

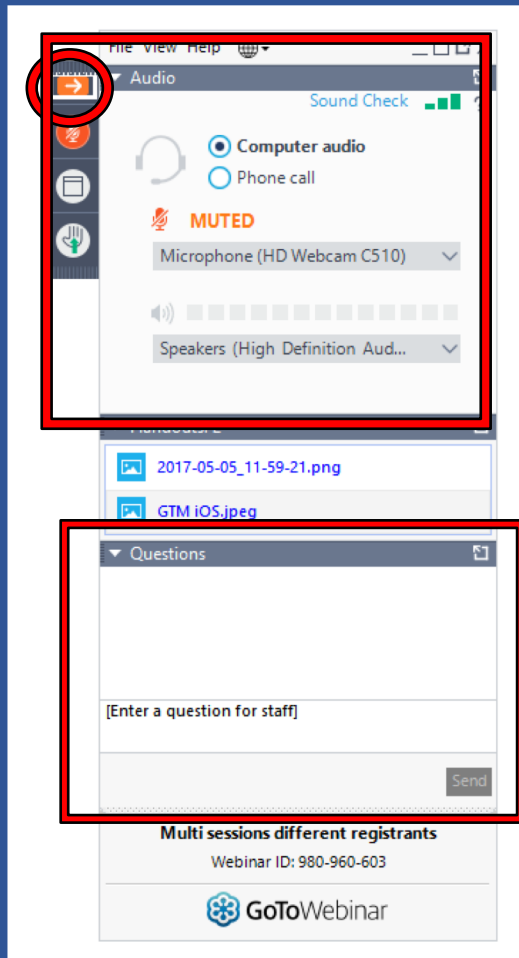
CT's MS4 Permit: Year 5 and Beyond

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UConn Center for Land Use Education and Research

July 1st, 2021

Navigating the Webinar



- Open and close your Panel
- View, Select, and Test your audio
- Submit questions
- Handouts
- Recording: <http://clear.uconn.edu>

Center for Land Use Education & Research



Water (NEMO)



Land Use &
Climate Resiliency



Geospatial Tools &
Training



Conservation &
STEM Education

MISSION: *to provide information and assistance to land use decision makers and other audiences in support of better land use decisions, healthier natural resources, and more resilient communities.*

What I'll Cover

- Year 5 tasks and beyond
- Commonly confused concepts
 - DCIA
 - Priority Area
 - Monitoring requirements
- New tools/guides
- What is troubling you?

New tasks in Year 5

- Same for Existing and New permittees

CENTER FOR LAND USE EDUCATION AND RESEARCH & CT NEMO

Connecticut MS4 Guide

Home Basics Tasks Tools About MS4 News NEMO CLEAR

Basics

Important Dates & Deadlines

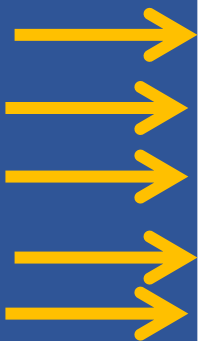
The overall effective dates of the permit are July 1, 2017 through June 30, 2022.

We developed an MS4 tasklist that may help you with MS4 planning. Because many deadlines are different between new and existing MS4 communities there are two versions - one for existing (2004) MS4 towns and another for new (2017) MS4 towns. Email Amanda if you'd like the original excel file instead of the pdfs posted here.

Existing MS4 Tasklist New MS4 Tasklist

Existing MS4 Tasklist & Download

Inspect all catch basins in Priority Areas	36	Jul 1 2020			✓		
Review regulations for LID barriers	27	Jul 1 2021				✓	
Legal authority for SW retention standards	27	Jul 1 2021				✓	
Monitor 6 'worst' outfalls to impaired waters annually	43	Jul 1 2021				✓	✓
Implement projects from retrofit plan	33	Jul 1 2021				✓	✓
Inspect all catch basins outside Priority Areas	36	Jul 1 2022					✓
2% impervious disconnection goal	33	Jul 1 2022					✓
Screen all outfalls to impaired waters	44	Jul 1 2022			50%		✓



