



# Department of Environmental Protection

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**Meeting Summary**  
**Stormwater Advisory Committee - Meeting #1**  
**February 12, 2020, 1:30 PM – 3:30 PM, MassDEP/Boston**

**ATTENDANCE**

**ADVISORY COMMITTEE MEMBERS**

Name	Affiliation
Henry Barbaro	Massachusetts Department of Transportation (MassDOT) – Highway Division
Jeffrey Brem	Home Builders and Remodelers Association of MA (HBRA-MA)
Sandra Brock	MA Association of Conservation Commissioners (MACC)
Ronald Burns	Boston Society of Civil Engineers Section (BSCE)
Ian Cooke	MA Rivers Alliance (MRA)
Michelle Craddock	MA Department of Fish and Game (MassDFG)
Rich Claytor	Member At Large
Patty Gambarini	Pioneer Valley Planning Commission (PVPC)
Ariela Lovett	MA Municipal Association (MMA)
Robert Lowell	MA Department of Conservation and Recreation (MassDCR)
Stacy Minihane	Association of MA Wetland Scientists (AMWS)
Stephanie Moura	Massachusetts Department of Environmental Protection (MassDEP)
Chip Nylen	National Association of Industrial and Office Properties (NAIOP)
Vandana Rao	MA Executive Office of Energy and Environmental Affairs (MA EOEEA)
Lisa Rhodes	MassDEP
Heidi Ricci	MA Audubon Society (MA Audubon)
Robert Roseen	Member At Large
Newton Tedder	U.S. Environmental Protection Agency (U.S. EPA)
Guy Webb	Home Builders and Remodelers Association of Central MA (HBRA-Central MA)
John Woodsmall	Central MA Regional Stormwater Coalition (CMRSWC)

**MASSDEP PROJECT TEAM AND CONSULTANT**

Name	Affiliation	Name	Affiliation
Kathleen Baskin	MassDEP	Judy Schmitz	MassDEP
Bernadette DeBlander	MassDEP	Alice Smith	MassDEP
Lealdon Langley	MassDEP	Kate Barrett	Regina Villa Associates (RVA)
Stephanie Moura	MassDEP	Amanda Poggenburg	RVA
Jill Provencal	MassDEP		
Lisa Rhodes	MassDEP		
Laura Schifman	MassDEP		

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

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## INTERESTED PARTIES / PUBLIC

Name	Affiliation
Lauren Caputo	VHB
Jon Goddard	Town of Southwick
Marianne Iarossi	Natick
Theresa McGovern	VHB
Heather Miller	Charles River Watershed Association (CRWA)
Hung Pham	MassDOT
Gabby Queenan	MRA
Kerry Reed	CMRSWC
Bill Renault	Town of Wakefield
Andrew Sankowski	Straughan Environmental, Inc.
Mike Stroman	MassDEP
Andy Truman	Shrewsbury Department of Public Works
T. Valton	MassDCR
Julie Wormser	Mystic River Watershed Association

This document summarizes the discussion at the February 12, 2020 MassDEP Stormwater Advisory Committee meeting. All references to slides relate to the presentation posted to the [website](#).

### WELCOME AND INTRODUCTIONS

Kathleen Baskin, MassDEP, welcomed the Advisory Committee members and attendees and introduced the DEP project team from the Boston office: Stephanie Moura, Lisa Rhodes, Laura Schifman, Lealdon Langley, and Alice Smith and the facilitation team from RVA, Kate Barrett and Amanda Poggenburg. She provided context for the important work DEP is undertaking, with consultation from the Advisory Committee, related to climate resilience (precipitation projections) and alignment of EPA's MS4 regulations and the MassDEP Stormwater Handbook.

Ms. Moura reviewed the meeting agenda and objectives. She requested that questions asked during the Q&A periods focus on clarifying questions and stated that substantive questions may be put in the parking lot for future meetings. She also noted that after the Advisory Committee process concludes, the formal regulatory process will follow including DEP preparing proposed regulatory updates for public comment. Ms. Moura invited the Advisory Committee to introduce themselves including their name, affiliation, and their organization's interest in stormwater management.

