With more frequent and intense storms, old and undersized infrastructure, and expanded stormwater permit requirements, stormwater management has gotten increasingly expensive. As of 2021, CT municipalities have a new tool to consider using to cover these costs – stormwater utilities. And there is a lot to consider! To help towns explore whether or not a stormwater utility might help, CLEAR, with funding from CT Sea Grant, has launched a webinar series covering a variety of topics pertaining to stormwater utilities. Sessions thus far have covered what a stormwater utility is and what it can be used for, South Burlington, VT’s experience of establishing the first stormwater utility in their state, and trends amongst the more than 2000 stormwater utilities nationwide.

Our latest webinar in October explored one of the most critical challenges of setting up a utility - getting public engagement and support for establishing one. This webinar, featuring Gretchen Young PE, Environmental Projects Manager for the City of Dover, NH, dove into the city’s process of implementing a stormwater utility in their city using a community-based ad-hoc committee, after an initial failed attempt due to lack of community understanding and support. To learn more about the process they employed, you can access Dover’s Ad Hoc Committee page containing the meetings, findings report, and summary of recommendations.

If you missed the Dover session, any of our previous webinars, or just couldn’t get enough and need another viewing, you can find them, along with extensive information and useful tools when considering a utility, on our website: nemo.uconn.edu/stormwater-utilities or scan our QR code with your smartphone:
In the Spring of 2019, Norwalk partnered with Fuss and O’Neil to apply for a Long Island Sound Futures Fund Grant from the National Fish and Wildlife Foundation for funding of various green stormwater infrastructure (GSI) projects to assist with flooding mitigation within the city and high bacteria levels in nearby waters.

I sat down with Michael Yeosock, Principal Engineer for Norwalk’s Transportation and Mobility, to talk about the process.

By the Fall of 2020, Norwalk’s plan for the project was submitted and approved by EPA, and construction began in August of 2021. The project consisted of disconnecting the 5.8 acre Webster Street parking lot using subsurface storage infiltration units, tree filters, and bioretention areas within parking lot islands and in between parking rows. This parking lot not only experienced frequent flooding that impacted downstream businesses, but is also located 500 ft away from the Norwalk River and Norwalk Harbor, both of which are impaired with a bacteria TMDL caused by stormwater pollution. These projects aimed to mitigate flooding and reduce the pollutant load flowing into the impaired local waters.

Construction, which finished in Spring 2022, went well with the only hold up being a delay in receiving the plants due to COVID. All in all, these areas are expected to infiltrate 6 million gallons of stormwater, to be returned to the groundwater, as well as remove 12.4 lbs. of nitrogen annually. In total, 3.5% of the impervious surface of the parking lot was disconnected.

In addition to the stormwater pollution improvements, these GSI areas also act as education examples for the public, City Officials, and Public Works Department. For the residents, educational signage has been placed beside the bioretention areas explaining what it is and how it is working to benefit both the city and the environment. Because the project is in highly used public space, it not only attracts the attention of residents and city officials, but serves as a demonstration of successful GSI implementation in an urban, coastal area. A maintenance program for this area provides training and a better understanding of GSI while increasing acceptance amongst staff.

Thank you to Michael for sharing Norwalk’s project! As a reminder, MS4 regulated municipalities are required to disconnect 1% of their directly connected impervious area annually after June 30th, 2022. If you have any stormwater LiD methods, projects, or experiences you’d like to have featured in our next newsletter, send us an email: mary.looney@uconn.edu

Images of Norwalk’s newly implemented green stormwater infrastructure.
**Funding Opportunities**

**CT DEEP Climate Resilience Funding**

CT DEEP has announced a new Climate Resilience Fund meant to support the development of resilience projects that can win federal grant funding. This grant will NOT cover construction and implementation – only planning and initial steps of development prior to submission for competitive federal grants. Stormwater infrastructure projects, including stormwater utility feasibility studies are eligible. For more information, visit CT DEEP's Climate Resilience Fund page.

**EPA: New England Stormwater Toolbox Equipment Loan Program**

This EPA program supplies watershed associations or NGOs within New England with a loan of stormwater monitoring equipment. This equipment can then be distributed to any municipalities regulated by a MS4 general permit for assistance in volunteer monitoring. Example equipment includes a Yellow Springs Instrument colorimeter and test strips to monitor water quality parameters, chlorine, ammonia, and surfactants. The loan comes with initial supplies only - there are no replenishing or consumable supplies (gloves, reagents, etc). The program runs on a year-long schedule with applications due in the Winter, toolboxes sent out in the Spring, and supplies to be returned in the Fall. For more information, reach out to coombs. michelle@epa.gov or download the Loan Program Plan.

**MS4 Puzzler**

“In the Annual Report, what is the difference between Part III Table 2.2: Wet weather sample and inspection data and Part III Table 3.3: Wet weather follow-up investigation outfall sampling data? What information should be reported in each table?”

**Answer:**

Table 2.2: Wet weather sample and inspection data is the initial wet weather IDDE screening. This baseline wet weather screening “under the IDDE program is designed to identify illicit discharges which may activate or become evident during wet weather” (Appx. B, pg. 8). It determines **whether or not an investigation is necessary**, This screening is for all problem, high priority and low priority outfall catchments in the priority area - and at least one System Vulnerability Factor (SVF) is present. It takes place between March and June. This is **part one** of the Catchment Investigation Procedure flow chart.

Table 3.3: Wet weather follow-up investigation outfall sampling data is for your follow-up wet weather priority catchment investigation screening of catchment outfalls with at least one SVF present, **after the illicit discharge has been removed**. If any SVFs are present in outfalls or manholes, conduct further follow-up investigations. This wet weather screening also takes place between March and June. Follow-ups take place within one year of elimination of the source and again within five years. This is **part two** of the Catchment Investigation Procedure flow chart.

**Reminder... We’re here to help!**

One of the more challenging parts of CT’s MS4 permit is the requirement to remove barriers to LID / green stormwater infrastructure in land use regulations and policies. Two new tools may prove helpful. The **Bylaw Review Tool** by Mass Audubon incorporates best management practices from local, regional, state, and federal best practices and allows users to evaluate existing land use regulations in comparison to these best practices in a “conventional,” “better,” and “best” format in relation to 30 considerations (such as street width, erosion control measures, sidewalk drainage, and more). The **Code Review Spreadsheet for MS4 Communities** by the Pioneer Valley Planning Commission is a checklist which can be used as a method of documenting review of existing local code for requirements that affect the creation of impervious cover and feasibility of allowing green infrastructure. It also contains some notes and recommendations for potential policy and language changes. Both tools, along with other support for reviewing land use regulations can be found on our website at [https://nemo.uconn.edu/ms4/tasks/post-construction/](https://nemo.uconn.edu/ms4/tasks/post-construction/).

And this is a good time to remind you that with the 5-year MS4 permit cycle at its end and the renewal process beginning, UConn CLEAR is here to assist with your MS4 compliance by providing resources and acting as a go-to for any questions or issues. Throughout the following weeks, we will be sending out blog post reminders of the various resources we have available on our website [https://nemo.uconn.edu/ms4](https://nemo.uconn.edu/ms4), along with clarifications and reminders for MS4 compliance in common problem areas. If you have not yet signed up to receive our emails from the listserv, you can do so [here](mailto:michelelooney@uconn.edu).