale. If EPA were to move ahead with an RDA permitting program, one action would be to express what those requirements are and translate targets specifically to smaller areas. The most efficient way is to take action in the most impactful areas, but there may not be the same level of control on each parcel. One approach could be offsite credits to help another property that could have more impact with your investment.*

FUTURE ENGAGEMENT

What is your preferred level of engagement in this process going forward?

- Multiple focus group members indicated that they would like to be remain engaged in this RDA process moving forward.

MMA Focus Group Notes | November 5, 2020

GENERAL QUESTIONS: WATER QUALITY & CHARLES RIVER PROXIMITY

What is your sense of the state of the Charles River and its water quality today?

- Improving
- It looks good, but I wouldn't want to swim in it.
- Positive trajectory, plateauing
- Charles River water quality has improved steadily since the initiation of CWA
- Pretty good but could be better
- Excluding the current drought situation, the Charles generally has good quality

When you think about the properties you or the clients you advise own/manage/develop/work on, how does proximity to the Charles River affect those properties?

- Charles River is seen as separate from or even unknown in the town:
    - We were the original study for an RDA permit, and the pilot experienced problems selling the program to residents, in part because they didn't even consider the Charles River as part of our town. We were constantly having to sell the value of the program. You cannot walk along or enter the Charles River anywhere in our town. You can see it and drive over it.
    - Most residents are not aware we are in the Charles River Watershed.
    - The Charles cuts off the southeastern corner of town but they're mostly rural, estate homes, not a big impact to/from the Town.
    - We do not have any public access to the River.
    - The river defines our southern border, and we have some points of access, but I don't think people have as much awareness or connection as we should.
- Charles River is important to residents:
    - The Charles River is a beloved resource for much recreation in our town (e.g., walking, canoeing, birdwatching). Residents are well aware of it in this area, and our town was able to easily pass a stormwater fee.
    - As part of the lower Charles, the river is an important recreational and economic asset.
    - Very iconic and important for Boston.
    - Everyone in Boston knows it's their river (despite what people in Cambridge think)!

What do you see as the opportunities, challenges for RDA as a supplement or addition to MS4 permits?

- **Watershed-wide focus:** river improvements should be done through watershed-wide initiatives.
- **Multiple members raised concerns about perceptions of "double taxing" residents and businesses arising from an RDA permit.**
    - Our town has adopted the regulations for a stormwater utility but has not yet set a fee. If our utility is implemented along with an RDA permit, there are concerns that citizens will see themselves as being "double taxed."
    - Messaging around the purpose and need of stormwater utilities is hard, especially when residents want it to be a water management and a water quality and public health and safety program. An RDA permit could complicate the message and feel like "double taxing." A lot of public education would be required.
    - *EPA: One potential strategy would be for municipalities to assume responsibility for private properties' stormwater management through the RDA permit and charge an appropriate amount to those properties through the fee. There would need to be an education component to effectively communicate about an RDA permit. The Clean Water Act (CWA) allows for petitions to recognize that there may be gaps between what municipalities can accomplish and what is needed to address a problem. The question front and center for municipalities is whether or not to expand your role and take on more (with resources from customers) or to address stormwater issues from private properties through a separate mechanism.*
    - EPA and DEP have been encouraging municipalities to develop dedicated revenue streams for stormwater management, and an RDA permit would complicate the manner in which that revenue stream is rationalized to homeowners and property owners. If any permit requirements are already incorporated into fee development, this would constitute an issue around engagement, fee structure, and hearings to look at ways to lower costs.
    - There are concerns that businesses that pay thousands per year through the stormwater utility fee could leave if they feel overburdened by an additional RDA permit. College campuses could prove to be a hurdle, so them having their own permit may make sense.
    - There is precedent in Vermont and in Maine for these kinds of stormwater management/RDA permitting programs that have seen some success.
- **Alignment with MS4 timetables:** would the timetable of an RDA permit align with that of MS4 permits?

