# CHAPTER 500 STAKEHOLDER ENGAGEMENT | TECHNICAL COMMITTEE MEETING #7 MINUTES

**RE:** **Chapter 500 Stakeholder Engagement, Technical Committee Meeting #6**

**DATE:** Monday December 16, 2024

**TIME:** 9:30AM-1:00PM

**LOCATION:** 90 Blossom Lane, Augusta, ME and Remotely via Microsoft Teams

**INVITEES:** Kerem Gungor, Cody Obropta, Jeff Dennis, Tracy Krueger, and David Waddell (Maine DEP)

Bina Skordas (FB Environmental Associates)

Chapter 500 Technical Committee & Steering Committee

## Summary:

The meeting focused on reviewing the progress of updating Maine's stormwater management rules under Chapter 500. Key topics included a detailed project timeline, stakeholder feedback, and proposed new standards aimed at promoting low-impact development (LID), addressing climate resiliency, and streamlining compliance. Stakeholders discussed adjustments to definitions, new basic and general standards, and implementation of region-specific requirements. Questions and comments addressed clarity on standards, challenges with aging infrastructure, and ensuring streamlined processes for waivers and exceptions. Action items include finalizing a comprehensive stakeholder engagement report, circulating a long memo for feedback, and continuing technical work. The goal is to adopt the new rules by summer 2026.

## Meeting Agenda:

| TOPIC |
|---|
| 1. Project Progress Update and Timeline Review |
| 2. Review of Stakeholder Feedback |
| 3. Implementation of New Rules |
| 4. Discussion<br>a. Stakeholder Input<br>b. Action Items & Next Steps |

## Project Progress Update and Timeline Review

- 12-month long process, meetings held every month except for January and May, 7 Steering Committee meetings, 7 Technical Committee meetings, 16 subcommittee meetings, +70 hours of meeting time
    - 100s of hours updating Maine's stormwater management rules
- Technical Committee Meeting #7
    - Discussed updates and remaining outstanding items in Long Memo
    - Discussed a DEP testing and evaluation of an example project under new Chapter 500 Proposal
    - Discussed updated draft chloride point system by Jeff Dennis. Needs more work to finalize it

## Review of Stakeholder Feedback

- See Table 1 in Appendix

- Feedback is written by topic. Definitions have been a big part of feedback (defining maintenance and urban impaired streams).
    - Meetings, Definitions, Impaired Streams, General and Basic Standards, Subdivisions and Redevelopment, Runoff and Groundwater Recharge, BMPs and Design Standards, Permitting, Data and Metrics, Sensitive and Threatened, Environmental Justice
- Making Ch. 500 rules more legible, simplified, and clear for compliance
- Runoff and Groundwater Recharge received a lot of feedback.
- Other Major Topics not addressed in list: No comments at the moment

## Implementation of New Rules

- **Overarching goals:** Promote LID (Basic Standards), address climate adaptation and resiliency (runoff volume reduction standard), streamline rules (improve day-to-day implementation, new PBR)
    - Required applicants to use up-to-date precipitation data and 18% multiplier to account for changes over time due to climate change
    - If applicants comply with new basic standards, they will be eligible for new PBR
- Current and New Chapter 500 waterbodies (Figure 1 in Appendix). New set of regions and watersheds identified as sensitive and threatened will be incorporated into Ch. 500
- Standards apply to activities disturbing one or more acre (Figure 2 in Appendix).
    - **Question** about post-construction standards
- **Question:** Kristie asked about recertification for disturbance of one or more acre of land. This relates to impervious surface that kicks-in 5-year recertification requirements. Not understanding why post-construction items are applying when the rules were applying to construction previously. DEP is redefining the basic standards because of wetland and natural drainage way requirements.
    - **Rob Wood:** Ch.500 rules address both pre and post construction, we are changing what falls under basic and general standards. Might want to consider different headings to better display what they are.
- **New Basic Standards:**
    - Wetland Protection: no disturbance area, impervious area setbacks, exception for wetland crossings
        - Part of outstanding LID strategy
    - Natural Drainage Network Protection: no disturbance setbacks for Natural Drainage Ways (NDW), post-development NDW catchment size, redistribution of stormwater at the property boundary, maintenance of channel continuity and catchment area at road crossings
        - Part of outstanding LID strategy
    - Stormwater Conveyance Hydraulic Capacity: under current Ch.500 in flooding standard which only applies to site law projects. So, moving this standard to basic standards for both stormwater and site law projects
    - **Comments:**
        - **Doug:** New Basic Standard could be Resource Protection Standard and General Standard could be Stormwater Management Standard
        - **Engineer:** Standard 1 and Standard 2 as new names? Rather than there being connotation associated with it.
        - **Ivy:** Combine ideas, Standard 1: Resource Protection, Standard 2: Stormwater Management. Tabulating the standards, defining them in both ways, and understanding how they're evolving the standards.
- **New General Standards:**
    - Runoff Volume Reduction Standard: compensation for infiltration loss, reduced post-development runoff volume, approximate pre-development hydrology

