CHAPTER 500 STAKEHOLDER ENGAGEMENT | STEERING COMMITTEE MEETING #3 MINUTES

RE: **Chapter 500 Stakeholder Engagement, Steering Committee Meeting #3**
DATE: Monday, February 26, 2024
TIME: **9:30am – 1:00pm**
LOCATION: Hybrid: in-person (Deering Conference room 101- 90 Blossom Ln, Augusta ME) & remotely via Microsoft Teams
INVITEES: Cody Obropta, Naomi Kirk-Lawlor, and Rob Wood (Maine DEP)
Bina Skordas and Maggie Kosalek (FB Environmental Associates)
Chapter 500 Steering Committee
Chapter 500 Stakeholders

MEETING OVERVIEW:

TOPIC	WHO	ESTIMATED DURATION
1. Topics & considerations review	Bina Skordas (FBE)	15 mins
2. Taunton recap and discussion	Bina Skordas (FBE) & Cody Obropta (DEP)	20 mins
3. IC analysis recap and discussion	Bina Skordas (FBE) & Cody Obropta (DEP)	20 mins
4. LID standards discussion	Bina Skordas (FBE) & Cody Obropta (DEP)	70 mins
Break (15 min)		
5. Flooding standards discussion	Bina Skordas (FBE) & Cody Obropta (DEP)	40 mins
6. Stakeholder input	Stakeholders; facilitated by Bina Skordas (FBE)	20 mins
7. Next steps	Bina Skordas (FBE)	10 mins

1. **Topics & considerations review.**

Topics

- LID Standards & Green Infrastructure.
  - Groundwater recharge.
  - Water quality.
  - Channel protection.
- New development vs redevelopment.
- Flood control.
- Stormwater control measures/manual.
  - Specify BMP designs and respective reduction rates.
- Standard conditions.
  - Inspection & maintenance.

Considerations

- Climate change.
- Municipal effort.
- Clarity.
- Treatment level.
- Environmental justice.
- Watershed scale stormwater management.
- Permitting considerations.
- Regulatory implications.
- On-the-ground implementation.
- Legal challenges.

- On "watershed scale stormwater management": The goal is to address specific needs for different watersheds/areas of the state. Hoping to do this through the sensitive & threatened watershed approach.
- Although DEP would like to take a fully holistic approach to updating these regulations, it is important to remember that some aspects are out of the scope of work for them.
- Reminder of organizational overview: Chapter 500 is separate from MS4, TMDL, MCGP, etc. Members of the water bureau are in the room, and we are hoping to harmonize things with their regulations, but the land bureau is not in charge of the MS4 and TMDL process, so we are not handling or making changes to those directly in this process.

2. **Taunton recap and discussion.**

- Key Points:
  - Incorporating GW recharge & controlling nutrient exports is the closest we can get to mimicking predevelopment conditions.
  - Heavily reliant on filtration.

- Discussion:
  - One of the nice things about this example is that it has more dense development, so for example, in a situation where you need more housing for environmental justice concerns, you can achieve stormwater goals.
    - Massachusetts recently implemented an EJ component to their MEPA review thresholds. The impact of development within an EJ area can be quite significant.
  - We can't apply the same stringent rules to MS4 communities as we do to more rural and undeveloped communities or communities with less resources, so we will need something like a tiered approach to fit the needs of many.
  - We have to think about soil type in a given community for their ability to infiltrate. Also, some communities (coastal) reduce a lot of runoff through evapotranspiration, and this cannot be replaced with infiltration. Many streams are only transporting water during wet weather events and are dry otherwise which means they are not getting the groundwater recharge they need to support the system. Need to find how to fix this and also deal with the salt issue when doing so. There is definitely a difference between coastal developed areas and other areas where we can infiltrate properly and take advantage of GI to the fullest extent.
  - It would be really interesting to see the Taunton study done in Maine. How does the installation hold up over time? These sorts of solutions require maintenance by the property owner which doesn't always happen.
  - Where we can't infiltrate, we need a backup. It's not always an option to pick a different site.
    - It is still not possible in some places.