- **Administration and enforcement:** there are concerns about municipal capacity to administer an RDA permit that operates alongside the MS4 permit. This would place a new, significant burden on municipal staff.
- **Identifying sources of phosphorus:** what are specific provable or traceable sources of phosphorus? Is it mostly coming from added fertilizers, detergents, etc.?
    - *EPA: Sources of phosphorus in the Charles River watershed include animal waste (wildlife, pets), organic matter (leaf litter), the soil itself (runoff), and exhaust (roads and parking lot). Organic matter sources can be managed with non-structural measures that can address that part of the source.*
- **RDA could help municipalities meet MS4 reduction goals:** the amount of phosphorus that municipalities need to remove will prove costly, and it will be more difficult if private parcels are not also making efforts. Municipalities are limited as to what can be accomplished through implementing BMP's on publicly owned land, especially as non-structural practices (e.g., street sweeping) generate little credit. However, the consideration of municipal capacity to administer an additional permit is important.
- **Determining eligible properties:** does the petition only impact projects that are not developing or redeveloping?
    - *EPA: The petition cites all properties one acre or greater to be included in an RDA permitting process. EPA would like to explore whether that determination of properties feels correct for a variety of stakeholders. The thrust of the petition is to address stormwater management on existing parcels that are not currently being addressed through other means, like the MS4 permit.*

If you could use RDA in a targeted way, how might you tailor this to supplement you without being too burdensome?

- **Focus group members raised concerns about how to achieve an equitable distribution of the burden with a potential RDA permit.**
    - Not every acre of land in the watershed has the same problem with phosphorus, and our municipality would not want to burden smaller landowners who are not significant contributors when there are plenty of larger contributors that could take action.
    - There is an environmental justice and social equity issue that has to be considered. If this RDA permit goes to large dense, high residential areas, and the cost gets passed on in rents or sales price, there will need to be an analysis of who bears the burden.
    - Targeted zoning of an RDA permit could put EPA in a position to be accused of "picking on" certain property owners or types.

How should EPA best approach RDA permit eligibility?

- **Challenge of communication:** there will always be someone unhappy with an approach and communicating the rationale for an RDA permit publicly could be difficult and complex, as there will be different messages for different stakeholders.

- **Parcel size versus % impervious cover:** why is the baseline framing for this conversation every property one acre or larger? Should percentage of impervious cover be used in place of parcel size?
    - *EPA: The petition asked EPA to look at the commercial, industrial, institutional, and multi-family properties that are one acre or larger without any differentiation based on impervious cover. EPA is holding focus group conversations to gather input on whether that one-acre threshold should be considered or whether there are better criteria to consider for inclusion of properties in an RDA permit. The EPA technical team is conducting GIS analyses to model programs based on different criteria, and percentage of impervious cover per parcel is one criterion they are exploring.*
- **Focus group members explored the potential benefits and limitations to a regional approach to an RDA permit. One example would be a "trade-able" system in which property owners could pool and transfer credits to fund mitigations in other areas.**
    - It would be great to have a regional Charles River Stormwater Authority. It's hard for communities to work together, so creating a regional body could help generate that collaboration.
    - The cost-effectiveness of implementing stormwater controls in certain areas of the watershed should be a consideration and was explored in the 2010 RDA Pilot study. A regional approach has previously been attempted, but there are barriers (political, legal, etc.) to establishing a regional collaborative or utility.
    - Long Creek, Maine, and the East of Hudson Watershed Corporation provide interesting models for regional collaboration on stormwater management.
    - In other states, there is county management of these issues, and Massachusetts provides an interesting dynamic for regional collaboration. The Mystic River Watershed Association is a model for regional collaboration in Massachusetts.
- **Additional RDA petitions:** has EPA received any other RDA petitions?
    - *EPA: EPA has received two more petitions for the Mystic River and Neponset River watersheds. EPA has not yet started to analyze those contexts or develop responses to the petitions. Each watershed has unique context and needs to restore the rivers to health. There could be instances of some municipalities that straddle multiple watersheds having to address different permit requirements.*

What additional information would your municipality require to think through an RDA approach?

