



**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, 2019 through December 31, 2019</u>                                                                                                                                                                     |                |
| 2. Provide the registration number for the existing general permit registration: <u>GSM000029</u>                                                                                                                                                         |                |
| <b>3. Registrant Type (check one):</b>                                                                                                                                                                                                                    | <b>Fees</b>    |
| <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>kserverance@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: **ATC Group Services LLC**

Mailing Address: 290 Roberts Street - Suite 301

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@atcgs.com

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

Name: **ATC Group Services LLC**

Mailing Address: 290 Roberts Street - Suite 301

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@atcgs.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: **Nathan L. Jacobson & Associates, Inc.**

Mailing Address: 86 Main Street

City/Town: Chester

State: CT Zip Code: 06412

Business Phone: 860-526-9591

ext.:

Contact Person: Wade Thomas

Phone: 860-526-9591 ext.

E-mail: wthomas@nlja.com

Service Provided: **Preparation of Annual Report**

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.

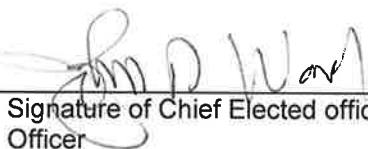
I certify that this annual report transmittal is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

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

4/15/2019  
Date

**John Ward**

Printed Name of Chief Elected official or Principal Executive Officer

**Town Manager**  
Title (if applicable)

Wade M. Thomas

Signature of Preparer (if different than above)

4/13/2019  
Date

**Wade Thomas**

Printed Name of Preparer

Associate  
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.



**Town of Granby, Connecticut**

**2019 Annual Report**

**General Permit for the Discharge of Stormwater  
from Small Municipal Separate Storm Sewer Systems**

**Permit Number GSM000029**

MS4 General Permit  
Town of Granby 2019 Annual Report  
Existing MS4 Permittee  
Permit Number GSM 000029  
January 01, 2019 - December 31, 2019

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This report documents the Town of Granby's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 01, 2019 to December 31, 2019.

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

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

**1.1 BMP Summary**

| BMP                                         | Status    | Activities in current reporting period                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Measurable goal                                       | Department / Person Responsible                                               | Due           | Date completed or projected completion date | Additional details |
|---------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------|---------------|---------------------------------------------|--------------------|
| 1-1 Implement public education and outreach | Completed | Clean Waters Starting in Your Home and Yard Fact Sheets prepared by a collaborative effort between the Connecticut Sea Grant Extension Program and the University of Connecticut Cooperative Extension System NEMO Program were made available to the public on the town website at: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a><br><br>The following Fact Sheets are available: | Make NEMO Fact Sheets available to the general public | Department of Public Works/<br>Kirk A. Severance,<br>Director of Public Works | July 01, 2018 | December 01, 2017                           |                    |

|                                                            |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                               |              |                          |
|------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------|--------------------------|
|                                                            |         | <p>Fact Sheet 2, <i>Managing Your Household Chemicals</i></p> <p>Fact Sheet 3, <i>Caring for Your Septic System</i></p> <p>Fact Sheet 4 <i>Integrated Pest Management and Biological Controls for the Homeowner</i></p> <p>Fact Sheet 5, <i>Conservation Landscaping for Water Quality</i></p> <p>Fact Sheet 6, <i>Animal Waste and Water Quality</i></p> <p>Fact Sheet 8, <i>Lawn Care the Environmentally Friendly Way</i></p> <p>Consideration may be given to provision of 9 NEMO Technical Papers to land use commission members.</p> |                                                               |              |                          |
| 1-2 Address education/ outreach for pollutants of concern* | Ongoing | <p>The following Clean Waters Starting in Your Home and Yard Fact Sheets discuss bacteria were available to the public on the town website at:<br/> <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a>:</p> <p>Fact Sheet 3, <i>Caring for Your Septic System</i></p> <p>Fact Sheet 6, <i>Animal Waste and Water Quality</i></p>                                                                                                          | Department of Public Works/<br>Kirk A. Severance,<br>Director | July 1, 2018 | <b>December 01, 2017</b> |

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

Additional Fact Sheets and stormwater quality educational materials will be made available to the public on the town website and/or at town public gathering places.

**1.3 Details of activities implemented to educate the community on stormwater**

| Program Element/Activity | Audience (and number of people reached) | Topic(s) covered | Pollutant of Concern addressed (if applicable) | Responsible dept. or partner org. |
|--------------------------|-----------------------------------------|------------------|------------------------------------------------|-----------------------------------|
|                          |                                         |                  |                                                |                                   |
|                          |                                         |                  |                                                |                                   |
|                          |                                         |                  |                                                |                                   |

