Using the Enhanced Stormwater Control Ordinance Action to Meet New DEP Requirements

Webinar

Tuesday, February 6, 2024







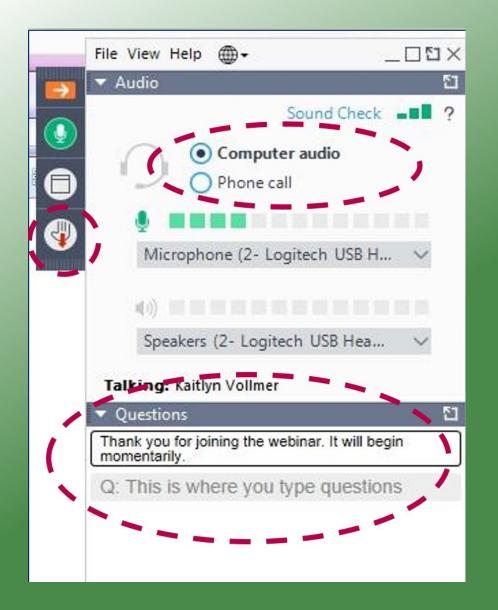






Using the Enhanced Stormwater Control Ordinance Action to Meet New DEP Requirements

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Panel Speakers



Anne Heasly



Mike Pisauro



Lindsey Sigmund

Enhanced Stormwater Ordinance

- Overview
- 2. Why update?
- 3. Enhancements
- 4. Next Steps
- 5. Upcoming Opportunities
- 6. Questions





What can municipalities do to better manage stormwater?













Why Do We Need to Do Better?



Clean Water Act

- The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.
- It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;
- It is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983



Water Pollution Control Act

It is the policy of this State to restore, enhance and maintain the chemical, physical, and biological integrity of its waters...

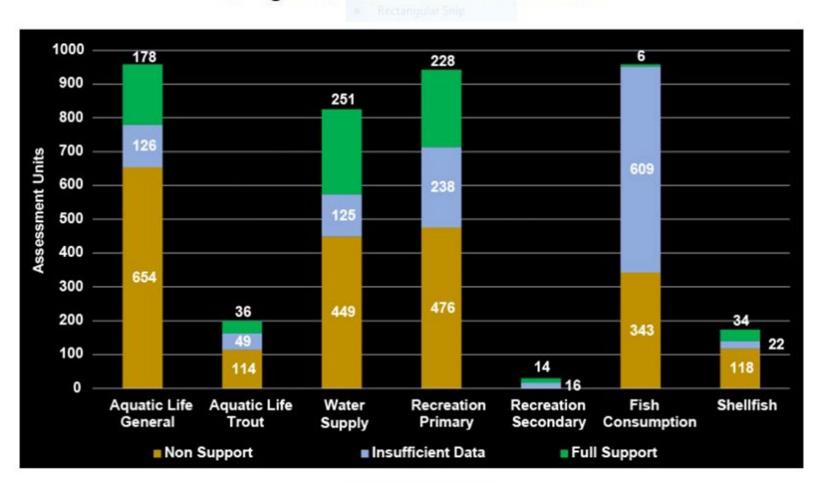
- to protect public health
- to safeguard fish and aquatic life
- scenic and ecological values ...

N.J.S.A. 58:10A-2.



Where are we with restoring?