- **Control actions required and phasing:**
    - Is it a fair assumption that an RDA permit would require structural controls on properties, or could actions be softer, like source control and property management?

        - *EPA: It could be that, with smaller properties, the permit starts with management practices while, on larger properties, the permit requires structural controls. EPA could also consider phased approaches and adaptive management.*
    - The phased approach begs the question of how EPA would quantify the credit to the community through the MS4 permit? Is there a default rate? That credit will become a moving target that figures into 20-year plans.
        - *EPA: Adaptive management is important. Through the MS4 permit, EPA does not request 20-year plans, but rather a series of 5-year plans that employ a "do and learn" approach. A similar approach could help feed what would happen with each RDA plan into the municipal MS4 plan.*
- **Timetable concerns:** when our municipality considered mitigation measures in MS4 permit planning, the timetable was an issue. Mitigation measures are best pursued during periods of redevelopment.

How could EPA best align an RDA permit to support existing municipal efforts?

- **Value in aligning RDA and MS4:** there is significant value in aligning an RDA permit to support and advance MS4 efforts, as it will be a challenge to meet total load reduction requirements without an RDA too. Basing an RDA permit on percentage of impervious cover appears to make sense. However, if there is lack of alignment between municipal and permit standards, there is a question about what happens when a parcel that is regulated under an RDA is redeveloped and the municipality has different requirements than what is in the permit. There may be some benefit in including every property in the permit and phasing up control actions from non-structural practices.
- **Allocating municipal credits:** a big factor is how credits will be awarded to municipalities for actions taken by private properties through an RDA permit.
- **Cost/benefit:** what would be the cost/benefit of the programs that are being explored?
    - *EPA: EPA is looking at the best ways to meet known reduction targets (e.g., 60% reduction across impervious cover). For municipalities to meet reduction targets, there are indicators and credits to look at for each control action. This is an approach that EPA would want to replicate for private properties, which would ultimately also reduce municipal phosphorus amounts.*
- **Examples of success:** could you provide examples of any communities that have met 62% reduction targets and over what time that reduction occurred?
    - *EPA: This discussion is somewhat new, and EPA only implements NPDES permits in a limited universe. EPA Region 6 is about to implement an RDA permit in an area of New Mexico. EPA Regions 3 and 9 are conducting a similar process to this one to explore a potential RDA permit program and determine best practices and permit requirements for Los Angeles, CA, and Baltimore, MD. EPA is considering whether a potential permit might require property owners to implement BMPs that are similar to those that the municipalities are already required to implement under the MA MS4 permit.*

    - *EPA: The 2016 MA MS4 General Permit The 2016 MA MS4 General Permit is the first MA MS4 permit to incorporate specific TMDL-driven permit conditions, and its implementation is still fairly new. This newness is one of the reasons that EPA pursued a phased approach, with the expectation that timeframes will be adjusted as efforts progress. There is not a good example of permit timing available yet.*

- **RDA permit management:** if there was an RDA for properties that are one acre or more, would they deal with EPA directly, or does EPA expect municipalities to manage the coordination?
    - *EPA: EPA understands that no municipality wants to receive thousands of reports from permit holders. However, is there any information that would be helpful for municipalities to know about permit holders?*
    - Municipalities would like to know how many credits they will receive. If it's EPA's permit, then all forms should go through EPA.

Would an RDA approach would help your municipality achieve its goals in its MS4 program?

- Four focus group members indicated that an RDA approach would help their municipality achieve its MS4 program goals. Two focus group members noted that it could maybe be helpful, and two additional members expressed concern that an RDA approach would not have much impact on achieving their MS4 program goals.