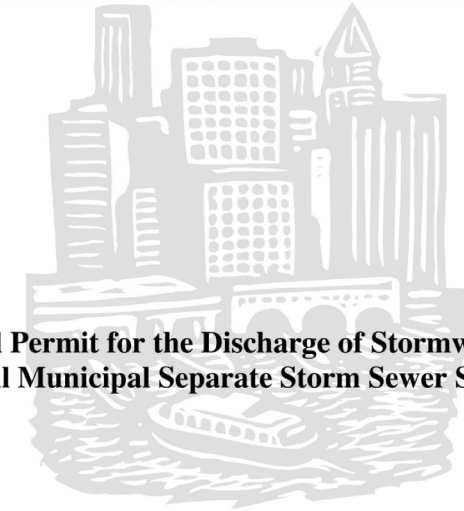
Poll questions 🕶️

- Do you expect that your community will have all catch basins inspected by next June?
- About how many disconnection projects have been completed since 2017?
- Do you know which waters in your community are considered impaired for MS4 permit requirements?

What happens next?



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division



General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

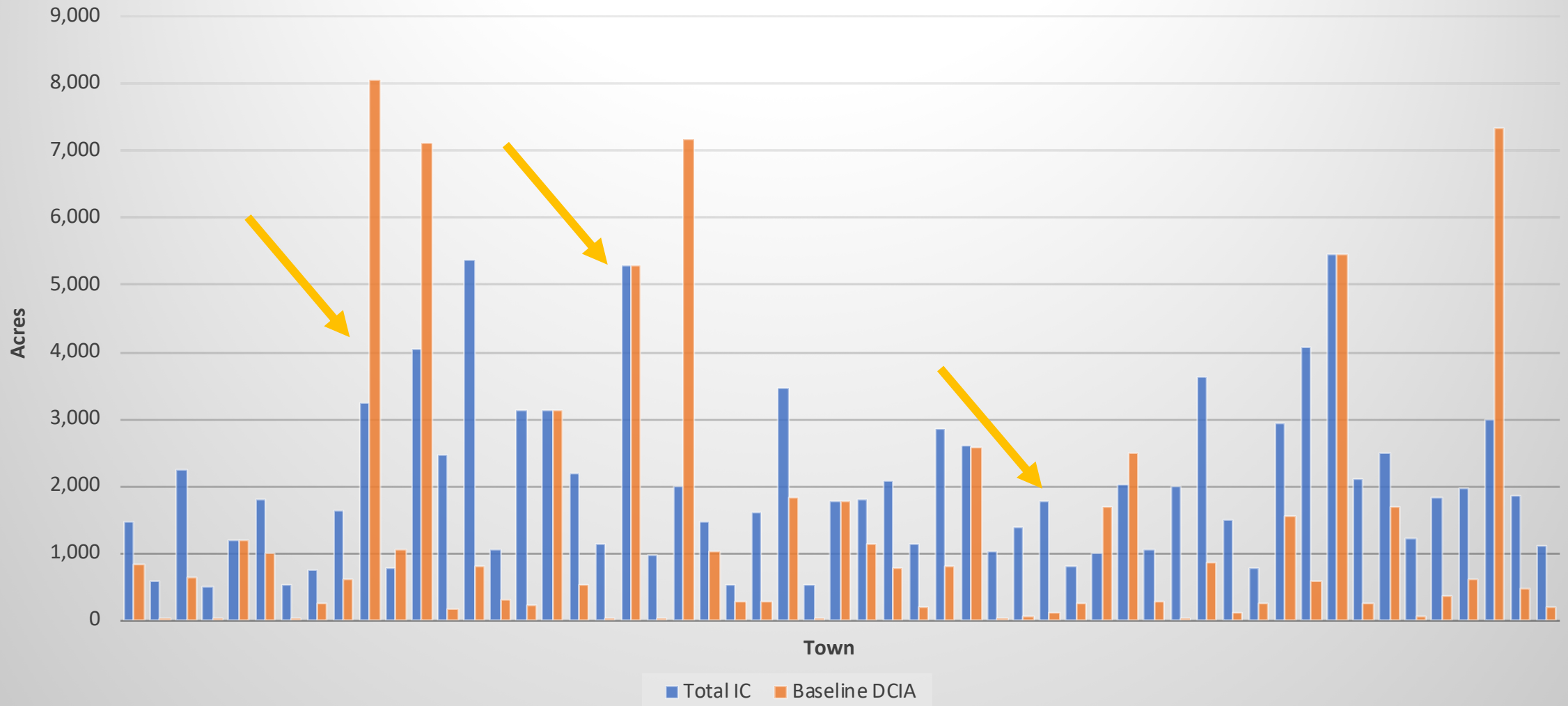
Issued: January 20, 2016

Effective: July 1, 2017

Expires: June 30, 2022

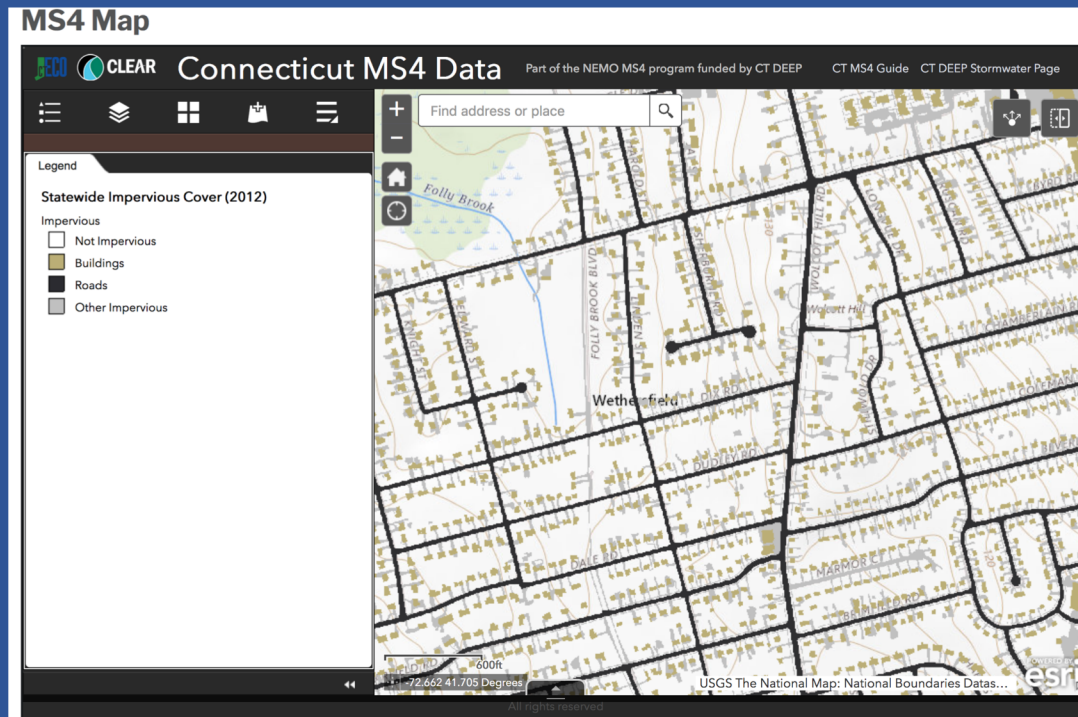
Commonly confused concept: DCIA

Total Impervious Cover vs Baseline DCIA calculation

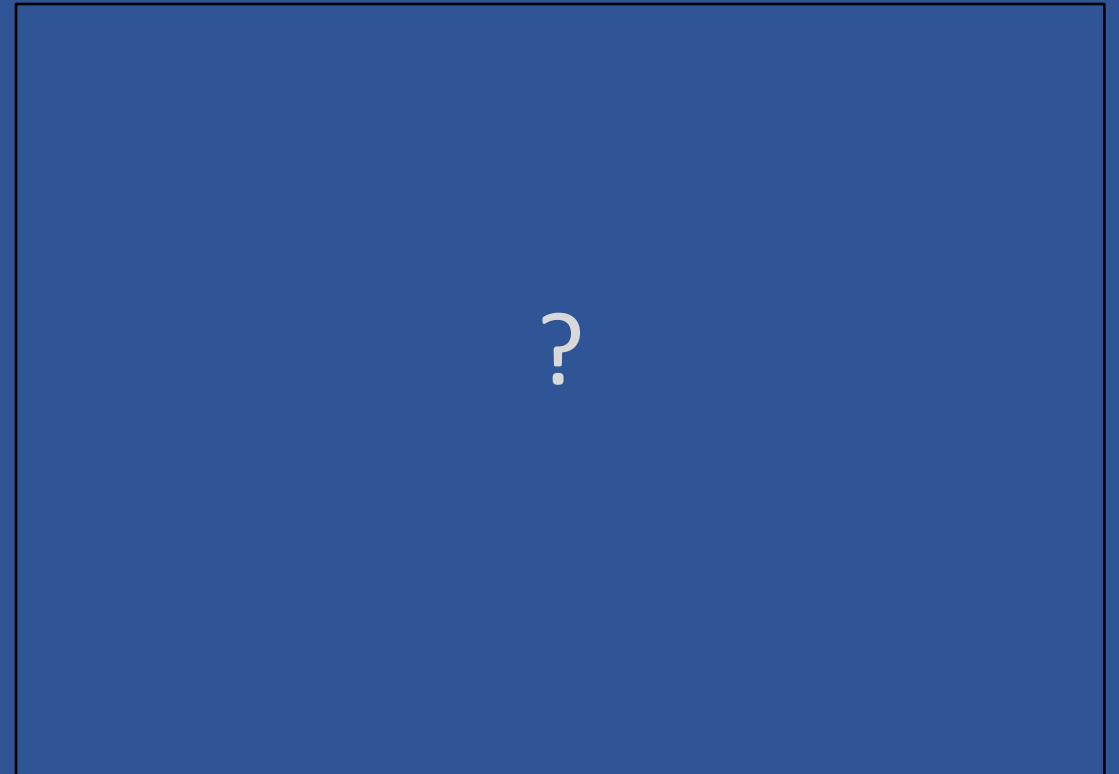