        - Some current requirements make it difficult to implement infiltration when this actually seems to be the preferred method of dealing with runoff. Infiltration does happen laterally in poorer soils more than we thought, so we may be underestimating the power of it.
    - Is there any consideration by DEP that you want to avoid rendering sites undevelopable? Is there any thought to make a map that shows sites that are unsuitable for development?
        - If you own land on, for example, wetlands of special significance or coastal sand dunes, you will definitely run into issues developing aside from stormwater considerations. This rule is trying to find missed opportunities as well as address specific pollutants and incorporate LID to the extent we can. DEP is not necessarily trying to make development more difficult, especially for places where it is needed, like EJ communities, but that will always come along with placing more regulations on it. If we are trying to seriously protect our natural resources, regulations are necessary.
    - What other models did DEP review other than the Taunton study?
        - DEP has looked at models all over New England and beyond. Taunton was determined to be the most applicable due to it being relatively close, recent, and it combined a lot of the latest science on the topic.
    - Since the MCGP will be much different than it currently is, seeing a draft of it to keep in mind during this process would be helpful.
        - We will be discussing this at the 4th Steering Committee meeting where Kris Bears will give a presentation on it.
    - In DEP's proposed changes, there seem to be two different ways to address pollutants. There is an intention to add total nitrogen in the same way there is phosphorus now, and then there is also a way to address pollutants of concern and chloride seems to be under this. Can you explain these distinctions and how you would determine impairments, especially since we don't always have the data to understand the impacts of these?
        - This specifically pertains to sensitive and threatened watersheds. We want to equip stormwater designers in these watersheds to actually address these pollutants of concerns. This is why we are adding in the total nitrogen aspect, especially for coastal communities where this is more of a concern than phosphorus. Likewise, with chloride, this is a very prominent and difficult pollutant to deal with. None of this is fully fleshed out, so that is intended to be a part of this process.
    - Regarding infiltration -agree with many of comments and on the technical end the need to protect groundwater. However, let's look at Ch500 Appendix D1-4: the tone of the regulation is very negative (i.e. language such as "may not" and "must include") and there are very stringent requirements for aspects such as monitoring, which in some cases (aquifers, Adams Soils, etc.) are well justified, but the rules and the need to line most systems into a bath tub (essentially making the system a :filtration system with an underdrain) puts this BMP at the bottom of the toolbox for many qualified sites. We need to make sure the technical standards are validated (i.e., 2.41 inches per hour, etc.).

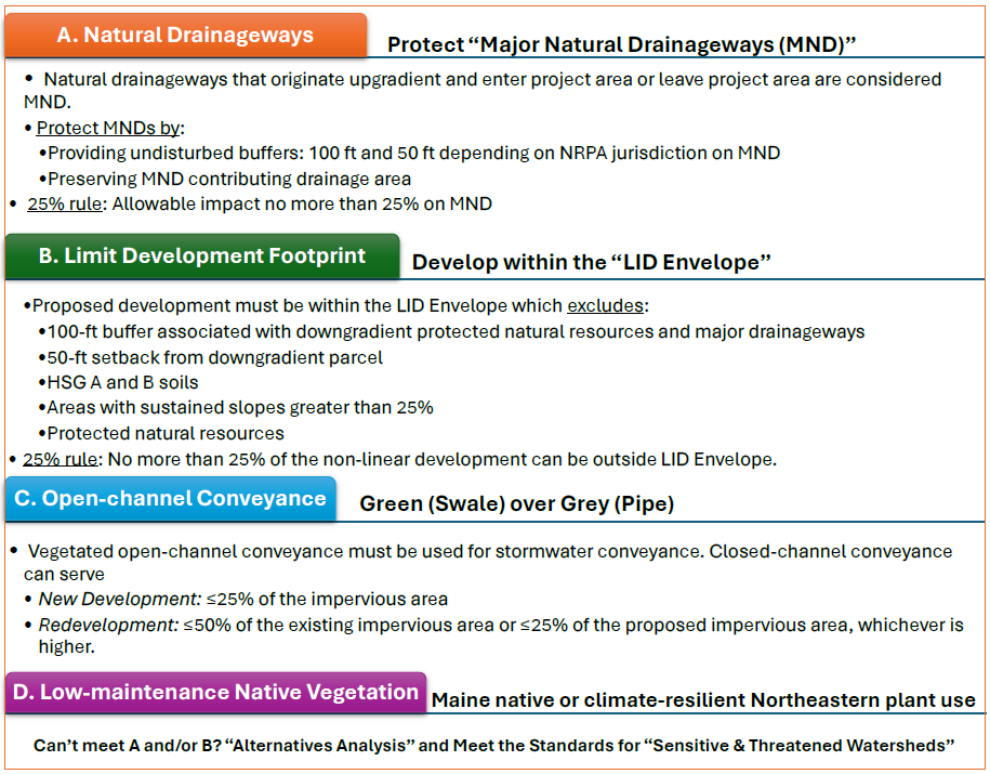
3. IC analysis recap and discussion.