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

### 2.1 BMP Summary

| BMP                                                                           | Status            | Activities in current reporting period                                                                                                                                                                                                                                                             | Measurable goal                                                              | Department / Person Responsible                          | Due               | Date completed or projected completion date                 | Additional details                                                               |
|-------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------|-------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------|
| 2-1 Comply with public notice requirements for the Stormwater Management Plan | Completed         | A hard copy of the Draft 2017 Stormwater Management Plan (SMP) was made available to the public for review and comment on the Town Website at: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a> | Complied with requirements                                                   | Department of Public Works / Kirk A. Severance, Director | April 03, 2017    | The 2017 SMP was available to the public on April 12, 2017. | No public comments were received.                                                |
| 2-2 Comply with public notice requirements for Annual Reports                 | Completed         | The Draft 2017 MS4 Annual Report will be made available for public review and comment on the town website at: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a>                                  | A Draft copy was provided for public review and comment in March 2018        | Department of Public Works / Kirk A. Severance, Director | February 15, 2018 | March 2018                                                  | The Annual Report will be revised if any pertinent public comments are received. |
|                                                                               | Completed         | The Draft 2018 MS4 Annual Report will be made available for public review and comment on the town website at: <a href="https://www.granby-ct.gov/public-works/pages/stormwater-management">https://www.granby-ct.gov/public-works/pages/stormwater-management</a>                                  | A Draft copy will be provided for public review and comment in February 2019 | Department of Public Works / Kirk A. Severance, Director | February 15, 2019 | February 2019                                               | The Annual Report will be revised if any pertinent public comments are received. |
|                                                                               | Will be completed | The Draft 2019 MS4 Annual Report will be made available for public review and comment on the town website at:                                                                                                                                                                                      | A Draft copy will be provided for public review and comment                  | Department of Public Works / Kirk A. Severance, Director | February 15, 2020 | February 18, 2020                                           | The Annual Report will be revised if any pertinent public comments are received. |



<https://www.granby-ct.gov/public-works/pages/stormwater-management>

in February  
2020

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

Community outreach activities will consist of providing GIS mapping of Impaired waterbodies in the town and presenting the GIS maps at public meetings.

## 2.3 Public Involvement/Participation reporting metrics

| Metrics                                                                                      | Implemented | Date          | Posted       |
|----------------------------------------------------------------------------------------------|-------------|---------------|--------------|
| Availability of the Stormwater Management Plan announced to public to meet FOIA requirements | Yes         | 04/03/2017    | Town Website |
| Availability of the 2017 MS4 Annual Report announced to public to meet FOIA requirements     | Yes         | March 2018    | Town Website |
| Availability of the 2018 MS4 Annual Report announced to public to meet FOIA requirements     | Yes         | February 2019 | Town Website |
| Availability of the 2019 MS4 Annual Report announced to public to meet FOIA requirements     | Yes         | February 2020 | Town Website |

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

#### 3.1 BMP Summary

| BMP                                                                        | Status      | Activities in current reporting period                                                                                                                                                                                                                                                                                                      | Measurable goal                                                    | Department / Person Responsible                                                                        | Due           | Date completed or projected completion date        | Additional details                                                                                              |
|----------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 3-1 Develop written IDDE program                                           | Completed   | The Town of Granby has developed a written IDDE program that includes an Illicit Discharge Reporting Form for use by the general public to report suspected illicit discharges and a investigation protocol for town officials to respond to reported illicit discharges. The IDDE program was presented to the DPW staff in December 2017. | Written IDDE Program                                               | Department of Public Works/ATC Group Services LLC                                                      | July 01, 2018 | The IDDE Program was implemented in November 2017. | The Department of Public Works is the central reporting agency for citizen illicit discharge complaint filings. |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas | In Progress | MS4 stormwater outfall mapping was conducted by the Department of Public Works in 2005-2006 and 2009. The stormwater outfall mapping was compiled on a ESRI GIS layer. The GIS mapping will be updated to include impaired waters as contained in the State of Connecticut, Department of                                                   | Development of an ESRI GIS map layer with MS4 stormwater outfalls. | Department of Public Works/ ATC Group Services LLC Subconsultant Nathan L. Jacobson & Associates, Inc. | July 01, 2019 | Prior to July 01, 2019                             | All catch-basins and outfalls added as layer in town GIS mapping.                                               |

|                                                              |           |                                                                                                                                                                                                                                                                                                       |                                     |                                                          |               |                                                                                                      |                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              |           | Energy and Environmental Protection 2018 Integrated Water Quality Report. The stormwater outfalls in the impaired waters will be identified.                                                                                                                                                          |                                     |                                                          |               |                                                                                                      |                                                                                                                                                                                                                                                 |
| 3-3 Implement Citizen Reporting Program                      | Completed | A program to allow the general public to report suspected illicit discharges was established. The form can be viewed on the town website at: <a href="https://www.granby-ct.gov/public-works/files/idde-reporting-form">https://www.granby-ct.gov/public-works/files/idde-reporting-form</a>          |                                     | Board of Selectmen, Town Manager/ ATC Group Services LLC | July 01, 2017 | November 2018.                                                                                       | Illicit discharge reporting form available at the DPW or online on the DPW website at <a href="https://www.granby-ct.gov/public-works/files/idde-information-public">https://www.granby-ct.gov/public-works/files/idde-information-public</a> . |
| 3-4 Establish legal authority to prohibit illicit discharges | In Place  | An Illicit Discharge Detection and Elimination Ordinance was enacted at a Town Meeting on November 21, 2016 and can be viewed on the town website at: <a href="https://www.granby-ct.gov/public-works/files/idde-reporting-form">https://www.granby-ct.gov/public-works/files/idde-reporting-form</a> | IDDE Ordinance Enactment            | Board of Selectmen/Town Manager                          | July 01, 2018 | November 21, 2016                                                                                    | Enacted at a Town Meeting                                                                                                                                                                                                                       |
| 3-5 Develop record keeping system for IDDE tracking          | In Place  | The Department of Public Works has developed a record keeping system as a Microsoft Excel spreadsheet for illicit discharge tracking                                                                                                                                                                  | Develop Microsoft Excel spreadsheet | Department of Public Works and ATC Group Services LLC    | July 01, 2017 | November 2017                                                                                        | The Department of Public Works is the lead contact for the program.                                                                                                                                                                             |
| 3-6 Address IDDE in areas with pollutants of concern         |           | Dry weather screening will be conducted during seasonal low groundwater conditions at outfall which discharge to                                                                                                                                                                                      |                                     |                                                          | Not specified | Dry weather screening was anticipated to have been conducted in the Fall of 2018, however, high Fall | Additional dry weather screening to occur in 2020.                                                                                                                                                                                              |

|  |  |                          |  |  |  |                                                                                                                   |  |
|--|--|--------------------------|--|--|--|-------------------------------------------------------------------------------------------------------------------|--|
|  |  | bacteria impaired waters |  |  |  | rainfall and associated high groundwater conditions would not have made outfall dry weather screening productive, |  |
|  |  |                          |  |  |  |                                                                                                                   |  |

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

Additional dry-weather screening of priority outfalls to be completed in 2020 to identify any potential illicit discharges.

