



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

## MS4 Annual Report Transmittal Form

### For the General Permit to Discharge Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)

Print or type unless otherwise noted. Please submit this completed transmittal form, fee, and the MS4 Annual Report as indicated at the end of this form.

CPPU USE ONLY	
App #:	_____
Doc #:	_____
Check #:	_____
Program: Stormwater Permits	

### Part I: Annual Report General Information

1. Reporting Period (Calendar Year): <u>January 1, 2021-December 31, 2021</u>	
2. Provide the registration number for the existing general permit registration: <u>GSM000029</u>	
3. Registrant Type (check one):	Fees
<input type="checkbox"/> state institution/agency	\$375.00 [713]
<input type="checkbox"/> federal institution/agency	\$375.00 [713]
<input checked="" type="checkbox"/> municipality	\$187.50 [713]
4. Municipality name or Municipality name where institution is located: <u>Town of Granby</u>	
The annual report will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the Department of Energy and Environmental Protection (DEEP) or by such other method as the commissioner may allow.	

### Part II: Registrant Information

1. Registrant (Name of Municipality or State or Federal Institution/Agency): <u>Town of Granby</u>	
Mailing Address: <u>52 North Granby Road</u>	
City/Town: <u>Granby</u>	State: <u>CT</u> Zip Code: <u>06035</u>
Business Phone: <u>860-653-8960</u>	ext.: _____
Contact Person: <u>Kirk Severance</u>	Phone: <u>860-653-8960</u> ext. _____
*E-mail: <u>kseverance@granby-ct.gov</u>	
*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject registration. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.	

## Part II: Registrant Information (continued)

### 2. Billing contact, if different than the registrant.

Name: **Atlas Technical Consultants**

Mailing Address: 290 Roberts Street

City/Town: East Hartford

State: CT Zip Code: 06108

Business Phone: 860-282-9924

ext.:

Contact Person: Luke Whitehouse

Phone: 860-608-8576 ext.

E-mail: luke.whitehouse@oneatlas.com

### 3. Primary contact for departmental correspondence and inquiries, if different than the registrant.

Name: **Atlas Technical Consultants**

Mailing Address: 290 Roberts Street

City/Town: East Hartford

State: CT Zip Code: 06108

Business Phone: 860-282-9924

ext.:

Contact Person: Luke Whitehouse

Phone: 860-608-8576 ext.

\*E-mail: luke.whitehouse@oneatlas.com

\*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject registration. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.

### 4. Engineer(s) or other consultant(s) employed or retained to assist in preparing the annual report.

☐ Check here if additional sheets are necessary, and label and attach them to this sheet.

Name: **Atlas Technical Consultants**

Mailing Address: 290 Roberts Street

City/Town: East Hartford

State: CT Zip Code: 06108

Business Phone: 860-282-9924

ext.:

Contact Person: Luke Whitehouse

Phone: 860-608-8576 ext.

E-mail: luke.whitehouse@oneatlas.com

Service Provided: **Annual Report Preparation**

5. ☐ Check here if there are adjacent towns or other entities with which implementation of the Stormwater Management Plan is coordinated for a portion of the subject MS4. If so, provide the names of such towns or entities: \_\_\_\_\_

### Part III: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the annual report must sign this part. [If the registrant is the preparer, please mark N/A in the spaces provided for the preparer.]

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

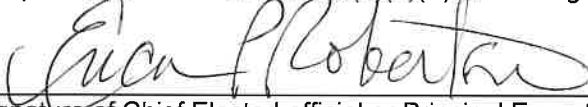
I certify that this annual report transmittal is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I certify that the following public notice requirements have been met.

- ☒ **Annual Report Availability:** At least forty-five (45) days prior to submission of each Annual Report to DEEP, pursuant to Section 4(d)(3) of the MS4 General Permit, each permittee shall make available for public review and comment a draft copy of the complete Annual Report. Comments on the Annual Report may be made to the permittee and are *not* submitted to DEEP. Reasonable efforts to inform the public of this document shall be undertaken by the permittee. Such draft copies shall be made available electronically on the permittee's website for public inspection and copying, consistent with the federal and state Freedom of Information Acts, and shall be made available, at a minimum, at one of the following locations: the permittee's main office or other designated municipal or institution office, a local library or other central publicly available location. Following submission of the Annual Report to DEEP, a copy of the final report shall be made available for public inspection during regular business hours.

I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

I also certify that the signature of the registrant, or a duly authorized representative, being submitted herewith complies with section 22a-430-3(b)(2)(B) of the Regulations of Connecticut State Agencies.

  
Signature of Chief Elected official or Principal Executive Officer

4-25-22  
Date

**Erica Roberson**

Printed Name of Chief Elected official or Principal Executive Officer



Signature of Preparer (if different than above)

**Luke Whitehouse**

Printed Name of Preparer

**Town Manager**

Title (if applicable)

**4-1-2022**

Date

**Environmental Division Manager**

Title (if applicable)

Note: Please submit 1) this completed Transmittal Form and the Fee to:

CENTRAL PERMIT PROCESSING UNIT  
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION  
79 ELM STREET  
HARTFORD, CT 06106-5127

- 2) a copy of this completed Transmittal Form and the Annual Report electronically to the following email address: [DEEP.StormwaterStaff@ct.gov](mailto:DEEP.StormwaterStaff@ct.gov).

Refer to [www.ct.gov/deep/municipalstormwater](http://www.ct.gov/deep/municipalstormwater) for information on Annual Report Templates or other additional information concerning the MS4 General Permit.

In the event that electronic submission is not available or possible, please contact the Stormwater Section at 860-424-3025.



# 2021 MS4 ANNUAL REPORT

Town of Granby, Connecticut



**MS4 General Permit**  
**Town of Granby 2021 Annual Report**  
**Permit Number GSM 000029**  
**January 1, 2021 – December 31, 2021**

Primary MS4 Contact: Kirk Severance, Director of Public Works, [kseverance@granby-ct.gov](mailto:kseverance@granby-ct.gov)

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This report documents Granby's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2021 to December 31, 2021.

**Part I: Summary of Minimum Control Measure Activities**

**1. Public Education and Outreach (Section 6 (a)(1) / page 19)**

**1.1 BMP Summary**

<b>BMP</b>	<b>Activities in current reporting period</b>	<b>Sources Used (if applicable)</b>	<b>Method of Distribution</b>	<b>Audience (and number of people reached)</b>	<b>Measurable Goal</b>	<b>Department / Person Responsible</b>	<b>Additional details</b>
1-1 Implement public education and outreach	<i>The Town has linked several sources to Stormwater Management page, of which provides several fact sheets pertaining to lawn care, septic system care, pest management and biological controls, and managing household chemicals.</i>	<i>Stormwater Management: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a></i>	<i>Town Website</i>	<i>~1,000</i>	<i>Provide public access to stormwater literature</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works</i>	

1-2 Address education/outreach for pollutants of concern	<i>The Town has linked a source pertaining to animal waste and water quality, which provides literature on animal waste controls and proper disposal</i>	<i>Pet Waste and Water Quality: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a></i>	<i>Town Website</i>	<i>~250</i>	<i>Educate and provide pet waste management to the public</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works</i>	
<b>Example Additional BMP:</b> 1-3 Hazardous Waste Collection	<i>In partnership with Farmington, Canton, Simsbury, and Avon, Hazardous Waste Collection days are provided per year.</i>	<i>Hazardous Waste Day Collections: <a href="https://www.granby-ct.gov/sites/g/files/vyhlf3171/f/uploads/2021_to_wn_of_granby_household_hazardous_waste_collection_1.pdf#:~:text=The%20Town%20of%20Granby%20will,Proof%20of%20residency%20is%20required.">https://www.granby-ct.gov/sites/g/files/vyhlf3171/f/uploads/2021_to_wn_of_granby_household_hazardous_waste_collection_1.pdf#:~:text=The%20Town%20of%20Granby%20will,Proof%20of%20residency%20is%20required.</a></i>	<i>Town Website</i>	<i>~2,000</i>	<i>Educate and provide hazardous waste collections.</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works</i>	

**1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.**

1. Continue Hazardous Waste Collection days with neighboring towns.
2. Update/add links to informational websites and videos that relate to bacterial impairment.
3. All of the above mentioned activities (1-1, 1-2) are planned for 2022, with specific dates to be determined.

## 2. Public Involvement/Participation (Section 6(a)(2) / page 21)

### 2.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Location Posted	Additional details
2-1 Final Stormwater Management Plan publicly available	Completed	Public notice posted via Town website.	Provide notice and access to Annual Report	Department of Public Works/ Kirk A. Severance, Director of Public Works	Completed on April 12 <sup>th</sup> , 2027	Stormwater Management Plan: <a href="https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/granby_stormwater_management_plan_-_final.pdf">https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/granby_stormwater_management_plan_-_final.pdf</a>	
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Ongoing	Public notice posted via Town website.	Provide notice and access to Annual Report	Department of Public Works/ Kirk A. Severance, Director of Public Works	Ongoing- Annual	Annual Report: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a>	
<b>Example additional BMP:</b> 2-3 Hazardous Waste Collection	Ongoing	In partnership with Farmington, Canton, Simsbury, and Avon for hazardous waste collection days.	Provide hazardous waste collections	Department of Public Works/ Kirk A. Severance, Director of Public Works	April 24 <sup>th</sup> , June 12 <sup>th</sup> , October 16 <sup>th</sup>	Hazardous Waste Day Collections: <a href="https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/2021_town_of_granby_household_hazardous_waste_collection_1.pdf#:~:text=The%20Town%20of%20Granby%20will,Proof%20of%20residency%20is%20required.ns">https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/2021_town_of_granby_household_hazardous_waste_collection_1.pdf#:~:text=The%20Town%20of%20Granby%20will,Proof%20of%20residency%20is%20required.ns</a>	Reason for addition: Committee will represent town departments & commissions with stake in stormwater mgmt.

### 2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Due to concerns surrounding the COVID-19 pandemic, public outreach will be restricted to online activities only. The annual Hazardous Waste Collection, which is provided annually, will be completed in 2022.

### 3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

#### 3.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
3-1 Develop written IDDE program (Due 7/1/19)	Completed	<i>The Town has completed a written IDDE program.</i>	<i>Develop written plan of IDDE program</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works</i>	<i>Completed in November 2017.</i>	<i>The Department of Public Works is the central reporting agency for citizen illicit discharge complaint filings.</i>
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	Completed	<i>The Town continues a QA/QC process of reviewing GIS systems and editing as necessary.</i>	<i>All outfalls mapped</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works/Atlas</i>	<i>Completed prior to July 2019</i>	<i>Mapping and data will be continually maintained as outfalls are tested, repaired, etc.</i>
3-3 Implement citizen reporting program (Ongoing)	Completed	<i>The general public may report suspected illicit discharges through the Department of Public Works or online.</i>	<i>Provide a reporting mechanism and log</i>	<i>Board of Selectmen/ Town Manager</i>	<i>Completed November 2018</i>	<i>Citizen Reporting Program: <a href="https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/idde_complaint_form.pdf">https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/idde_complaint_form.pdf</a></i>
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	Completed	<i>An Illicit Discharge Detection and Elimination Ordinance was enacted in 2016.</i>	<i>Adopt ordinance</i>	<i>Board of Selectmen/Town Manager</i>	<i>Completed November 2016</i>	<i>Illicit Discharge Ordinance: <a href="https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/idde_ordinance.pdf">https://www.granby-ct.gov/sites/g/files/vyhlif3171/f/uploads/idde_ordinance.pdf</a></i>
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Ongoing	<i>The Department of Public Works has developed a record keeping system. Utilizing Excel, illicit discharges are tracked.</i>	<i>Maintain IDDE list.</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works</i>	<i>Completed in November 2017-ongoing for throughout permit life.</i>	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	<i>Wet weather screening was conducted at six (6) priority outfalls.  Catchment Rankings have been completed. SSOs are under investigations.</i>	<i>Wet weather testing and additional investigation as necessary.</i>	<i>Department of Public Works/ Kirk A. Severance, Director of Public Works/Atlas</i>	<i>Ongoing-Started in 2020</i>	<i>Atlas assists the Town with sampling and inspections at outfalls to impaired waterbodies, as well as dry weather inspections at outfalls related to the Town MS4 infrastructure.</i>

### 3.2 Describe any IDDE activities planned for the next year, if applicable.

1. Continue wet weather sampling at priority outfalls to impaired waters
2. Continue dry weather inspections throughout the entire Town
3. Respond to any illicit discharge complaints

**3.3 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and SSOs occurring July 2017 through end of reporting period using the following table.** Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
286 West Granby Road	4/9/2021	Approximately 195 ft. from OF-152	Unknown	Underground spring	Atlas was called to investigate a potential illicit discharge in the Town. Upon arrival, water was found to be discharging from a driveway at a steady, bubbling rate, with heavy algae growth. Discharge lead down the driveway into an adjacent ditch. This runoff discharge is in the vicinity of OF-152, which in turn discharges to the West Branch Salmon Brook. A sample of the discharge was submitted for the analysis of E.coli, T. coli, nitrite, nitrate, and phosphorus to assess potential illicit discharge sources. A review of sampling data from the nearby MS4 outfall (OF-152) did not indicate illicit discharges were entering this catchment. Laboratory analytical results were indicative of groundwater, and it is suspected an underground spring had worked its way to the surface.	<b>E. coli</b> -<10 MPN/100mL <b>T. Coli</b> - 10 MPN/100mL <b>Nitrite</b> - <0.010 mg/L <b>Nitrate</b> - 0.55 mg/L <b>Phosphorus</b> - 0.304 mg/L
Canal Street	Unknown	None.	Unknown	Property Owner	A property owner diverted discharge from a sump pump. The discharge was directed down the driveway and into the road. The Town Engineer and Director of Public Works met with the property owner, and discussed redirecting the discharge, as well as icing concerns on the road. The property owner was responsive, and redirected the discharge onto a grassy area on the property.	<b>None.</b>
The Town coordinated with the Farmington Valley Health District (FVHD) in early 2019 regarding addresses in the Town where septic system repairs were completed. According to the FVHD, approximately 50 septic repairs/replacements were conducted in 2020. Evaluation of these repairs are being conducted in coordination with Atlas to determine if certain sections of the Town have patterns of septic repairs and/or failures.						