Getting from Impervious Cover to DCIA

Impervious Cover



DCIA



Basically 3 ways


1. Assume DCIA is equal to Impervious Cover – easy!
2. Use equations from the MS4 mapping page – a little more work
3. Field verifications – much more work...

<https://nemo.uconn.edu/ic-guide/index.htm>

COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

Do It Yourself: Communities Respond to an Impervious Cover TMDL

Home Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Step 7 Step 8



Step 1

Develop accurate information on total impervious cover in your area (watershed, town) of interest.

To respond to an IC-TMDL, a town must first have accurate data on the amount and location of impervious cover. This is for two important reasons. First, you need a baseline from which to measure progress against the numeric limits. Second, you need this information, in the form of a map, to help determine the best LID strategies (see [Steps 2 and 4](#)).

Mapping of this type requires the use of several digital data layers, and geospatial technology like geographic information systems (GIS) to help you work with them. See below for more information.


[What Type of IC Maps do You Have?](#)

[Using Imagery to Get a Handle on IC](#)

[CLEAR's Geospatial Training Courses](#)

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- [About This website](#)
- [LID Gallery](#)
- [Interactive Tour](#)
- [IC-Guide Booklet](#)
- [Eagleville Brook IC-TMDL](#)
- [National LID Atlas](#)
- [Contact Us](#)