        - UIS-100%
        - STRW, site law, cannot meet basic standards – 75%
    - Stressor Guided Stormwater Treatment Standard: nitrogen and phosphorous stressors (minimum average annual reductions using SCMs, coastal and noncoastal applications), chloride stressor (proposed point system)
    - Nature-based stormwater control measures will be required under new general standards
    - **Comments:**
        - **Dionne:** Does DEP plan on getting the blessing from John for new infiltration standard? (Answered, yes)
        - **Anonymous:** What is the nexus between this and nutrient standards? This designation would not trigger going through a different pathway. (Jeff: looking at what is happening in streams, quantitative nutrient standards will not apply to Chapter 500)
        - Is there a definition of what is coastal? How far would that extend? (Answer: that is a tricky one. Taking a simple approach)
- **New Flooding Standard**
    - Remains unchanged, except for source of precipitation data and optional detention waiver for UIS watersheds
    - Use NOAA Atlas 14 with an 18% for climate change until NOAA Atlas 15 is released
    - Applies to Site Law Projects
- **New Development in a Non-Lake Watershed (Figure 3)**
    - Not playing around with thresholds for impervious. Performance curves have been discussed in depth in previous meetings, used in New England area so we are adopting what is out there
    - Step 1 – New Basic Standards
        - All projects must meet New Basic Standards
        - Stormwater law projects qualify for a PBR if they are not required to meet: the new general standards or the phosphorous standard
    - Step 2 – Urban Impaired Stream
        - Projects in urban impaired stream watersheds that exceed size thresholds must also meet new General Standards
    - Step 3 – S&T Regions or Watersheds
        - Projects in these regions or watersheds that exceed size thresholds must also meet new general standards
    - Step 4- Site Law Projects
        - Not in UIS or ST must also meet new general standards
            - 75% of Runoff Volume Reduction Standard
            - Stressor Guided Stormwater Treatment
                - DEP identified stressors: nitrogen, phosphorous, chloride
                - Sized using performance curves
- **New Development and Redevelopment in a Non-Lake Watershed (Figure 4)**
    - For redevelopment, there are going to be select credits, and lower bar for redevelopment projects or portions of a project
- **Other Standards**
    - Phosphorous
        - Remaining in place
    - Flooding
        - Remaining in place
    - UIS
        - Remaining in place

    - Discharge to Wetlands Standard
        - Changing maximum storage depth requirement
- **Example Project Reviews**
    - DEP Engineering Team
        - Evaluated the originally proposed LID standards using example projects. Used to craft new basic standards
        - Has been working on example projects to demonstrate how ch.500 will be implemented
        - Will continue into January 2025
    - New chapter 500 framework has been established. Engineering team's work will flesh out finer technical details
    - **Comments:**
        - Devil is in the details about it being arduous. Some people might not get permits and they'll be upset about it.
        - Sometimes developers from elsewhere think they are lax or not lax depending on where they've worked previously

## Discussion and Next Steps

**Stakeholder Input**

- **Municipal Representative:** Being pulled in multiple directions. 2 ways: make sure new requirements are clear, and clear process for granting waivers and exceptions
- **Anonymous:** Like helping people getting to yes and not no when it comes to development / developers
- **Karem:** For challenging sites, need to expand stormwater manual for people to use
- **Nathan:** Aging infrastructure and ability to adapt. Karem said he has a few reservations about aging infrastructure in Chapter 500. Stormwater management law is clear that you cannot touch grandfathered portions of the site, so it is beyond the purview of the rules.
    - Especially in the downstream sections of some of our more impaired waters, there's a lot more storm water, lot more storm flow and stream flow moving through those culverts. So, we had to move them to 52 closes to 100 years old. You just to avoid flooding; it is associated with historic development. So sometimes those things need to be considered. Portland's trying to figure out how we can take some of that into a so that we're not allowing, you know, an existing condition to be exacerbated with people.
    - Committee and stakeholders further discussed redevelopment of sites and of aging infrastructure
- **Cynthia:** Will be helpful to see definitions. Hard to have good knowledge of where it's going without a framework, foundation for each word. Examples are also extremely helpful.
- **Ryan:** Long memo is going well so far
- **Rick:** Clear concise definitions and examples will be helpful from a design standpoint