### 3.4 Provide a summary of actions taken to address septic failures using the table below.

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
<p><i>The Farmington Valley Health District (FVHD) received and maintains records of septic failures along with actions taken. All sanitary sewer connections and system extensions are managed by the Building Department. The Town will begin to formally coordinate with Building Department regarding records of septic failures. In coordination with Atlas, the Town is currently investigating any septic repairs and/or failures through the FVHD as well.</i></p>				

### 3.5 Briefly describe the method and effectiveness of said method used to track illicit discharge reports.

Residents of the Town can report illicit discharges directly to the Department of Public Works, or via [https://www.granby-ct.gov/sites/g/files/vyhlf3171/f/uploads/idde\\_complaint\\_form.pdf](https://www.granby-ct.gov/sites/g/files/vyhlf3171/f/uploads/idde_complaint_form.pdf). The Department of Public Works staff then performs investigations. Digital records on the Town server are used for tracking illicit discharges in excel format.

### 3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	185
Estimated or actual number of interconnections	Under investigation
100%	100%
Interconnection mapping complete	Under investigation
System-wide mapping complete (detailed MS4 infrastructure)	95% (ongoing updates throughout permit lifetime.)
Outfall assessment and priority ranking	(90%) Outfalls to impaired waterbodies have been inspected and sampled. Six (6) outfalls have been chosen as priority outfalls. Priority rankings have also been mapped, and may change throughout the lifetime of the permit based on future data.

Dry weather screening of all High and Low priority outfalls complete	<i>55% All dry weather screening at outfalls in high priority outfalls and discharging to impaired waterbodies have been investigated. Outfalls throughout the entirety of the Town are continued to be investigated.</i>
Catchment investigations complete	<i>90% All catchments (utilizing basins for assessment purposes), have been ranked and prioritized. Due to the lengthy time needed to investigate all septic repairs and/or failures, the Refer to <b>Appendix III</b> for the completed Catchment Investigations)</i>
Estimated percentage of MS4 catchment area investigated	45% (est.)

**3.7 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often it is given (minimum once per year).**

*Best Management Practice training is provided to all DPW staff for new procedures, as determined by the Director of Public Works. Annual training for all Department of Public Works and applicable staff was provided by Atlas in March 2021.*

## 4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

### 4.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit (Due 7/1/20)	<i>In Progress</i>	<i>The Town sent a letter informing a property owner to cease discharge the road, and subsequently the MS4 system, as well as an icing concern for passing drivers and/or pedestrians.</i>	<i>Revise land-use regulations.</i>	<i>Community Development Department/Abigail Kenyon/ AICP and Land Use Commission Members</i>	<i>In Progress-Started in 2018</i>	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	<i>Completed</i>	<i>Kevin W. Clark, P.E., L.S., Town Engineer prepares land use review letters for most applications to the Inland Wetlands Commission, Planning Commission and Zoning Commission.</i>	<i>Utilize interdepartmental coordination in site plan review and approval as it pertains to the MS4 permit.</i>	<i>Land Use Commission Members</i>	<i>Completed in 2017-continues annually</i>	
4-3 Review site plans for stormwater quality concerns (Ongoing)	<i>Completed</i>	<i>Kevin W. Clark, P.E., L.S., Town Engineer encourages the use of LID and Stormwater BMPs practices as contained in the 2004 Connecticut Stormwater Quality Manual.</i>	<i>Issue review comments, and review revised plans for MS4 compliance.</i>	<i>Town Engineer/Kevin W. Clark, P.E., L.S.</i>	<i>Completed in 2017-continues annually</i>	
4-4 Conduct site inspections (Ongoing)	<i>Ongoing</i>	<i>The Town conducts construction site inspections for the proper implementation and maintenance of soil erosion and sediment control measures.</i>	<i>Document inspections and actions.</i>	<i>Community Development Department Director/Abigail Kenyon, AICP/Town Engineer/Kevin. W. Clark, P.E., L.S.</i>	<i>Completed in 2017-continues annually</i>	
4-5 Implement procedure to allow public comment on site development (Ongoing)	<i>Ongoing</i>	<i>The land use application process allows for public comment on land use applications. Applications are submitted to the Inland Wetlands Agency, Planning Commission, Zoning Commission during the Public</i>	<i>Provide an opportunity for public comment/involvement.</i>	<i>Community Development Department Director/ Abigail Kenyon, AICP and Land Use Commission Members</i>	<i>Completed in 2017-continues annually</i>	



		<i>Hearing Process, when applicable.</i>				
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing)	<i>Ongoing</i>	<i>During engineering reviews, letters are typically prepared as part of the land use application process. These letters are used to make developers aware of the need to register for the Construction Stormwater General Permit.</i>	<i>Include comments to applications.</i>	<i>Community Development Department Director/Abigail Kenyon, AICP and Town Engineer/Kevin W. Clark, P.E., L.S.</i>	<i>Completed in 2017-continues annually.</i>	

**4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.**

*1. The Town will continue to utilize zoning regulations and inspections as a means to ensure BMPs are utilized by site developers.*

## 5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)

### 5.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 7/1/22)	<i>In Progress</i>	<i>A new subdivision located, at 76 West Granby Street, was approved for construction by the Town. The Town Engineer worked with contractors to help revise their drainage plan. The drainage plan was developed to incorporate natural infiltration as opposed to connections to the MS4 system.</i>	<i>Adopt BMPs for any activity, operation, or facility which may cause or contribute to the pollution or contamination of stormwater, the storm drain system, or waters of the U.S.</i>	<i>Community Development Department Director/ Abigail Kenyon, AICP and Land Use Commission Members</i>	<i>In progress- Started in 2019</i>	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	<i>In Progress</i>	<i>Current Town Building and Planning &amp; Zoning regulations generally meet LID/runoff reduction requirements for development and redevelopment projects. As such, enforcement for such activities would be followed as any other Town coding violation would be.</i>	<i>Enforce regulations and guidelines of LID and runoff reductions.</i>	<i>Community Development Department Director/Abigail Kenyon, AICP, Town Engineer/Kevin W. Clark, P.E., L.S. and Land Use Commission Members</i>	<i>In progress- Started in July 2019</i>	
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	<i>Completed</i>	<i>A GIS layer of retention ponds was added to an ArcGIS layer for the Town.</i>	<i>Compile a list and complete mapping of Town-owned detention basins.</i>	<i>Department of Public Works/ Atlas, Town Engineer/Kevin W. Clark, P.E., L.S.</i>	<i>Completed</i>	

5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing)	Completed	<i>A Long-Term Operation and Maintenance Plan was developed for the Town. This plan includes regular inspections and the documentation of all Town-owned retention basins on an as-needed basis, with a minimum full inspection once every five (5) years.</i>	<i>Annually inspect and maintain facilities.</i>	<i>Department of Public Works/ Kirk A. Severance, Director and Town Engineer/Kevin W. Clark, P.E., L.S.</i>	Completed	
5-5 DCIA mapping (Due 7/1/20)	Completed	<i>The DCIA was calculated for the Town with assistance from Nathan L. Jacobson &amp; Associates. Atlas has mapped the DCIA areas through ArcGIS.</i>	<i>Provide an understanding of the Town's overall DCIA to the MS4 infrastructure.</i>	<i>Nathan L. Jacobson &amp; Associates/Atlas</i>	Completed	
5-6 Address post-construction issues in areas with pollutants of concern	In Progress	<i>In post-construction areas, if erosion or high accumulation of sedimentation are found during the annual inspections conducted under the long-term maintenance plan, the Town of Simsbury will prioritize these areas for DCIA retrofit projects.</i>	<i>Address post-construction areas where erosion or high accumulation of sedimentation are found during annual inspections.</i>	<i>Community Development Department Director/Abigail Kenyon, AICP and Town Engineer, Kevin W. Clark, P.E., L.S.</i>	In Progress-Started in 2021	

## 5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

1. The Town will continue to monitor, clean, and repair settling/silting basins, catch basins, outfalls, swales, etc.

## 5.3 Post-Construction Stormwater Management reporting metrics

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/post-construction.htm>. Scroll down to the DCIA section.

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	21.19 acres
DCIA disconnected (redevelopment plus retrofits)	acres this year (TBD) / acres total (TBD)
Retrofit projects completed	Under Development
DCIA disconnected	% this year (TBD) / % total since 2012 (TBD)

Estimated cost of retrofits	\$TBD
Detention or retention ponds identified	4 /4

#### 5.4 Briefly describe the method to be used to determine baseline DCIA.

The DCIA Mapping was conducted in substantial accordance with the methodologies presented in the October 25, 2017 UConn CLEAR Webinar entitled CT MS4 Mapping Details, Clarifications and Tools, the October 19, 2018 UConn CLEAR Workshop entitled CT MS4 Mapping Workshop as well as information contained in the EPA reference entitled Estimating Change in Impervious Area (IA) and Directly Connected Impervious Area (DCIA) for Massachusetts Small MS4 Permit utilizing Sutherland equations.

The DCIA computations were prepared utilizing Connecticut Environmental Conditions Online MS4 base mapping prepared by UConn CLEAR.

Impaired waters were determined from the report entitled 2018 Integrated Water Quality Report, dated August 01, 2019, prepared by the State of Connecticut Department of Energy and Environmental protection.

The method to determine the 2012 baseline DCIA was to first compile the CT DEEP drainage basin characteristics in a Microsoft Excel spreadsheet. Information on the Connecticut Environmental Conditions Online MS4 Mapping was used to determine the impervious area breakdown as Buildings, Roads and Other. For CT DEEP drainage basins that fell in two or more municipalities the advanced mapping tab of Connecticut Environmental Conditions Online was used to delineate and determine the applicable town CT DEEP basin area. It was assumed that the entire drainage basin characteristics were directly proportional to the applicable town CT DEEP drainage basin area.

In that ConnDOT has a MS4 Stormwater Program which applies to state owned roads and facilities which the town has no control over, it was decided that the impervious state road area would be determined and deducted from the total impervious road area for each CT DEEP drainage basin as the impervious road areas associated with state highways and facilities constitutes a considerable portion of the total town impervious road area.

The ConnDOT state highway, parking lot and facility impervious road areas were then determined for each CT DEEP drainage basin. The ConnDOT state highway, parking lot and facility impervious road areas were then deducted from the total town impervious road area to determine a town owned impervious road area for each CT DEEP drainage basin. Subsequent to the above deduction, the total impervious area in acres and percentage was then recomputed for each CT DEEP drainage basin.

The DCIA formula for each of four development types was then utilized to compute the DCIA. The impervious area in acres was assigned to each of the four Sutherland equations which were modified for the northeastern United State. The Sutherland equation to be utilized was determined using the following methodology:

For impervious percentage less than 6%:

100% of the impervious area was assigned to the slight connectivity Sutherland Equation where  $DCIA\% = 0.01 \cdot (IA\%)^{2.0}$

For an impervious area between 6% and 12 %:

50% of the area was assigned to the partial connectivity Sutherland Equation where  $DCIA\% = 0.04 \cdot (IA\%)^{1.7}$

and

50% was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10 \cdot (IA\%)^{1.5}$

For an impervious area between 12% and 18 %:

50% of the area was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10 \cdot (IA\%)^{1.5}$

and

50% was assigned to the high connectivity Sutherland Equation where  $DCIA\% = 0.40 \cdot (IA\%)^{1.2}$

For an impervious area of greater than 18 %:

100% of the area was assigned to the high connectivity Sutherland Equation where  $DCIA\% = 0.40 \cdot (IA\%)^{1.2}$

The DCIA for each CT DEEP drainage basin was then summed to determine the entire town DCIA. Subsequent to completion of 2012 Baseline DCIA computations, UConn CLEAR Mapping available on Connecticut Environmental Conditions Online (CT ECO) was revised to separate road impervious area into State Road Impervious Area (Acres) and Town Road Impervious Area (Acres).

The original 2012 Baseline DCIA computations were revised utilizing the UConn CLEAR State Road Impervious Area (Acres) and Town Road Impervious Area (Acres).