FUTURE ENGAGEMENT

What is your preferred level of engagement in this process going forward?

- Multiple focus group members indicated that they would like to remain engaged in this RDA process moving forward.

NGO Focus Group Notes | November 5, 2020

GENERAL QUESTIONS: WATER QUALITY & CHARLES RIVER PROXIMITY

What is your sense of the state of the Charles River and its water quality today?

- Problematic, especially regarding cyanobacteria. Eutrophied and dealing with blue green algal blooms driven by phosphorus loading
- Fouled by an urbanized area
- Vastly improved from the beginning of the CWA, but more improvements are needed to attain WQS
- Way better than it used to be - a ways to go for sure
- Great except for occasional issues
- Greatly improved but major stormwater issues that need to be addressed
- Better than when I grew up in the watershed, but still needing work.
- Overall, fair but still impaired by stormwater, phosphorus, and some bacteria issues

How do your constituents see the Charles River?

- **Recreational value:** Our constituents find value in the path network. Residents and community partners benefit greatly in their personal lives and the value it adds to their community. There is access to natural space in their own backyards. There are also a lot of recreational companies active in the watershed (e.g., Charles River Canoe/kayak, fishing boat, tour boat, etc.).

POTENTIAL RDA APPROACHES

What do you see as the opportunities, challenges for RDA as a supplement or addition to MS4 permits?

Focus group members named the following opportunities.

- **RDA as an opportunity to share the burden:**
    - The RDA approach presents a real opportunity to share the economic burden and to show municipalities what the RDA means for reducing the municipalities' liability in the future.

    - Sharing the burden across private owners will help with planning for climate change for everyone. There is a more equitable way for us to deal with how we handle water resources.

- **Opportunity to supplement MS4 efforts:** Many municipalities are still wrapping their heads around how they will comply with MS4 and are starting to see RDA as a potential tool to work hand-in-hand with those efforts. Many municipalities will struggle to achieve their required MS4 reductions without a tool like RDA.

Focus group members named the following challenges:

- **Inconsistent permit scope:**
    - The biggest challenge for municipalities is if RDA is instituted in a relatively small geographic area as opposed to a larger state-wide requirement. Towns expressed concern that being subject to an RDA permit would make them less competitive with neighbors. An RDA approach should be employed statewide.
    - It will be easier for municipalities if EPA creates a uniform RDA approach. Leaving towns to solve 100% of the problem working with only 40% of the land is not efficient. To the extent that communities are pursuing new development, it does come with a modest amount of new pollution.
- **Property tax revenue:** as long as municipal governments rely on property tax for revenue, there will be a concern that RDA will have an effect on municipal finance.
- **Communications:** another concern is that municipalities will have to explain the different regulatory mechanisms that they use, which will be viewed as burdensome. EPA could provide a centralizing force for communications and data collection to help address that issue.

What are some potential program elements EPA could include in an RDA approach?

- **Shorter timelines than MS4:** it would make sense for RDA to mimic the structure of the MS4, but RDA does not need to have the exact same timeline. Shorter timelines may be possible given that it is a single property owner addressing issues on their property.
- **Concerns about delays:** in our experience with permits, it took 15 years for a 5-year permit to get renewed. There is a hazard of only having actions in the first 5-year permit, as it could delay action.
- **Feed into MS4 planning:** it would be a significant benefit to municipalities to have private properties moving slightly ahead of reporting deadlines for municipalities. Towns would have to know what is going to be done on a property to factor it into their MS4 planning.
- **Total number of properties:** what is the total number of properties that would be included in an RDA approach?

