The COMMUNITY Foundation for Greater New Haven
NOW MORE THAN EVER

# QUINNIPIAC RIVER FUND FINAL REPORT- 2019

Please complete and submit completed form via e-mail to dcanning@cfgnh.org at The Community Foundation for Greater New Haven by March 31, 2020 (or as otherwise stated on the terms of grant).

Date: March 27, 2020

Group/Organization Name: City of Meriden, Dept. of Public Works

Address: 142 East Main Street

City, State, & Zip: Meriden, CT 06450

Telephone #: 203-630-4026

Project Name: Eliminator Hooded Outlets Pilot Program

Grant Number: 20190131

Name & title of person completing this form: Emile Pierides, P.E., Associate City Engineer

E-mail address: epierides@meridenct.gov

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Please respond to the following statements:

1. List the specific objectives/outcomes of the project and tell how they were met during the grant period. Also, provide an update on any special conditions of the grant (if applicable).

*The objective was to evaluate the effectiveness of this retrofit as it relates to floatable debris removal while still allowing a relatively easy process for the City Highway Department to maintain the catch basins and storm pipes.*

*Effectiveness of Removing Debris – Since the installation of the Eliminator hooded outlets on August 26 2019 we have seen promising results. A final inspection and maintenance cleaning of the basins was performed on March 18 2020. In this 6 month time period some of the retrofitted basins in high pedestrian traffic areas have shown a very good effectiveness of the hooded outlets ability to capture floatables (photo attached). Debris captured included plastic bottles and caps, cigarette buds, styrofoam, and plastic wrappers.*

*Ease of Maintenance – Maintenance on the catch basins did take slightly more too moderately more time to perform compared to a basin with no hooded outlet. Additional information provided below.*

2. Please share your successes, challenges and any lessons learned through the implementation of your project. Were there any unintended consequences or lessons learned that may affect how you operate your program moving forward?

*As can be seen in the attached photo the hooded outlets located in high pedestrian traffic areas proved effective in removing floatable debris which would otherwise be discharged into the Quinnipiac River or one of its tributaries.*

*Some challenges were encountered during the installation of the Eliminator hoods into existing basins. Due to the age and composition of some of the City's storm infrastructure, locating catch basins that were capable of accepting the installation of the Eliminator hoods proved to be challenging. Most of these catch basins were constructed out of brick or masonry and did not contain the required clearances needed for the units. The larger Eliminator units also required modifications that will allow then to fit through existing catch basin frame openings.*

*Some challenges were also encountered during maintenance procedures. Obtaining a thorough vacuuming of the basin sump proved to be difficult in some locations due to the physical size of the hooded outlet. In some instances the vacuum hose could not reach between the sides of the basins and the hoods and in all cases the basins could not be effectively vacuumed under the hood. Therefore more man time must be spent with shovels and pressure washer to reach these areas. This results in less catch basins being cleaned each season or resources being diverted from other maintenance procedures.*

3. What are the opportunities and needs of your organization as it continues to move forward with its work to positively impact the Quinnipiac River?

*Now that we can see the effectiveness that the hooded outlets provide we are looking at purchasing a few units a year to install at strategic locations throughout the City. The results have shown us that some locations, such as areas with low pedestrian traffic in residential areas, do not have the high floatable content that other areas have. Therefore, the biggest benefit to the Quinnipiac watershed for the least cost is to install these units in locations that are prone to the highest debris loading.*

Also, please email a photo or image that can be uploaded along with your report to The Quinnipiac River Fund website to dcanning@cfgnh.org.


Fanta

Eliminator Final Inspection

Date: 3/18/2020

| Location # | Loc. Description | Sediment Depth (inch) | Floatable Capture (1-10) | Cleaning Effort (1-5) | Notes |
|---|---|---|---|---|---|
| 1 | S. Vine @ Carl | 14" | 3 | 2 | |
| 2 | 71 S. Vine | 12" | 5 | 2 | |
| 3 | 60 Peacock | 5" | 6 | 3 | |
| 4 | Phesant | 6" | 1 | 2 | |
| 5 | 107 Hamilton | 2" | 2 | 2 | |
| 6 | 179 Winthrop Tr. | 4" | 2 | 3 | |
| 7 | 9 Ames Ave | 3" | 4 | 3 | |
| 8 | Ames @ Pasco | 10" | 5 | 2 | |
| 9 | 91 S. Vine | 2" | 1 | 2 | |
| 10 | Liberty St. | 4" | 8 | 4 | |

Cleaning Effort

1: Same effort compaired with no hood

2: Somewhat more difficult to remove sediment and debris

3: More difficult to remove sediment and debris

4: Very difficult to remove sediment and debris

5: Can not remove sediment and debris effectively