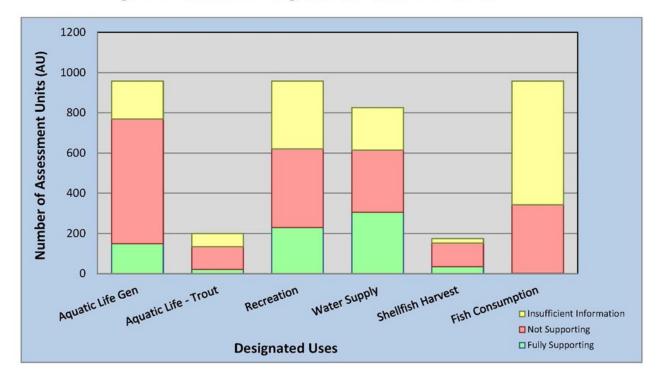
Designated Use Results Statewide

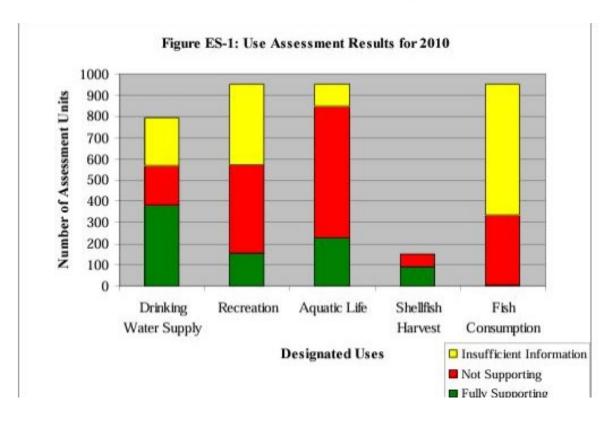


2018/2022 Integrated Water Quality Assessment Report

Where are we with restoring?

Figure ES-1: Statewide Designated Use Assessment Results, 2016





Issues with Stormwater Regulations

- Current program may be slowing not stopping the rate at which the stormwater problem is getting worse.
- But only large developments are addressed.
- Program not addressing existing stormwater problems.
- Current rules do not address volume of runoff.
- Current rules do not in practice address Redevelopment







Enhancements

- → Low Impact Development
- → Major Development
- → Onsite Retention
- → Maximum Contribution Area
- → Regulated Impervious Surface
- → Stormwater Runoff Quality
- → Minor Development
- → Redevelopment
- → Runoff Quality TMDL
- → Maintenance









Low Impact Development

 Add definition and update requirements to emphasis the use of natural site features – landform, slope, and natural cover – when designing green infrastructure in order to reduce the disruption of the landscape from development and enhance the function of green infrastructure.

Low Impact Development

New Jersey Future



Include definition of "Low Impact Development"

- Manage stormwater close to its source
- Preserve hydrologic and ecologic functions of receiving waters
- Example: Preservation of natural landscape features

Include additional requirements for a Site Development Plan – Environmental Site Analysis

Low Impact Development

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- minimizing site disturbance
- preserving natural vegetation
- forests and especially core forests
- reducing and disconnecting impervious cover
- minimizing proposed ground slopes
- utilizing native vegetation
- minimizing turf grass lawns
- revegetating maintaining and enhancing natural drainage features and characteristics.









Major Development

 To manage more stormwater generated from development to reduce the threshold of disturbance by revising the definition of major development.

Add NJDEP min here?

Major Development

New Jersey Future

- Include revised definition of "Major Development"
- Select one of the thresholds from the options provided
- Recommended threshold: Disturbance of ½ acre, 5,000 SF of added impervious surface, 5,000 SF of added motor vehicle surface

By selecting thresholds below the minimum 1 acre of disturbance required by NJDEP, stormwater management will become a requirement for a larger number of projects, advancing the pace of stormwater improvements.

Major Development

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Enhanced:

- ½ acre of soil disturbance
- 5,000 square feet of impervious coverage
- Water Quality treatment for all impervious surfaces

Existing:

- 1 acre of soil disturbance
- ¼ new impervious cover
- Water Quality treatment only for regulated motor vehicle surfaces







Onsite Retention

• To reduce the amount of runoff as well as clean and manage more stormwater, promote infiltration to allow stormwater more time to soak into the ground during storm events.

Onsite Retention

New Jersey Future

- Include Onsite Retention under Groundwater Recharge
- Revise Stormwater Runoff Quantity
 Standards to include Onsite Retention

Infiltration of stormwater from onsite impervious will achieve several stormwater management goals, including reduced flooding, improved water quality, and increased groundwater recharge



Onsite Retention

Watershed Institute

"Retention Storm" means retaining onsite through green infrastructure or reuse one-half of the projected 2 year storm as defined in Table 6.

The site shall be designed to manage through on-site retention the Retention Storm at the site or on contiguous properties in common ownership. The management shall be through the utilization of one or more green infrastructure techniques.

Section IV(T)







Maximum Contribution Area

 To manage stormwater closer to its source and use a more distributed system, reduce the maximum contributory drainage area.

Maximum Contribution Area

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 Modify table in Section IV.O.2 to reduce the maximum contribution area

Reducing maximum contributory drainage areas will lead to more stormwater best management practices that are distributed on the site, a key component of low impact development.