- *EPA: EPA is not sure of a definitive number at this time, but it is likely in the tens of thousands. The EPA technical team is working on that and similar questions, considering the one-acre threshold and the tiered thresholds above that, too.*

- **Rewarding quick implementation:** Could there be a permit program that provides incentives for speed?
  - *EPA: In other areas, EPA has taken a similar approach, perhaps lessening the total amount of action required if the permit holder acts quickly. EPA is also considering if an RDA program was designed in connection with a crediting or trading program. With that approach, EPA is familiar with how to build in incentives for going early – give them credits with economic value. One of things we talked with the municipalities about is the idea that they might want to give some incentives from their own stormwater fees.*

How should EPA best approach RDA permit eligibility?

- **Data available:**
  - Has EPA done modelling to understand the different eligibility approaches?
    - *EPA: Better understanding the different approaches is part of what PA is hoping to use its data analysis efforts for. EPA would want to analyze the impact of implementing a cutoff at a certain level to determine how much of the problem would be addressed. When EPA talked to property owners, there were two strains of thought: (1) EPA should focus on larger, more capable properties; (2) but then larger properties have to do more if the small ones aren't doing anything.*
  - EPA should look at the Long Creek, Maine, RDA example, where commercial stormwater dischargers with over one acre of impervious cover had the option of putting in their own controls or paying into a general fund managed by a MRWA-type entity. EPA worked with the state, figured out a budget for addressing where they would be implementing a plan, and put out a funding mechanism where owners could pay annually based on impervious cover. Then, an entity would keep the budget, do the billing, and then build the most efficient BMPs first. Necessary components were commercial property owners agreeing to give easements and pay a share of the program's cost. Almost every property owner picked the utility district approach.
- **Efficiency concerns:** for the sake of efficiency, it would be hard to permit everyone. Structures at the smallest scale have poor cost/benefit. Homeowners are often groups that are already paying for MS4 in their communities. Individual homeowners and those small parcels already have a stake in the game through taxes.
- **Impervious cover:**
  - It seems unreasonable to include everyone in the permit. It does make sense to target those with the largest impervious cover, and the argument that those properties will have to do more may not be true or relevant. TMDL has a roadmap for reductions by land use and looking at that model under projected climate change

scenarios raised how much harder it will be to achieve compliance moving forward. Doing more will be necessary.

- Studies from USGS and the Massachusetts Department of Fish and Game addressed impervious surfaces having effects on stream flow impediments. The RDA could potentially "kill two birds with one stone" to incentivize minimizing impervious surfaces. There might be a tie-in with municipal zoning bylaws.

- **Implementation concerns:** there is a lack of framework around maintenance on private properties. This issue will become more difficult with less sophisticated owners. However, if a goal of the RDA is to reduce X amount of phosphorus loadings, it may burden universities or other large owners with infiltrating x% of run-off.

What tools might we use to complete this? How apply technology to this permit? And are there good models in your area that you know about?

- **Focus group members raised a number of points about finding the correct balance between Green Infrastructure (GI) approaches and non-structural practices.**
  - GI implementation is necessary to have a measurable impact, as non-structural practices don't make enough of a dent in the problem.
  - There should be a cap to credits achieved for non-structural practices.
  - Like the MS4 permit, the RDA approach will need multiple scales of treatment. The Charles River has a very developed watershed and will require both types of actions. Infiltration is good and credit should apply to this permit as well. The more area you can direct into a treatment system, the more you can get.
- **Phased approach:** Five-year phasing, like the MS4 permit, may be a bit long, but EPA could pursue a phased approach with interim targets building towards an ultimate goal.
- **Focus group members shared the below reflections on a "trade-able" or centralized "buy-in" program versus a property-by-property program:**
  - An approach based on trading of credits would be concerning if a particular sub-watershed would not get any benefit. That approach needs to be designed carefully so that all water bodies get treated properly and fairly.
  - There is benefit from creating trading on a larger scale if EPA is making sure that nobody is getting left behind. However, municipalities would be concerned with how they would receive credit for an action if something is traded outside of their borders.
  - A property-by-property approach focused on individual responsibility doesn't have to preclude the idea of a general permit. In Long Creek, if property owners don't buy into the program, they receive an individual permit.
  - Whether the permit is general or individual, it is important that the permittees are obtaining permits from EPA and subject to EPA oversight. Towns don't want this to

be a burden. Long Creek is instructive, but it's on permittees to determine who manages a centralized utility.

