

# CHAPTER 500 STAKEHOLDER ENGAGEMENT | STEERING COMMITTEE MEETING #5 MINUTES

**RE:** Chapter 500 Stakeholder Engagement, Steering Committee Meeting #5

**DATE:** Monday, September 23<sup>rd</sup>, 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, Jeff Dennis, David Waddell, Naomi Kirk-Lawlor, and Rob Wood (Maine DEP)  
Bina Skordas (FB Environmental Associates)  
Chapter 500 Steering Committee  
Chapter 500 Stakeholders

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## **SUMMARY**

The Chapter 500 Steering Committee Meeting #5, held on September 23, 2024, addressed the use of NOAA Atlas 14 data with an 18% rainfall increase multiplier until NOAA Atlas 15 is available, with consensus (with some reservation) to use the best available NOAA data for stormwater modeling. Criteria for identifying Sensitive and Threatened (S&T) watersheds were reviewed, focusing on impervious cover thresholds and municipal inclusion, with discussions on municipalities with high impervious cover and changes in impervious cover. The committee examined existing redevelopment standards, debating how they incentivize redevelopment over greenfield development, and considered the goals for redevelopment standards, including addressing past stormwater impacts and promoting brownfield development. The integration of redevelopment into Core LID and S&T standards was also discussed. Stakeholder feedback was incorporated, and the next steps for the Technical Committee were outlined to refine the standards and continue engagement.

## **TECHNICAL COMMITTEE INFORMATION**

- **Cody's Updates:**
  - Review of subcommittee meetings and technical meeting objectives.
- Updates on working with the AG office and policy teams.
  - Stressor-Specific Committee: Focus on nitrogen (N), phosphorus (P), and chloride (Cl).
- Performance Curves: To be based on SNEPs, tailored with regional data for Maine, in collaboration with Paradigm Enviro.
- TMDL Integration: TMDL discussions to be integrated with the broader standards.
- Data for Performance Curves

### Questions/Discussion

1. *Cindy requested data that informs performance curves.*
  - a. Some data is available through the EPA Opti Tool and will be supplemented with Maine-specific data. More monitoring data is needed for developing performance curves for vegetated buffers, a unique consideration for Maine.
2. *Nathan Robbins stressed the importance of consistency with other state initiatives, such as the Maine Climate Council.*

3. *Ivy raised the need for criteria on different phosphorous standards*
4. *Doug highlighted effective BMPs for nitrogen and phosphorus but noted a need for more on chloride.*
  - a. *Jeff proposed a potential point system for chloride standards.*

### Consensus Items

- **Precipitation Data**
  - Does the Steering Committee support the recommendation of the Technical Committee to utilize NOAA Atlas 14 data + 18% until NOAA atlas 15 data is published? Is there an agreement to use the best available data from the NOAA atlas? Does anyone have any concerns using the best available NOAA Atlas data?
    - Endorsement: Ivy, Kerem, Doug, Nathan, Cindy, Mark Beregon (best available data to NOAA Atlas)
- **Impervious Cover (IC)**
  - Rick: How IC alone factors into the discussion.
    - Cindy: Regardless of the goal, she doesn't believe IC alone addresses the issue effectively and that the Sensitive and Threatened (S&T) designation may not be necessary. She also noted that IC doesn't account for many factors.
    - Ivy: Does Cindy disagree with using IC in the Total Maximum Daily Load (TMDL) approach, clarifying that it's not intended as a regulatory tool but simply states that IC can be used.
    - There was also a suggestion to strengthen the Urban Impaired Stream (UIS) list and the Lakes Most At Risk (LMARS) designation.

### Redevelopment

- Cody presented on the current provisions in Chapter 500.
  - The committee then discussed whether they agree with the goal and how to incorporate it into the standards, reviewing various considerations.
  - Considered how to task the Technical Committee (TC) with this issue and what direction the Steering Committee (SC) can give the TC regarding redevelopment standards.
- Discussed whether implementing these standards would satisfy other parts of the permitting process.

## **Meeting Topic #1: Precipitation Data Source**

Flooding Technical Committee Task: Decide on which source to use for precipitation data

### Background

- Designers and engineers currently use a static data table located in Appendix H to model flooding standards. This data table uses information extracted from the Northeast Regional Climate Center Extreme Precipitation Tables back in June of 2014. The average design life for stormwater infrastructure is between 50 and 100 years. The Maine Climate Council released a scientific and technical assessment for the State of Maine which found precipitation intensity and storm event frequency are changing due to climate change. Using data from 2014 to model infrastructure that will potentially still be in use in the year 2100 is out of alignment with Maine's climate resiliency goals. Further, needing to engage in major substantive rulemaking to update the precipitation table when new data sets are released is a hinderance to using best available science and data.