**3.3 List of citizen reports of suspected illicit discharges received during this reporting period.**

| Date of Report       | Location / suspected source | Response taken |
|----------------------|-----------------------------|----------------|
| 2017 - None Reported | Not Applicable              | Not Applicable |
| 2018 - None Reported | Not Applicable              | Not Applicable |
| 2019 - None Reported | Not Applicable              | Not Applicable |

**3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table. The Town of Granby has had no SSOs**

| Location<br>(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) |
|----------------------------------------------------------------------|---------------------------------|-----------------------------------|-----------------------------|----------------------------------------------|-----------------------------------------------------------|--|-------------------------------|
|                                                                      |                                 |                                   |                             |                                              |                                                           |  |                               |

**3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.**

See above.

**3.6 Provide a summary of actions taken to address septic failures using the table below.**

| Location and nature of structure with failing septic systems                     | Actions taken to respond to and address the failures                                                                                                                                                                                                                                                                                                                                   | Impacted waterbody or watershed, if known |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Further evaluation of information received to determine potential problem areas. | Town coordinated with the Farmington Valley Health District in early 2019 regarding addresses in Town where septic system repairs were completed. Evaluation of repairs will be made to determine if certain sections of Town have patterns of septic repairs and potential priority areas. Evaluation will be considered in the selection of the 6 priority outfalls by July 1, 2020. | TBD                                       |

### 3.7 IDDE reporting metrics

| Metrics                                                              |                                                   |
|----------------------------------------------------------------------|---------------------------------------------------|
| Estimated or actual number of MS4 outfalls                           | 188                                               |
| Estimated or actual number of interconnections                       | In Evaluation                                     |
| Outfall mapping complete                                             | 100%                                              |
| Interconnection mapping complete                                     | 0%                                                |
| System-wide mapping complete (detailed MS4 infrastructure)           | 90%                                               |
| Outfall assessment and priority ranking                              | To be Initiated                                   |
| Dry weather screening of all High and Low priority outfalls complete | 100% to be Inspected a second time in Spring 2020 |

|                                                         |     |
|---------------------------------------------------------|-----|
| Catchment investigations complete                       | 6   |
| Estimated percentage of MS4 catchment area investigated | 20% |

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

The Department of Public Works will be provided with a copy of the publication entitled *Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities*, Published January 2003 by the New England Interstate Water Pollution Control Commission. Annual training is provided to all DPW and applicable town staff. Training was completed most recently on November 26, 2019.

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

##### 4.1 BMP Summary

| BMP                                                                                                                          | Status                  | Activities in current reporting period                                                                                                                                         | Measurable goal                | Department / Person Responsible                                                                 | Due           | Date completed or projected completion date | Additional details                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------|---------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 General Permit | To be Initiated in 2018 | The required elements of Minimum Control Measure No. 4 - Construction Site Runoff Control will be incorporated into the land use regulations were provided to the town.        | In Process                     | Community Development Department Director/ Abigail Kenyon, AICP and Land Use Commission Members | July 01, 2019 |                                             | Representatives from Halloran & Sage LLP have indicated that a Regional Planning Agency is in the process of developing model land use regulations to meet the requirements of the 2017 MS4 General Stormwater Permit. |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval                               | Ongoing                 | 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. | Interdepartmental Coordination | Land Use Commission Members                                                                     | July 01, 2017 | Ongoing                                     | Ongoing review of construction and building permits in areas of concern by Engineering and P&Z staff.                                                                                                                  |
| 4-3 Review site plans for stormwater quality concerns                                                                        | Ongoing                 | Kevin W. Clark, P.E., L.S., Town Engineer encourages the use of LID and                                                                                                        | Compliance                     | Town Engineer/ Kevin W. Clark, P.E., L.S.                                                       | July 01, 2017 | Ongoing                                     |                                                                                                                                                                                                                        |

|                                                                                                                                                                                                                |         |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                  |                                                                                                              |               |         |                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-4 Conduct site inspections                                                                                                                                                                                   | Ongoing | Stormwater BMPs practices as contained in the 2004 Connecticut Stormwater Quality Manual.<br>The town conducts construction site inspections for proper implementation and maintenance of soil erosion and sediment control measures.                                                                                        | Compliance with Approved Plans                                                                                                                   | Community Development Department Director/ Abigail Kenyon, AICP and Town Engineer/Kevin W. Clark, P.E., L.S. | July 01, 2017 | Ongoing | Ongoing BMPs Inspections by Engineering and P&Z staff during active construction projects with a focus on projects with higher potentials of stormwater runoff. |
| 4-5 Implement procedure to allow public comment on site development                                                                                                                                            | Ongoing | The land use application process allows for public comment on land use applications which are submitted to the Inland Wetlands Agency, Planning Commission, Zoning Commission during the Public Hearing Process when applicable.                                                                                             |                                                                                                                                                  | Community Development Department Director/ Abigail Kenyon, AICP and Land Use Commission Members              | July 01, 2017 | Ongoing |                                                                                                                                                                 |
| 4-6 Implement procedure to notify developers about the CT DEEP General Permit for the Discharge of Stormwater and Dewatering wastewaters from Construction Activities (Construction Stormwater General Permit) | Ongoing | Since the inception of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Town Engineer, Kevin W. Clark, P.E., L.S., has made developer's engineers aware of the need to register for the Construction Stormwater General Permit in engineering review letters which | Awareness of the need to register for the General permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities | Community Development Department Director/Abigail Kenyon, AICP and Town Engineer/Kevin W. Clark, P.E., L.S.  | July 01, 2017 | Ongoing |                                                                                                                                                                 |



