

RDA Permitting in Massachusetts: What to Expect in 2024?

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ANNE LEIBY, ESQ.
SENIOR ADVISOR
WATER DIVISION, EPA, REGION 1

LAURA SCHIFMAN, PH.D.
STORMWATER PERMIT WRITER
WATER DIVISION, EPA, REGION 1

Presentation Outline

1. Why is EPA Pursuing RDA permitting at time?
2. What are the benefits of the RDA permits?
3. RDA petition and permitting process
4. RDA stakeholder outreach
5. Technical basis for this permit
6. Types of stormwater management controls
7. Benefits of these stormwater management controls in affected communities

Note: The numbers, graphics, and technical conclusions throughout this presentation are pre-decisional, subject to change, and may be different than the final calculations relied upon in the draft and final permits. EPA will publish its draft RDA permit and RDA determination in the Federal Register for public comment and will consider all significant public comments.



Clean water/Healthier wildlife/Recreation



Certain private sources of stormwater run-off regulated by this RDA permit will take responsibility for their contribution, thereby reducing the burden on MS4s



May help beautify neighborhoods through green infrastructure installations (i.e., trees, rain gardens) and increase infiltration of stormwater into groundwater.



Actions required by permittees may help counteract impacts of climate change – reductions in flooding and heat island impacts, increases in carbon capture

Why this Permitting Action Matters:

The (Co)Benefits

Clean Water Act 402(p)

Defines specific sources that must be authorized by an "NPDES" permit, but also recognizes that other sources may need to be regulated.

Allows for regulation of "other sources"

Referred to as "Residual Designation Authority," or simply, "RDA."

RDA Authority Can Be Used to Require NPDES permits when:

- * the discharges contribute to a violation of water quality standards,
- * are a significant contributor of pollutant to federally protected surface waters, or
- * controls are needed for the discharge based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutant(s) of concern.

What is RDA?

Petitions Request that EPA Exercise its Residual Designation Authority

(2019 Charles, 2020 Mystic, Neponset)

Petitioners: The Conservation Law Foundation and Charles River Watershed Association

Request: That all commercial, industrial, and institutional (collectively “CII”) properties 1 acre or greater and large Multi-Family (M) parcels (five or more housing units) in the Charles, Mystic, Neponset receive NPDES permits (an “RDA permit”).

Determination (September 2022)

EPA designates all CII parcels (but not multi-family units) with 1 acre or more of Impervious Cover* (“IC”) in the Charles, Mystic and Neponset Watersheds.

Develop Permitting Framework & Issue Draft Permit

(Goal: September 2024)

EPA is moving forward with the development of a permitting framework and outreach strategy.

*Impervious Cover - any surface that prevents or significantly impedes the infiltration of water into the underlying soil. This can include but is not limited to: roads, driveways, parking areas and other areas created using nonporous material; buildings, rooftops, structures, artificial turf and compacted gravel or soil