- <u>Key Points:</u>
    - Impervious cover increases in concentration are:
        - Along transportation hubs
        - In areas with local laws stricter than Ch 500 rules
    - Need to establish threatened/sensitive watersheds.
        - Mandate already exists in Stormwater Management Law (SWML). This is not currently being utilized.
- <u>Discussion:</u>
    - Lewiston goes from densely developed area to very rural within a few miles. We have strict development regulations in the densely developed city center and they get more lax as you reach more rural areas.
    - There are so many development projects that fall under the 1 acre threshold, especially in the southern Maine towns. It seems like it would make sense to lower this threshold to capture those. In

Portland/South Portland we have the staff to handle these projects under 1 acre, but many smaller towns do not.
    - The 1 acre threshold at the state level is pretty common among other states. DEP relies on municipalities to create their own regulations for projects under 1 acre. It is not feasible for DEP to lower the standard due to staffing constraints, and this is a better suited job for municipalities.
    - Addressing redevelopment in which the original development occurred before stormwater regulations existed is a really good opportunity to implement change.
  - Can we use % IC to determine threatened/sensitive areas? This may help to reduce rate of development in communities where it is high and threatening to the health of waters.
    - Using IC to determine risk areas misses the ability to identify sensitive areas since this should be more based on sensitive resources (i.e., shellfish, fish, etc.).
    - The smaller the stream the more sensitive it is and the more likely it is to be threatened if stressors are introduced. How small are we willing to consider? At what level can you still maintain a healthy community? This may help us determine which areas of the state are more important/worth targeting for protection.
    - It is also really important to focus on watersheds that are not yet threatened and pay attention to them so that they do not become at risk. There are a lot of small developments going in on a lake such as Watchic Lake that are under 1 acre, but all these added up may eventually lead this watershed to be on the highly developed list. We want to proactively prevent these issues from happening.
    - Different class streams should have different standards that are specific to their needs.

4. LID standards discussion.

- Key Points:
  - Need clear, specific, and measurable standards.
    - Core Standards:



  - Establish sensitive/threatened watersheds.
    - Additional GW recharge requirements here.
    - Nutrient removal requirements (performance curves).