## 6. Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)

### 6.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program (Ongoing)	Ongoing	Annual training related to the MS4 permit was conducted in early March 2021 by Atlas to the Town's Department of Public Works and other applicable staff.	Eliminate non-stormwater discharges into the storm sewers	Department of Public Works/Atlas	Ongoing-Completed Annually	
6-2 Implement MS4 property and operations maintenance (Ongoing)	Ongoing	The Public Works maintains outdoor maintenance at the Town's parks, school grounds, and all other Town-owned land. Additionally, the Public Works manages roads, including maintenance, resurfacing, drainage repairs, signage, winter plowing, street sweeping, etc.	Eliminates/minimizes spills and/or pollutant releases to the environment and navigable waterways.	Department of Public Works/ Kirk A. Severance, Director	Ongoing throughout permit life.	
6-3 Implement coordination with interconnected MS4s	Ongoing	Coordination of the MS4 interconnection mapping began in 2019. CTDOT interconnections are currently under investigation by the CTDOT, and will be added to the Town's GIS system once this information is available. Interconnections of surrounding Town's are pending investigation.	Update the GIS system with interconnected locations.	Department of Public Works/ Kirk A. Severance, Director/Atlas	Ongoing-Started in 2019	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Completed	A spill response team has been developed in coordination between the Town and Atlas.	Reduce other possible pollutants to the MS4.	Department of Public Works/ Kirk A. Severance, Director/Atlas	Ongoing throughout permit life.	A plan of action for emergency spills has been created, and is as follows: The Town will immediately notify Atlas of a spill. Atlas will provide spill response and guidance, such as coordinating the elimination of any spill flow to navigable waterways, spill cleanup, reporting, etc.

6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Wet weather sampling events have been conducted, and priority outfalls were identified throughout the Town. Dry weather inspections are continuing to be conducted for the entirety of the Town. As catchments are investigated, the Town will coordinate with Atlas on future measures pertaining to the reduction of bacteria discharge to impaired waters.	Pending further investigations, create a program or plan of action to reduce bacterial discharge to impaired waters.	Department of Public Works/ Kirk A. Severance, Director/Atlas	Ongoing-Started in 2018	Based on wet-and-dry weather testing, the Town will implement additional measures including but not limited to a retrofit program or source management to correct the problem at municipally-owned or operated facilities, as well as IDDEs, where applicable.
6-6 Track projects that disconnect DCIA (Ongoing)	Ongoing	A Stormwater Retrofit Program has been drafted, and will be utilized as a method of tracking future DCIA disconnects.	Track DCIA disconnects.	Department of Public Works/ Kirk A. Severance, Director/Atlas	Ongoing-Started in 2021	The Town will utilize the Impervious Cover Tracking Sheet created by NEMO. This will allow the Town to track Project information, new developments, redevelopment, retrofits, changes in impervious cover, and cumulative totals.
6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Ongoing	Inspections and maintenance are continually implemented throughout the Town's MS4 infrastructure.	Reduce/ eliminate causes or contributions of pollution or contamination of stormwater, the storm drain system, or waters of the U.S.	Department of Public Works/ Kirk A. Severance, Director	Ongoing-Started in 2021	
6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	Ongoing	A Stormwater Retrofit Program has been drafted. Prioritized areas and/or sites were identified based off of DCIA calculations, impaired waterbodies, current stormwater infrastructure, and the MEP of the Town.	Develop retrofit projects	Department of Public Works/ Kirk A. Severance, Director	Ongoing-Started in 2021	
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	Ongoing	As Retrofit Projects are identified, the Town will utilize the Impervious Cover Tracking Sheet to track and work towards disconnecting 2% of DCIA, or the MEP of the Town.	Track and reduce DCIA impacts.	Department of Public Works/ Kirk A. Severance, Director	Ongoing-Started in 2021	

6-10 Develop/implement street sweeping program (Ongoing)	Ongoing	The Town currently implements a road sweeping program to address known areas of high sediment accumulation.	Track swept lane miles.	Department of Public Works/ Kirk A. Severance, Director	Ongoing throughout permit life	
6-11 Develop/implement catch basin cleaning program (Ongoing)	Ongoing	The Town currently cleans catch-basins in areas where known conditions warrant sediment removal.	Track material usage, and update plan as needed.	Department of Public Works/ Kirk A. Severance, Director	Ongoing throughout permit life.	
6-12 Develop/implement snow management practices (Due 7/1/18)		The Town utilizes alternative road de-icing mixtures. These mixtures are modified on a yearly basis based on costs and emerging technologies.	Track material usage, and update plan as needed.	Department of Public Works/ Kirk A. Severance, Director	Ongoing throughout permit life.	

## 6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

1. Continue snow management and road sweeping activities
2. Begin implementation of the Stormwater Retrofit Program

## 6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes / March 4 <sup>th</sup> , 2021
Street sweeping	
Curb miles swept	60 miles
Volume (or mass) of material collected	385 tons
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	1,227
Total catch basins town- (or institution-) wide	1,343
Catch basins inspected	581
Catch basins cleaned	555
Volume (or mass) of material removed from all catch basins	125 tons
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	
Total amount of each deicing material applied	1,500 tons



Type(s) of deicing equipment used	<ol style="list-style-type: none"> <li>1. One (1) 10-Wheeler Plow/Spreader</li> <li>2. Seven (7) 6-Wheeler Plows/Spreaders</li> <li>3. One (1) Mason Plow/Spreader</li> </ol> <p>*Application rate is 400 lbs per lane mile</p>
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	94 miles
Snow disposal location	Site specific-no Town snow yard
Staff training provided on application methods & equipment	11/2021
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	Not applicable
Reduction in turf area (since start of permit)	Not applicable
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$TBD

#### 6.4 Catch basin cleaning program

##### **Provide any updates or modifications to your catch basin cleaning program.**

*There are 1,343 catch basins in the Town of Granby.*

*2017 - Approximately 480 catch basins were cleaned in 2017 by a subcontracted catch basin cleaning company. The catch basin cleanings are screened and recycled at the former town landfill site in conformance with CT DEEP regulatory guidance.*

*2018 - No catch basins were vactored. The sump depth (sump bottom to lowest pipe invert out) and accumulated sediment/debris depth was measured for more than 700 catch basins*

*2019 - No catch basins were vactored. The sump depth (sump bottom to lowest pipe invert out) and accumulated sediment/debris depth was measured for more than 500 catch basins. Catch basins to be cleaned in early 2020 where applicable.*

*2020 - Approximately 844 catch basins were cleaned in spring of 2020 by a subcontracted catch basin cleaning company (including some dry wells). The catch basin cleanings are screened and recycled at the former Town landfill site, in conformance with CT DEEP regulatory guidance.*

*2021: Approximatley 555 catch basins were cleaned in the spring of 2021 by a subcontracted catch basin cleaning company. The catch basin cleanings are screened and recycled at the former Town landfill site, in conformance with CTDEEP regulatory guidance.*

## 6.5 Retrofit program

**Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. (Due 7/1/20)**

The Stormwater Retrofit Program was drafted by the Town and Atlas in 2021. The Program was designed to provide guidance on implementing LID, runoff reduction measures, or other means to disconnect or improve stormwater quality. To meet the 2% MEP disconnection goal, DCIA calculations, Urbanized areas, Impaired Waterbodies, and Catchment Rankings were utilized in identifying and prioritizing areas and/or projects to be selected for retrofits.

DCIA by Catchment was identified utilizing the the following formulas:

**High Connectivity**

$$DCIA\% = 0.4 * (IA\%)^{1.2}$$

$$\text{Directly Connected Area} = (DCIA)(IC \text{ Acres})$$

**Average Connectivity**

$$DCIA\% = 0.1 * (IA\%)^{1.5}$$

$$\text{Directly Connected Area} = (DCIA)(IC \text{ Acres})$$

**Partial Connectivity**

$$DCIA\% = 0.04 * (IA\%)^{1.7}$$

$$\text{Directly Connected Area} = (DCIA)(IC \text{ Acres})$$

**Slight Connectivity**

$$DCIA\% = 0.01 * (IA\%)^{2.0}$$

$$\text{Directly Connected Area} = (DCIA)(IC \text{ Acres})$$

The Average Connectivity calculation was utilized in assessing the Town's DCIA connectivity, based on the majority of land utilizing defined as agricultural and/or rural, minor residential communities, and minor-to-moderate commercial or industrialized areas. Based on the Average Connectivity calculations for each catchment, no catchments were identified with a connectivity of 11% or greater.

Catchments were then prioritized utilizing the total urbanized area per catchment. Atlas was provided with a shapefile of the 2010 Urbanized Areas for the Town from the 2010 Census or Urban Classifications, which was imported into ArcGIS for calculation purposes. Utilizing the Overlay-Intersect Tool, Atlas was able to extract the total Urbanized Area acreage per catchment, and then calculate the Urbanized area percentage per catchment utilizing the following formula: Based on these calculations, 28 catchments were identified with Urbanized Areas

$$\text{Urbanized Area (Ac.)} / \text{Basin Total Acreage} * 100$$

28 catchments containing impaired waterbodies were identified for the Town.

Catchment Priority Rankings were conducted for all Sub-Basins in the Town. Multiple factors were taken into consideration when scoring each catchment, including but not limited to DCIA calculations, previous screening results, age of development/structures, density of generating sites, nearby sewer repairs, urbanized areas, and impaired waterbodies. 52 catchments were identified as Problem or High Priority.

Specific criteria was utilizing in defining priority areas for the implementation of non-municipal retrofit projects. The criteria utilized in defining priority areas of non-municipal retrofit projects included High or Problem catchment priority rankings, catchments containing an impaired waterbody, and catchments identified with an urbanized area.

Utilizing ArcGIS, Atlas extracted catchments where two (2) or more of the aforementioned criteria were found. Community outreach or project redevelopment is encouraged in these defined catchments.

Municipal-owned retrofit projects were identified for several schools, and other municipal-owned sites such as the Fire Department, Town Hall, etc. These locations were selected based on location and plausibility of future disconnects. Refer to the attached Stormwater Retrofit Program for further information on these projects.

The draft Stormwater Retrofit Program is attached in this Annual Report.

**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection annually in future years. (Due 7/1/22)**

The Stormwater Retrofit Program, included in **Attachment V**, is designed to comply with *Section (6) (B) (ii)* of the CTDEEP 2017-2022 MS4 Permit. The Town of Canton will work towards disconnecting existing DCIA. The initial focus of the Stormwater Retrofit Program will first be applied to Town-owned properties, parks, and other facilities, followed by a focus of non-municipal facilities, parks, communities, or other redevelopments. Progress towards the DCIA disconnects will be tracked and continuously updated, with a goal to disconnect one percent (1%) of DCIA or to the MEP each year following the fifth year of the MS4 permit.

## Part II: Impaired waters investigation and monitoring

### 1. Impaired waters investigation and monitoring program

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

**1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution.** This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/ Phosphorus ☐

Bacteria ☒

Mercury ☐

Other Pollutant of Concern ☐

#### 1.2 Describe program status

**Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.**

*Wet weather samples were collected from nine (9) outfalls (13, 14, 15, 73, 74, 102, 103, 104 and 105) on September 10, 2018.*

*Wet Weather Sampling: 2018 - Wet weather samples were collected from sixteen (16) outfalls (13, 14, 15, 44, 73, 74, 86, 102, 103, 104, 105, 109, 152, 153, 154 and 155) on December 28, 2018. Nine (9) of the samples were resampled during the September 10, 2018 sampling event. One (1) wet weather sample was also obtained from Salmon Brook proximal to outfalls 103 and 104 on December 28, 2018.*

*2020 - Wet weather samples were collected from fifteen (15) outfalls (13, 14, 15, 44, 73, 74, 86, 102, 103, 104, 103/104 Stream, 109, 152, 153 and 155) on March 19, 2020. On September 10, 2020, wet weather samples were collected from eight (8) outfalls (14, 15, 73, 74, 102, 103, 104 and 105).*

*2021-Wet weather samples were collected from six (6) priority outfalls in September 2021.*

### 2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

#### 2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater impaired waterbody during the reporting period. For details on this requirement, visit [www.nemo.uconn.edu/ms4/tasks/monitoring.htm](http://www.nemo.uconn.edu/ms4/tasks/monitoring.htm). Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

Each Annual Report will add on to the previous year's data showing a cumulative list of sampling data. **You may also attach an excel spreadsheet with the same data rather than copying it into this table.** If you do attach a spreadsheet, please write "See Attachment" below.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *
OF-13	41.95783989/ -72.78437469	09/10/18	Bacteria	E. Coli 20 Total >24,200	Phoenix Environmental	Yes
OF-14	41.95707475/ -72.78068224	09/10/18	Bacteria	E. Coli >24,200 Total >24,200	Phoenix Environmental	Yes