Results from Technical Committee:

- The Technical Committee is actively voting on a proposal to use NOAA Atlas 14 data with an 18% rainfall multiplier for all design storm events until NOAA Atlas 15 is released, reviewed, and approved by the Department.
- This proposal considers the Maine DOT's analysis of CMIP5 climate model data under the RCP 4.5 climate scenario, which shows a projected 18% increase in rainfall over the next 50 years.
- The Technical Committee believes the 18% multiplier accurately reflects future rainfall projections and can be used until NOAA Atlas 15 is available in 2026, with supplemental data expected in 2027

## **Meeting Topic #2: Sensitive and Threatened Watersheds**

### LID Technical Committee Tasks:

- Decipher between threatened and sensitive watersheds.
- 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).

### Background

- Except for lake watersheds, compliance with the current Chapter 500 General Standards is required for projects meeting the post construction thresholds in all organized municipalities throughout the State. This is overprotective in many portions of the lightly developed areas where the density and frequency of such projects is very low. To remedy this situation the Department has proposed implementation of the mandate in the Stormwater Management Law to create a list of Sensitive and Threatened Regions and Watersheds. The standards applied to these watersheds would be aimed at preventing future impairments of the aquatic biota and the habitat they require in watersheds that are currently not impaired and elevation of impairments in watersheds that are already impaired.

### Results from the Technical Committee:

- The technical committee is actively voting on the proposed criteria for inclusion into Sensitive/Threatened Watershed list (identified below):
- % impervious cover (%IC) in the watershed is the best available tool for identifying S&T stream watersheds and, specifically, that current %IC (2021 CCAP) and the 2001 to 2019 change in %IC (NLCD) were the best currently available means of assessing threat.
- Impervious cover thresholds for inclusion in the list:
  - Current watershed %IC > 10%
  - Current watershed %IC 7 to 10%, Change in %IC > 1%
  - Current watershed %IC 4 to 7%, Change in %IC > 2%
- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> order streams should be evaluated and that only streams with watershed area greater than 0.8 sq km (200 acres) should be considered for inclusion on the list.
- Municipalities with the following conditions may be included in the Sensitive/Threatened watershed list:
  - high current townwide %IC (>5%) and high change in townwide %IC (>0.5%) or

- high densities (>6) of catchments that exceed the individual watershed thresholds or
- at least part of the municipality within a designated Municipal Separated Storm Sewer System (MS4) (Note: this is subject to subjective confirmation of appropriateness for inclusion.)
- The Technical Committee also supported future work on the following:
- Assessment of the feasibility of and methodology for identifying Sensitive and Threatened Coastal Regions
- Identification of the likely current and future stressors for the listed stream watersheds
- Evaluation of options to ensure timely updates of the S&T lists.

### **Meeting Topic #3: Redevelopment**

#### Redevelopment Project Treatment Requirements:

- Treatment is scaled based on the pollutant discharge from the redevelopment, with a pollutant ranking assigned to each land use based on Table 2.
- The Department may adjust the pollutant ranking by up to 2 points based on project-specific features.

#### Method for Determining Treatment Requirements

1. Calculate existing impact by multiplying land area by pollutant ranking for each land use.
2. Calculate proposed impact similarly for the redevelopment.
3. Divide the existing and proposed impact ratings by total redevelopment area.
4. Subtract existing impact from proposed impact to determine treatment level.

#### Treatment Priorities

- Priority must be given to areas with the highest pollutant ranking.

#### Additional Considerations

- If meeting the general standards on-site is not practicable, equivalent treatment or mitigation on an off-site parcel in the same watershed may be allowed.
- If the redevelopment spans multiple watersheds, treatment requirements must be calculated for each.

#### Questions/Discussion

1. *Does the Steering Committee agree with the general goal of redevelopment standards as they exist currently (to incentivize redevelopment over new development in greenfield sites)?*
  1. If yes, should the Technical Committee be tasked with incorporating redevelopment into the standards being developed (Core LID, Sensitive/Threatened Watersheds, etc.)?
  2. If not, what should the goal of redevelopment standards be? How should the technical committee be directed to incorporate these goals?
2. *The goals of redevelopment standards should be to address impacts from the past to the extent practicable.*
3. *Incentivize development on brownfield over greenfield.*
4. *The goal should be to require some reduction of stormwater pollution.*