|  |  |                                                                     |  |  |  |  |  |
|--|--|---------------------------------------------------------------------|--|--|--|--|--|
|  |  | are typically prepared as part of the land use application process. |  |  |  |  |  |
|  |  |                                                                     |  |  |  |  |  |

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

|  |
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|  |
|--|

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

### 5.1 BMP Summary

| BMP                                                                                                                        | Status            | Activities in current reporting period                                                                                             | Measurable goal                           | Department / Person Responsible                                                                                                          | Due           | Date completed or projected completion date | Additional details                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning | Under Development | The land use regulations will be revised to incorporate the Minimum Control Measure No. 5 into the applicable land use regulations | The proposed revisions are being reviewed | Community Development Department Director/ Abigail Kenyon, AICP and Land Use Commission Members                                          | July 01, 2021 |                                             | Representatives from Halloran & Sage LLP have indicated that a Regional Planning Agency is in the process of developing model land use regulations to meet the requirements of the 2017 MS4 General Stormwater Permit. |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects                                   | Ongoing           | Continuing                                                                                                                         | Compliance                                | Community Development Department Director/Abigail Kenyon, AICP, Town Engineer/Kevin W. Clark, P.E., L.S. and Land Use Commission Members | July 01, 2019 | July 01, 2019                               | Current town building and P&Z regulations generally meet the requirements 5-2.                                                                                                                                         |
| 5-3 Identify retention and detention ponds in priority areas                                                               | Under Development | Retention Ponds, Detention Ponds and Hydrodynamic                                                                                  | Moving to Compliance                      | Department of Public Works/                                                                                                              | July 01, 2019 | July 01, 2019                               | GIS layer of retention ponds to be included in 2020.                                                                                                                                                                   |

|                                                                                         |                   |                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                               |               |               |                                                                                                  |
|-----------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|--------------------------------------------------------------------------------------------------|
|                                                                                         |                   | Separators were inventoried. Retention ponds owned by the Town were inspected by town Engineering staff and documented in 2019.                                                                                                                                      |                                                                                                                                                                                                                                   | ATC Group Services LLC, Town Engineer/Kevin W. Clark, P.E., L.S. and Subconsultant Nathan L. Jacobson & Associates, Inc. Department of Public Works/ Kirk A. Severance, Director and Town Engineer/Kevin W. Clark, P.E., L.S. |               |               |                                                                                                  |
| 5-4 Implement long-term maintenance plan for stormwater basins and treatment structures | Under Development | Long Term Operation and Maintenance Plans internal policy developed for the Town. The Long-Term O&M Plans include regular inspections and documentation of all town-owned retention basins on an as-needed basis, with a minimum full inspection once every 5 years. | A Post-Construction Stormwater Management Facility Operation & Maintenance Plan Manual with and Effective Date of July 01, 2019 was prepared.<br><br>It is anticipated that the inspection of town facilities will begin in 2020. |                                                                                                                                                                                                                               | July 01, 2019 | July 01, 2019 |                                                                                                  |
| 5-5 DCIA mapping                                                                        | Completed         | The development of Baseline 2012 DCIA condition was completed in 2018 from base mapping prepared by UConn CLEAR.                                                                                                                                                     | The DCIA to MS4 stormwater outfalls discharging to Impaired Waters in the 2018 Integrated Water Quality Report and in watersheds with a DCIA of greater than                                                                      | ATC Group Services LLC Subconsultant Nathan L. Jacobson & Associates, Inc.                                                                                                                                                    | July 01, 2020 | January 2019  | Compilation of projects that have increased or decreased the DCIA since 2012 will start in 2020. |

|                                                                          |                 |      |                                                                                                                                                                                                                                                                  |                                                                                                              |               |  |                                                                                                       |
|--------------------------------------------------------------------------|-----------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------|--|-------------------------------------------------------------------------------------------------------|
| 5-6 Address post-construction issues in areas with pollutants of concern | To Be Developed | None | 11 percent will start in 2020.<br><br>Stormwater outfalls discharging to waters identified as impaired in the 2016 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11 percent will be subject to enhanced water quality treatment. | Community Development Department Director/Abigail Kenyon, AICP and Town Engineer, Kevin W. Clark, P.E., L.S. | Not specified |  | Ongoing review of construction and building permits in areas of concern by Engineering and P&Z staff. |
|                                                                          |                 |      |                                                                                                                                                                                                                                                                  |                                                                                                              |               |  |                                                                                                       |

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

|  |
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**5.3 Post-Construction Stormwater Management reporting metrics**

| Metrics                                                   |                                 |
|-----------------------------------------------------------|---------------------------------|
| Baseline (2012) Directly Connected Impervious Area (DCIA) | 21.19 Acres                     |
| DCIA disconnected (redevelopment plus retrofits)          | 0 acres this year/0 acres total |

|                                         |                                                          |
|-----------------------------------------|----------------------------------------------------------|
| Retrofits completed                     | None                                                     |
| DCIA disconnected                       | 0% this year / Total Acreage Since 2012 To Be Determined |
| Estimated cost of retrofits             | Not Applicable                                           |
| Detention or retention ponds identified | 5 this year /5 total                                     |

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

Based on information contained in the Factsheet: *Town of Granby Water Quality and Stormwater Summary*, prepared by the CT DEEP, 675.70 acres of the town has an impervious area exceeding 12% which is approximately 7.16% of the town. 232.83 acres have an impervious cover of ranging from 12% to 25%, 344.14 acres have an impervious cover ranging from 26% to 50%, 77.24 acres have an impervious cover ranging from 51% to 75% and 21.49 acres have an impervious cover ranging from 76% to 100%.