OF-15	41.95555698/ -72.77987999	09/10/18	Bacteria	E. Coli 269 Total >24,200	Phoenix Environmental	Yes
OF-73	41.99012475/ -72.82173222	09/10/18	Bacteria	E. Coli 6,870 Total >24,200	Phoenix Environmental	Yes
OF-74	41.98422475/ -72.82008222	09/10/18	Bacteria	E. Coli 13,000 Total >24,200	Phoenix Environmental	Yes
OF-102	41.98150808/ -72.80684889	09/10/18	Bacteria	E. Coli 9,210 Total >24,200	Phoenix Environmental	Yes
OF-103	41.97025533/ -72.80552466	09/10/18	Bacteria	E. Coli 12,000 Total >24,200	Phoenix Environmental	Yes
OF-104	41.9703202/ - 72.80493613	09/10/18	Bacteria	E. Coli 4,880 Total >24,200	Phoenix Environmental	Yes
OF-105	41.97032138/ -72.80427953	09/10/18	Bacteria	E. Coli 9,210 Total >24,200	Phoenix Environmental	Yes
OF-13	41.95783989/ -72.78437469	12/28/18	Bacteria	E. Coli 4,110 Total 7,270	Phoenix Environmental	Yes
OF-14	41.95707475/ -72.78068224	12/28/18	Bacteria	E. Coli >24,200 Total >24,200	Phoenix Environmental	Yes
OF-15	41.95555698/ -72.77987999	12/28/18	Bacteria	E. Coli <10 Total 8,660	Phoenix Environmental	Yes
OF-44	41.95012476/- 72.83546555	12/28/18	Bacteria	E. Coli 10 Total 2,910	Phoenix Environmental	Yes
OF-73	41.99012475/ -72.82173222	12/28/18	Bacteria	E. Coli 256 Total 9,210	Phoenix Environmental	Yes
OF-74	41.98422475/ -72.82008222	12/28/18	Bacteria	E. Coli <10 Total 17,300	Phoenix Environmental	Yes
OF-86	41.94182471/- 72.83427937	12/28/18	Bacteria	E. Coli <10 Total 1,620	Phoenix Environmental	Yes
OF-102	41.98150808/ -72.80684889	12/28/18	Bacteria	E. Coli 41 Total 1,790	Phoenix Environmental	Yes
OF-103	41.97025533/ -72.80552466	12/28/18	Bacteria	E. Coli 120 Total 5,480	Phoenix Environmental	Yes
OF-104	41.9703202/ - 72.80493613	12/28/18	Bacteria	E. Coli 10 Total 14,100	Phoenix Environmental	Yes
OF-105	41.97032138/ -72.80427953	12/28/18	Bacteria	E. Coli <10 Total >2,610	Phoenix Environmental	Yes
OF-109	41.97384142/- 72.87186554	12/28/18	Bacteria	E. Coli 433 Total 17,300	Phoenix Environmental	Yes
OF-152	41.95585809/- 72.84359888	12/28/18	Bacteria	E. Coli <10 Total 1,840	Phoenix Environmental	Yes
OF-153	41.95514142/- 72.84341555	12/28/18	Bacteria	E. Coli <10 Total 8,160	Phoenix Environmental	Yes
OF-154	41.95330809/- 72.84114888	12/28/18	Bacteria	E. Coli 20 Total 305	Phoenix Environmental	No
OF-155	41.94902476/- 72.83758222	12/28/18	Bacteria	E. Coli 20 Total 11,200	Phoenix Environmental	Yes
OF-103/104	41.97025533/- 72.80552466	12/28/18	Bacteria	E. Coli 216 Total 4,350	Phoenix Environmental	Yes
Stream		3/19/20	Bacteria	E. Coli 201 Total 2,490	Phoenix Environmental	Yes
OF-103/104	41.97025533/- 72.80552466	3/19/20	Bacteria	E. Coli 31 Total 1,920	Phoenix Environmental	Yes
Stream		3/19/20	Bacteria	E. Coli 563 Total 17,300	Phoenix Environmental	Yes
OF-102	41.98150808/ -72.80684889	3/19/20	Bacteria	E. Coli <10 Total 8,660	Phoenix Environmental	Yes

OF-103	41.97025533/ -72.80552466	3/19/20	Bacteria	E. Coli 798 Total 19,900	Phoenix Environmental	Yes
OF-104	41.9703202/ - 72.80493613	3/19/20	Bacteria	E. Coli 20 Total 12,000	Phoenix Environmental	Yes
OF-14	41.95707475/ -72.78068224	3/19/20	Bacteria	E. Coli 10 Total 3,650	Phoenix Environmental	Yes
OF-153	41.95514142/- 72.84341555	3/19/20	Bacteria	E. Coli 10 Total 13,000	Phoenix Environmental	Yes
OF-15	41.95555698/ -72.77987999	3/19/20	Bacteria	E. Coli 233 Total 14,100	Phoenix Environmental	Yes
OF-13	41.95783989/ -72.78437469	3/19/20	Bacteria	E. Coli 20 Total 3,650	Phoenix Environmental	Yes
OF-86	41.94182471/- 72.83427937	3/19/20	Bacteria	E. Coli <10 Total 6,490	Phoenix Environmental	Yes
OF-74	41.98422475/ -72.82008222	3/19/20	Bacteria	E. Coli 20 Total 8,660	Phoenix Environmental	Yes
OF-73	41.99012475/ -72.82173222	3/19/20	Bacteria	E. Coli 20 Total 4,880	Phoenix Environmental	Yes
OF-109	41.97384142/- 72.87186554	3/19/20	Bacteria	E. Coli 2,480 Total 4,110	Phoenix Environmental	Yes
OF-155	41.94902476/- 72.83758222	3/19/20	Bacteria	E. Coli 249 Total 2,600	Phoenix Environmental	Yes
OF-152	41.95585809/- 72.84359888	9/10/20	Bacteria	E. Coli 5790 Total >24,200	Phoenix Environmental	Yes
OF-44	41.95012476/- 72.83546555	9/10/20	Bacteria	E. Coli 110 Total 7,270	Phoenix Environmental	Yes
OF-14	41.95707475/ -72.78068224	9/10/20	Bacteria	E. Coli 173 Total >24,200	Phoenix Environmental	Yes
OF-15	41.95555698/ -72.77987999	9/10/20	Bacteria	E. Coli 389 Total >24,200	Phoenix Environmental	Yes
OF-73	41.99012475/ -72.82173222	9/10/20	Bacteria	E. Coli 860 Total >24,200	Phoenix Environmental	Yes
OF-74	41.98422475/ -72.82008222	9/10/20	Bacteria	E. Coli 122 Total >24,200	Phoenix Environmental	Yes
OF-102	41.98150808/ -72.80684889	9/10/20	Bacteria	E. Coli 30 Total >24,200	Phoenix Environmental	Yes
OF-103	41.97025533/ -72.80552466	9/10/20	Bacteria	E. Coli 74 Total >24200	Phoenix Environmental	Yes
OF-104	41.9703202/ - 72.80493613	09/10/20	Bacteria	E. Coli 20 Total >24,200	Phoenix Environmental	Yes
OF-14	41.95707475/ -72.78068224	9/1/2021	Bacteria	E. Coli- 813 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-15	41.95555698/ -72.77987999	9/1/2021	Bacteria	E. Coli- 1,430 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-73	41.99012475/ -72.82173222	9/1/2021	Bacteria	E. Coli- 24,200 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-74	41.98422475/ -72.82008222	9/1/2021	Bacteria	E. Coli- 1,400 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes

OF-102	41.98150808/ -72.80684889	9/1/2021	Bacteria	E. Coli- 1,790 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-103	41.97025533/ -72.80552466	9/1/2021	Bacteria	E. Coli- 3,450 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-104	41.9703202/ - 72.80493613	9/1/2021	Bacteria	E. Coli- 2,380 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes
OF-105	41.97032138/ -72.80427953	9/1/2021	Bacteria	E. Coli- 7,700 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental	Yes

Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

### 3. Follow-up investigations (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
All above listed outfalls	Investigations are being conducted on the surrounding drainage area, with a focus on surrounding runoff from agricultural land, septic repairs, and septic failures.	Potential measures that may be used in addressing bacterial impairments include aquatic vegetative buffers, control runoff measures implemented. Discussions are underway within the Town on how to address potential septic failures or repairs at privately-owned properties.

#### 4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2021. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write "See Attachment" below.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
OF-14	41.95707475/ -72.78068224	09/10/20	Bacteria	E. Coli – 5790 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-15	41.95555698/ -72.77987999	09/10/20	Bacteria	E. Coli – 110 Total Coliforms – 7270	Phoenix Environmental Laboratories, Inc.
OF-73	41.99012475/ -72.82173222	09/10/20	Bacteria	E. Coli – 173 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-74	41.98422475/ -72.82008222	09/10/20	Bacteria	E. Coli – 389 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-102	41.98150808/ -72.80684889	09/10/20	Bacteria	E. Coli – 860 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-103	41.97025533/ -72.80552466	09/10/20	Bacteria	E. Coli – 122 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-104	41.9703202/ -72.80493613	09/10/20	Bacteria	E. Coli – 30 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-105	41.97032138/ -72.80427953	09/10/20	Bacteria	E. Coli – 74 Total Coliforms - >24200	Phoenix Environmental Laboratories, Inc.
OF-14	41.95707475/ -72.78068224	9/1/2021	Bacteria	E. Coli- 813 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-15	41.95555698/ -72.77987999	9/1/2021	Bacteria	E. Coli- 1,430 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-73	41.99012475/ -72.82173222	9/1/2021	Bacteria	E. Coli- 24,200 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-74	41.98422475/ -72.82008222	9/1/2021	Bacteria	E. Coli- 1,400 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-102	41.98150808/ -72.80684889	9/1/2021	Bacteria	E. Coli- 1,790 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-103	41.97025533/ -72.80552466	9/1/2021	Bacteria	E. Coli- 3,450 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-104	41.9703202/ -72.80493613	9/1/2021	Bacteria	E. Coli- 2,380 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.
OF-105	41.97032138/ -72.80427953	9/1/2021	Bacteria	E. Coli- 7,700 (MPN/100 mls) T.Coli- >24,200 (MPN/100 mls)	Phoenix Environmental Laboratories, Inc.



## Part III: Additional IDDE Program Data

### 1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
4001-00-1*	Low Priority	4
4300-44-1-L1	Problem	8
4309-00-1	Low Priority	3
4309-01-1	High Priority	10
4309-02-1	Low Priority	3
4319-00-2-R1	High Priority	16
4319-00-2-R2	High Priority	14
4319-00-3-R1	Problem	7
4319-00-3-R2	Problem	8
4319-00-3-R3	Low Priority	5
4319-00-3-R4	Problem	8
4319-00-3-R5	High Priority	16
4319-00-3-R6	High Priority	12
4319-02-1	Problem	6
4319-03-2-R1	Low Priority	2
4319-03-2-R2	Problem	9
4319-04-1	Problem	9
4319-05-1	Problem	8
4319-06-1	Low Priority	4
4319-07-1	Problem	8
4319-08-1	Problem	8
4319-09-1	Problem	7
4319-10-2-L1	Problem	9
4319-10-2-L2	Low Priority	2
4319-10-2-R1	Low Priority	2
4319-11-1	Low Priority	3
4320-00-1	Low Priority	3
4320-00-2-R1	Low Priority	5
4320-00-2-R2	Problem	6
4320-00-2-R3	Problem	5
4320-00-2-R4	Problem	4
4320-00-3-L1	Problem	8
4320-00-3-R1	Problem	7
4320-00-3-R2	Problem	9

4320-00-3-R3	Problem	8
4320-00-3-R4	Problem	8
4320-00-3-R5	High Priority	16
4320-00-3-R6	Problem	9
4320-00-4-R1	High Priority	13
4320-00-4-R2	Problem	8
4320-00-4-R3	Problem	6
4320-00-4-R4	Low Priority	3
4320-01-1	Problem	7
4320-02-1	Problem	8
4320-03-1	High Priority	11
4320-04-1	Problem	7
4320-05-2-R1	Low Priority	3
4320-05-2-R2	High Priority	10
4320-07-1	Low Priority	3
4320-08-1	Problem	6
4320-09-1	Problem	8
4320-10-1	High Priority	12
4320-10-2-R1	Low Priority	5
4320-11-1	Problem	7
4320-12-1	High Priority	12
4320-12-2-R1	Low Priority	2
4320-13-1	Problem	9
4320-13-1-L1	High Priority	13
4320-14-1	High Priority	13
4320-15-2-R1	High Priority	10
4320-15-3-R1	High Priority	12
4320-16-1	Problem	10
4320-17-1	High Priority	12
4320-17-2-R1	Problem	6
4320-17-3-R1	Low Priority	3
4320-21-1	Problem	4
4320-21-1-L1	Problem	8
4320-22-1	Problem	9
4320-26-1-L1	Problem	9

## 2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

### 2.1 Dry weather screening and sampling data from outfalls and interconnections

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline monitoring flowchart.

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

## 2.2 Wet weather sample and inspection data

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern
<i>System Vulnerability Factors are currently under investigation, and will be added to the next annual report. Refer to <b>Section 1: Catchment Investigation Data, 3.1 System Vulnerability Factor Summary</b> for more information.</i>										

## 1. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

For details on this requirement, visit [www.nemo.uconn.edu/ms4/tasks/monitoring.htm](http://www.nemo.uconn.edu/ms4/tasks/monitoring.htm). Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

### 3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors
<i>The Town of Granby's sanitary sewer is currently managed by the Town of Granby's Water Pollution Control Authority (WPCA). The storm sewer and sanitary sewer have historically been separate, and remain so in the present day. Therefore, SVFs 4, 5, 6, 7, 8, and 9 are not applicable to the Town. Other SVFs are currently under investigation, and will be updated in the next annual report. These investigations include coordination between the WPCF, as well as the Farmington Valley Health District.</i>		

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).

### 3.2 Key junction manhole dry weather screening and sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write “See Attachment” below.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

### 3.3 Wet weather investigation outfall sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write “See Attachment” below.

Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfactants

### 3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed
286 W. Granby Rd (OF-152)	Underground spring	Atlas was called to investigate a potential illicit discharge in the Town. Upon arrival, water was found to be discharging from a driveway at a steady, bubbling rate, with heavy algae growth. Discharge lead down the driveway into an adjacent ditch. This runoff discharge is in the vicinity of OF-152, which in turn discharges to the West Branch Salmon Brook. A sample of the discharge was submitted for the analysis of E.coli, T. coli, nitrite, nitrate, and phosphorus to assess potential illicit discharge sources. A review of sampling data from the nearby MS4 outfall (OF-152) did not indicate illicit discharges were entering this catchment. Laboratory analytical results were indicative of groundwater, and it is suspected an	Citizen report	4/7/2021	N/A	None.	N/A

		<i>underground spring had worked its way to the</i>					
		<i>the surface.</i>					

**Part IV: Certification**

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer

Print name:

Kirke Severance

Signature / Date:

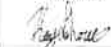
 4-4-2022

Email:

KSeverance@granby-ct.gov

Document Prepared by

Print name: Kay Lehoux-Environmental Scientist



Signature / Date:

4/1/2022

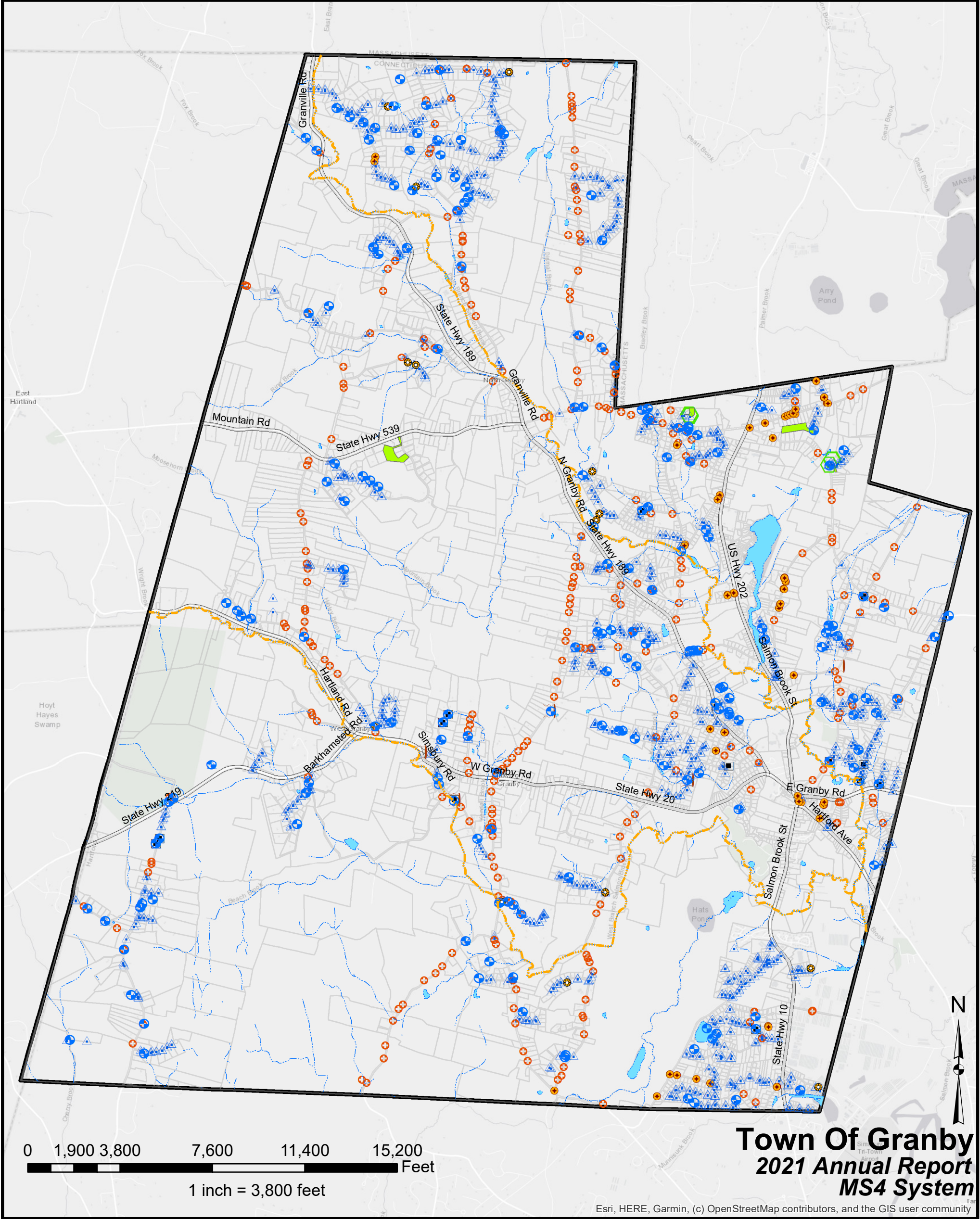
Email:

