



## **STILL RIVER WATERSHED PARTNERS**

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### **WATERSHED PLAN PARTNERS MEETING**

6/22/2016

DANBURY CITY HALL, ROOM 3C  
155 DEER HILL AVENUE ~ DANBURY, CT  
10:00 AM – 1:00 PM

### **ATTENDANCE**

- Marcia Wilkins – Sierra Club/Brookfield Open Space Legacy
- James Ferlow – Town of New Milford
- Tom Altermatt – City of Danbury
- George Benson – Town of Newtown
- Jessica Leonard – Antioch University New England
- Seth Lerman – NRCS
- Carol Donzella – NRCS
- Susan Peterson – CT-DEEP
- Mike Towle – WestCOG
- Soumya Sudhake – WestCOG
- Carl Zimmerman – WestCOG
- Maribeth Chassey – Weantinoge Heritage Land Trust
- Rebekah White – Friends of the Lake
- Chris Stone – CT-DEEP
- Karen Allen – CT-DEEP
- Devon Tyrell – CT-DEEP
- Mike Jastremski – HVA
- Caroline Hilli – HVA
- Brian Saccardi – HVA
- Savannah Judge – HVA

### **ACTION ITEMS:**

#### **All partners:**

- Review new MS4 permit (effective July 2017): go to [http://www.ct.gov/deep/cwp/view.asp?a=2721&q=558562&deepNav\\_GID=1654](http://www.ct.gov/deep/cwp/view.asp?a=2721&q=558562&deepNav_GID=1654)

### **MEETING NOTES:**

#### **1) Municipal Updates and Questions**

- Question (New Milford): Will the new LIDAR function in real time?  
Answer (WestCOG):

- Derived data shot in 2015 has 1m pixels; vertical accuracy is 0.1 feet and horizontal accuracy is 2-5 cm. Carl Zimmerman can send level 2 specs if desired
- Newtown Update:
  - Just started a trout habitat assessment on Deep Brook through a private, \$40,000 grant from an anonymous donor (able to start on this weekend)
  - Cole Baldino started the project last semester and has been coordinating
  - Trying to reintroduce/bring back trout
  - Volunteers are welcome

## 2) MS4 Permit 101: Rain Happens! (See PowerPoint)

### *Chris Stone, CT-DEEP Stormwater Section*

- The new permit builds on the existing permit
- What are the major issues in the state that we need to address and focus on in the new permit?
  - Impervious cover
    - 1) Urban Areas (UAs): a measure of densely populated areas
    - 2) Dense development usually correlates with more impervious cover
  - Long Island Sound
    - 1) There is a TMDL for the Sound
    - 2) Everything (including the Still River and the Housatonic River) drains to the Sound
  - Impaired Waters
    - 1) EPA is placing more focus on impaired waters
    - 2) 80% of impairments in CT are related to phosphorous, nitrogen or bacteria (other sources include PCBs, copper, etc.)
- How did we go about updating the permit?
  - Started with the current permit and began looking at what other states and agencies are doing, including MA, NH, NY, NJ and the EPA (every state was in a similar situation)
  - Primary issues:
    - 1) 303d (impaired waters)
    - 2) UA (urban areas)
    - 3) IC (impervious cover)
    - 4) DCIA (directly connected impervious areas): this is a new term in the permit and is where LIDAR will come into effect
    - 5) "Priority areas"
  - Illicit discharges
    - 1) One of the 6 minimum control measures in the permit
    - 2) EPA saw this was where people needed the most help

- 3) Investigating illicit discharges is a labor-intensive process (involves popping manhole covers, etc.)
  - 4) The new permit gives the illusion of adding new requirements, but it mostly just provides better guidance/better descriptions of the requirements compared to the original permit (e.g. the current permit devotes one page to IDDE, whereas the new permit contains an entire appendix)
- Who is covered by the new permit?
  - Any town with UAs
    - 1) The old permit determined UAs based on the 2000 census, in which 130 towns contained UAs and 19 towns qualified for waivers. There were only 113 permits due to a misunderstanding of municipal naming conventions (e.g. the Town of Groton vs. the City of Groton, and the Town of Stonington v. the Borough of Stonington)
    - 2) The new permit is based on the new 2010 census, in which 138 towns have UAs (121 towns total)
  - The word “municipal” in the term “MS4” is actually a misnomer; the permit covers not just municipalities, but also federal institutions, DOT, etc.
  - UAs don’t follow census blocks
  - Originally, the state planned to cover every town in the state (including those that didn’t include UAs), because virtually every town in CT has impaired waters & impervious areas.
- Six minimum control measures: The minimum control measures represent the core of the program. Every town or institution has to develop a stormwater management plan that addresses these measures and BMPs to implement them. There is a good deal of autonomy in how you can implement your program.
  - A key phrase in the permit is “maximum extent practicable” (MEP), i.e. do as much as you can with the resources that you have. Recommended that everyone take a look at the definition of MEP in the permit
  - The six minimum control measures are:
    - 1) Public education and Outreach
      - Detailed description in the permit
      - In one example, when DOT was cleaning out catch basins they found that people were putting bags of pet waste into storm drains
      - Target different audiences
      - Value of Partnerships: MS4 towns can partner with qualifying local programs (QLD) such as watershed associations, etc., who can organize clean up events, seminars, etc. Does not cost you a dime; just have to submit a report