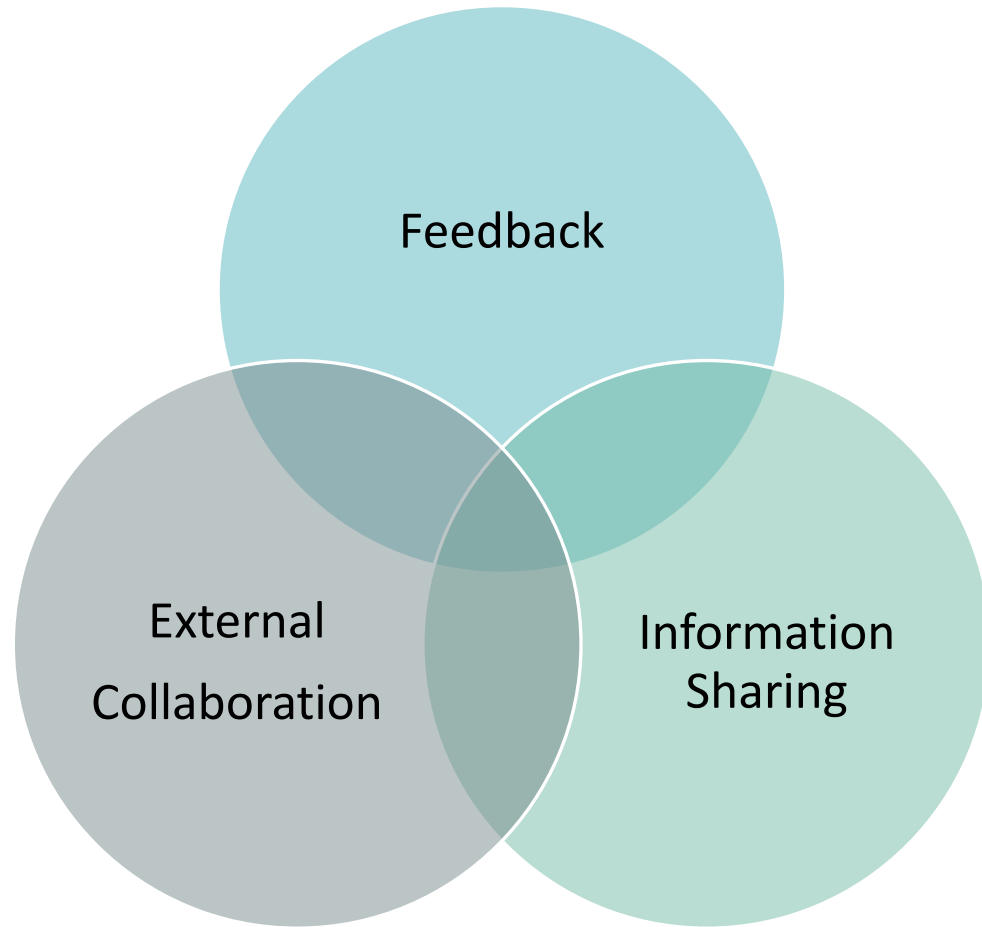
RDA Process

RDA Permitting Timeline

Draft RDA Permit Target – Fall
2024

Public Comment Period (at least