Kay.Lehoux@oneatlas.com


## FIGURES

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Legend




Outfall




Retention Basin




Impaired Waterbody




Surfacer Water




Main Road




Retention Basin




Parcel




Town Line




BC




CB




CC



DW



HW



MH


Granby Stormwater Infrastructure

Fig No.  
1

Drawn By: KLL

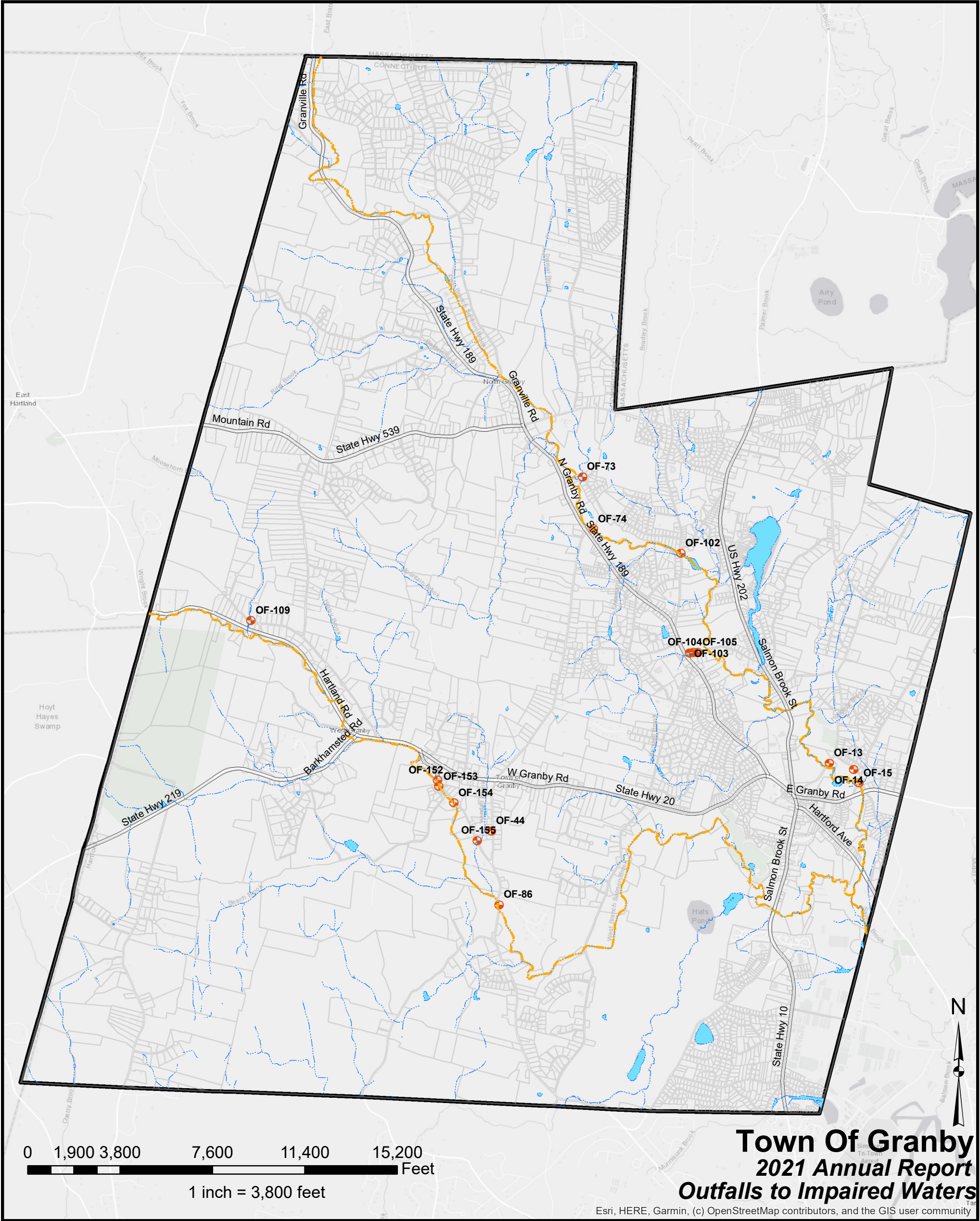
Checked by: LRW

Date: 2021



290 Roberts Street Suite 301  
East Hartford,CT 06108





**Legend**

Outfall to Impaired Waterbody

Impaired Waterbody

Surfacer Water

Main Road

Parcel

Town Line

Fig No.  
2

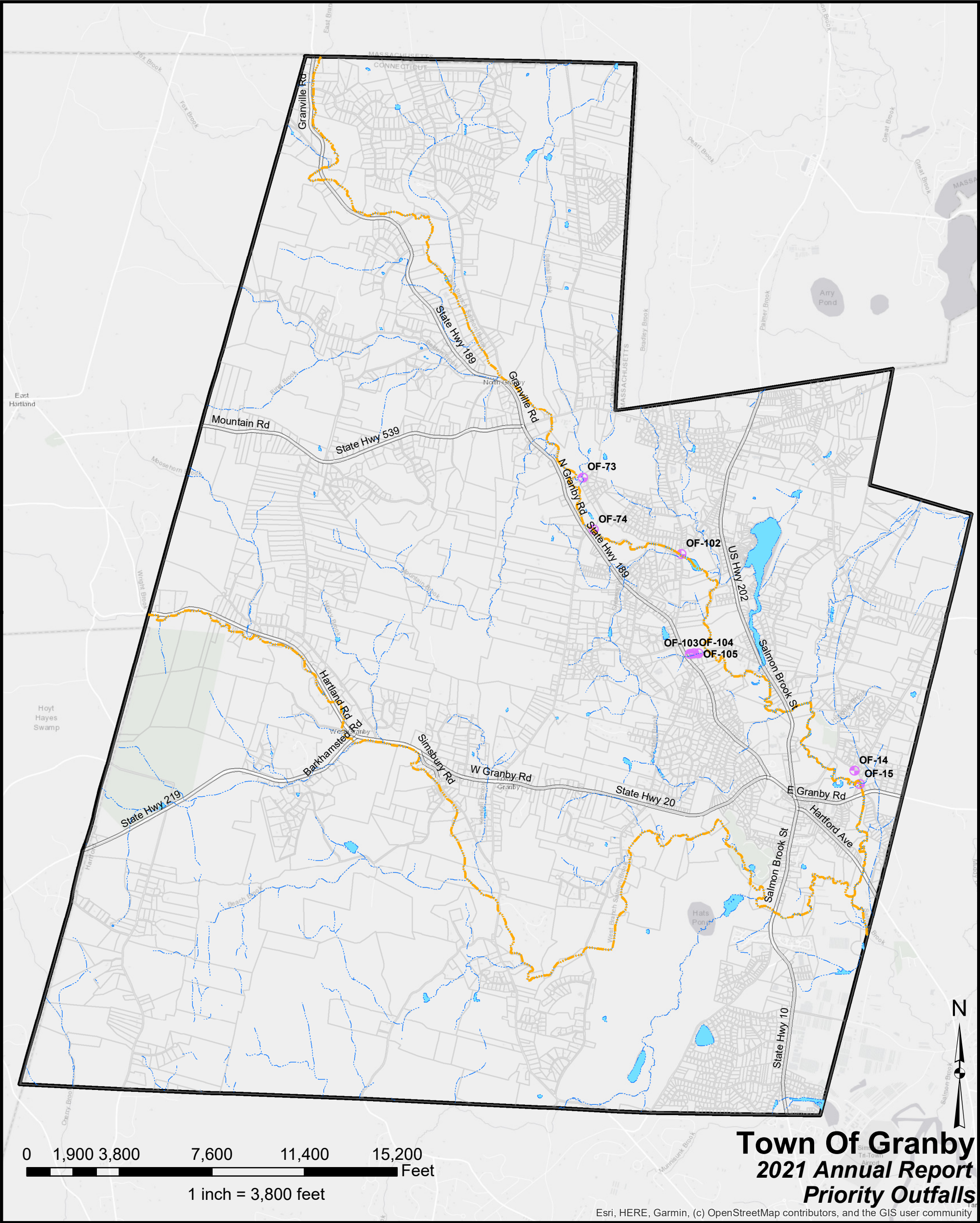
Drawn By: KLL

Checked by: LRW

Date: 2021

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East Hartford,CT 06108





**Legend**

Priority Outfall

Impaired Waterbody

Surfacer Water

Main Road

Parcel

Town Line

Fig No.  
3

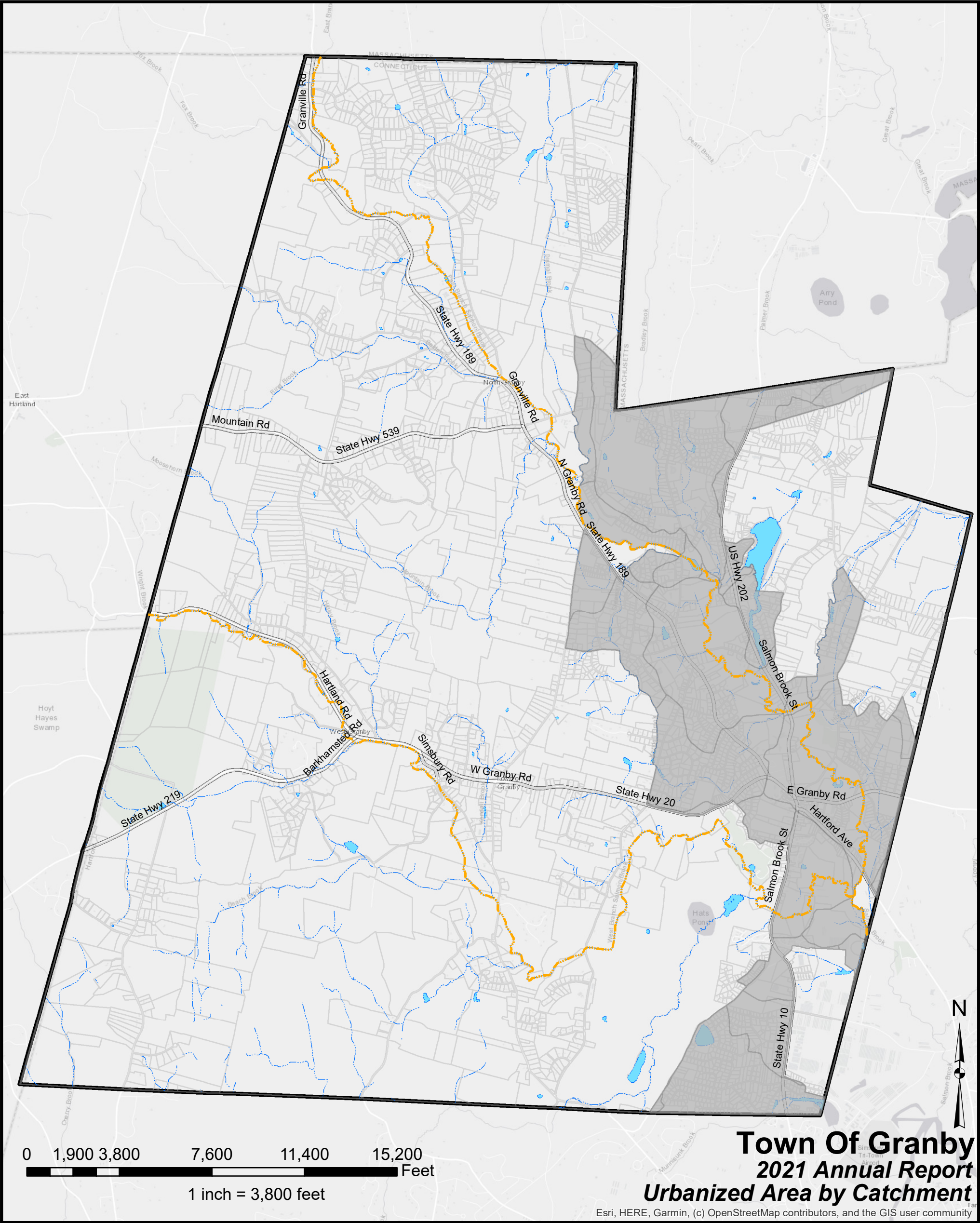
Drawn By: KLL

Checked by: LRW

Date: 2021

290 Roberts Street Suite 301  
East Hartford,CT 06108





**Legend**

Impaired Waterbody

Surfacer Water

Main Road

Parcel

Urbanized Area by Catchment

Town Line

Fig No.

4

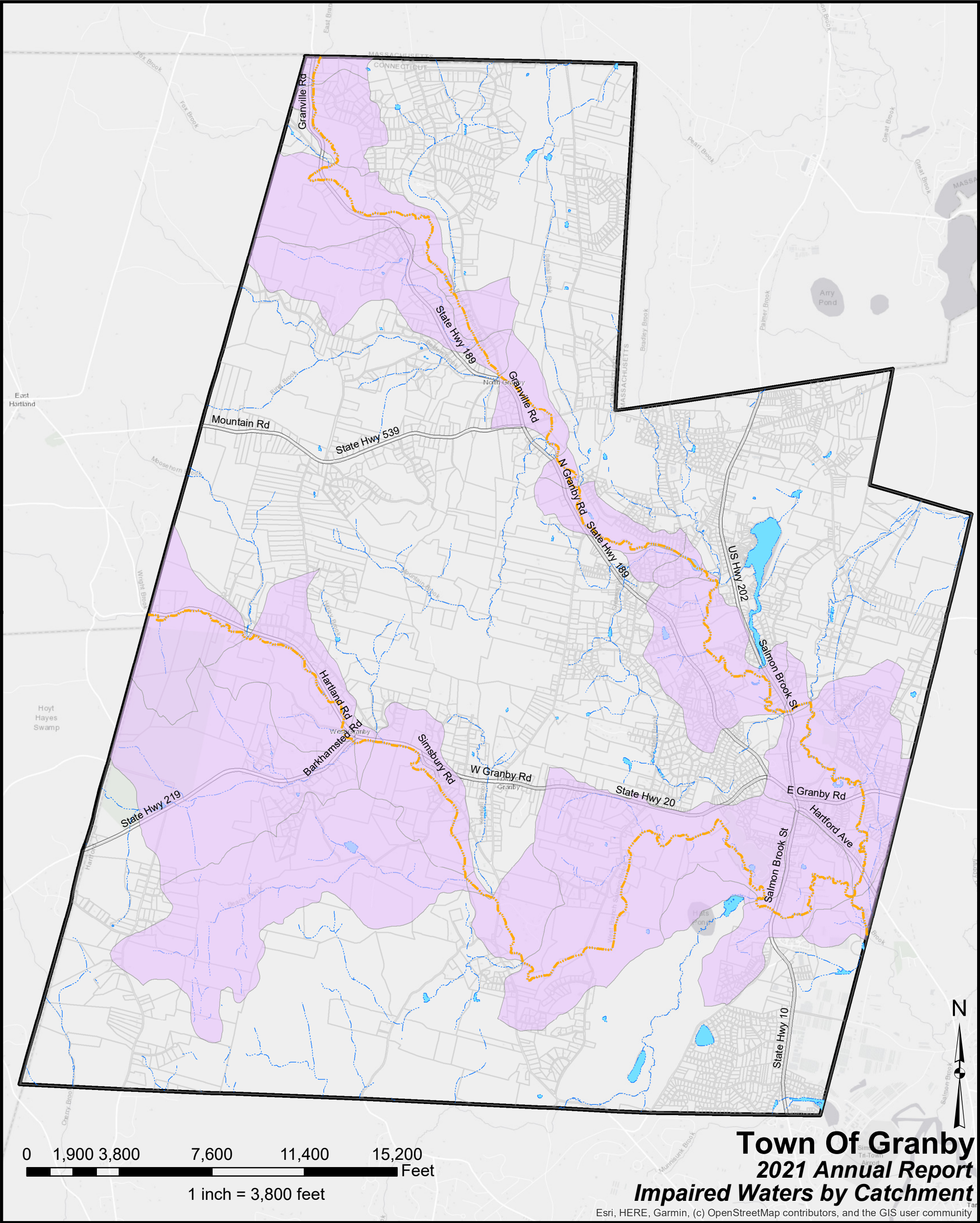
Drawn By: KLL

Checked by: LRW

Date: 2021

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East Hartford,CT 06108





**Legend**

Impaired Waterbody

Surfacer Water

Main Road

Parcel

Impaired Waterbodies by Catchment

Town Line

Fig No.  
5

Drawn By: KLL

Checked by: LRW

Date: 2021

290 Roberts Street Suite 301  
East Hartford,CT 06108

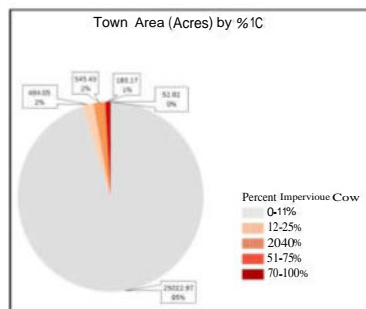
## **ATTACHMENT I –Surface Water Research**

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# Phosphorous and Nitrogen Loading in Surface Water: Granby, CT

## Introduction

This research evaluates the correlation of land usage and nitrogen and phosphorous loading in surface water bodies. The Town of Granby, Connecticut, was selected as the research geographical location. The Town includes a general **rural landscape** with less than 20% considered urbanized. The largest waterbodies include the East and West Branch of **Salmon Brook**.



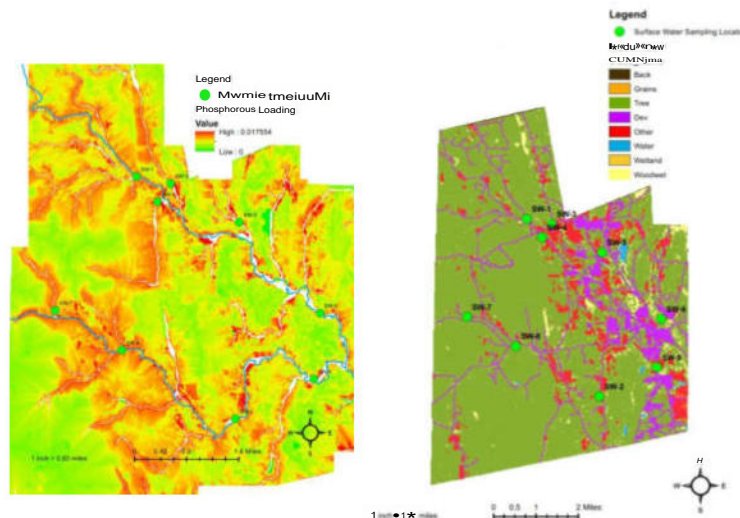
## Objectives

This research evaluates the correlation of land usage and **nitrogen** and **phosphorous** loading in surface water bodies. Additionally, the objective was to identify accessible and qualitative resources for spatial analysis and supplement the research with field sampling and observations.

## Methodology

Two (2) techniques were utilized for this research and included:

1. Prediction modeling using geographic information system (GIS) spatial land cover data and InVest analysis tools for phosphorous and nitrogen impacts to surface water quality, and
2. Field sampling of phosphorous and nitrogen and field observations of land use.



## Results

Surface Water Sample Location	Dissolved Phosphorus (mg/L)	Imperial Units (ppm)	pH (Scale)	Specific Conductivity (micromhos/cm)	Nitrate-Nitrite (N) (mg/L)	TKN (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
SW-1	18.2	9.1	8.12	133.0	0.25	0.17	0.42	0.013
SW-2	14.8	10.2	7.11	116.0	0.16	0.17	0.33	0.024
SW-3	15.6	13.5	6.94	107.0	0.22	0.25	0.47	0.011
SW-4	18.4	11.2	7.04	45.5	0.04	0.15	0.19	0.010
SW-5	15.1	11.8	7.03	125.7	0.55	0.20	0.75	0.013
SW-6	15.5	12.0	6.84	172.5	0.76	0.28	1.04	0.013
NW-7	18.6	8.5	7.48	120.2	0.21	0.11	0.32	0.010
SW-8	18.8	9.8	7.17	76.4	0.12	0.12	0.23	0.010
SW-9	19.6	11.0	6.85	120.1	0.13	0.18	0.51	0.010
Criteria / Guidance	>50	---	6.5-8.1	---	0.12-2.2	0.12-2.2	1.50	0.05-0.1
Mean	17.2	11.0	7.2	112.9	0.292	0.181	0.473	0.0104
Median	18.2	11.0	7.0	120.1	0.22	0.17	0.42	0.010

Surface Water Sample Location	InVest Modeling Loading (High, Moderate, Low)	N - field Results	InVest Modeling Loading (High, Moderate, Low)	P - field Results	Field Observations
SW-1	Moderate	Moderate	Medium to High	Medium	Wooded, rural
NW-2	Moderate	Low-Moderate	Moderate	High	Rural adjacent to open game preserve, possible former farming
NW-3	High	Moderate-High	High	Moderate	Large farm adjacent to water body
SW-4	High	Low	Moderate to High	Low	Commercial and residential area
SW-4	Low	High	Moderate to Low	Moderate	Commercial and residential area
SW-6	Low	High	Low	Moderate	Wooded, rural
SW-7	Moderate	Moderate	Moderate to High	Low	Small tributary stream in residential area
SW-8	High	Low	Moderate to High	Low	Rural off main road
SW-9	Moderate to High	High	Moderate to High	Low	Some development and agriculture

## Conclusions

InVest modeling indicated the highest P and N loading were in agricultural areas adjacent to streams.