- Ms. Rhodes, MassDEP, said her interest in stormwater management is to ensure regulations are understandable and implementable and to make sure regulations and regulatory tools are up-to-date and reflect future conditions.
- Ronald Burns, BSCE, said his interest is to represent civil engineers and to ensure the regulations are based on good science and implementable across the state.
- Henry Barbaro, MassDOT, said the MassDOT Stormwater Design Guide is dated 2004 and he is interested in seeing how the Design Guide fits into this process.
- Robert Lowell, MassDCR, said DCR has property in 300 of the 351 MA cities and towns and they try to treat all properties with good stormwater management and practices. Their handbook is 10 years old and they are looking to update it.
- Jeffrey Brem, HBRA-MA, said his approach is to look at the regulations from an in the field, everyday use perspective.
- Guy Webb, HBRA-Central MA, said his interests are both representing his organization by offering input and conveying to his members how the regulations will work.

## Stormwater Advisory Committee Meeting Summary

- Newton Tedder, U.S. EPA, is the author of the MS4 Permit and is interested in how the DEP stormwater updates will interplay with the rules and regulations of the MS4 permit.
- Michelle Craddock, MassDFG, said her interest is in how stormwater management interacts with waterways across the state as well as the precipitation updates.
- John Woodsmall, CMRSC, said his interest is in making sure the regulations are streamlined for all users when the changes are made.
- Ariela Lovett, MMA, said she represents the interests of the 351 cities and towns and acts as an intermediary between the group, MassDEP, and other state agencies. She will be relying on input from MMA membership to guide her comments and feedback.
- Patty Gambarini, PVPC, said her interest is in understanding the implications of the regulations at the local level and how local boards will implement what is discussed.
- Ian Cooke, MRA, said his interest is what can be done to ensure the health of rivers across the state.
- Stacy Minihane, AMWS, said her interest is in science-based regulations as well as their understandability and implementation.
- Rich Claytor, Member At Large, said he is a stormwater practitioner with many clients that implement stormwater management and his interest is to see that the best performance and most cost-effective practices are implemented.
- Chip Nylen, NAIOP, said his interest is in developing properties and having regulations that are understandable and cost-effective.
- Vandana Rao, MA EOEEA, said she cares about everything to do with stormwater but is particularly interested in how the Commonwealth deals with increasing stormwater and precipitation; she would like a futuristic view.
- Sandra Brock, MACC, said she is looking forward to thinking about resilience and climate change.
- Robert Roseen, Member At Large, said his interest in stormwater management is in mainstreaming green infrastructure. He was at UNH for 12 years and has been in private practice for the last 8 years, working with developers on factors such as appropriate sizing, long-term operating and maintenance, and feasibility for owners.
- Ms. Baskin, MassDEP, said she is interested in updating stormwater standards that affect all levels of private and public property owners in ways that are environmentally protective and forward looking.
- Heidi Ricci, MA Audubon, said she is interested in regulations, with a particular interest in LID.

Ms. Barrett introduced her role as facilitator. She reviewed the Advisory Committee role to provide MassDEP with input and to make sure members serve as a conduit to their constituents. She highlighted key ground rules (distributed in advance).

- The meetings are working sessions for the Advisory Committee; there will be time at the end for questions from the public.
- RVA expects to send meeting materials a week in advance of each meeting.
- Meeting summaries will be distributed to the Committee in a timely fashion after each meeting.
- MassDEP will post meeting materials and other relevant information to its [Stormwater Advisory Committee web page](#). Interested parties may submit comments/questions through the web page and Ms. Rhodes will be the point of contact between meetings. MassDEP will carefully consider all input, though it isn't possible to provide individual responses to every comment.
- Subsequent meetings will be March 24 in Worcester; April 16, in Boston; and April 28, in Boston.

Ms. Moura noted that Tom Maguire, MassDEP, couldn't make it to this meeting, but he looks forward to participating in future ones.

## OVERVIEW OF REGULATORY FRAMEWORKS AND WETLANDS CONTEXT

To help establish the context for Advisory Committee meetings, Ms. Rhodes presented an overview of the relevant state and federal regulatory tools, and the relationships among them, followed by an overview of the three main issues for proposed updates to the Wetlands Protection Act (WPA) regulations, Water Quality Certification (WQC) regulations and the MassDEP Stormwater Handbook. See slides 5-18.