- **Permitting authority:** Would municipalities or EPA be in charge of managing permitting?
    - *EPA: EPA has the authority to make residual designation determinations and issue NPDES permits in Massachusetts. The Clean Water Act (CWA) does not authorize permitting authority for municipalities.*
- **Enforcement:**
    - How is the EPA thinking about enforcement?
        - *EPA: One important consideration is how big to create the universe of permit holders. However, limiting permit eligibility could also limit the potential impact. This would be an EPA permit, but EPA would work with the state where they have capacity to help out. Massachusetts has been a leading state on how to ensure compliance when there are large facilities using creative tools, and there are other ways to get at compliance. In general, the larger the number of permits, the more challenging.*
    - The situation described may argue for a specific set of requirements. The MS4 has so many requirements, and it's unclear if there is a way to do this more simply.
        - Would a multisector general permit be something to explore, in terms of how it operates?
            - *EPA: There could be a permit that was really simple. Most of the people that EPA permits have other permits as well. A lot of RDA permits could be going to first time permittees, so keeping it understandable is important. One way to keep it simple and account for differences is to create a permit that is clear and has appendices for each type of use category. This could help limit what any one facility has to absorb.*
        - There could be lessons to be learned from how Massachusetts does their sanitation code for Title V, focusing on mitigation actions during the transfer of property when that happens. If the RDA permit was capturing many smaller properties, that might be one approach but not the only way.
        - It seems like the notion of a third-party contractor to support enforcement would not be too difficult to pursue (e.g., licensed engineer inspecting system every 5 years).
- Mass DEP's role: what role would MassDEP play in the RDA?
    - *Mass DEP: DEP is participating in these focus groups to better understand how this process is progressing, but DEP still is sorting out our potential role. This process is by EPA not DEP. With the changes of MEPA permitting in June, DEP has to consider how to address a potential RDA. The reason DEP is here is to try to learn from this process to inform our decision.*

In municipalities where development pressure is high, RDA would probably not scare developers away from hot markets. For some communities along the river vying for a tax base, the RDA could drive developers away to a town out of the watershed. How should EPA best address that the burden of RDA would be experienced differently throughout the watershed?

- The concern of sharing the burden speaks to the importance of expanding RDA beyond the Charles River Watershed and making it a statewide tool. Communities outside of the watershed will still be grappling with MS4 and imposing requirements. Stormwater management impacts from private properties are not a problem unique to our watershed, and people need to figure out how to address those issues.
- If the developer leaves the watershed, they are getting a free pass to pollute somewhere else. It is unclear if an RDA can be expanded if the other watersheds aren't similarly impacted. Is there a way to expand statewide? Would you have to have a Total Maximum Daily Load (TMDL) in place?
    - *EPA: One important consideration is how big to create the universe of permit holders. However, limiting permit eligibility could also limit the potential impact. This would be an EPA permit, but EPA would work with the state where they have capacity to help out. Massachusetts has been a leading state on how to ensure compliance when there are large facilities using creative tools, and there are other ways to get at compliance. In general, the larger the number of permits, the more challenging.*

FUTURE ENGAGEMENT

What is your preferred level of engagement in this process going forward? And how would you like to be engaged?

- Focus group members indicated that they would like to remain engaged as the process progressed through periodic updates and potentially reconvening of the focus group.

495 Partnership Focus Group Notes | November 20, 2020

GENERAL QUESTIONS: WATER QUALITY & CHARLES RIVER PROXIMITY

What is your sense of the state of the Charles River and its water quality today?

- Grew up in the 60's. It was a mess. Not swimmable. Now much better.
- I wouldn't swim in it but would certainly kayak!
- It's improving.