- Discussion:

- Why is IC not a part of the core LID standards?
  - If you address the core LID standards, you will be considering and impacting IC. IC is not directly mentioned in the core standards because the point of them is to minimize impacts and be as close to a natural state as possible, which, in an ideal world, means no IC at all. The point is also about effective IC versus real IC. If you have a large impervious area that you are infiltrating through the whole area, the impact is 0. If you have a small impervious area that is completely runoff, there are impacts.
  - DEP was also trying to address IC with the LID envelope (i.e., 25% rule under B, above). If you are following these rules, then you have to minimize IC.
    - This needs to be very clear in the rules.
- The standards are missing the specific language to minimize impacts to the maximum extent possible (i.e., low maintenance native vegetation – maintain to the maximum extent possible / don't cut anything down). Need to clearly define that this is the purpose – minimize impact.
  - In Portland, developers get credit for developing on the already existing footprint and not expanding it. There are lots of other factors that come along with redevelopment too. The distinction for everything from development to greenfield must be made.
  - Ch500 Section 4 redevelopment standards should be revisited to provide more incentive to brownfield sites. For example, taking an almost entirely historical/legacy lot, making it into an economic contributor to the community, going through VRAP to clean the site and use Smart Growth principles, reducing IC – still having to treat 60% of the site after all this doesn't make sense. We need to look at specific examples and run the numbers to see if tables 1 and 2 here should be revised. Incentivizing is key.
  - Rules give much less credit to rain gardens and bioswales than soil filters in terms of capacity – why is this? Potentially get landscape architects involved to better define why Maine rules favor unaesthetic grass sumps instead of more habitat and vegetation focused BMPs. The go-to for meeting Ch500 standards becomes the soil filter in many projects.
- Is DEP trying to implement 50 ft buffer zone to all non-jurisdictional sites?
  - TC has to look at how this would work in a real application. This is currently a simplification and needs to be fleshed out, but the intention is to maintain natural hydrology.
- Define different standards for different areas and test them in scenarios.
- The model ordinance committee for the MS4 process did an extensive review on regulation in other states. The TC may find this helpful to flesh out the LID proposal along with the MCC recommendations and Appendix F.
  - The Technical Committee will receive and has received many of these resources.
- Have to be thoughtful in how we think about natural drainage ways since so many have been altered by humans and they still need protection. Also need to keep in mind that higher order streams and wetlands that drain into these main channels are just as important in determining the main channel's health and habitat. We need to look at the whole system.
  - We have to be careful talking about habitat under this law because it will legally get tricky.
    - Habitat is very relevant here due to the way the water quality system is set up in Maine.
- Potentially have less stringent regulations for developments that help low income communities such as low income housing.
  - Alternatively, have more stringent regulations on developments near low income housing which is where there are often unequitable development considerations.
  - Might be helpful for the Steering Committee to analyze whatever the Technical Committee comes up with for this so as to see how it impacts the market when applied to real scenarios.
  - Important to remember that there are other regimes that decide factors that impact costs (i.e., parking).
  - Defining what EJ means and the other considerations is important. <u>DEP team to work on defining all considerations from topics & considerations list.</u>

- <u>Technical Committee tasks:</u>
  - Clarify in the language that the goal is specifically to minimize impacts.
  - Decipher between threatened and sensitive watersheds.

- Define low maintenance vegetation and consider – low maintenance to who?
- Specify requirements based on different applications. Potential examples include:
    - Development vs redevelopment;
    - Stream class;
    - Sensitive vs threatened;
    - Pollutants of concern;
    - Rural vs urban (and how this is defined);
    - Population type/resource access (i.e., EJ community, different regions of state).
- Develop a framework for testing the rule changes under different scenarios. Potential considerations include:
    - Project description: size; development vs redevelopment.
    - Project location/impact characteristics: coastal vs inland; natural vs manmade channel; urban vs rural; threatened vs sensitive watershed; climate change impacts on the area; etc.
    - Cost: social; construction; maintenance; the cost of doing something now vs restoration later due to continued pollution; etc. (state costs are a consideration out of the scope of TC to be handled by DEP).

5. Flooding standards discussion.

- <u>Key Points:</u>
    - Remove precipitation table and use best available data that factors in climate change.
    - Remove 2-year peak controls.
    - Require all projects to prevent flooding access roads and meet minimum conveyance design standards.
    - More work is needed (50-yr & 100-yr storm controls? Impaired system controls? Evaluate waivers?).

