Addressing Stormwater through the 303(d) Program

APPROACHES AND PLANS USED BY CT DEEP
It’s Just Stormwater……

• Link Stormwater to Water Quality impacts
• Work within permit program approaches
• Integrate approach with 303(d) based plans
Water Quality Standards

Antidegradation Policy

Tier 2:

For new or increased discharges or activities resulting from stormwater the first inch of rainfall is not discharged to a surface water body and Best Management Practices deemed necessary to protect and maintain designated uses and meet state Standards and Criteria are implemented.
Impervious Cover & Aquatic Life Condition

Benthic community data collected by DEEP

Aquatic Life Condition

% Impervious Cover

12% IC Threshold

Meets WQS

Doesn’t Meet WQS

Good

Poor
Eagleville Brook TMDL

- TMDL focusing on storm water and water quality
- Uses Impervious Cover as a Surrogate
- Implementation Plan focuses on reducing the impact of IC on the environment
- 12% IC Threshold with 1% MOS
- 11% IC for both WLA & LA

NEMO Bioretention Cell Laurel Hall UCONN and Green Roof
Watershed Response Plan for IC

- Extends IC TMDL approach to other watersheds
- Core document
- Additional Resources for Implementation
- Documentation regarding IC as a surrogate TMDL target
- Responding to an Impervious Cover based TMDL
- Case Examples
- 15 Watershed Appendices
## Table 3-2: Summary of Designated Uses with Common Stressors

<table>
<thead>
<tr>
<th>Impaired Use</th>
<th>Examples of Common Stressors</th>
<th>Examples of Common Sources</th>
<th>Potential Stressors Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing or Proposed Drinking Water</td>
<td>Bacteria</td>
<td>Stormwater, illicit discharges, agricultural runoff</td>
<td>x x x</td>
</tr>
<tr>
<td>Fish Consumption</td>
<td>Mercury, PCBs, Pesticides</td>
<td>Atmospheric deposition, industrial discharges, municipal wastewater treatment discharges hazardous waste sites, oil and chemical spills, land use, stormwater</td>
<td>x x</td>
</tr>
<tr>
<td>Marine and Freshwater Habitat for Fish, Other Aquatic Life and Wildlife</td>
<td>Habitat alterations, flow regime changes, Toxics, Nutrients, Interactions between multiple pollutants, Low Dissolved Oxygen, other pollutants</td>
<td>Industrial discharges, municipal wastewater treatment discharges hazardous waste sites, oil and chemical spills, land use, stormwater</td>
<td>x x x</td>
</tr>
<tr>
<td>Recreation</td>
<td>Bacteria</td>
<td>Stormwater, illicit discharges, agricultural runoff</td>
<td>x x x</td>
</tr>
<tr>
<td>Shellfish Harvesting for Direct Consumption</td>
<td>Bacteria</td>
<td>Stormwater, illicit discharges, agricultural runoff</td>
<td>x x</td>
</tr>
<tr>
<td>Commercial Shellfish Harvesting</td>
<td>Bacteria</td>
<td>Stormwater, illicit discharges, agricultural runoff</td>
<td>x x</td>
</tr>
</tbody>
</table>
MS4 Permit Revision
303(d) Partnership with Permit Program

- Presentations
- Meet with towns
- Website: Stormwater & WQ
- Story Map: Stormwater & WQ
- WQ Fact sheets for all towns in State
- Third Party Assistance
Relate IC to Impaired Waters

Aquatic Life Use Impairments & IC

Recreation Impairments & IC
169 Town Fact Sheets
Written for general audience
Impervious Cover Data
Presentation & Interpretation of Stormwater Monitoring Data
Links to applicable TMDLs
Town maps with IC and waterbody assessment status
WQ based MS4 Permits

Best Management Practice Approach

• Baseline requirements applicable to all permittees
• Additional BMPs for waters (identified in table in permit)
  • With a TMDL
  • Included in a water quality restoration plan
  • Impaired without a TMDL
• Require Infiltration/Treatment of first inch of Stormwater
• Requires evaluation of %IC for each stormwater outfall
• Prioritizes IC disconnection in areas with >11% IC

Bacteria
Nitrogen
Phosphorus
Mercury
Current Actions

• Considering expansion of Watershed Response Plan

• Potential to change to TMDL

• Update town fact sheets and convert to online interactive web mapping application

• Establish or update TMDLs to provide more specific implementation recommendations in TMDLs

• Evaluating updating 90% storm information in the WQS based on new climate data

• Incorporate information on climate change and updated infiltration recommendations into TMDLs
Take Aways

Identify the relationship between Stormwater and Water Quality

Communicate early, often & across multiple venues

Get help for outreach

Keep the water quality and stormwater concerns visible

Develop tools across multiple CWA programs

Partner with permitting program