Questions from the Advisory Committee:

- Ms. Minihane: Does the alignment with MS4 mean the requirements are changed for all WPA jurisdictional areas or just the overlapping WPA/MS4 jurisdiction area? MassDEP response: it would change for all areas.
- Ms. Minihane: If the MS4 Permit is being updated by EPA now, why is MassDEP working on alignment now rather than waiting for the update? MassDEP response: MassDEP feels it's important to move forward now, the resiliency effects of the alignment will benefit some of the other goals to make stormwater systems more resilient. There's also an EPA mandate for towns to implement local ordinances by June 30, 2021, it's been a goal for some time to assist communities in that.
- Mr. Claytor: Does the update include non-MS4 urbanized areas? MassDEP response: regulatory updates will apply to all wetland jurisdictional areas, MS4 or not; but MassDEP is not expanding wetland jurisdiction to non-wetland areas.
- Ms. Brock: Will the DOT Highway special considerations be part of the update to the WPA regulations? MassDEP response: MassDEP doesn't expect the DOT special considerations to warrant a regulation update, rather it's likely just going to be incorporated into the MassDEP Stormwater Handbook.
- Mr. Nysten: Will the DEP regulations have to be updated again to adapt to the new MS4 permit after it's amended by EPA? Mr. Tedder noted that proposed MS4 settlement agreement is viewable on EPA's website and that the initial comment period ended (1/27/20). Another 45-day comment period on the substance of the proposed modifications is expected to begin at the end of February. After that, EPA will address those comments and make the modifications final. Ms. Rhodes noted that MassDEP will look at the MS4 settlement modifications to see if they're relevant to the state's proposed wetlands modifications.

## PRECIPITATION PROJECTIONS

Ms. Rhodes presented the first of three topical overviews about the need to account for current and future climate conditions by adopting updated precipitation projections for incorporation into MassDEP WPA/WQC regulations and Stormwater Handbook. See slides 19-30.

Questions from the Advisory Committee:

- Mr. Nysten: NOAA 14 is a dynamic document. Will MassDEP provide specific multipliers each year for the NOAA 14+ Factor of Safety for use by engineers? MassDEP response: NOAA 14 data is online with an easy to use tool to determine precipitation data for specific locations and design storms. NOAA 14+ would be determined by multiplying the most recent NOAA data by a Factor of Safety, to be discussed further at an upcoming meeting.
- Ms. Brock: Will MassDEP look at different return periods for design storms? MassDEP response: Yes, NOAA 14 looks at different design storms; to be discussed further at an upcoming meeting.
- Mr. Roseen: Why is MassDEP proposing NOAA 14 Atlas 10 as opposed to Cornell's Northeast Regional Climate Center, as the latter is updated more frequently? MassDEP response: DEP believes NOAA 14 is the most robust data available for two main reasons - it considers the longest period of record and reflects the most weather stations. NOAA 14 data is not static, there's already an update from the 2015 Atlas.

- Ms. Rao noted that currently there isn't an ability to downscale precipitation data specifically for MA using any of the available tools.

### ALIGNING DEP STORMWATER HANDBOOK WITH EPA MS4 PERMIT REQUIREMENTS

Ms. Schiffman presented the second topical overview about the reasons for and approach to aligning the DEP Stormwater Handbook with EPA's MS4 General Permit. See slides 31-41.

Questions from the Advisory Committee:

- Mr. Roseen: Is MassDEP thinking of simplifying the overlapping regulations just by alignment or are there other considerations? MassDEP response: Ideally, there will be a clear set of rules so that applicants know that if they follow the DEP Stormwater Handbook, they will also meet MS4 Permit requirements.
- Mr. Burns: Raised several points about the connection between MS4 alignment and climate change. He emphasized the broader issue about what constitutes resilience planning – noting it's more than just updating precipitation data. He also asked how MS4 alignment will help achieve resilience. He asked about the policy level goal of resilience planning, for example will there be a requirement to be prepared for a certain level of storm event and will that be incorporated into the DEP Stormwater Handbook. MassDEP response: From a regulatory lens, DEP is getting ready to update its body of stormwater regulatory tools, driven by two key needs: 1) enhancing climate resilience, and the hook for that is precipitation data, and 2) improving regulatory consistency and certainty. Aligning state and federal requirements as much as possible will be easier for applicants and will allow for more extraction of stormwater that may lead to flooding and taxing drainage systems. The precipitation data update is intended to bring regulatory tools up to date for current conditions *and* to account for future conditions to inform design of and avoid damage to infrastructure and stormwater systems.
- Mr. Woodsmall: Asked that the Committee keep in mind that stormwater standards aren't just referenced in DEP's wetlands regulations and stormwater Handbook, but many communities also have specified stormwater management practices for local land use permits. So, alignment isn't just about DEP and EPA standards but has to consider local stormwater rules also.
- Ms. Ricci: Noted that many communities have adopted stormwater bylaws. She also asked MassDEP to help the Committee understand the intersection of precipitation update and MS4 alignment with other issues/initiatives, such as the Statewide Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and the relationship to statewide mosquito control efforts for public health purposes.