**Action Items & Next Steps**

- FBE will be creating a complete stakeholder engagement report
    - Dozens of pages very comprehensive
    - Implement executive summary
- Long memo will be circulated around for feedback
- In the process of evaluating new standards as it pertains to development projects
- Asking for stakeholder input via our email for written comments
- Schedule and timeline: engage steering committee on process report, rule drafting, rulemaking, technical work (performance curve development for vegetative buffers, stormwater manual (contractor selection, establish work group)

    - Aiming for summer 2026 for adoption of new rules
    - Stakeholders discussed the stormwater manual's relationship with chapter 500.
- Conclusion of official stakeholder process. DEP will engage with stakeholders on an as need basis

## APPENDIX

**Table 1.** Overview of Stakeholder Feedback

| Topic | Feedback |
|---|---|
| **Meetings** | • Maine DEP should consider opening future Steering Committee and Technical Committee meetings to in-person Stakeholder attendance<br>• Ensuring clear communication with developers, municipalities, and the public was consistently mentioned as a key component of successful stormwater regulation implementation. |
| **Definitions** | • Develop a clearer definition of "maintenance"<br>• Certified Professional in ESC – Update to clarify what types of professional certifications qualify<br>• LID – update to reflect the broader site planning and natural resource protection meaning of LID |
| **Impaired Streams** | • Chapter 500 includes a strong focus on "impaired streams" (303(d)-listed) and places the "Urban Impaired Streams" designation on many if not all of them for the purposes of stormwater regulation; What about the other water bodies that are "impaired"<br>• Urban Impaired Stream Standard: The exception for impervious cover removal should require a stream, natural stream buffer or riparian buffer restoration standard. |
| **General & Basic Standards** | • General Standard: Pollutant-Generating Impervious Surfaces<br>• Basic Standard: Cumulative Impact of Small Developments<br>• Challenges for Larger Projects<br>• Wetland Protection<br>• Natural Drainage Network<br>• Downstream and Off-Site Channel |
| **Subdivisions & Redevelopment** | • A potential loophole was raised regarding impervious coverage calculations for subdivision projects.<br>• Rather than focusing on addressing past harm, the goal should be framed around what measures must be taken during redevelopment to ensure stormwater pollution is reduced |
| **Runoff & Groundwater Recharge** | • Roof Runoff and Groundwater Separation<br>• Off-Site Drainage<br>• Infiltration and Impermeable Liners<br>• Alignment with TMDLs<br>• Recharge Effectiveness and Hydrology<br>• Aquifer and Aquatic Ecosystem Considerations<br>• Recharge and Site-Specific<br>• Recharge Goal Clarification<br>• Clarification of Data in Reports<br>• Balancing Infiltration with Groundwater Protection<br>• Chloride Management / Chloride as a Stressor<br>• Infiltration Testing and Site Conditions<br>• Challenges with Site-Specific Infiltration<br>• Infiltration Feasibility<br>• Channel Protection and Stormwater Volume<br>• Stormwater Control Measures and Soil Considerations<br>• Soil Testing for Infiltration<br>• Challenges with Impermeable Liners<br>• Stormwater Rules Alignment<br>• Impact of Development on Drainage Areas |