30 days 40 CFR § 124.10(b))

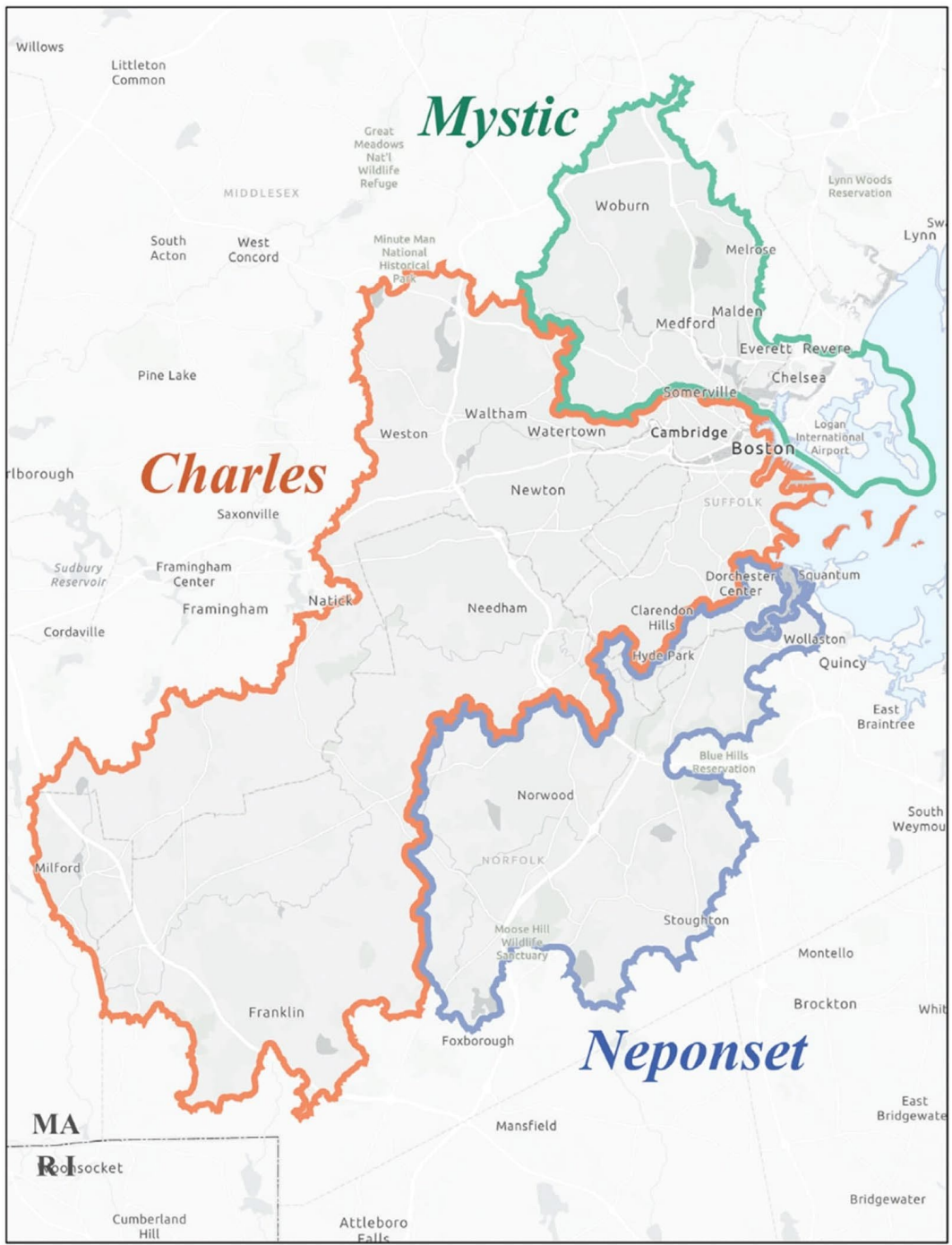
Final Permit Issued with a
Response to the Public
Comments