Modified Table in Section IV.O.2.:

Best Management Practice	Maximum Contributory
	Drainage Area
Dry Well	[0.25 / 0.5 / 0.75] acre
Manufactured Treatment Device	[0.5 / 1.0 / 1.5] acre
Pervious Pavement Systems	Area of additional inflow cannot
	exceed [one / two] times the
	area
	occupied by the BMP
Small-scale Bioretention	[0.5 / 1.0 / 1.5] acre
Systems	
Small-scale infiltration basin	[0.5 / 1.0 / 1.5] acre
Small-scale sand filter	[0.5 / 1.0 / 1.5] acre







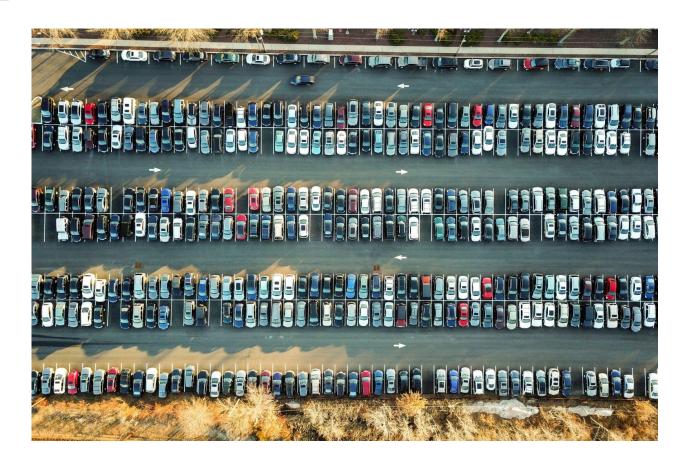
Regulated Impervious Surface

 Includes all impervious areas within the project area, instead of net increase of impervious cover. This provides for the water quality, quantity and recharge improvements inherent in the use of green infrastructure to apply to all impervious areas of a site – existing and new.

Regulated Impervious Surface

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 Revise definition of Regulated Impervious surface to include new AND existing impervious surfaces



Regulated Impervious Surface

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- All impervious surfaces require water quality treatment not just regulated motor vehicle traveled surfaces.
- Requires motor vehicle traveled surfaces to received treatment for hydrocarbons and other substances.
 Sec. IV(S)(12)

Runoff from non-motor vehicle traveled surfaces should be routed to separate BMPs for water quality treatment.

Sec. IV(S)(11)







Stormwater Runoff Quality

 Provide for improvements to water quality by including regulated impervious and regulated motor vehicle surfaces – all impervious areas.

Stormwater Runoff Quality

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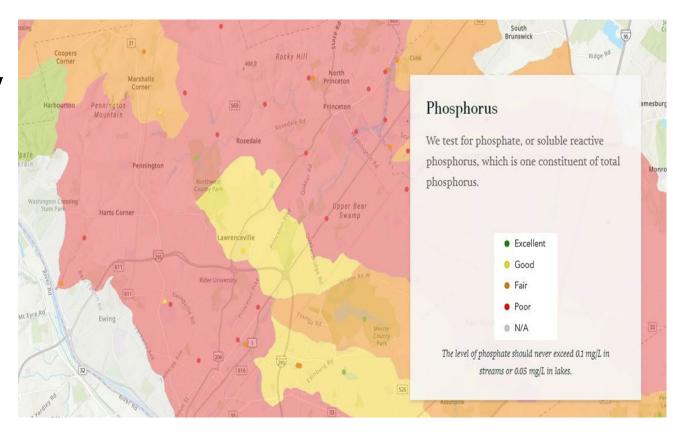
 Ensure the threshold is consistent with the major development threshold



Stormwater Runoff Quality

The Watershed Institute

- Require consideration of the water quality status of receiving waterway
- Address impaired waters
- Implement stronger measures consistent with TMDL
- No increase in pollution discharges into FW1 waters









Minor Development

 To reduce the cumulative impact of stormwater generated from many small developments, add a definition for Minor Development to capture stormwater generated from disturbances of between 250-1000 square feet of new impervious surfaces.

