

CHAPTER 500 STAKEHOLDER ENGAGEMENT | TECHNICAL COMMITTEE MEETING #3 MINUTES

RE: Chapter 500 Stakeholder Engagement, Technical Committee Meeting #3
DATE: Tuesday, June 25th, 2024
TIME: 9:30am – 1:00pm
LOCATION: Remote via Microsoft Teams
INVITEES: Kerem Gungor, Cody Obropta, Jeff Dennis, Tracy Krueger, and David Waddell (Maine DEP)
Bina Skordas & Sierra Guite (FB Environmental Associates)
Chapter 500 Technical Committee

1. Project Timeline

- Started December 5th
- All committee meetings are on schedule.
- Hoping to wrap all the meetings up by the end of September.
- Then FBE will be providing stakeholder engagement report.

2. Refresher: tasks from Steering Committee

Documents shared with stakeholders include:

- LID Standard Proposal
 - o Watershed and stressor specific standards promoting LID
 - o Important LID standard implementation chart
 - Projects in Urban Impaired System watershed
 - Project in sensitive or threatened watershed
 - Project not in UIS or sensitive and threatened watershed
- Flood Protection Proposal
 - o 5 Recommendations for protection
- MCC Resiliency WG Proposal

Tasks that were given to this committee from the steering committee

1. Clarify the language that the goal is specifically to minimize impacts
2. Decipher between threatened and sensitive watershed
3. Define low maintenance vegetation and consider- low maintenance to who
4. Specify the requirements based on different applications
5. Develop a framework for testing the rule changes under different scenarios

Flooding tasks

1. Decide on source for precipitation data
2. Determine uncertainty that persists following changes and decide how to deal with that
3. Clarify the language (less technical more accessible)
4. Define DEP scope and consider how this can be framed around watershed-wide perspective
5. Specify flood requirements based on stream risk/classification
6. Ensure proper education of changes made
7. How to incorporate Environmental Justice (EJ)?

3. Summarize Subcommittee Discussions

Core LID Subcommittee:

- The intent of developing core standards is to come up with clear standards to help developers because LID does not have very clear or measurable standards there.
- These standards have the goal of being applicable to all sites, but if not realistic, these standards at least require people to be more selective and aware when developing a project
- In ideal scenarios core LID would be required for all watershed development, because keeping them in mind would affect site selection and development, but if not possible, people should need to demonstrate why these cannot be met
- If you cannot achieve core LID, for whatever reason, then you should have to do something else, such as doing more storm weather control measures
- If one comes up with a good design, there is not much required for quality or groundwater treatment.

Groundwater Recharge Meeting recap:

- It is important to note the differences between Stormwater vs Geology perspective on groundwater
 - When geologists look at groundwater recharge, they think of aquifers but here stormwater scientists do not think of aquifer recharge and instead, they think about just putting water into the ground.
- It is important to consider how we define required infiltrations because it is dependent on how we apply soils. Maybe instead of soil type there should be clarification such as: infiltrating all the rooftops.

Definitions Meeting Recap

- Discussion of variety of new proposed definitions including LID, flooding, astronomical tide
- Need to clarify the definition for environmental justice because there are two possible definitions for this project, and each could be applied to chapter 500 in a different way.
 - 1: There are communities that have expressed that they are in dire need of housing and having to comply with stringent definitions reduces the ability to apply housing.
 - 2: From an EJ standpoint they could say do the people occupying this standard require the same standard, because if not up to standard, then housing but poor quality.

----Break-----

4. Sensitive/Threatened Watersheds & Regions

Presentation ---Sensitive and Threatened Regions and Watersheds TAC Initial Discussion

- Stormwater Management Law – 420-D.4 Degraded, sensitive or threatened regions or watersheds.
- Unnecessary Requirements: Regardless of receiving water vulnerability. All stormwater projects are currently treated equally unless in a UIS or Lake Most at Risk Watershed.
- Prevention is Priority: It is difficult, expensive and often not feasible to restore stream watersheds once they are impaired. Prevention/ protections are much more effective, but no one must know where to prioritize those efforts.
 - You can always make them better, but it is hard to fully restore
- Why use IC as a metric?
 - Strong (not perfect) predictor of health of a stream's aquatic life and the quality of the habitat that it requires
 - Data on impervious cover is currently available and can be applied to very small hydrologic units
 - NHDPlus HR
 - National Land Cover database
 - 2021 NOAA C-CAP Version 2 IC Layer
 - Relationship with IC may vary depending on
 - Baseline stream characteristics
 - Integrity of the riparian corridor
 - Location of development
 - Type and density of development
- Effects of Urbanization on the Aquatic Life of Maine Streams (Danielson, TJ et al., 2016 MDEP)
 - Conclusions: Class AA/A - 1% to 3%, Class B - 3% to 6%, Class C -10% to 15%