| | |
|---|---|
| **BMPs & Design Standards** | • Small Projects and Thresholds<br>• Tailored BMPs<br>• Post-Construction Maintenance<br>• Pre-Treatment and Maintenance<br>• Design Robustness<br>• Core LID Requirements<br>• Challenges in Urban and Rural Sites<br>• LID Envelope Conflicts<br>• Practical Approaches to LID and Maintenance<br>• Recharge and Infiltration Challenges: Recharge through LID techniques is seen as a necessary tool, but site-specific challenges (e.g., poor soils or the inability to support infiltration) can complicate its use<br>• Setbacks and Buffer Zones<br>• Balancing Stormwater and Land Use Regulations<br>• Chloride Reduction and Stormwater BMPs<br>• Flexibility in BMP Design<br>• Maintenance and Long-Term Sustainability<br>• Formal SWPPP more like the EPA model<br>• ESC measures must be installed prior to any activity |
| **Permitting** | • Permit-by-Rule (PBR) for Small Sites Next to Impaired Streams<br>• Permit Modification for MS4 Communities<br>• Appendix F and LID Requirements<br>• Need for Clear Interplay Between MS4 and Chapter 500<br>• Regulatory Harmonization and Data Gaps |
| **Data & Metrics** | • Precipitation Data & Storm Design:<br>• 50-Year Storm Event for Larger Infrastructure<br>• NHD Plus High-Resolution Stream Layer<br>• Web Soil Survey (WSS) & Hydrologic Soil Group (HSG) Assignment<br>• Challenges in Verifying Soil Types<br>• Potential Shortage of Soil Scientists<br>• Ksat Estimation for HSG Soils<br>• Management Practices (BMPs) in addressing various pollutants: Nitrogen, Metals & Pathogens, Chlorides<br>• Integration of Regulations: The need to harmonize Chapter 502 regulations (UIS Watersheds) with other regulatory frameworks such as the 303(d) list of impaired waters and TMDLs (Total Maximum Daily Loads)<br>• Challenges in Current Framework |
| **S&T** | • Integration with Existing Lists<br>• Maintenance Challenges<br>• Stakeholders stressed the importance of more comprehensive data on impervious cover (IC) trends<br>• IC as a Key Indicator<br>• Impervious Cover (IC) and Watershed Health<br>• Overlapping Frameworks<br>• Regulatory Flexibility<br>• S&T Designations and Regulatory Challenges<br>• Proactive Measures in Redevelopment Areas |
| **Environmental Justice** | • Balancing Development and Environmental Protection in EJ Areas<br>• Redevelopment and Affordable Housing |