Seek Feedback on Permit
Implementation Challenges and
Strategies

Facilitate Information-Sharing
between stakeholders and EPA

Foster External Collaborations
With Municipalities/Watershed
Groups/Others



Stakeholder Outreach Timeline

WINTER

- ✓ Re-engage stakeholders across all three watersheds

SPRING

- ✓ Information sharing with stakeholders
- Seek feedback on permit implementation

SUMMER

- Meet with Environmental Justice groups
- Refine options for permit framework

Stakeholder Outreach: 2024

Outreach events are still
being planned

1. Neponset River Watershed Association: January 17th
2. MA Rivers Alliance: February 28th
3. Charles River Watershed Association: March 7th
4. Mystic River Watershed Association: March 14th
5. NAIOP/495 Partnership RDA Presentation: March 22nd
6. Colleges Universities/Hospitals: April 1st
7. Congressional Staff: April 24th
8. Metropolitan Area Planning Council & Mass Municipal Association: May 15th
9. Communities with Environmental Justice Concerns: May 30th

Represents a continuation of stakeholder outreach initiated in 2020; Report available at: <https://www.epa.gov/npdes/epas-residual-designation-authority>

Types of Questions EPA Seeks Feedback On:

1. Permit Administration

- Phasing of permit
- Compliance timeframes
- Accounting & tracking of obligations

2. Stormwater Controls

- Stormwater Control options
- Credits for existing stormwater controls

3. Funding Mechanisms

- Regionalized stormwater management
- Impact on stormwater utilities

4. Needed Resources

- Data tools & technical assistance
- EPA support
- Assistance w/ Reporting

Improvements in Pollution Control

1970s to now

99% of CSO and illicit discharges reduced

2000s to now

90% Phosphorus from WWTPs reduced

2016 MS4

Municipal Stormwater Programs manage stormwater from the entire municipality and are responsible for all required load reductions

RDA

Private CII land uses cover 14-18% of the area in the three watersheds. An RDA program will distribute stormwater management responsibilities among municipalities and designated private sources

Who does the RDA permit apply to?

- ✓ Commercial, Industrial, and Institutional properties in the Charles, Mystic, and Neponset River Watershed
 - Charles River Watershed: 35 cities and towns
 - Mystic River Watershed: 21 cities and towns
 - Neponset River Watershed: 14 cities and towns
- X Municipal and other public property (regulated via MS4 permit)
- X Municipal and state roadways (regulated via MS4 permit)
- X Residential properties

How did EPA designate CII properties?