<https://nemo.uconn.edu/ms4/tasks/mapping.htm>

Commonly confused concept: Priority Areas

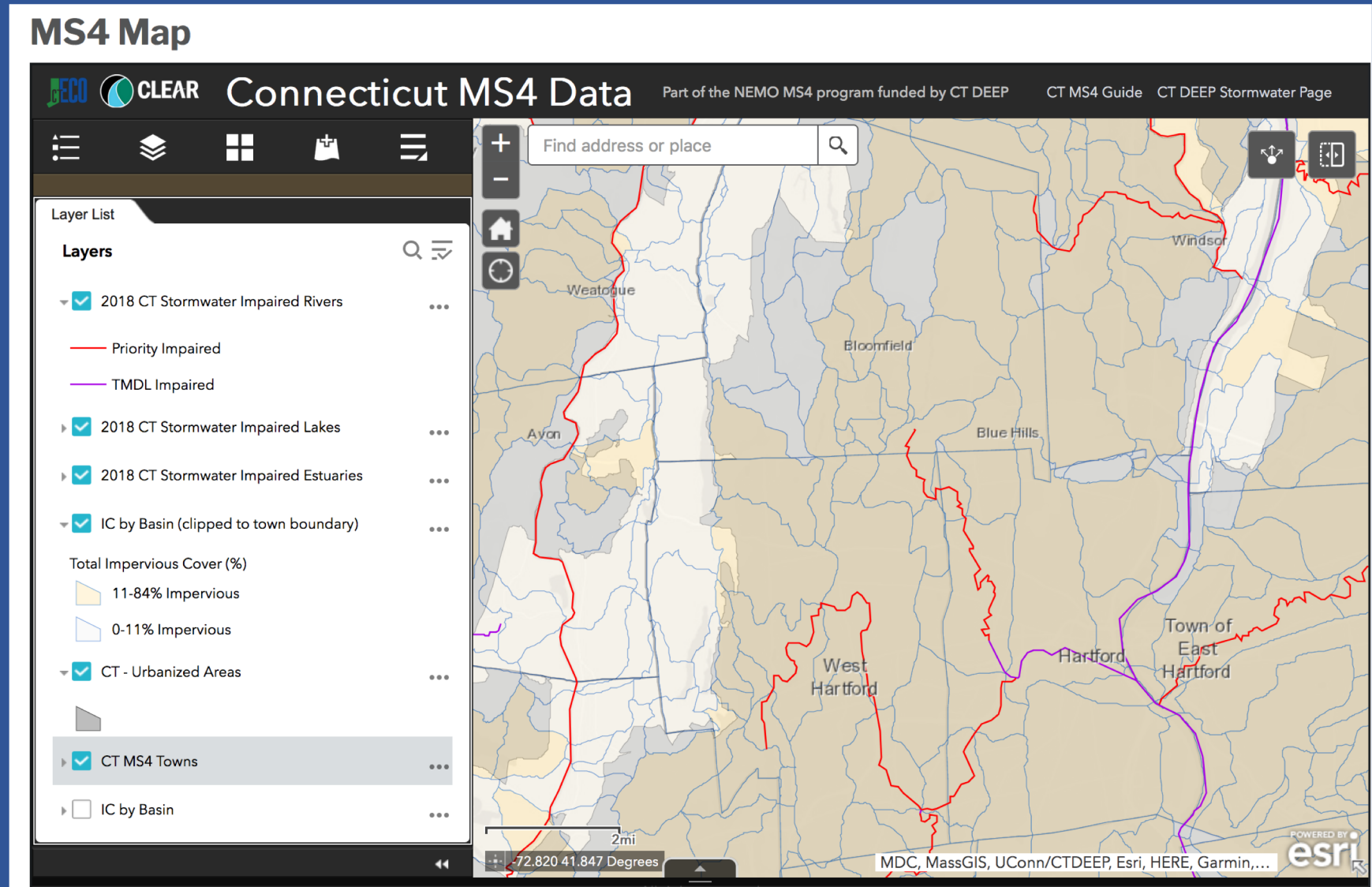
Old permit mostly townwide

Updated permit “priority areas”