Field sampling and observations indicated a higher variability associated with stream size and specific location of sampling.

- > Regulatory criteria for P and N in surface water is based on numerous factors:
  - Size of waterbody and flow;
  - Intended-use of waterbody
  - Quality classification of WB
- ❖ Highest concentrations of N located in samples collected from **commercial/residential** area and rural wooded area.
- ❖ Highest concentrations P located in agricultural-use areas



## Discussion

Considerations to provide additional qualitative data:

- o Multiple Sampling Events
- o Sampling Before/After Rain Events
- o Refine "other" Landuse For Agr. Type

Management of farming BMPs would likely assist in reducing P and N loading into surface water bodies in town.

**ATTACHMENT II –Wet Weather Inspections**

---



**Town of Granby**  
**MS4 General Permit**  
*Priority Outfall Sampling*

Outfall ID	Inspection Date	Condition	Discharge Description	Discharge Visual	Bacterial	
					Escherichia Coli	Total Coliforms
					MPN/100mL	
OF-14	9/1/21	Good	Strong flow, clear.		813	>24,200
OF-15	9/1/21	Good	Strong flow, clear. Slight suspended sediment.		1,430	>24,200
OF-73	9/1/21	Good-to-fair	Moderate flow. Outfall covered in brush. Clear discharge.		24,200	>24,201
OF-74	9/1/21	Good	Strong flow, little suspended sediment, clear.		1,400	>24,200
OF-102	9/1/21	Good	Moderate flow. Clear discharge.		1,790	>24,200
OF-103	9/1/21	Good	Moderate flow. Cloudy, some suspended sediment.		3,450	>24,201
OF-104	9/1/21	Good	Moderate flow. Clear discharge.		2,380	>24,201
OF-105	9/1/21	Good	Moderate flow. Clear discharge.		7,700	>24,201

**Notes:**

\* All highlighted bacterial concentrations are required for follow-up investigations at associated

\*Highlighting is based on the following criteria;

1. E. Coli >235/100mL for Swimming Areas, and >410 col/100mL for all others.
2. Total Coliform > 500 col/100mL
3. Fecal Coliform >31 col/100 mL for Class SA and >260 col/100mL for Class SB
4. Enterococci >104 col/100mL for Swimming Areas and >500 col/100mL for all others.

## **ATTACHMENT III- Catchment Assessment and Priority Ranking Matrix**

Town of Granby  
Catchment Assessment  
and  
Priority Ranking Matrix

Catchment ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input? <sup>1</sup>	Discharging to Area of Concern to Public Health? <sup>2</sup>	Frequency of Past Discharge Complaints	Receiving Water Quality <sup>3</sup>	Density of Generating Sites <sup>4</sup>	Age of Development/ Infrastructure <sup>5</sup>	Historic Combined Sewers or Septic? <sup>6</sup>	Aging Septic? <sup>7</sup>	Culverted Streams? <sup>8</sup>	Additional Characteristics	Sewer Repair Nearby?	Urbanized Area	DCIA >11%	Impaired Waterbody	Additional Characteristics Score	Score	Priority Ranking <i>Low Priority</i> : 0-5 <i>Problem</i> : 6-9 <i>High Priority</i> : ≥10
Information Source		Catchment inspections and sample results	GIS Maps	Municipal Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Municipal Staff, GIS Maps	Land Use, Municipal Staff	GIS and Storm System Maps	Other	Municipal Staff, GIS Maps	CLEAR	Nathan L. Jacobson & Associates	CLEAR	Other		
Scoring Criteria		Yes = 3 (Problem Catchment) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	Description	Yes=2 No=0	Yes =1 No = 0	Yes =1 No = 0	Yes =1 No = 0	High = 3 Medium =1-2 Low = 0		
4001-00-1*	Great Brook		0		0	1	2	0		0	Wooded; goes into MA		0	0	0	1	4	Low Priority
4300-44-1-L1	Farmington River		0		0	3	1	0		0	Mostly residential with some agricultrual	2	1	0	0	1	8	Problem
4309-00-1	Cherry Brook		0		0	1	1	0		0	Wooded with some agricultural land		0	0	0	1	3	Low Priority
4309-01-1	Cherry Brook		0		0	2	2	0		3	Wooded with residential along highway		1	0	0	2	10	High Priority
4309-02-1	Cherry Brook		0		0	1	1	0		0	Mostly wooded with some residential		1	0	0	0	3	Low Priority
4319-00-2-R1	West Branch Salmon Brook		3		2	2	2	0		3	Mostly wooded with recreational areas along stream and some residential		1	0	1	2	16	High Priority
4319-00-2-R2	West Branch Salmon Brook		0		2	2	2	0		3	Wooded W of stream; Residential E of stream	2	1	0	1	1	14	High Priority
4319-00-3-R1	West Branch Salmon Brook		0		2	1	2	0		0	Wooded with State Hwy 20 bisecting catchment		0	0	1	1	7	Problem
4319-00-3-R2	West Branch Salmon Brook		0		2	1	2	0		0	Mostly wooded with light agricultural land East of the stream		1	0	1	1	8	Problem
4319-00-3-R3	West Branch Salmon Brook		0		2	1	1	0		0	Wooded		0	0	1	0	5	Low Priority
4319-00-3-R4	West Branch Salmon Brook		0		2	2	2	0		0	Agricultural and Wooded		0	0	1	1	8	Problem
4319-00-3-R5	West Branch Salmon Brook		3		2	1	2	0		3	Wooded with some residential/commercial; park	2	1	0	1	1	16	High Priority
4319-00-3-R6	West Branch Salmon Brook		0		2	2	2	0		3	Wooded/residential with some agricultural land		1	0	1	1	12	High Priority
4319-02-1	Moosehorn Brook		0		0	1	1	0		3	Mostly wooded with minimal residential		0	0	0	1	6	Problem
4319-03-2-R1	West Branch Salmon Brook		0		0	1	1	0		0	Wooded; Stream meanders Westward; floodplain		0	0	0	0	2	Low Priority

Town of Granby  
Catchment Assessment  
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Catchment ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input? <sup>1</sup>	Discharging to Area of Concern to Public Health? <sup>2</sup>	Frequency of Past Discharge Complaints	Receiving Water Quality <sup>3</sup>	Density of Generating Sites <sup>4</sup>	Age of Development/ Infrastructure <sup>5</sup>	Historic Combined Sewers or Septic? <sup>6</sup>	Aging Septic? <sup>7</sup>	Culverted Streams? <sup>8</sup>	Additional Characteristics	Sewer Repair Nearby?	Urbanized Area	DCIA >11%	Impaired Waterbody	Additional Characteristics Score	Score	Priority Ranking <i>Low Priority:</i> 0-5 <i>Problem :</i> 6-9 <i>High Priority :</i> ≥10
Information Source		Catchment inspections and sample results	GIS Maps	Municipal Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Municipal Staff, GIS Maps	Land Use, Municipal Staff	GIS and Storm System Maps	Other	Municipal Staff, GIS Maps	CLEAR	Nathan L. Jacobson & Associates	CLEAR	Other		
Scoring Criteria		Yes = 3 (Problem Catchment) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	Description	Yes=2 No=0	Yes =1 No = 0	Yes =1 No = 0	Yes =1 No = 0	High = 3 Medium =1-2 Low = 0		
4319-03-2-R2	West Branch Salmon Brook		0		0	1	2	0		3	Mostly wooded with minimal residential areas	2	0	0	0	1	9	Problem
4319-04-1	West Branch Salmon Brook		0		0	2	2	0		3	Mostly wooded with minimal residential/agricultural areas		1	0	0	1	9	Problem
4319-05-1	West Branch Salmon Brook		0		0	1	1	0		3	Wooded with dense residential area E of stream		1	0	0	2	8	Problem
4319-06-1	Higley Brook		0		0	1	1	0		0	Wooded with minimal cleared land for residential	2	0	0	0	0	4	Low Priority
4319-07-1	Beach Brook		0		0	1	2	0		3	Mostly wooded with minor residential areas towards lower end of stream		1	0	0	1	8	Problem
4319-08-1	Kendall Brook		0		0	1	1	0		3	A mixture of wooded, agricultural, and residential parcels	2	0	0	0	1	8	Problem
4319-09-1	West Branch Salmon Brook		0		0	1	2	0		3	Mostly wooded; little residential		0	0	0	1	7	Problem
4319-10-2-L1	West Branch Salmon Brook		0		0	1	2	0		3	Mostly wooded; little agricultural/residential	2	0	0	0	1	9	Problem
4319-10-2-L2	West Branch Salmon Brook; Trout Pond		0		0	1	1	0		0	Wooded		0	0	0	0	2	Low Priority
4319-10-2-R1	West Branch Salmon Brook		0		0	1	1	0		0	Wooded		0	0	0	0	2	Low Priority
4319-11-1	West Branch Salmon Brook		0		0	1	2	0		0	Wooded		0	0	0	0	3	Low Priority
4320-00-1	Unnamed Stream		0		0	1	1	0		0	Wooded with minimal residential; large mansion with cleared land in Southeast catchment		0	0	0	1	3	Low Priority

Town of Granby  
Catchment Assessment  
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Catchment ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input? <sup>1</sup>	Discharging to Area of Concern to Public Health? <sup>2</sup>	Frequency of Past Discharge Complaints	Receiving Water Quality <sup>3</sup>	Density of Generating Sites <sup>4</sup>	Age of Development/ Infrastructure <sup>5</sup>	Historic Combined Sewers or Septic? <sup>6</sup>	Aging Septic? <sup>7</sup>	Culverted Streams? <sup>8</sup>	Additional Characteristics	Sewer Repair Nearby?	Urbanized Area	DCIA >11%	Impaired Waterbody	Additional Characteristics Score	Score	Priority Ranking <i>Low Priority</i> : 0-5 <i>Problem</i> : 6-9 <i>High Priority</i> : ≥10
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4320-00-2-R1	Unnamed Stream		0		0	1	1	0		0	Wooded with small residential development	2	0	0	0	1	5	Low Priority
4320-00-2-R2	Fox Brook		0		0	1	1	0		3	Mostly wooded with some agricultural land along Hwy 89		0	0	0	1	6	Problem
4320-00-2-R3	East Branch Salmon Brook		0		0	1	2	0		0	Mostly agricultural with some wooded		0	0	0	2	5	Problem
4320-00-2-R4	East Branch Salmon Brook		0		0	1	2	0		0	Mostly wooded with minimal residential		0	0	0	1	4	Problem
4320-00-3-L1	Dismal Brook		0		0	1	2	0		0	Commercial/Agricultural	2	1	0	0	2	8	Problem
4320-00-3-R1	East Branch Salmon Brook		0		0	1	2	0		3	Wooded with residential sites in the SE catchment and one plot of agricultural land		0	0	0	1	7	Problem
4320-00-3-R2	West Branch Salmon Brook		0		2	1	2	0		0	Wooded with agricultural and residential land East of stream		1	0	1	2	9	Problem
4320-00-3-R3	Mountain Brook		0		0	1	2	0		0	Agricultural	2	1	0	0	2	8	Problem
4320-00-3-R4	West Branch Salmon Brook		0		2	1	2	0		0	Mostly residential/agricultural		0	0	1	2	8	Problem
4320-00-3-R5	West Branch Salmon Brook		0		2	2	2	0		3	Mostly residential/commercial	2	1	0	1	3	16	High Priority
4320-00-3-R6	West Branch Salmon Brook		0		2	1	2	0		0	Residential with some agricultural land		1	0	1	2	9	Problem
4320-00-4-R1	East Branch Salmon Brook		0		0	2	2	0		3	Tariffville Park, residential and moderate commercial areas	2	1	0	0	3	13	High Priority
4320-00-4-R2	Salmon Brook		0		0	1	2	0		3	Mostly Agricultural with some residential and wooded		1	0	0	1	8	Problem

Town of Granby  
Catchment Assessment  
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Priority Ranking Matrix

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Information Source		Catchment inspections and sample results	GIS Maps	Municipal Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Municipal Staff, GIS Maps	Land Use, Municipal Staff	GIS and Storm System Maps	Other	Municipal Staff, GIS Maps	CLEAR	Nathan L. Jacobson & Associates	CLEAR	Other		
Scoring Criteria		Yes = 3 (Problem Catchment) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	Description	Yes=2 No=0	Yes =1 No = 0	Yes =1 No = 0	Yes =1 No = 0	High = 3 Medium =1-2 Low = 0		
4320-00-4-R3	Salmon Brook		0		0	2	2	0		0	Mostly Agricultural		1	0	0	1	6	Problem
4320-00-4-R4	Salmon Brook		0		0	1	1	0		0	Largely Agricultural		0	0	0	1	3	Low Priority
4320-01-1	Belden Brook		0		0	1	1	0		3	Mostly wooded; Peck Orchard in Northwest of catchment		1	0	0	1	7	Problem
4320-02-1	Fox Brook		0		0	1	2	0		3	Mosltly Wooded with some residential/commercial		1	0	0	1	8	Problem
4320-03-1	Salmon Brook, unnamed stream		0		0	1	2	0		3	Mostly residential/wooded with intermittnet cleared land	2	1	0	0	2	11	High Priority
4320-04-1	East Branch Salmon Brook		0		0	1	2	0		3	Mostly wooded with some agricultural and residential land		0	0	0	1	7	Problem
4320-05-2-R1	Belden Brook		0		0	1	1	0		0	Mostly wooded with a small orchard in Northeastern region of catchment		0	0	0	1	3	Low Priority
4320-05-2-R2	Belden Brook		0		0	1	2	0		3	Wooded with some residential	2	1	0	0	1	10	High Priority
4320-07-1	Ring Brook		0		0	1	1	0		0	Mostly wooded with one road of residential		0	0	0	1	3	Low Priority