- Identified use codes from tax assessor's database that indicate commercial, industrial, institutional land uses in the three watersheds
- Geospatial analysis to determine impervious cover* acreage per parcel
- Maximize environmental benefit by permitting the fewest number of CII sources led to 1 acre impervious cover permitting threshold

Parcel level analysis reports: <https://www.epa.gov/npdes-permits/january-2024-update-residual-designation-authority-rda-activities-underway-charles>

*Data for the Charles River Watershed is being updated

RDA and MS4 Permit work in concert to improve water quality

MS4 Permit

- Regulates public property
- Primary regulatory mechanism for stormwater

Adaptive
management
Stormwater
management
actions to
address
impaired
waters

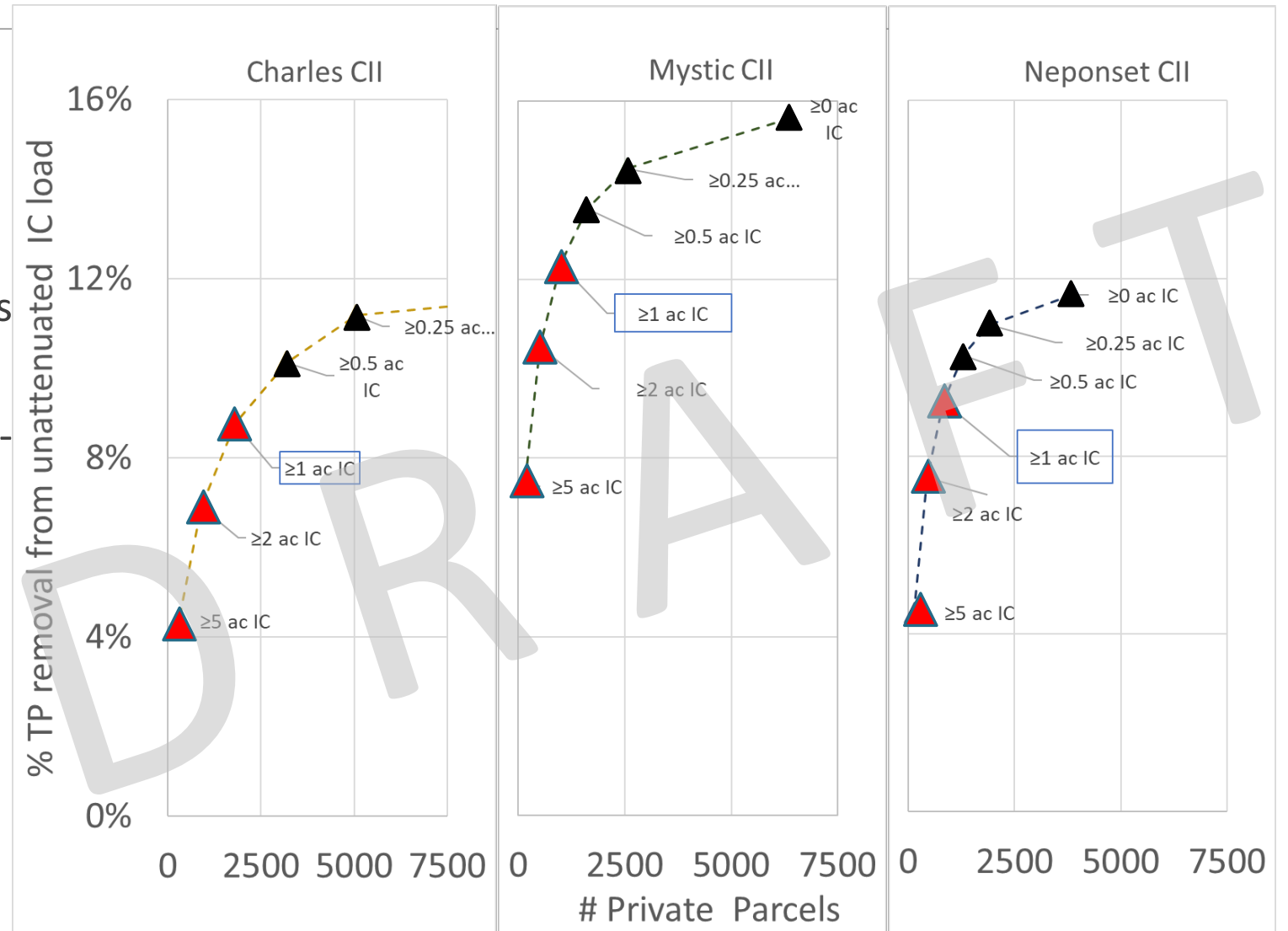
RDA Permit

- Regulates private CII properties with >1 ac impervious cover
- Currently unregulated properties

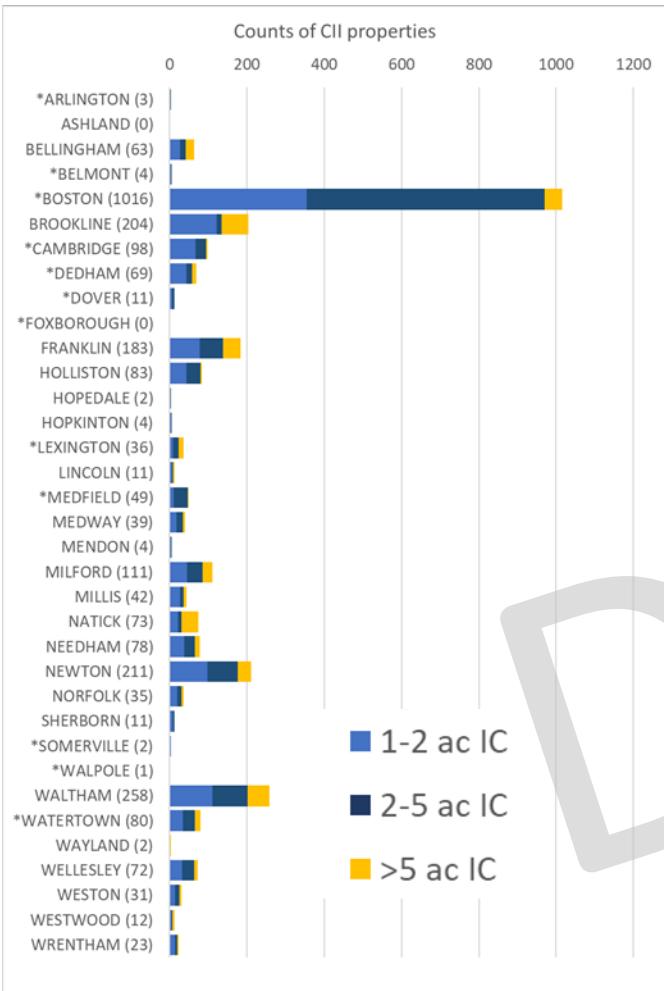
Neither permit addresses single family homes and other multi-residential sources