Based on information contained in the MS4 mapping tab of Connecticut Environmental Conditions Online The impervious surface area consists of 129.50 acres of buildings, 209.78 acres of roads and 229.33 acres of other impervious surfaces for a total impervious surface area of 568.61 acres.

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 for each town or towns.

In that the 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. The ConnDOT impervious road areas were then determined for each CT DEEP drainage basin. The ConnDOT impervious road areas were then deducted from the total impervious road area to determine a town owned impervious road area for each CT DEEP drainage basin. 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  $DCIA\% = 0.01*(IA\%)^{2.0}$

For an impervious area between 6% and 12 %:

50% of the area was assigned to the partial connectivity Sutherland Equation where  $DCIA\% = 0.04*(IA\%)^{1.7}$   
and 50% was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10*(IA\%)^{1.5}$

For an impervious area between 12% and 18 %:

50% of the area was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10*(IA\%)^{1.5}$   
and 50% was assigned to the high connectivity Sutherland Equation where  $DCIA\% = 0.40*(IA\%)^{1.2}$

For an impervious area of greater than 18 %:

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

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 to include the UConn CLEAR State Road Impervious Area (Acres) and Town Road Impervious Area (Acres). No major 2012 Baseline DCIA computation discrepancies were noted.

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

### 6.1 BMP Summary

| BMP                                                    | Status            | Activities In current reporting period                                                                               | Measurable goal      | Department / Person Responsible                         | Due           | Date completed or projected completion date | Additional details                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------|---------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-1 Develop/implement formal employee training program | Started           | A Street Sweepings & Catch Basin Cleanings Management Plan was developed.                                            | Moving to Compliance | Department of Public Works and ATC Group Services LLC   | July 01, 2017 | December 11, 2017                           | A Street Sweepings & Catch Basin Cleanings Management Plan Training Session was developed by ATC Group Services LLC. The Training Session was held annually in 2017, 2018 and 2019 and was attended by employees of the Department of Public Works. The Street Sweepings & Catch Basin Cleanings Management Plan is kept at the DPW Facility for use and reference. |
| 6-2 Implement MS4 property and operations maintenance  | Under Development | Development of an online tracking system for maintenance and retrofit activities associated with MS4 infrastructure. | Moving to Compliance | Department of Public Works/ Kirk A. Severance, Director | July 01, 2018 | Fall 2017                                   | The DPW is updating the invoice and work tracking system to better document ongoing MS4 infrastructure maintenance and retrofits.                                                                                                                                                                                                                                   |
| 6-3 Implement coordination with interconnected MS4s    | Not Applicable    | None                                                                                                                 | Not Applicable       | Department of Public Works/ Kirk A. Severance, Director | July 01, 2017 | Not Applicable                              |                                                                                                                                                                                                                                                                                                                                                                     |

|                                                                                 |                                         |                                                                                                 |                      |                                                         |               |               |                                                                                                             |
|---------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------|---------------|---------------|-------------------------------------------------------------------------------------------------------------|
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | To Be Developed and Implemented in 2018 | Meetings with DPW, P&Z, Engineering and outside consultation for interdepartmental coordination | Moving to Compliance | Department of Public Works and ATC Group Services LLC   | July 01, 2017 | July 01, 2018 | Continued meetings with DPW, P&Z, Engineering and outside consultation for additional pollutant reductions. |
| 6-5 Evaluate additional measures for discharges to impaired waters*             | To Be Implemented in 2018               | Meetings with DPW, P&Z, Engineering and outside consultation for interdepartmental coordination | Moving to Compliance | Department of Public Works and ATC Group Services LLC   | July 01, 2017 |               | Continued meetings with DPW, P&Z, Engineering and outside consultation for additional pollutant reductions. |
| 6-6 Track projects that disconnect DCIA                                         | Initiated                               | None                                                                                            | Moving to Compliance | Department of Public Works/ Kirk A. Severance, Director | July 01, 2017 |               | Ongoing review of projects where a disconnect has occurred since 2012.                                      |
| 6-7 Implement infrastructure repair/rehab program                               | Initiated                               | Ongoing                                                                                         | Moving to Compliance | Department of Public Works/ Kirk A. Severance, Director | July 01, 2021 |               | Ongoing inspections and maintenance of stormwater infrastructure throughout town.                           |
| 6-8 Develop/implement plan to identify/prioritize retrofit projects             | To Be Implemented                       | Initiated                                                                                       | Moving to Compliance | Department of Public Works/ Kirk A. Severance, Director | July 01, 2020 |               | Track previous – past 5 years. Begin to track additional retrofits/redevelopments as they are completed     |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA                        | To Be Implemented                       | None                                                                                            | Moving to Compliance | Department of Public Works/ Kirk A. Severance, Director | July 01, 2022 |               |                                                                                                             |
| 6-10 Develop/implement street sweeping program                                  | Ongoing                                 | The Town of Granby currently implements a road sweeping program.                                | Continuing           | Department of Public Works/ Kirk A. Severance, Director | July 01, 2017 |               | The road sweeping program was developed to address known areas of high sediment accumulation.               |
| 6-11 Develop/implement catch basin cleaning program                             | Ongoing                                 | The Town of Granby implements a catch basin cleaning program whereby                            | Continuing           | Department of Public Works/ Kirk A.                     | July 01, 2020 |               | The catch basin cleaning program was developed to address                                                   |