- <u>Discussion:</u>
    - TC should decide on a singular best data source to use.
        - Cornell tactic? Atlas?
    - It will be important to properly educate on the changes that are made, and with this comes ensuring the language itself is clear and easy to understand
    - Specify regulations based on stream class
    - Important to consider larger storms events – perhaps leave to TC to decide just how large to go.
    - Agree with removing 2-year peak control.
    - Potentially take money that would be spent on detention basins due to new development and spend it on analyzing/addressing choke points in stream and the ability to handle the current flows with the current IC status.
        - This goes with addressing watershed-scale instead of stie-scale. It is really important to look at the whole system.
        - This may not work because when you get rid of one choke point, another one is likely created.
        - Important to keep in mind requirements from other agencies (Corps/Stream Smart) for culverts when/if addressing choke points.
    - Important to keep in mind that DEP's scope in dealing with these regulations is mainly with permits, so the scope is oftentimes forced to be smaller than would maybe be ideal. TC should figure out a way to consider larger impact.
    - Need to address uncertainty within the standards and how that will be dealt with.
        - The new standards need to be tested similarly to how the LID standard needs to be tested (and all other changes to be made)

- <u>Technical Committee tasks:</u>
    - Decide on which source to use for precipitation data.
    - Determine the uncertainty that persists after changes are made and decide how this will be delt with.
        - This goes along with testing the standard after changes are made by running it through scenarios, similar to LID standard.

- Clarify language to ensure standards can be understood by less technical audiences.
- Define DEP scope and consider how this can be framed around a watershed-wide perspective as opposed to project site specific view. Consider how regulations from other agencies and municipalities impact this.
- Specify flood requirements based on stream risk/classifications (similar to LID TC task)
- Ensure proper education of changes made (this is a task related to all Ch500 changes made, not just flooding standard).
- Consider EJ perspective (this is a task related to all Ch500 changes made, not just flooding standard). As aforementioned, DEP team will define EJ in the scope of this project along with other considerations.

6. Stakeholder input.

- Add cost to considerations to keep funding and municipal burden issues.
- Determine how low maintenance vegetation is defined and decide which plants are most effective for climate change. Potentially tap into NH stormwater center for information on this. Include in manual updates.
- Will the new standards focus on the definition of what constitutes a natural drainage way and if historical development drainage (man-made) is considered a natural drainage way?
- Consider criteria under which MEDEP stormwater engineering can waive the flooding standard (specific criteria).

7. Next Steps

- Next Steering Committee meeting: TBD. There will be two more SC meetings.
- First Technical Committee meeting: March 18th.

In person attendees

Bina Skordas
Cody Obropta
Curtis Bohlen
Dave Waddell
David Courtemanch
Doug Roncarati
Fred Dillon
Ivy Frignoca
Jeff Dennis
Joe Laverriere
John Kuchinski
Matt Marks
Mark Bergeron
Naomi Kirk-Lawlor
Rob Wood
Tracy Kreuger

Online Attendees

Adam Bliss
Alexis Racioppi
Ali Clift
Angela Blanchette
Ashley Hodge
Aubrey Strause
Brenda Zollitsch
Brian Ambrette
Brian Bernosky
Boyd Snowden
Charles Hebson
Christine Rinehart
Chuck Norton
Cindy Dionne
Derek Berg
Ethan Moskowi
Gary Fish
Gregg Wood
Gretchen Anderson
Jeff Spaulding
Johnathan Boynton
John McMeeking
Kristie Rabasca
Lauren Swett
Logan MacDonald
Lynn Geiger
Mark Arienti
Matt Cannon
Matt Provencher
Matthew Orr
Mike Foster
Nathan
Neil Rapoza
Paul Iorio
Paul Ostrowski
Peter Newkirk
Randy Stephenson
Rich May
Rick Licht
Rodney Kelshaw
Ryan Barnes
Sean Donahue
Sean Thies
Stuart Cole
William Longley