Town of Granby  
Catchment Assessment  
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Scoring Criteria		Yes = 3 (Problem Catchment) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	Description	Yes=2 No=0	Yes =1 No = 0	Yes =1 No = 0	Yes =1 No = 0	High = 3 Medium =1-2 Low = 0		
4320-08-1	Mountain Brook		0		0	1	2	0		0	Mostly wooded with light residential areas and a natural diversity area in Northeast corner of catchment.	2	0	0	0	1	6	Problem
4320-09-1	Dismal Brook; unnamed ponds		0		0	1	2	0		3	Mostly wooded with light residential areas and cleared land		1	0	0	1	8	Problem
4320-10-1	West Branch Salmon Brook		0		0	2	2	0		3	Mostly Residential	2	1	0	0	2	12	High Priority
4320-10-2-R1	West Branch Salmon Brook		0		0	1	1	0		0	Wooded	2	0	0	1	0	5	Low Priority
4320-11-1	Salmon Brook		0		0	2	2	0		0	Agricultural	2	0	0	0	1	7	Problem
4320-12-1	Bradley Brook		0		0	2	2	0		3	Mostly residential with some cleared land and wooded areas; Intermediate School	2	1	0	0	2	12	High Priority
4320-12-2-R1	Salmon Brook		0		0	1	1	0		0	Wooded		0	0	0	0	2	Low Priority
4320-13-1	Salmon Brook		3		0	1	1	0		3	Wooded with some residential; recreational lake in NE catchment		0	0	0	1	9	Problem
4320-13-1-L1	Manitook Lake; Unnamed Stream		3		0	2	2	0		0	Commercial (Masonry/Concrete quarry); recreational (Lake)	2	1	0	0	3	13	High Priority
4320-14-1	Kendall Brook		0		0	2	2	0		3	Residential with some commercial including a school.	2	1	0	0	3	13	High Priority
4320-15-2-R1	Hungary Brook		0		0	2	2	0		3	Mosltly residential with one large farm and some cleared land		1	0	0	2	10	High Priority
4320-15-3-R1	Salmon Brook		0		0	2	2	0		3	Residential with some cleared land	2	1	0	0	2	12	High Priority
4320-16-1	Beaverdam Marsh, Great Marsh, unnamed stream, Newgate Pond		0		0	1	2	0		3	Mostly wooded with light residetntial areas along Copper Hill Rd.	2	1	0	0	1	10	Problem
4320-17-1	Unnamed Stream		0		0	2	2	0		3	Mostly residential with some cleared land and minimal agricultural land	2	1	0	0	2	12	High Priority

Town of Granby  
Catchment Assessment  
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Priority Ranking Matrix

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Scoring Criteria		Yes = 3 (Problem Catchment) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 No = 0	Yes = 3 No = 0	Description	Yes=2 No=0	Yes =1 No = 0	Yes =1 No = 0	Yes =1 No = 0	High = 3 Medium =1-2 Low = 0		
4320-17-2-R1	Unnamed Stream		0		0	1	1	0		3	Wooded with some rural residential areas		0	0	0	1	6	Problem
4320-17-3-R1	Salmon Brook		0		0	1	1	0		0	Wooded with some agriculture		0	0	0	1	3	Low Priority
4320-21-1	Salmon Brook		0		0	1	2	0		0	Agricultural with some wooded		0	0	0	1	4	Problem
4320-21-1-L1	Salmon Brook; Sumatra Pond		0		0	2	2	0		0	Commercial and Agricultural		1	0	0	3	8	Problem
4320-22-1	Unnamed Stream		0		0	1	2	0		3	Mostly Agricultural with some wooded and minimal residential		1	0	0	2	9	Problem
4320-26-1-L1	Salmon Brook		0		0	2	2	0		0	Agricultural and Residential	2	1	0	0	2	9	Problem

Scoring Criteria:

- <sup>1</sup> Previous screening results indicate likely sewer input if any of the following are true:
- 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
- <sup>2</sup> Catchments that discharge to or in the vicinity of any of the following areas: public beaches, recreational areas, drinking water supplies, or shellfish beds
- <sup>3</sup> Receiving water quality based on latest version of State of Connecticut Integrated Water Quality Report.



## **ATTACHMENT IV- Miscellaneous Documentation**

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**CONNECTICUT DEPARTMENT OF  
ENERGY & ENVIRONMENTAL PROTECTION**

**REPORT OF PETROLEUM OR CHEMICAL PRODUCT  
DISCHARGE, SPILLAGE OR RELEASE**

**1.) When did the incident occur?**

Date: May 5, 2021

Time: 10:00 AM

**2.) Where did the incident occur?**

Approximately 40 ft. northeast of 113 Higley Road  
Higley Road  
Granby, CT 06090

**3.) How did the incident occur?**

During routine town-road maintenance on Higley Road, a hydraulic fitting failed on the town's backhoe, releasing ~8-10-gallons of hydraulic fluid on the road surface. A light rain was occurring at the time of the incident.

**4.) Under whose control was the chemical or petroleum product at the time of this incident? Please give their name, mailing address and telephone number.**

Town of Granby  
Kirk Severance: Director of Public Works  
(860) 653-8960  
Granby Public Works  
52 N. Granby Road, CT

**5.) Who is the owner of the property onto which the spill occurred? If this is corporate property or property owned jointly, who represents the owner? Please give their name, mailing address and telephone number.**

**Owner:** Town of Granby  
**Representative:** Kirk Severance, Director of Public Works  
(860) 653-8960  
52 N. Granby Road  
Granby, CT 06090

**6.) When was the incident verbally reported to the Department of Energy & Environmental Protection?**

**Date:** 5/5/2021 **Time:** ~12PM

**To:** Staff ID at CTDEEP Spill Hotline **Case #:** 2021-1668

Spill Case No. #CT 2021-1668

- 7.) **Who reported the incident and whom were they representing? Please give their name, title, mailing address and telephone number.**

**Representative Reporting on Behalf of the Town of Granby:**

Joel Faria  
Deputy Director of Operations  
*Granby Public Works*  
52 N. Granby Road  
Granby, CT  
(860) 653-8960

- 8.) **What were the chemical or petroleum products released, spilled or discharged? Give an exact description of each of the materials involved in the incident, including chemical names, percent concentrations, trade names, etc. If the chemicals are Extremely Hazardous Substances or CERCLA hazardous substances they must be identified as such and include the reportable quantity (RQ). Please attach a Material Safety Data Sheet (MSDS) for each chemical involved. What were the quantities of chemicals that were released, spilled or discharged to each environmental medium (air, surface water, soil, and groundwater)? [NOTE: CGS 22a-450 requires the reporting of any amount of any substance or material released to the environment].**

Approximately eight (8) to ten (10) gallons of hydraulic fluid were released to the paved roadway, as well as a low-lying curb area bordered by grass.

- 9.) **Did any of the chemical travel beyond the property line? [NOTE: materials that enter the ground water are considered to have gone beyond the property line.]**

Yes. A small amount of hydraulic fluid was released to the grassy area bordering the low-lying curb. All other hydraulic fluid was contained within three (3) catch basins along the Higley Road shoulder.

- 10.) **What actions were taken to respond to and contain the release, spill or discharge?**

Immediately following the spill, the backhoe was moved out of a high-flow area, and turned off. Sand and dirt booms were quickly constructed to contain any fluids traveling down the steep, paved roadway. Other methods of containment included absorbent pads, layers of sand put on the roadway, and absorbent pads/socks in and around the catch basins.

The three (3) catch basins containing hydraulic fluids were vacuumed out, totaling 330-gallons of an oil/water mixture. The grass beyond the low-lying curb area containing a small amount of fluid was scraped a few inches down to remove any contaminated soil. Sand was swept and containerized into drums, with more sand being put down due to rainy conditions. This sand was again swept and containerized the following day. Absorbent socks were placed inside the three (3) catch basins and at a corresponding outfall, which will be left in place for a week before disposal. Approximately four (4) 55-gallon drums of contaminated solid material were removed from the site.

**11.) What actions are being taken to prevent reoccurrence of an incident of this type?**

Preventative actions will continue to include the use of spill equipment, training, and safe response to spills. The incident was related to a common mechanical failure.

**12.) Were there any injuries as a result of the incident? If so, list the names of exposed individuals, their addresses, and phone numbers and describe their injuries.**

There were no injuries as a result of the incident.

**13.) What is the appropriate advice regarding medical attention necessary for exposed individuals?**

No contact by individuals reported.

**14.) Is there any known or anticipated health risks, acute or chronic, associated with the release of this chemical or medical advice that should be communicated?**

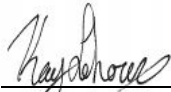
None.

**15.) Was the incident completely cleaned up by the time this report was submitted? If not, what are the anticipated remedial actions and their duration?**

Yes. No further actions associated with the hydraulic fluid release are planned at this time.

**16.) CERTIFICATION**

I hereby affirm that the foregoing statement is true to the best of my knowledge.

	Environmental Scientist	5/20/2021	
Signature	Title	Date	
Kay Lehoux- ATC Group Services, LLC		(860) 282-9924	
Print Name		Telephone Number	
290 Roberts Street	East Hartford	CT	06108
Street Address/P.O. Box	City/Town	State	Zip

This form may be reproduced or computerized as long as it contains all of the information requested and is on an 8 1/2 x 11 white paper, black type format. For serious incidents the questions may be answered in a narrative format which must include the preparer's affidavit.

Spill Case No. #CT 2021-1668

MAIL TO: Connecticut Department of Energy and Environmental Protection  
Oil and Chemical Spill Section  
79 Elm Street  
Hartford, CT 06106  
(860)424-3338 (routine calls)

Spill Case No. #CT 2021-1668

# PHOTOGRAPHIC LOG

ATC Group Services, LLC  
290 Roberts St  
East Hartford, Connecticut



<b>Client Name:</b> <i>Town of Granby</i>	<b>Site Location:</b> <i>Higley Road, Granby, CT</i>	<b>ATC Project #:</b> <i>22050</i>
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**Photograph #1**

**Description:**  
*Spill flow direction.*



**Photograph #2**

**Description:**  
*Low-lying curb with grassy area containing small amount of spilled hydraulic fluid.*





# PHOTOGRAPHIC LOG

ATC Group Services, LLC  
290 Roberts St  
East Hartford, Connecticut



<b>Client Name:</b> <i>Town of Granby</i>	<b>Site Location:</b> <i>Higley Road, Granby, CT</i>	<b>ATC Project #:</b> <i>22050</i>
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**Photograph #3**

**Description:**

*Initial catch basin  
with majority of  
hydraulic fluid.*



**Photograph #4**

**Description:**

*Initial catch basin  
with majority of  
hydraulic fluid.*



# PHOTOGRAPHIC LOG

ATC Group Services, LLC  
290 Roberts St  
East Hartford, Connecticut



<b>Client Name:</b> <i>Town of Granby</i>	<b>Site Location:</b> <i>Higley Road, Granby, CT</i>	<b>ATC Project #:</b> <i>22050</i>
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**Photograph #5**

**Description:**

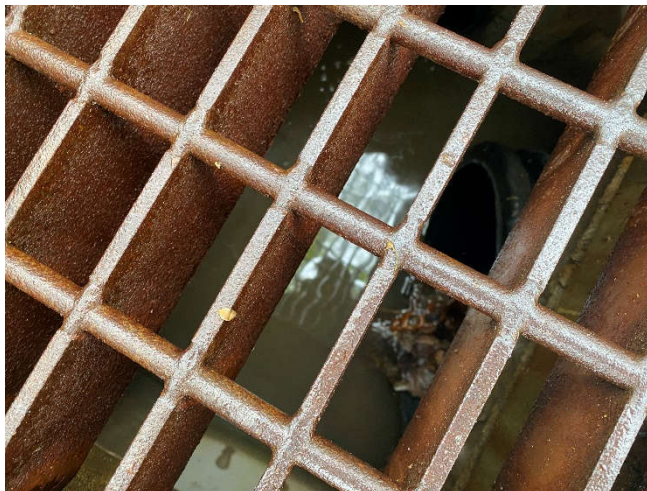
*Second catch basin with slight sheen of hydraulic fluid.*



**Photograph #6**

**Description:**

*Initial catch basin with majority of hydraulic fluid.*





# PHOTOGRAPHIC LOG

ATC Group Services, LLC  
290 Roberts St  
East Hartford, Connecticut



<b>Client Name:</b> <i>Town of Granby</i>	<b>Site Location:</b> <i>Higley Road, Granby, CT</i>	<b>ATC Project #:</b> <i>22050</i>
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## Photograph #7

**Description:**

*Associated outfall showing no release and/or sheen from hydraulic fluid.*



## Photograph #8

**Description:**

*Preventative sock at end of outfall discharge.*