|                                                  |         |                                                                                                                                             |            |                                                       |             |  |                                                                                                 |
|--------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------|-------------|--|-------------------------------------------------------------------------------------------------|
|                                                  |         | vactoring of catch basins is subcontracted.                                                                                                 |            | Severance, Director                                   |             |  | known areas of high sediment accumulation.                                                      |
| 6-12 Develop/implement snow management practices | Ongoing | Alternate road deicing mixtures are currently being utilized and will be modified as cost-effective emerging technologies become available. | Continuing | Department of Public Works and ATC Group Services LLC | Jul 1, 2018 |  | DPW staff are aware of risks associated with snow distribution and potential effects of runoff. |
|                                                  |         |                                                                                                                                             |            |                                                       |             |  |                                                                                                 |

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

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**6.3 Pollution Prevention/ Good Housekeeping reporting metrics**

|                                          |                                                                                  |
|------------------------------------------|----------------------------------------------------------------------------------|
| <b>Metrics</b>                           |                                                                                  |
| Employee training provided for key staff | 2017 - December 19, 2017<br>2018 - December 21, 2018<br>2019 - November 26, 2019 |
| <b>Street sweeping</b>                   |                                                                                  |
| Lane miles swept                         | 2017 - 100± out of 184.68<br>2018 - 0<br>2019 - 116.2 miles                      |
| Volume (or mass) of material collected   | 2017 - 450± Cubic Yards<br>2018 - 0 Cubic Yards<br>2019 - 400± Cubic Yards       |
| <b>Catch basin cleaning</b>              |                                                                                  |
| Total catch basins in priority areas     | Not Known                                                                        |
| Total catch basins in MS4                | 1,340±                                                                           |
| Catch basins inspected                   | 2017 - 480±<br>2018 - 700±<br>2019 - 500±                                        |
| Catch basins cleaned                     | 2017 - 480± Catch Basins were Vactored                                           |

|                                                                                                                                     |                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                     | 2018 - 0 Catch Basins were Vactored<br>2019 - 0± Catch Basins were Vactored                                                                                                                                                                                    |
| Volume (or mass) of material removed from all catch basins                                                                          | 2017 - 180± Cubic Yards<br>2018 - 0 Cubic Yards<br>2019 - 0 Cubic Yards                                                                                                                                                                                        |
| Volume removed from catch basins to impaired waters (if known)                                                                      | 2017 - Volume or Mass Undetermined<br>2018 - Volume or Mass Undetermined<br>2019 - Volume or Mass Undetermined<br>The Volume or Mass removed will be determined in 2020                                                                                        |
| <b>Snow management</b>                                                                                                              |                                                                                                                                                                                                                                                                |
| Type(s) of deicing material used                                                                                                    | Deicing Mix<br>Comprised of 1 Part Sand to 4 Parts NaCl Salt with a Deicing Additive<br>Deicing Additive - Beet Heet® or Safe Melt® 40/60<br>5 Gallons of Deicing Additive per Ton of Salt                                                                     |
| Total amount of each deicing material applied                                                                                       | 2017<br>400 Tons of Sand<br>1,500 Tons NaCl Salt<br>3,000 Gallons Deicing Additive<br>2018<br>400 Tons of Sand<br>1,500 Tons NaCl Salt<br>3,000 Gallons Deicing Additive<br>2019<br>200 Tons of Sand<br>1,500 Tons NaCl Salt<br>3,500 Gallons Deicing Additive |
| Type(s) of deicing equipment used                                                                                                   | One 10-Wheeler Plow/Spreaders<br>Seven 6- Wheeler Plows/Spreaders One Mason Plows/Spreader<br>Most have Ground Speed Controlled Spreaders<br>Application Rate 400 Pounds per Lane Mile (Min.)                                                                  |
| Lane-miles treated                                                                                                                  | 184.68                                                                                                                                                                                                                                                         |
| Snow disposal location                                                                                                              | DPW Facility                                                                                                                                                                                                                                                   |
| Staff training provided on application methods & equipment                                                                          | Annually                                                                                                                                                                                                                                                       |
| <b>Municipal turf management program actions (for permittee properties in basins with N/P Impairments)</b>                          |                                                                                                                                                                                                                                                                |
| Reduction in application of fertilizers (since start of permit)                                                                     | Not Applicable                                                                                                                                                                                                                                                 |
| Reduction in turf area (since start of permit)                                                                                      | Not Applicable                                                                                                                                                                                                                                                 |
| <b>Lands with high potential to contribute bacteria (dog parks, parks with open water, &amp; sites with failing septic systems)</b> |                                                                                                                                                                                                                                                                |

|                                      |                |
|--------------------------------------|----------------|
| Cost of mitigation actions/retrofits | Not Applicable |
|                                      |                |

#### 6.4 Catch Basin Cleaning Program

**Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.**

There are approximately 1,340 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.

#### 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.**

Storm Drainage Retrofit prioritization will be given to stormwater outfalls that are known to result in soil erosion and sedimentation. Prioritization will be given to the MS4 stormwater outfalls located within impaired water drainage basins with particular emphasis placed on stormwater outfalls which are located on fine grained glacial till soils.