- Reduce burden
- Focus on problem areas

Areas to Focus Efforts

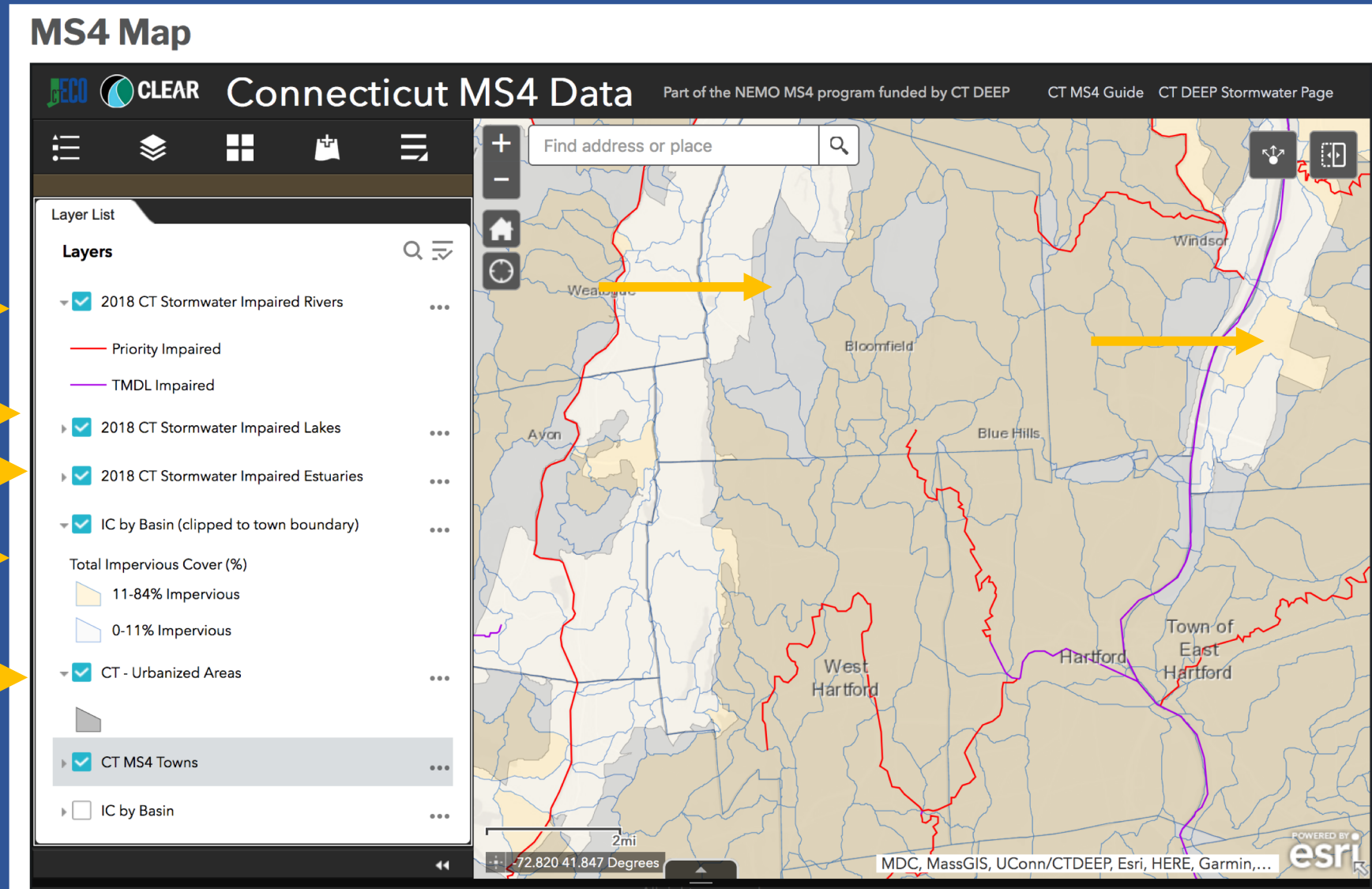
- Public Outreach
- IDDE
- IC Disconnects
- System mapping
- Monitoring
- Prioritization (MEP)