**Figure 1.** Waterbodies included in the previous and new Chapter 500 rules.

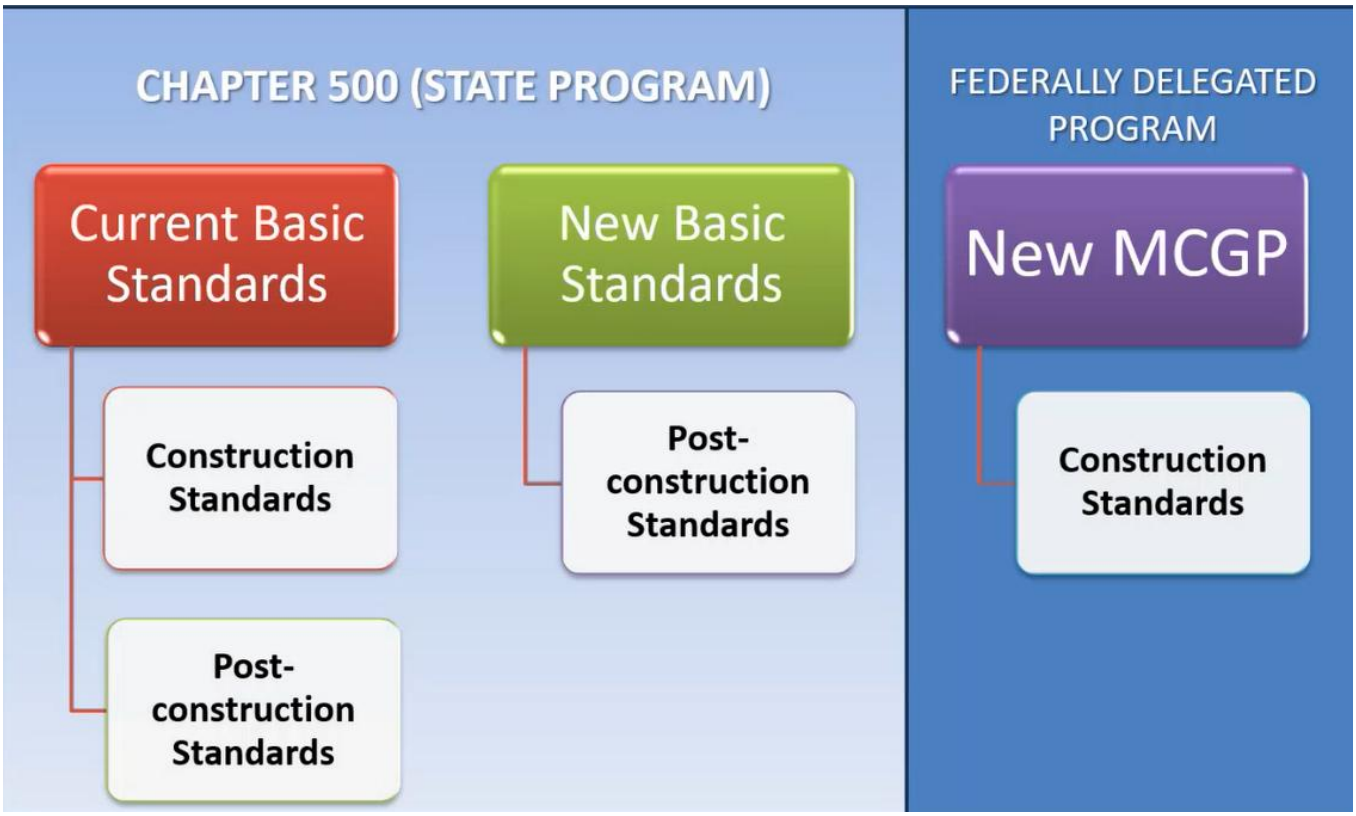


**Figure 2.** Standards apply to activities  disturbing one or more acres.