Finding a balance for the RDA program

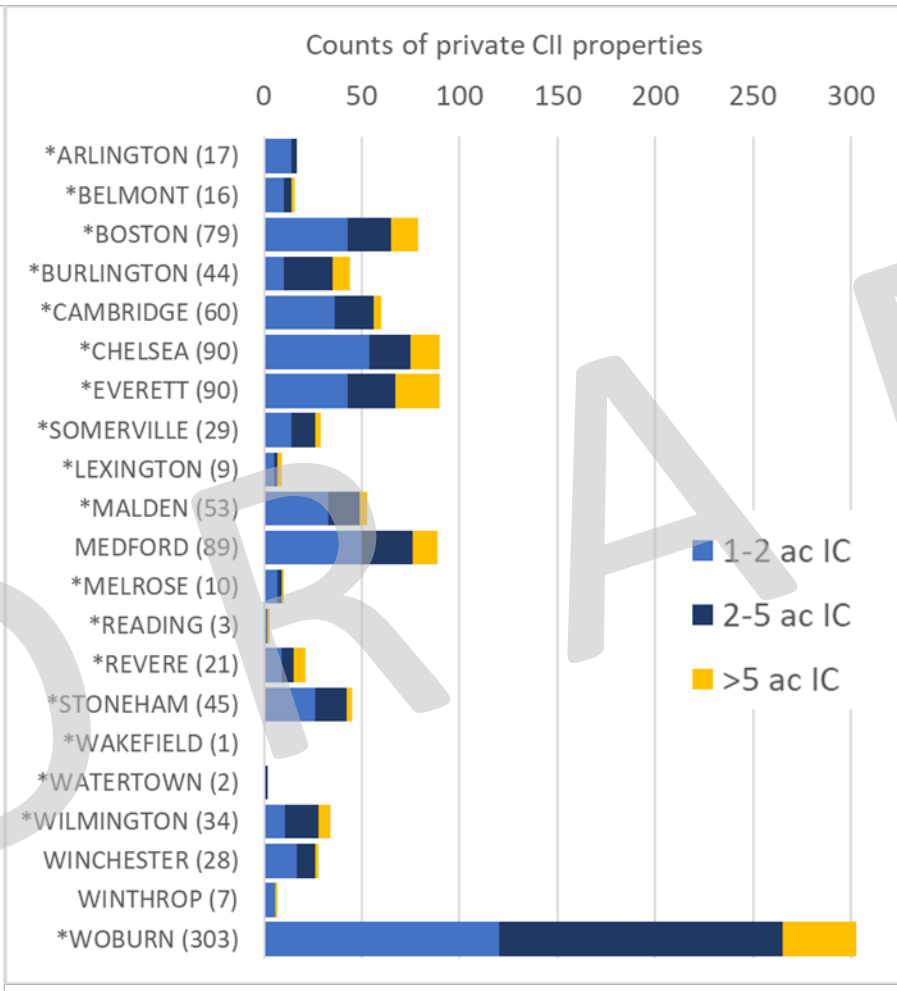
- “Knee of the curve”
 - Balance highest pollution reduction potential with permitting fewest number of CII properties
- Same eligibility for all CII properties
- Differences in estimated pollution reductions reflect variations in non-CII land use and overall impervious cover of the watershed.



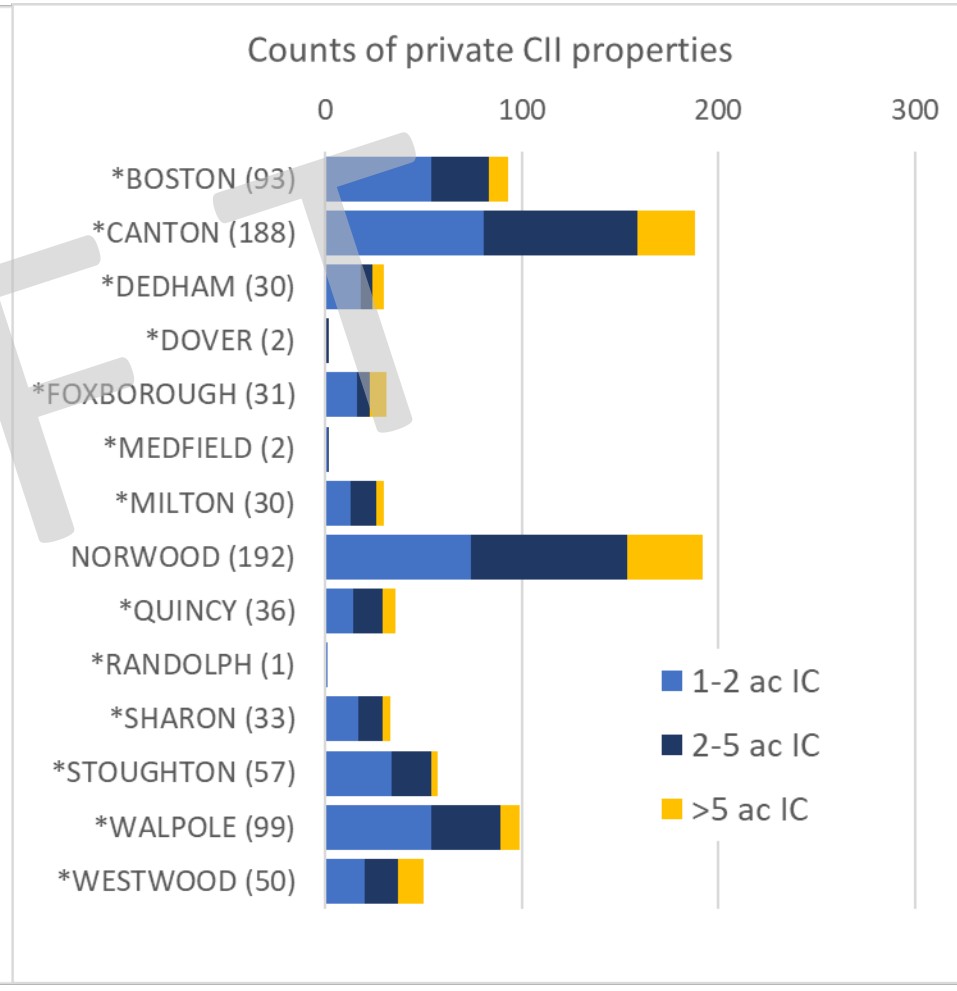
Numbers of properties considered for permitting