Commonly confused concept: Priority Areas

Anywhere that meets any of these criteria:

- Located in the urbanized area →
- Discharges to a stormwater impaired waterbody →
- Directly connected impervious area > 11% →

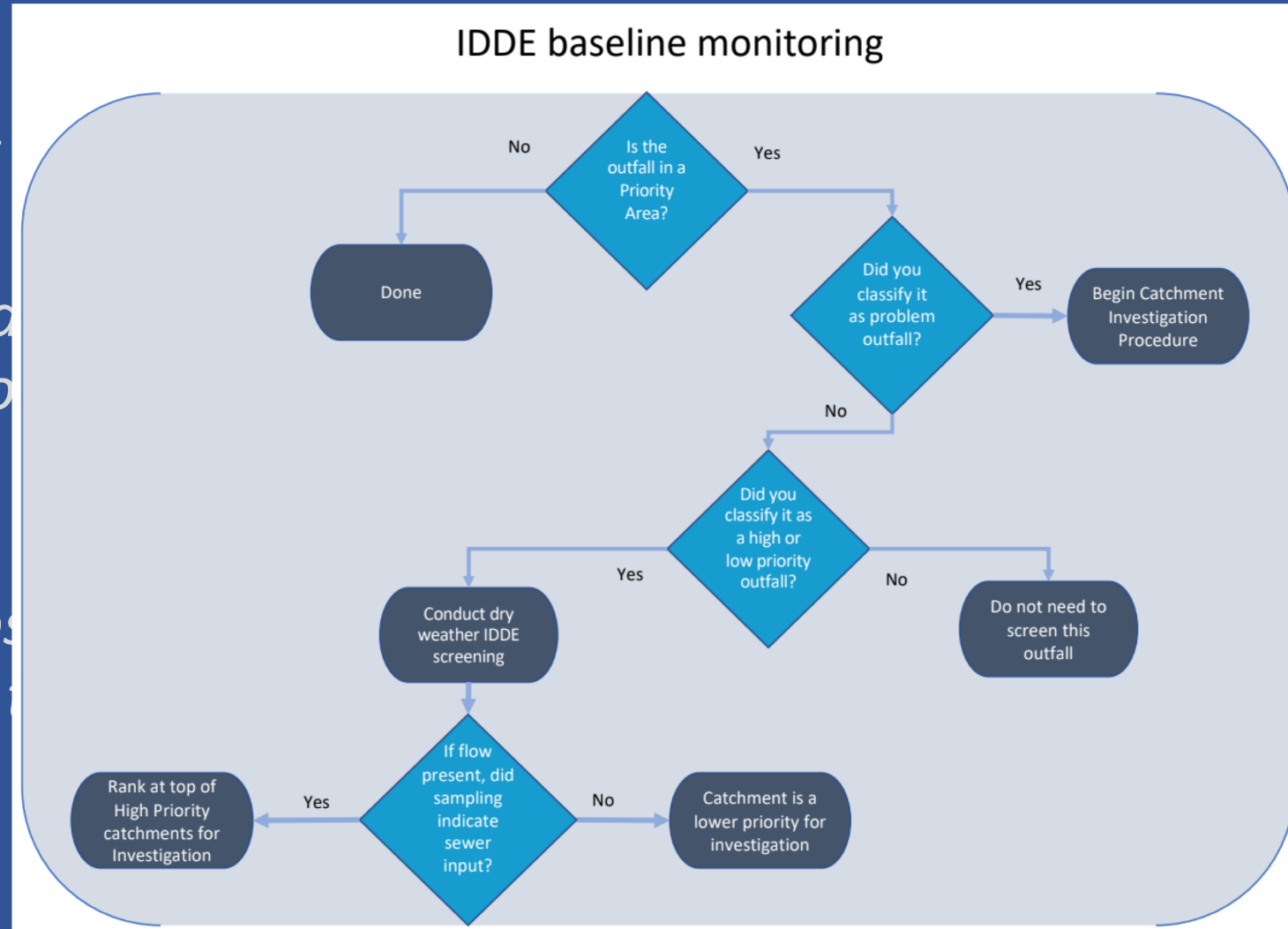


Commonly confused concepts: Monitoring

"I have some questions about IDDE stormwater sampling..."

We have a list of priority outfalls in town and identified which ones need to be sampled.

If the outfalls do not have dry weather flow how am I supposed to sample them? Do I only do ones that have flow?"



deadlines	Screen all outfalls to impaired waters by end of permit term 6/30/22 (all MS4s)	Complete baseline sampling: 6/30/20 (2004 MS4s)	Complete catchment investigation procedure in 100% of MS4 served by Problem catchments by 6/30/2022.
	Begin annual monitoring of worst 6 outfalls once 50% of all		Complete catchment investigation procedure in 100% of catchments with indications of sewer input (highest High Priority catchments by 6/30/2022.

Problem, high, & low priority catchments

2. Problem Catchments: Catchments with known or suspected contributions of illicit discharges based on existing information. This category includes any catchments where previous outfall/interconnection screening indicates likely sewer input. Likely sewer input indicators are any of the following:

- Olfactory or visual evidence of sewage,
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine.

Screening and sampling is not required for Problem Catchments. Problem Catchments must be scheduled for catchment investigation. Following the initial ranking of catchments, subsequent rankings shall not add any catchments to the Problem Catchment category.

3. High Priority Catchments: Catchments that have not been classified as Problem Catchments and that are:

- Discharging to an area of concern to public health due to proximity of public beaches, recreational areas, drinking water supplies or shellfish beds
- Determined by the permittee as high priority based on outfall/interconnection screening and catchment characteristics assessment.

Any catchment where outfall/interconnection screening indicates likely sewer input as described under Item 1, Problem Catchments, shall be ranked at the top of the High Priority Catchments category and scheduled for catchment investigation.

4. Low Priority Catchments: Catchments determined by the permittee as low priority based on outfall/interconnection screening (see Section 7) and catchment characteristics assessment (see below).