- You can solicit partnerships (e.g. if you have fliers to educate businesses, distribute them through the Chamber of Commerce)
- PSA's, radio, TV, billboards, door hangers, social media, town website
- Need to consider different audiences
- Summarize your efforts in your annual report
- Targeted focus for specific impairments (see permit for more details)

## 2) Public involvement/participation

- Publish notice annually, via web, email, newsletter, etc. (doesn't have to meet staff public notice requirements)
- Make initial stormwater management plan & annual reports available on web & in hard copy at the town hall or library and provide a 30-day comment period

## 3) IDDE

- One of the hardest control measures (personnel-intensive)
- Good news: existing permits should already have a lot of this stuff done and COGs and watershed associations can help
- Every town has to develop a written protocol
  - Implement in priority areas
  - Citizen reporting
  - See protocol in Appendix B of the permit
  - Record actions in annual report
  - Establish legal authority
  - Map all outfalls and prioritize/rank for screening. Towns need to update outfall maps (been 12 yrs since 1<sup>st</sup> permit)
  - The IDDE protocol is only part of permit not required to be done in 5 years (i.e. it goes beyond the term of the program)

## 4) Construction

- One of the easiest control measures; CT has had this in place for decades (construction has already been monitored through Erosion and Sediment Control regulations)
- This permit req's towns to update their land use regs.
- Interdepartmental coordination (e.g. one town, 2 depts registered)
- Site review & inspection
- Public involvement
- State permit notification: if project area is over 5 acres, towns should provide notification of state requirements

## 5) Post-Construction

- After machinery is done and people live there
- LID/ runoff reduction

- Retain the WQ volume= the runoff from the first inch of rain
- A lot of towns already have LID measures in their planning and zoning regulations; remove barriers to LID in current land use regulations (e.g. curb requirement, etc)
- Need to ensure long term maintenance for basins and treatment devices; we can't have abandoned structures
- Map DCIA to find out what's out there
  - If IC is above 11%, water quality has been shown to be significantly reduced
  - New flight able to provide high resolution and MS4 needs to groundtruth it (LIDAR is not perfect)
  - Still consider it disconnected if it meets the 1" retention requirement
    - we'll get the basemap for you
    - COGs/watershed associations can do groundtruthing

#### 5) Pollution prevention/good housekeeping

- Employee training (Some people believe twice the fertilizer is twice as good)
- Retrofit program
  - Reduce DCIA 1%
  - 1<sup>st</sup> 3 years: mapping, groundtruthing. After that, start disconnecting through retrofit programs and redevelopment projects
  - Permit provides a 5-year look back, so any projects (redevelopment projects with LID) can count.
  - Property Maintenance (parks, vehicles, dog parks, leaf management - not leaf pick up)
  - Some places have even higher goals, e.g. Chesapeake goal is to disconnect 20% of DCIA in 5 years
  - Street Sweeping: once a year in priority areas (same as current permit) program for rest of town
  - Catch basin cleaning
  - Snow management
  - Sampling
    - Sampling program reduced to focus on impaired waters P, N, bacteria
    - Outfall discharge testing
    - Permit gives indicators (not rules) to identify outfalls and look at upland land use

- Annual Report
  - Developing a template
  - Steps:
    - 1) Read the permit
    - 2) Read your stormwater management plan (SMP): Every one has to update their plan for the new permit
    - 3) Tell us what you said you would do (for each BMP)
    - 4) Tell us what you actually did
    - 5) If there's a difference between the two, explain why and how will you fix it? (You can leave completed BMPs in each subsequent reports)
- Permit Timeline:
  - Current permit- comply until next July, but should be starting to gear up for the new one (COGs/watershed associations can help you figure out your niche)
- Grants: can't get \$ to do MS4 things you are required to do anyway; however organizations & COG's *can* get \$
- CT Conference of Municipalities is using a software that allows towns to fill out annual reports online
- New permit becomes effective 7/1/17
- Existing resources:
  - QLP's (environmental groups, civic/business organizations)
  - CT-DEEP website
  - CT-DEEP is close to getting funding for a partnership with NEMO that would allow UCONN to be a major outreach arm of DEEP (e.g. by hiring a circuit rider to help towns with their program) and statewide mapping
  - Encourage coalitions and utilities- ways to come up with new \$
    - Central Massachusetts Stormwater coalition is a great example of resource sharing (NH, NYS have coalitions, too)
- Chris highly encourages questions call, email