### MASSDEP STORMWATER HANDBOOK / EPA TS4 PERMIT - MASSDOT SPECIAL CONSIDERATIONS

Mr. Langley provided the final topical overview of the meeting related to MassDOT Highway special considerations to be incorporated into the DEP Stormwater Handbook and reflected in the forthcoming EPA TS4 Permit. See slides 42-46.

### GENERAL Q&A WITH ADVISORY COMMITTEE

- Mr. Woodsmall: Asked whether local Transportation Improvement Program (TIP) and Chapter 90 municipal roadway projects would be subject to the TS4 permit. He expressed a preference that the MassDOT special considerations and TS4 Permit *not be* extended to the municipal level as it would create more problems for cities and towns.
- Ms. Gambarini: Noted that Stormwater Coalition meetings include a lot of discussion of the TS4 permit issue and there's concern around CSO communities.
- Ms. Lovett: Confirmed that many municipalities have questions about whether/how the TS4 permit will affect them.
- Mr. Cooke: Asked for more information about the different variations on incorporating a Factor of Safety into NOAA 14 between MassDEP and RMAT. Ms. Rao responded that the EOEEA-led RMAT effort includes

a scientific advisory group looking at various design standards that can be used to make Commonwealth-owned assets more resilient (e.g. buildings and infrastructure), and one component they're assessing is precipitation. The RMAAT group approach is considering different tiers of criticality that account for such factors as an asset's location and design life. RMAAT and MassDEP are coordinating efforts and sharing information.

- Mr. Tedder: In addition to updates to Standards 3, 4, and 7, will MassDEP be updating pollution removal credits given in its Stormwater Handbook? MassDEP response: Yes.

### GENERAL Q&A WITH THE PUBLIC

Ms. Barrett invited questions from the public.

- Bill Renault: Asked for clarification about whether municipal linear projects (roadways) will be covered by the DEP special considerations and EPA's TS4 Permit. He expressed that municipalities may want that opportunity rather than just limiting it to MassDOT. MassDEP response: DEP isn't aware of municipalities not being able to comply, as those issues would be brought up with EPA. A key factor for MassDOT requesting a special TS4 Permit is the extensiveness of its roadways and drainage systems.
- Kerry Reed: Asked about the next steps for the DEP special considerations and TS4 Permit after getting Advisory Committee feedback. MassDEP response: EPA will determine the timing and process for the TS4 Permit. For the DEP Stormwater Handbook chapter on MassDOT special considerations, after the Advisory Committee process concludes there will be a public comment period as part of the formal regulatory update process. Overall, MassDEP's intention is to get complete the formal stormwater regulatory/Handbook updates by the end of 2020/early2021.
- Julie Wormser: Raised the issue of what happens when rainfall data can't be reliably predicted anymore. Will MassDEP and the Advisory Committee consider different model than "predict and prepare"? MassDEP response: The agency is thinking about that and are open to ideas. There are currently no statewide projections for future design storms, though there are examples where projections have been developed (e.g. the City of Cambridge and Boston Water and Sewer Commission). MassDEP's intent is to use the NOAA 14 data for existing conditions along with applying a Factor of Safety as a surrogate for *future* conditions, which will suffice in the near-term, while more detailed downscale models are developed over time.

Ms. Barrett thanked everyone for attending and stated that the presentation and meeting summary will be posted on the website and urged the Advisory Committee to share the information with their organizations and constituents. The next Advisory Committee meeting is March 24 in Worcester.