What is your sense of the value of the Charles River to you?

- Natick has a popular park in South Natick (at the dam). Folks value the river for recreation and historic identity.
- The Charles River factors into a holistic view of why businesses locate and stay here. There is an educated workforce, transportation, and high quality of life. That broader quality of life for employers is where the river ties in. People see a lot of value in being in the MetroWest area.
- High-value property for municipalities: In a recent municipal Open Space 10-year plan, properties along the Charles River were listed as high value and something that the town should pursue to guarantee community access to the river.
- Historical and recreational value:
    - A municipality has a popular park near the river; folks value the river for recreation and historic identity. The Charles River is part of the community's history.
    - Residents are invested in the conditions of the public recreation areas in town, like the Charles River.

For municipalities: How do you think about RDA potentially fitting into your MS4 efforts?

- **Jurisdictional concerns**: our municipality is in a situation of having parcels that discharge indirectly into the roadway, but not directly into the river. In those situations, town authority becomes vague and it becomes more difficult to remediate or work with the property owner. How could those situations be handled under an RDA approach?
    - *EPA: One of the most important questions around a potential RDA permit is what would and wouldn't be included. That example raises a tricky question of jurisdiction over that discharge. That's an issue that EPA will need to discuss with DEP and with communities, as*

there may be things that EPA doesn't have jurisdiction over. Enforcement is a common theme on these calls, and EPA needs to give it more thought. If the permit would only include a consolidated number of larger facilities, then the traditional approach of inspections could work. However, the petition asks for inclusion of all private properties that are one acre and larger, which would lead to considerations of third-party certifications. At the state level, Massachusetts has good experience figuring out compliance in sectors with large numbers of properties covered.

- **Properties included in scope**: is most consideration being given to those properties that abut the River?
    - *EPA: An RDA approach could also include facilities that discharge into your municipal systems. EPA is working to better understand what would be most helpful to municipalities.*
- **Learnings from other programs**: Are there any lessons to be learned on enforcement from the program in Long Creek, Maine?
    - *EPA: In the Long Creek, Maine, program, there are 100 properties covered, and 99 joined together to develop their own miniature utility. It is a centralized fund that all properties pay into that manages the whole program and implementation of BMPs. The program is now in its tenth year. The state of Maine issued the permit, so they would probably be the most likely actor to send an inspector out and take action to bring properties into compliance.*

For private property owners, what are challenges and barriers to improving your stormwater management? How often do those impervious surfaces get re-covered, changed, improved?

- **Equipment concerns**: a primary stormwater management concern is equipment, namely the purchasing, installation, and maintenance of expensive equipment. There is interest in looking at other approaches to dealing with stormwater that don't require buying new equipment, but there is limited access to information on or understanding of other mitigation actions.
- **Newer versus older properties**: another concern is a potential difference in how newer and older property owners would be treated with an RDA approach, as impervious cover varies between newer and older developments. Newer developments tend to have more infrastructure or design elements aligned with stormwater management goals. A question raised has been when would owners have to change their parking lot layout.
- **Cost and existing site conditions as factors for resurfacing**: cost is the number one factor in implementing these technologies. Regulations around redevelopment are going to become more stringent (e.g., new DEP standards). Cost and existing site conditions all factor into decisions regarding changes to impervious surfaces. Resurfacing can happen when you have new owners, every 15-20 years, etc. Timing of when improvements occur is somewhat dependent on the luck of the draw and how pavement is holding up.

How should EPA best approach RDA permit eligibility?