- Challenges and considerations of IC
- Determining appropriate IC thresholds
 - o Current %IC
 - o Change in %IC overtime
- Stream Order
 - o First and second order most vulnerable
 - There is a new layer of first and second order catchments with associated C-CAP and NLCD IC data.
 - o In Maine, 3rd order is only vulnerable if contributing headwaters are developed.
- Catchment size
 - o Stream catchments >0.4sqkm (400 acres) support robust aquatic communities but resulting list could be very long and difficult to implement.
- Urban and rapidly urbanizing watershed conundrum
 - o The proposed decision tree would only require core LID in watersheds that are not on the S&T list, the UIS list, or in a lake watershed.
 - o A catchment size threshold of 0.8 sq km or higher will leave many viable streams off the S&T list.
 - o In already urban or rapidly urbanizing areas this will result in many currently high IC small streams with inadequate protection.
- Possible solution- identify urban/urbanizing regions that would protect those streams
 - o All regulated development would have to meet the S&T stormwater requirements.
 - o Regions could be highly impervious and high growth municipalities.
 - o Would dramatically reduce the number of S&T watersheds make implementation much easier.
- It was clarified that Jeff is using big categories to determine why certain streams should be selected and wanting feedback on these categories.
- There was confusion surrounding what Maine gets to define and what EPA gets to define. Specifically surrounding what was proposed as changes to the existing policies.
- EPA takes a long time to response. Maine water quality standards are not EPA's, they are Maine's. EPA just approves the standards, but we get to set them. It defines goals for various parameters for different classes of streams and one of the criteria in these standards is narrative biological criteria for aquatic life. Our goal is to meet the aquatic life criteria in these streams (not EPA metal standard).
- The difference between sensitive and threatened in comparison to other classifications was asked. The clarification stated that the sensitive and threated life idea is determined by whatever EPA has established is sensitive and threatened.
 - o Following up on this it was noted that the group here will hopefully have different people working on water quality standards

First cut thresholds

- Standards
 - o 2021 C-CAP %IC> 15, NLDC 2001-19 change>0
 - o 2021 C-CAP %IC> 10 <15, NLDC 2001-19 change>0
 - o 2021 C-CAP %IC> 7<10 15, NLDC 2001-19 change>1
 - o 2021 C-CAP %IC> 4<7, NLDC 2001-19 change>2
- Catchment size
 - o 1.0sqkm
 - o 0.8sqkm
- Urban/urbanization regions
 - o Municipalities with town wide
 - 2021 C-CAP %IC> 5, NLDC 2001-19 change>0.5
- Findings
 - o Number of catchments that meet the threshold and are not in UIS or urban urbanizing municipality
 - >1sq km 52, >0.8sq km 61
 - o Number of catchments that meet thresholds and are in UIS or urban urbanizing municipalities
 - >1sq km 133, >0.8sq km 151
 - o Number of catchments that meet threshold and are in the UIS watershed

- >1sq km 38, >0.8sq km 44
- * at least 70 polygons were removed for these purposes after evaluation
 - Flow path of the catchment was mostly tidal waters
 - The CCAP impervious layers were falsely identifies
 - The NLCD changed analysis layers and identified pervious areas as impervious
 - This is due to significant areas of the polygon did not drain into the stream

Next Steps

- Refine the initial analysis input from the TAC
- Consider alternative ways to define S&T regions
- Perform parallel analysis for 3rd order streams
 - o Identify missed streams
 - o Will likely add some streams
- Consider inclusion of S&T coastal and estuarine watersheds
 - o Areas with first through third order drainage to nitrogen sensitive waters
 - o Could be done in a way similar to the S&T
 - o DEPs Marine unit is considering recommendations for this
- Consider ways to refine inform the list using available GOS land cover data and orthophotos to assess
 - o Stream and corridor integrity
 - o Dominant land cover type in the watershed
 - o Will at least inform stressor identification

Discussion following presentation

- The zoning regulations were acknowledged, and it was noted that it should be relatively easy to determine what is residential
- There were concerns addressed surrounding the idea of referring to municipalities' regions and then how municipality growth is tracked. This comment brought up how the ways that this growth is projected is from previous observation, but there is likely a large change in growth rates from previous years to current years. The response addressed how this is not a perfect system, but many streams that are in heavily urbanized areas are impaired by urbanization.
- This led to a request to create a layer that displays catchments present. This is something that is in the process of getting completed. It is, however, a complicated process due to the standards that must be met and the streams that are not listed right now due to complicated regulations.
- The connection of how watershed and lakes loop into this whole proposed process was then clarified by stating that the scope of this proposal does not contain lake watershed because they are completely separate. The only difference is the impervious side threshold for most at risk.
- Another issue addressed was how this information would be told to the public. The public will request a much clearer explanation of the processes, and the group will need to decide how in depth we go with explanations of numbers (i.e. do they need to know why all numbers were picked or can we just post the numbers).
- Most people agreed that there needs to be a clear decision made of what is going to make the cut for getting presented to the public and then have more in-depth information additional to those that wish to understand how everything was decided.
- Maine's expanding population was acknowledged and way that this may affect watershed. Someone brought up how if there is a large store built on a smaller stream watershed, that people will want to be in that region. This would obviously cause issues and there needs to be a system in place to deny people the ability to build wherever they want.
- Many people agreed that any site should meet the sensitive watershed standards because that would be easy to justify and determine how much of the catchment area they are using. This seems to be relatively easy to implement.
- The final topic addressed in this discussion was what happens when a watershed grows due to climate change. This may be a good question to pose to potential modelers. Having this information would be helpful in determining future groundwater recharge.

