December Disconnection workshop series

• Today - Supporting Low Impact Development (LID) Practices in Local Regulations
• Wednesday December 9th – Finding Retrofits
• Wednesday, December 16th – Keeping Track & Maintenance
LID in the MS4 Permit

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MS4 support for you!

- UConn CLEAR provides MS4 support to towns:
  - Website – [www.nemo.uconn.edu/ms4](http://www.nemo.uconn.edu/ms4)
  - Listserv
  - Circuit Rider
  - Workshops, webinars, templates
CT’s MS4 Permit in 60 seconds

CT DEEP

- Update Permit every 5 years
- Receive Permit registrations and Annual Reports
- Conduct inspections

MS4 Permit Structure

- 6 Minimum control measures plus monitoring

[Image of MS4 Permit Structure diagram]

https://portal.ct.gov/DEEP/Water-Regulating-and-Discharges/Stormwater/Municipal-Stormwater
Low Impact Development

• Maintain pre-development hydrology
• use many small-scale practices
• distributed throughout a site to manage runoff volume and water quality at the source

Rain Gardens
Permeable pavement
Dry wells
Tree box filters
Green roofs
And many more
LID in the MS4

Establish a legal authority (ordinance, bylaw, regulation, standard condition of approval or other appropriate legal authority) to:

1. Review local guidance & regulations for barriers
2. Developers shall consider LID first
3. Infiltrate first inch of rain on-site
4. If not possible, establish alternative options

Permit due date:
July 1st, 2021
* July 2022 for new MS4 towns & institutions
1. Review local guidance & regulations for barriers to LID

Review guidance for barriers
- Ex. Zoning regulations, street design requirements, etc.

Reduce/eliminate barriers ‘where appropriate’

Resources

Low Impact Development

Tools for reviewing and updating municipal regulations
- Developing a Sustainable Community by CT NEMO. An easy to use guide to help Connecticut communities craft plans and regulations that promote Low Impact Development and protect water quality.
- LID Site Planning and Design Techniques: Municipal Self assessment by RI NEMO. A comprehensive step-by-step guide for reviewing municipal regulations
- Code and Ordinance Worksheet (CODW) by the Center for Watershed Protection. A tool to help communities evaluate their local development regulations to identify revisions that allow (or require) site developers to minimize impervious cover, conserve natural areas and use runoff reduction practices to manage stormwater runoff.

Tools for reviewing site plans
- CT NEMO sample LID checklist for site plans.
- Town of Vernon LID checklist for review of development applications to the Planning & Zoning Department.

LID Design templates
- Tree well designs from the Town of East Lyme.
- 15’ x 6’ Bioswale design from the City of New Haven.
- Bioswale cross section from the City of New Haven.
- CT NEMO’s Rain Garden App and website.

https://nemo.uconn.edu/ms4/tasks/post-construction.htm
2. Developers shall consider LID first

• Prior to other local guidance

• Applies to new and redevelopment of sites ½ acre (or smaller if normally regulated)

• Site = extent of construction activities, including creation of new impervious cover
  • repaving or rebuilding on existing footprint without disturbing any soil would not be included

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3. Infiltrate first inch of rainfall on-site*

- Retain first 1” on-site if <40% DCIA
- *Retain first ½” on-site if >40% DCIA
- If not feasible...

Excuse me, what’s DCIA?
- Directly Connected Impervious Area
- It’s any impervious area that connects to storm sewer system like this parking lot:
4. Set-up alternative options

When stormwater infiltration standard can’t be met:

- Developer explains why and:
  - Proposes alternative site / project to make up for rainfall volume not infiltrated
  - OR pays a fee to town
Thank you!

• Please add any questions you have in the chat box...

• Next, Aaron Budris from Naugatuck Valley Council of Governments