**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.**

The 2012 Baseline Directly Connected Impervious Area was determined to be 21.19 acres as reported above in Section 5.3 using the DCIA computation methodology as described in Section 5.4.

The CT DEEP goal of 2% disconnection of DCIA from July 01, 2012 to June 30, 2022 may be difficult given the rural character of much of the town. Using the 2012 Baseline DCIA of 21.19 acres, a goal of 0.42 acre of DCIA reduction is the goal by July 01, 2022.

**Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.**

The annual CT DEEP goal of 1% disconnection of DCIA beyond June 30, 2022 may be difficult given the rural character of much of the town and the general lack of redevelopment.

## Part II: Impaired waters investigation and monitoring

### 1. Impaired waters investigation and monitoring program

**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.**

2018 - Wet weather sampling of outfalls directly discharging to the impaired waters was conducted as follows:

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

Wet weather samples were obtained from sixteen outfalls (13, 14, 15, 44, 73, 74, 86, 102, 103, 104, 105, 109, 152, 153, 154 and 155) on December 28, 2018. Nine of the samples were resampling of the September 10, 2018 sampling.

One wet weather sample was also obtained from Salmon Brook proximal to outfalls 103 and 104 on December 28, 2018.

The wet weather sampling locations are highlighted on a pdf following the text.

2019 - No Dry Weather Screening or Wet Weather Sampling of outfalls to impaired waters was conducted. In August 2019, the Water Quality Report indicated that one of the two impaired water bodies in the Town of Granby was no longer impaired. Additional evaluation of the priority areas in the Town and focus of dry and wet weather screening/sampling is being evaluated in early 2020.

Dry weather inspections were completed at all outfalls that discharge to impaired waterbodies in 2018. Additional follow-up dry weather inspections will be completed at each of those outfalls in the spring of 2020.

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

### 2.1 Screening data collected under 2017 permit

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

| <b>Outfall ID</b> | <b>Sample date</b> | <b>Parameter<br/>(Nitrogen,<br/>Phosphorus,<br/>Bacteria, or Other<br/>pollutant of<br/>concern)</b> | <b>Results<br/>MPN/100ML</b>     | <b>Name of<br/>Laboratory<br/>(if used)</b>                 | <b>Follow-up required?</b> |
|-------------------|--------------------|------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|----------------------------|
| OF-13             | 09/10/18           | Bacteria                                                                                             | E. Coli 20<br>Total >24,200      | Phoenix<br>Environmental<br>Laboratories,<br>Inc. (Phoenix) |                            |
| OF-14             | 09/10/18           | Bacteria                                                                                             | E. Coli >24,200<br>Total >24,200 | Phoenix                                                     |                            |
| OF-15             | 09/10/18           | Bacteria                                                                                             | E. Coli 269<br>Total >24,200     | Phoenix<br>Environmental                                    |                            |
| OF-73             | 09/10/18           | Bacteria                                                                                             | E. Coli 6,870<br>Total >24,200   | Phoenix<br>Environmental                                    |                            |
| OF-74             | 09/10/18           | Bacteria                                                                                             | E. Coli 13,000<br>Total >24,200  | Phoenix<br>Environmental                                    |                            |
| OF-102            | 09/10/18           | Bacteria                                                                                             | E. Coli 9,210<br>Total >24,200   | Phoenix<br>Environmental                                    |                            |
| OF-103            | 09/10/18           | Bacteria                                                                                             | E. Coli 12,000<br>Total >24,200  | Phoenix<br>Environmental                                    |                            |
| OF-104            | 09/10/18           | Bacteria                                                                                             | E. Coli 4,880<br>Total >24,200   | Phoenix<br>Environmental                                    |                            |
| OF-105            | 09/10/18           | Bacteria                                                                                             | E. Coli 9,210<br>Total >24,200   | Phoenix<br>Environmental                                    |                            |
| OF-13             | 12/28/18           | Bacteria                                                                                             | E. Coli 4,110<br>Total 7,270     | Phoenix<br>Environmental                                    |                            |
| OF-14             | 12/28/18           | Bacteria                                                                                             | E. Coli >24,200<br>Total >24,200 | Phoenix<br>Environmental                                    |                            |
| OF-15             | 12/28/18           | Bacteria                                                                                             | E. Coli <10<br>Total 8,660       | Phoenix<br>Environmental                                    |                            |
| OF-44             | 12/28/18           | Bacteria                                                                                             | E. Coli 10<br>Total 2,910        | Phoenix<br>Environmental                                    |                            |
| OF-73             | 12/28/18           | Bacteria                                                                                             | E. Coli 256<br>Total 9,210       | Phoenix<br>Environmental                                    |                            |
| OF-74             | 12/28/18           | Bacteria                                                                                             | E. Coli <10<br>Total 17,300      | Phoenix<br>Environmental                                    |                            |
| OF-86             | 12/28/18           | Bacteria                                                                                             | E. Coli <10<br>Total 1,620       | Phoenix<br>Environmental                                    |                            |
| OF-102            | 12/28/18           | Bacteria                                                                                             | E. Coli 41<br>Total 1,790        | Phoenix<br>Environmental                                    |                            |