- **Envisioning a coordinated approach**: there is Interest in a type of approach where there is some sort of alliance - participating in a utility feels different than top-down regulation. Depending on how many properties would be impacted, the utility could be much larger than 100. How would that work? What would be necessary? Who would take the lead? Could that work with a watershed the size of the Charles River watershed?
    - *EPA: Those are great questions, and EPA is exploring those as well. One of the most important strategies to keeping costs down for property owners is the kind of coordination and collaboration that's happening in Long Creek - it's more efficient. An RDA in the Charles River watershed is definitely on a different scale than Long Creek, but an option could be grouping properties in a certain area. There could be a mechanism in the permit to allow those facilities in that area to work together to find cost effective solutions.*
    - Banding together makes the most sense for private property owners. Important considerations moving forward include how to keep costs low, as cost is the number one driver for private property owners. Any action that EPA could take to facilitate partnerships and making funding available to them would help.
- **Size of properties in RDA scope**
    - The petition specifies private properties that are one acre and above. In its response, does EPA have the authority to shift focus to larger parcels?
        - *EPA: EPA is not obligated to go with the petition threshold of one acre or above. EPA's duty is to develop a record that demonstrates whether discharges are contributing to water quality standards harms and then determine potential permitting approaches on whatever scale the science can support. A tiered approach or larger acreage designations are on the table.*
    - Where did the petition threshold of one acre and above come from?
        - *EPA: Further clarity on the threshold would have to come from the petitioners. The petitioners developed a robust technical support document that describes, from their consultant's perspective, that EPA may need to go down to one acre to get the desired water quality results. EPA's record may show that a phased approach will be effective.*
    - **Capacity of smaller businesses**: the size of a business entity would directly relate to their ability to pay for actions required through an RDA. If EPA includes smaller parcels, it might target smaller businesses lacking capacity to address these issues, especially in the COVID-19 climate.
    - **Focus on impervious cover**: the one-acre threshold seems arbitrary. Percent impervious or minimum impervious threshold would seem like a more targeted approach.

        - *EPA: In the petition, it's the size of the parcel that is the determining factor. EPA is not bound to that criteria and is looking at if it makes more sense to determine eligibility based on the amount of impervious area..*

Would an RDA approach be better served by an individual or general permit?

- **Smaller versus larger business capacity**: some smaller businesses might be interested in more streamlined compliance methods, and some larger entities may have the capacity to take on responsibility for their own management. Cost is going to be the first consideration, but simplicity and the time is going to be another.
- **EPA capacity**: EPA would be crushed by having to administer and manage individual permits that include properties down to one acre in size.
- **Clarifying question on TMDL loadings**: in a previous EPA presentation, there was a slide that included TMDL loadings by property type for the lower Charles River. Is it safe to assume that the same percentage of loadings by property type is consistent up and down the river? Is that data available?
    - *EPA: That information is the TMDLs and available. EPA will share that chart back out to members.*
- **Anticipated RDA timeline**:
    - What is EPA's estimated timeline for an RDA permit?
        - *EPA: MS4 permits have a 20-year schedule. Their job is to look at the whole municipality, which is a much different scope than what could be asked of private property owners. The RDA timeframe is not necessarily going to be the same as that of the MS4. EPA wants to take into account issues like the one raised earlier about repaving and redevelopment because it is more cost effective to time work that is required under a stormwater permit along with necessary improvement projects. Part of this initial process EPA is undergoing is determining a reasonable timeframe for a potential RDA. An important consideration for setting a timeframe is when the watershed will start to experience environmental improvements. If the EPA does move forward with an RDA, then there would be a public process with draft permits and designations for public comment. EPA understands that stormwater management is a big issue to address and wanted to start gathering stakeholder input early to inform its deliberations.*
    - Could EPA envision RDA permits that have phased timelines?
        - *EPA: Absolutely. The MS4 permit is structured with a phased approach, with targets to meet in 5-year chunks. Some of the controls municipalities employ are non-structural and can make a difference right away without a large capital investment.*
        - A phased approach is smart to help both facilities and the river quickly.

FUTURE ENGAGEMENT

What is your preferred level of engagement in this process going forward? And how would you like to be engaged?

- Focus group members shared that they are interested in engaging with the process moving forward but that they may have limited engagement capacity given other competing priorities.