### ***Questions/Comments:***

- Discussion between WestCOG and CT-DEEP regarding the data being used for DCIA mapping
  - WestCOG: The 2012 data flight CT-DEEP is out of data and relies on a raster; i.e. it won't have impervious cover tags that would allow people to differentiate rooftops, driveways, etc. This is critical because the permit system depends on DCIA tracking. Could purchase attribute data for 2016 flight. Another issue is watershed definition scale; would need finer scale watershed definitions to look at DCIA/drainage areas
  - CT-DEEP: Focusing on the 2012 data because of the 5-year look back allowance. Will talk to their GIS people.

- Question (WestCOG): How will the annual report requirement be enforced? E.g. what if a town isn't able to submit an annual report for some reason?  
*Answer (CT-DEEP):*
  - Penalties are the LAST resort. If a town is showing a good faith effort, CT-DEEP won't come down on them
  - Karen does a lot of MS4 inspections; towns have several weeks notice to compile their paperwork. She sits down with each town to go through their paperwork (e.g. minimum control measures, discuss what's going on in their town, challenges/successes, etc.)
  - Report cards for AR's to let people know if they're doing it right

### **3) Discussion: Connecting the Dots between the Watershed-Based Planning Process and MS4 (see factsheet)**

- Looking at ways the watershed plan can compliment MS4 requirements
  - 1) Public Education and Outreach
    - a. Website: not a lot of traffic so far; towns can link it to their MS4
    - b. Mailings
    - c. CT-DEEP suggestion: HVA should reach out to towns to find about what is being done
  - 2) IDDE
    - a. Outfall mapping/ammonia nitrogen (dry weather sampling only)
      - i. CT-DEEP suggestion: take a close look at protocol in the permit Appendix to prioritize outfalls (so we can get biggest bang for buck)
      - ii. All impaired reaches as of 2012 (40 miles). Impaired reaches are a priority for MS4
      - iii. If it is impaired but not in the MS4, its not part of the permit.
  - 3) DCIA Mapping
    - a. Chris: satellite shows where impervious areas are; that's where groundtruthing comes in
    - b. Identifies what's 11% IA or greater (a broad brush for such a local phenomenon)
  - 4) Pollution Prevention/Good Housekeeping
    - a. Retrofits in watershed-based planning/recommendations for projects
    - b. More funding flexibility for non-MS4's
    - c. MS4 could get a grant before July to do retrofits because it's not an existing requirement yet; if you already have funding, it doesn't go away once it becomes a requirement
    - d. Resource sharing theme
    - e. Don't forget about the institutions

**4) Mapping Directly Connected Impervious Area (DCIA): WestCOG/HVA pilot project**

- WestCOG to provide high resolution mapping and modeling
- HVA would do groundtruthing
- Probably in Bethel
- Will keep in touch as project develops
- Part of HVA field work is going to include upland assessments

**5) CT-DEEP Integrated Water Quality Management (see fact sheets)**

- Eliminate pollution source
- TMDL vision: how do we coordinate with other programs?
- Look at other programs in the agency
- See map: restoration screening potential tool
- Social layer, too
- Ran all basins in the state through this tool
- Currently out for public comment due next week
- Basins in need of restoration vs. protection
- Map could be revised as part of the public comment period (until June 30)
- Uses federal HUC system

**6) Watershed Inventory, Synthesis and Field Work Update**

- HVA has assessed 10.35 miles of stream across three towns (Newtown, Bethel and Danbury) so far, including Limekiln Brook, Dibble Brook, East Swamp Brook, and sections of Miry Brook and Padanaram Brook
- Sending out mailings to streamside landowners to notify them
- Jessica Leonard continuing to tag documents in the watershed inventory based on watershed plan focus areas and extracting relevant information that will support a narrative for the Existing Conditions Report.

**7) Still River Watershed Youth Stewardship Program Update**

- This spring, HVA partnered with the Northwest Conservation District and the Town of Brookfield to arrange two field trips for Danbury High School students to work on wetland planting sites at the Still River Greenway in Brookfield (see Facebook page, Still River Watershed, for photos and details)
- This summer, we have a crew of four young men (ages 14-17) that will be working on restoration projects and job skills development at the Still River Greenway in Danbury. If any partners have expertise they would like to share, please contact Savannah Judge (sjudge.hva@gmail.com)