|                      |          |          |                             |                          |  |
|----------------------|----------|----------|-----------------------------|--------------------------|--|
| OF-103               | 12/28/18 | Bacteria | E. Coli 120<br>Total 5,480  | Phoenix<br>Environmental |  |
| OF-104               | 12/28/18 | Bacteria | E. Coli 10<br>Total 14,100  | Phoenix<br>Environmental |  |
| OF-105               | 12/28/18 | Bacteria | E. Coli <10<br>Total >2,610 | Phoenix<br>Environmental |  |
| OF-109               | 12/28/18 | Bacteria | E. Coli 433<br>Total 17,300 | Phoenix<br>Environmental |  |
| OF-152               | 12/28/18 | Bacteria | E. Coli <10<br>Total 1,840  | Phoenix<br>Environmental |  |
| OF-153               | 12/28/18 | Bacteria | E. Coli <10<br>Total 8,160  | Phoenix<br>Environmental |  |
| OF-154               | 12/28/18 | Bacteria | E. Coli 20<br>Total 305     | Phoenix<br>Environmental |  |
| OF-155               | 12/28/18 | Bacteria | E. Coli 20<br>Total 11,200  | Phoenix<br>Environmental |  |
| OF-103/104<br>Stream | 12/28/18 | Bacteria | E. Coli 216<br>Total 4,350  | Phoenix<br>Environmental |  |
|                      |          |          |                             |                          |  |
|                      |          |          |                             |                          |  |
|                      |          |          |                             |                          |  |

## 2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

| <b>Outfall</b> | <b>Sample date</b> | <b>Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)</b> | <b>Results</b>         | <b>Name of Laboratory (if used)</b> | <b>Follow-up required?</b> |
|----------------|--------------------|----------------------------------------------------------------------------------|------------------------|-------------------------------------|----------------------------|
| I-1            | 11/21/04           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 09/15/05           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 09/14/06           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 10/19/07           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 09/26/08           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 11/14/09           | Bacteria                                                                         | E. coli TBR/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 08/01/13           | Bacteria                                                                         | E. coli 200/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 08/13/14           | Bacteria                                                                         | E. coli 700/<br>100mls | Phoenix<br>Environmental            | No                         |
| I-1            | 09/27/16           | Bacteria                                                                         | E. coli 52/<br>100mls  | Phoenix<br>Environmental            | No                         |

|  |  |  |  |  |  |
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|--|--|--|--|--|--|

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

Provide the following information for outfalls exceeding the pollutant threshold.

| <b>Outfall</b> | <b>Status of drainage area investigation</b> | <b>Control measure implementation to address impairment</b> |
|----------------|----------------------------------------------|-------------------------------------------------------------|
| 13             | Wet Weather Resample                         | Dry Weather Screening                                       |
| 14             | Wet Weather Resample                         | Dry Weather Screening                                       |
| 15             | Wet Weather Resample                         | Dry Weather Screening                                       |
| 73             | Wet Weather Resample                         | Dry Weather Screening                                       |
| 74             | Wet Weather Resample                         | Dry Weather Screening                                       |
| 102            | Wet Weather Resample                         | Dry Weather Screening                                       |
| 103            | Wet Weather Resample                         | Dry Weather Screening                                       |
| 104            | Wet Weather Resample                         | Dry Weather Screening                                       |
| 105            | Wet Weather Resample                         | Dry Weather Screening                                       |
|                |                                              |                                                             |
|                |                                              |                                                             |
|                |                                              |                                                             |



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

Once outfall screening 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 01, 2020.

| Outfall | Sample Date | Parameter(s) | Results | Name of Laboratory (if used) |
|---------|-------------|--------------|---------|------------------------------|
|         |             |              |         |                              |
|         |             |              |         |                              |
|         |             |              |         |                              |
|         |             |              |         |                              |
|         |             |              |         |                              |

### 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<br>(DEEP Basin ID)          | 2. Category   | 3. Rank                                                                                                                                                                       |
|---------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4320-00_01<br>Salmon Brook                  | High Priority | 1                                                                                                                                                                             |
| 4319-00_01b<br>Salmon Brook, West<br>Branch | High Priority | 2<br>The Salmon River, West Branch was delisted based on information contained in Appendix B-5 of the CT DEEP<br>2018 Integrated Water Quality Report, dated August 01, 2019. |

## 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

Provide sample data for outfalls where flow is observed. Only include Pollutant of Concern data for outfalls that discharge into stormwater impaired waterbodies.

| Outfall ID | Screening / sample date | Ammonia | Chlorine | Conductivity | Salinity | E. coli or enterococcus | Surfactants | Water Temp | Pollutant of Concern | If required, follow-up actions taken |
|------------|-------------------------|---------|----------|--------------|----------|-------------------------|-------------|------------|----------------------|--------------------------------------|
| 74         | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 102        | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 189        | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 13         | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 14         | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 15         | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 153        | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 154        | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |
| 86         | 8/23/18                 | NA      | NA       | NA           | NA       | NA                      | NA          | NA         | Bacteria             |                                      |

### 2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

| Outfall ID | Sample date | Ammonia | Chlorine | Conductivity | Salinity | E. coli or Enterococcus | Surfactants | Water Temp | Pollutant of concern |
|------------|-------------|---------|----------|--------------|----------|-------------------------|-------------|------------|----------------------|
| 74         | 12/28/18    | NA      | NA       | NA           | NA       | E. coli                 | NA          | NA         | Bacteria             |
| 102        | 12/28/18    | NA      | NA       | NA           | NA       | E. coli                 | NA          | NA         | Bacteria             |
| 13         | 9/10/18     | NA      | NA       | NA           | NA       | E. coli                 | NA          | NA         | Bacteria             |

### 3. Catchment Investigation Data (Appendix B (A)(7)(e) / page 9)

#### 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 |
|------------|-----------------|------------------------------|
|            |                 |                              |

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).

#### 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

Document Prepared by

Print Name: John D. Ward, Town Manager

Print Name: Wade M. Thomas, CPMSM

Signature:



Signature: *Wade M. Thomas*

Date:

April 16, 2020

*5/3/20*

Date:

April 16, 2020