Minor Development

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- Include definition of Minor Development
- Include Design and Performance
 Standards for Minor Development
- Include Section for Minor Development requirements

This may capture very small projects that collectively contribute an increase of stormwater runoff to a vulnerable area.



Minor Development

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- •Define as 250 SF or more of impervious surface
- •Treat 2 gallons of stormwater per square feet of impervious surface
- Retention Storm
- Include Redevelopment
- •Require mitigation fee to secure waiver of requirements









Redevelopment

 To clarify how to calculate stormwater runoff from sites with existing development.

Redevelopment

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 Revise the definition of "Regulated impervious surface" to include ALL impervious surface within the project area limit of disturbance

A more holistic enhancement that addresses all impervious, not just the net increase of impervious.



Redevelopment

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- For calculating compliance with Quantity requirements assume the site is not developed but wooded in good condition.
- Assume no pre-existing impervious cover









Runoff Quality

• In order to ensure that runoff is not further degrading water quality, when stormwater will be directed to impaired waters – those with a Total Maximum Daily Load (TMDL) – the design includes a corresponding reduction of total suspended solids (TSS).







Runoff Quantity

Runoff Quantity

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- The design shall avoid changing the surface and subsurface hydrology
- The design shall not cause, contribute to our exacerbate flooding upstream or downstream from the site.







Design Submissions

- map all streams, wetlands, vernal pools
- Subsurface and surface hydrology
- TMDLs
- Flood Plains
- Forests
- Map with soil test pits/bores overlaid with location of BMPs
- Map demonstrating the contributory drainage areas







Maintenance

 Add definitions and update requirements to emphasis the use of natural site features – landform, slope, and natural cover – when designing green infrastructure in order to reduce the disruption of the landscape due to development and enhance the function of green infrastructure.

Maintenance

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- Requires permit/license from municipality
- Submission of annual reports on required maintenance.







Next Steps

• Ensure you meet the requirements to share the draft and final ordinance with your County – see Step 5 in the action - Municipal Land Use Law at N.J.S.A. 40:55D-15.b and -16.

 Consider – update to your master plan – stormwater management plan

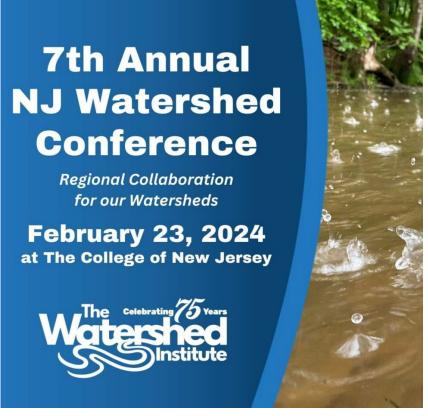






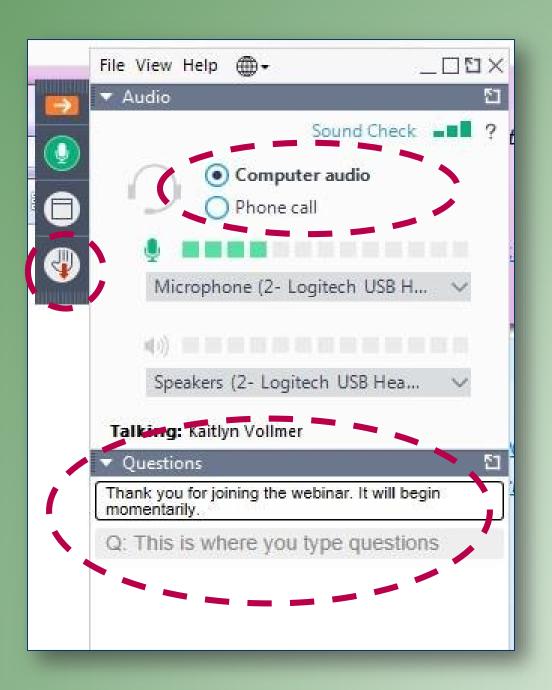
Important Dates

















Questions & Discussion

- Michael Pisauro, Policy Director, The Watershed Institute, mpisauro@thewatershed.org
- Lindsey Sigmund, Program Manager, Mainstreaming Green Infrastructure Program, New Jersey Future, lsigmund@njfuture.org
- Anne Heasly, Program Manager for Policy and Planning, heaslya@tcnj.edu







Thank You