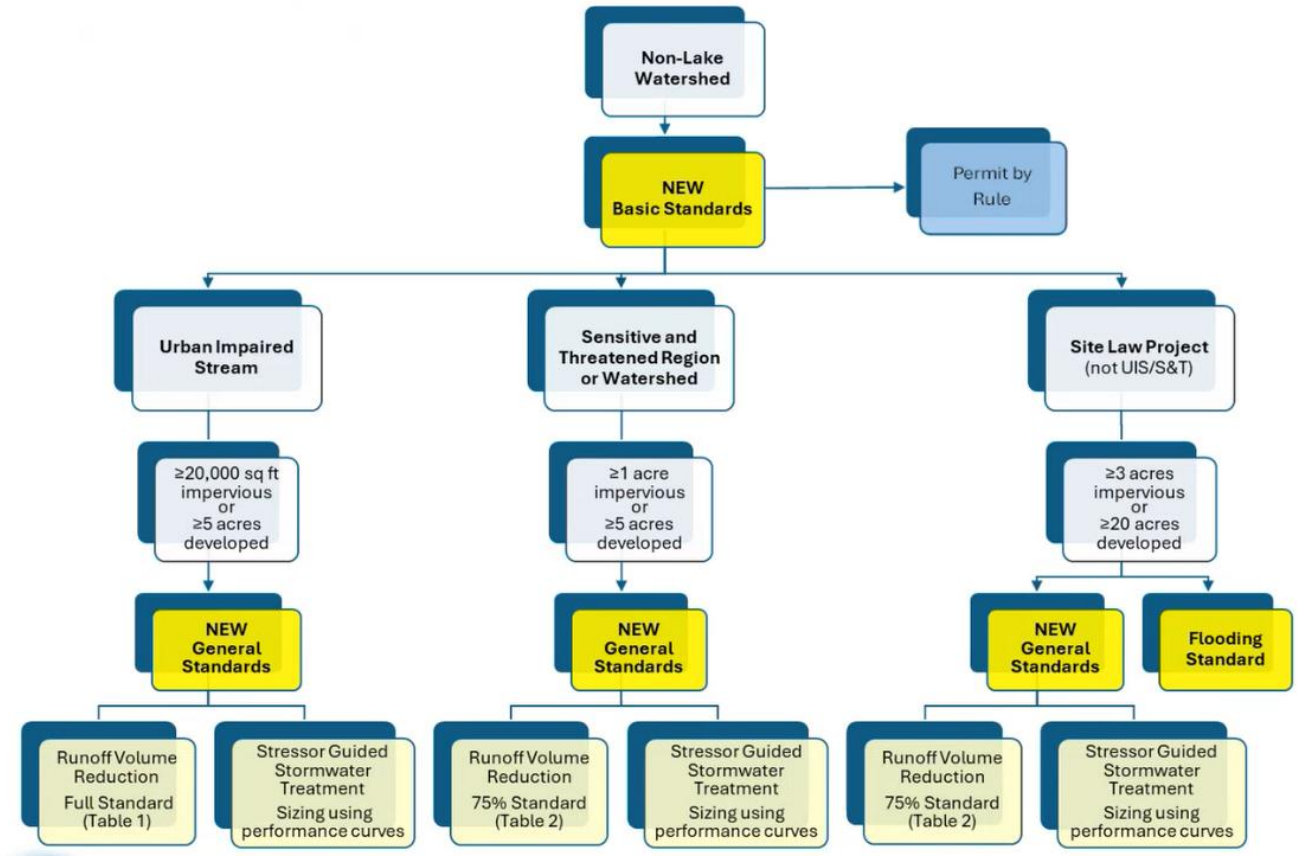


**Figure 3.** New Development in a Non-Lake Watershed

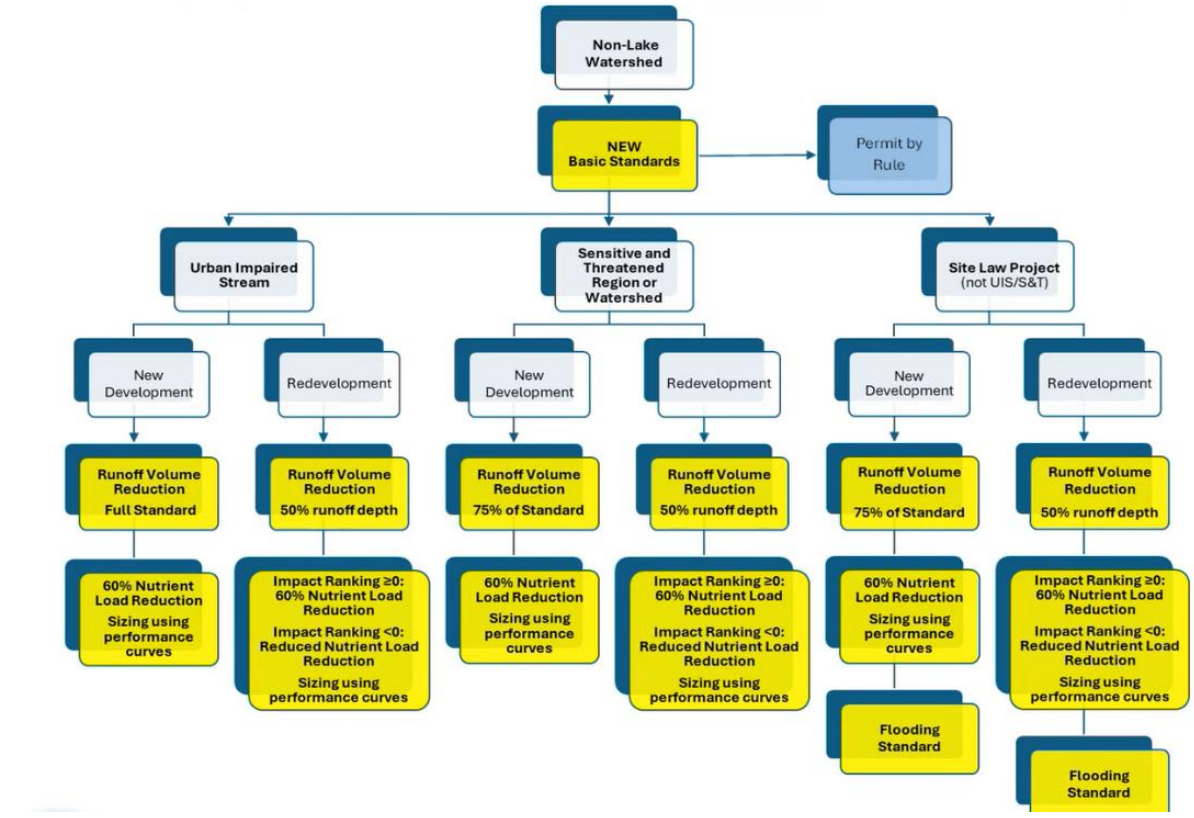


**Figure 4.** New Development and Redevelopment in a Non-Lake Watershed