Charles River Watershed



Mystic River Watershed



Neponset River Watershed

What does stormwater management under an RDA Program look like?

STRUCTURAL CONTROLS

Infiltration Practices

- Infiltration trenches
- Infiltration basins/ Rain gardens
- Biofiltration/ Tree filters
- Gravel Wetlands
- Enhanced Biofiltration with internal storage
- Sand Filters
- Porous Pavements

Disconnection

- Impervious Cover Disconnection with and without storage

Storage/Detention

- Dry Ponds Water Quality Swale with Detention
- Enhanced Biofiltration with internal storage
- Wet Ponds

Stormwater Reuse

Manufactured Treatment Devices *

NON-STRUCTURAL CONTROLS

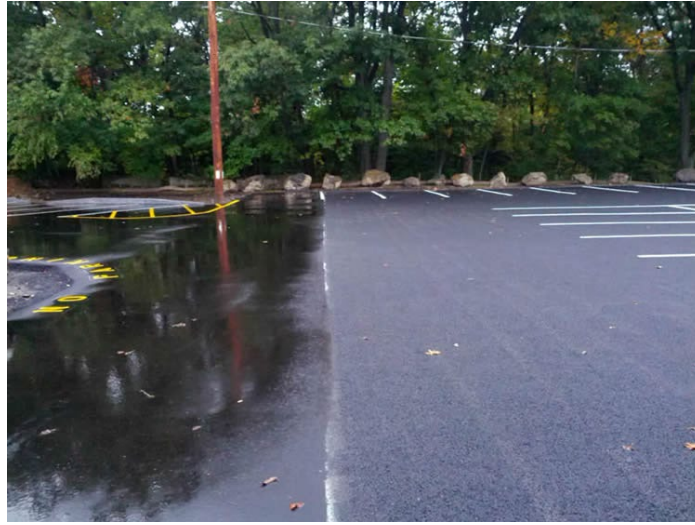
Street and parking lot sweeping

Catch basin cleaning

Leaf litter collection program



Street sweeping
City of Palo Alto, CA



Pervious pavement, right, allows water to seep into the ground.



Parking lot infiltration
MN Pollution Control Agency

Examples of stormwater management options

Resources, Feedback, Questions?

More Information:

<https://www.epa.gov/npdes-permits/watershed-based-residual-designation-actions-new-england>

RDA Petitions for Charles, Mystic and Neponset River Watersheds

EPA's Initial RDA Designation

Monthly RDA Updates

Parcel-level analyses for all three watersheds

Tools and Informational Fact Sheets

Stakeholder Events and Presentations

EPA plans to hold more focused conversations on specific topics of importance that arise as part of this engagement process.

Focused conversations with municipalities will take place from 2-4pm on June 5 and June 18. Please indicate in the upcoming poll whether you are interested in participating.

Feedback and Questions:

Do you have any feedback on permit implementation challenges or ideas for solutions to those permit challenges?

Email us: R1.RDA@epa.gov