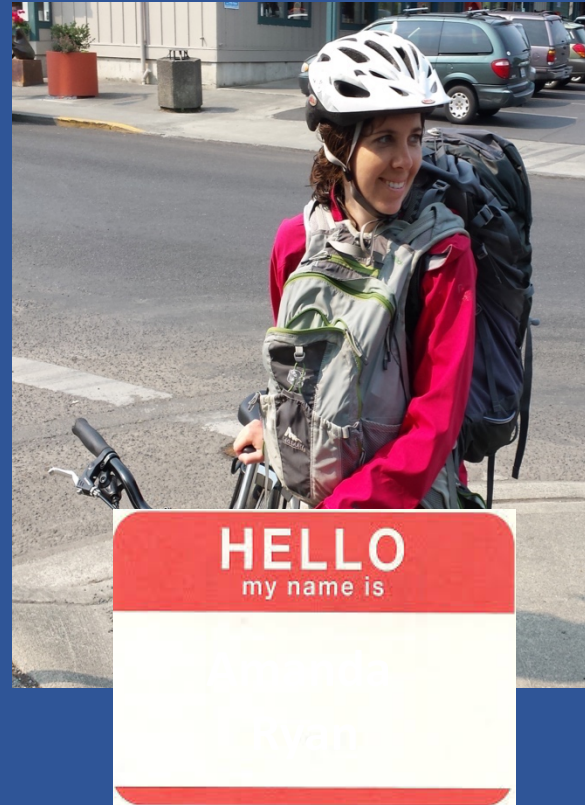
Commonly confused concepts: Monitoring

	<p>for SB) Enterococci (>104 col/100ml for swimming areas) and (>500 col/100ml for all others)</p> <p><u>Other pollutant of concern:</u> screen for turbidity (> 5 NTU)</p>		<p>temperaure (no threshold)</p>
follow-up	<p>For any sample that exceeds the listed threshold, investigate the outfall's drainage area to find sources of pollutant. You might consider land use, development patterns, commercial activities, industrial activities, DCIA, natural sources, residential activities, etc.</p> <p>Implement BMP program to mitigate suspected sources of pollutant.</p>	<p>If a sample exceeds all three thresholds for ammonia, surfactants and bacteria (or ammonia, surfactants and detectable chlorine), then rank the catchment at the top of the High Priority catchments for investigation.</p>	<p>After all illicit discharges in a section of your stormwater system are confirmed and removed, conduct dry weather screening (and wet weather if any SVFs are present) within one year.</p> <p>Conduct follow-up dry weather screening (and wet weather if any SVFs are present) within 5 years.</p>
deadlines	<p>Screen all outfalls to impaired waters by end of permit term 6/30/22 (all MS4s)</p> <p>Begin annual monitoring of worst 6 outfalls once 50% of all outfalls have been screened by 6/30/20 (2004 MS4s) or 6/30/2021 (2017 MS4s)</p>	<p>Complete baseline sampling:</p> <p>6/30/20 (2004 MS4s)</p> <p>6/30/22 (2017 MS4s)</p>	<p>Complete catchment investigation procedure in 80% of MS4 served by Problem catchments by 6/30/2020.</p> <p>Complete catchment investigation procedure in 100% of MS4 served by Problem catchments by 6/30/2022.</p> <p>Complete catchment investigation procedure in 100% of catchments with indications of sewer input (highest High Priority catchments by 6/30/2022.</p> <p>Complete catchment investigation procedure in 40% of area served by all MS4 catchments by 6/30/2022.</p> <p>Complete catchment investigation procedure in 100% of area served by all MS4 catchments by 6/30/2027.</p>

<https://nemo.uconn.edu/ms4/tasks/monitoring.htm>

NEMO Support— extended for another year

- funded by DEEP
- 5 year MOA
- ‘circuit rider’
- Website & listserv
- workshops & webinars
- tools & templates
- maps & data



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Connecticut MS4 Guide

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Public Education & Outreach

Public Involvement

Illicit Discharge Detection & Elimination

Construction Site Stormwater Runoff Control

Post-construction Stormwater Management

Pollution Prevention & Good Housekeeping

What's the latest?

CT MS4 Newsletter
This newsletter was created to relay occasional updates and important information to MS4 regulated c...

Summer Math Adventure for Kids
Book Your FREE Math Class

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Monitoring

Mapping

Legal Authorities

MS4 Map

This guide was developed by NEMO program staff within the UConn Center for Land Use Education and Research with funding from the Connecticut Department of Energy and Environmental Protection (DEEP). It is part of a broad outreach effort to provide guidance, training, tools and other support to help Connecticut MS4 communities and institutions comply with the revised MS4 general permit. This website is frequently updated and materials will be added

www.nemo.uconn.edu/ms4



New / Upcoming MS4 assistance

- Stormwater Pond Retrofit Workshop
July 27th in Groton
<https://form.jotform.com/211654666221150>
- Stormwater Authority Bill
 - Recorded webinar (10/1/2019): **Stormwater Utilities in CT?!**
<https://nemo.uconn.edu/ms4/tools/webinars.htm>
- Updated Stormwater impaired waters layer (2020)
- Post-Construction Legal Authority guidance
<https://nemo.uconn.edu/ms4/tools/regulations.htm>



Questions / complaints / suggestions?

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www.nemo.uconn.edu/ms4