5. Discussion on the Tasks Assigned to the Technical Committee

Major Takeaways

A. Consensus Items

- Subtract: is there a standard in the DEPs proposal that must be eliminated?
- Add: Is there an important LID strategy that is missing in the DEPs proposal which must be considered
- Roadblock: Is there required missing information?

Discussion

- Many people agreed that the sooner we can get in front of stakeholders the better. Certain stakeholders are expecting to see what they see in other NE states, and this proposal is different. Due to the differences, there will likely be some convincing required and since they will not understand this and therefore potentially reject it. However, we need to have clear decisions before we can go and engage with the non-technical stakeholders. But we have good justification for the approach to LID and why it looks different than MA and NH so this should not be rejected by stakeholders.
- One of the roadblocks that have arisen before and may harm our proposal is what people's concepts of situations are. There are a lot of unknowns as to how we will directly address these issues. If we can bring up each one of these pieces and agree that each one of these standards is x then I think there will be more onboard. We need to establish these for core LID standards (i.e. 25ft).
- It was agreed that some of the importance is in the details. It appears the group for core LID has consensus on further back.
- For future meetings, there seems to be confusion amongst this committee in understanding some of the details. These are mostly clarification regarding why specific pieces are included and it would be helpful for Kerem to be present at the next meeting.

B. Items that require more work

- Which items are higher priority
- What is the progress status of these items
- Considering the level of effort required can these tasks be completed on time? (regarding tasks given earlier)

Discussion

- Many agreed that there are issues with people being present during the summer and this may require a shift in the schedule for the foreseeable future. It seems to be unrealistic to achieve everything that is desired and produce a good product in this timeline. Almost everyone agreed to invest more time and effort into the project thus extending the deadline.
- There was also clarification requested regarding the difference between threatened and sensitive watersheds. This is because they would be treated the same way and would get the same requirements.

Flooding

A. Major Take-aways

a. Consensus items

- a. Authoritative precipitation reference for new chapter 500 must be NOAA Atlas 14 until Atlas 15 is released
- b. Retain 2-year storm peak flow attenuation standard
 - i. Input from John Field requested
- c. No need to require peak flow control beyond 25-year storm

Discussion

- Someone brought up that there has been more discussion on defining new zones and coming up with different conservation zones with respect to sea level rise. This may be outside the scope of Ch500 and what this directly needs to address, but it is still important to discuss.

- b. Items that require more work
 - Which items are higher priority
 - What is the progress status of these items
 - Considering the level of effort required can these tasks be completed on time? (regarding flooding tasks given earlier)

Discussion

- It was again addressed that there are places in the state where the demand for housing is greatly increasing, and more people means more need for stores. This addresses the concern that we don't really know what the future holds and using 2001 to 2019 to determine that may be understating things based on what we are really working on here. There is regularly available land cover projection, and we should incorporate that along with projections.

6. Next Steps for the Technical Committee & Subcommittees

- Eleven workdays between now and the next steering committee
- Technical meetings until the SC meeting:
 - o TC and/or Subcommittees
- Short list of readily available references to speed up the technical team's work
 - o Recently updates stormwater standards of other new England states
 - o State of Washington BMP manuals
 - o Minnesota stormwater manual
 - o Others?

*Considering the discussions we might want to have a core LID meeting before the next meeting

Attendees:

TAC Members:

- Al Palmer
- Andy Johnston
- Aubrey Strause
- Chris Baldwin
- Joe Laverriere
- Mark Bergeron
- Paul Ostrowski
- Rodney Kelshaw
- Peter Newkirk
- Phil Ruck
- Doug Roncarati

Project Team DEP & FBE:

- Jeff Dennis
- Kerem Gungor
- Tracy Kreuger
- Cody Obropta
- Dave Waddell
- Sierra Guite
- Bina Skordas

Others in attendance:

- Cindy Dionne
- John Kuchinski
- Alexis Racioppi
- Nathan Robbins
- Gregg Wood