WILTON RAIN GARDEN
GREEN INFRASTRUCTURE PROJECT

On the morning of Sunday, August 7th, volunteers gathered at Cooley Park on the northwest side of town hall to help dig and plant a rain garden, an arrangement of plants meant to help direct and contain stormwater runoff. Using highly hydroponic plants alongside an array of stones and bark mulch layered into a basin-shaped area, the garden will help to mitigate erosion in Cooley Park, and stop water runoff onto Main Street. Furthermore, the design incorporates a flexible, perforated downspout to funnel rainwater off of town hall and deposit it over a large area, as opposed to the rigid, green downspout installed in the building in 2018, which directs all the water to a single point on the hill. This point has suffered extreme erosion from this design, visible even from the road below.

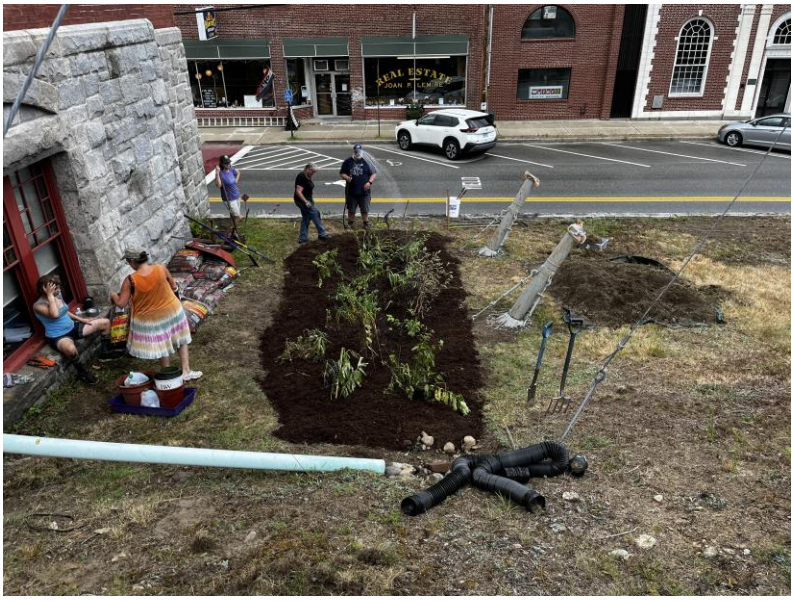
Cooley Park, before the project began. Notice the obtrusive green spout with a large patch of bare dirt at the end.

Work on the project began at 8 AM, when volunteers began digging out the ponding depth for the garden. The area dug was 8 feet wide and extends back 22 feet, and about 6 inches deep. Along the side facing Main St., a 5-inch berm (a wide mound of dirt) was added to act as a barrier, keeping water in the garden and not leaking down onto the street below. The rest of the

garden was dug in a basin shape, to more effectively trap stormwater in and allow the plants to absorb it. By digging the area deeper in the center and shallower near the edges, water coming out of the downspout and flowing down the hill will be slowed into the center of the garden, mitigating washout and flooding.

The area dug out for the garden was made to be shallower on the hill, letting water flow through to the deeper section on flat ground.

After digging out the area for the garden, the plants selected for the garden were brought to the site to be planted. The flowers and bushes being planted in the garden were chosen from the University of New Hampshire's "Native Plants for New England Rain Gardens," and are known to generally be hydrophilic, or water-loving. These plants are able to handle the amount of water flowing into the garden, and would bloom at different times of the year, so that the garden would always be able to thrive on the water it absorbs. The garden incorporates great blue lobelia, New England Aster, butterfly milkweed, Joe Pye weed, swamp verbena, spotted geraniums, tiger lilies, blue flag iris, and three highbush blueberries. Many of these plants, known for their hardiness, will handle the amount of water they are receiving well, and will add to the water-absorbing nature of the garden. After planting all of the flowers, a 4-inch layer of mulch was added to improved the structure and absorbance of the garden.



The arrangement of plants in the garden, viewed from Maple St.

The final part of the garden itself to be added were the pond stones laid by the downspout. These were added the following day, August 8th, and were meant to help the water coming out of the spout to percolate over a wider area, as well as prevent the loose soil and mulch at the top of the garden from washing down into the middle. The stones help to add stability to the flow of water in the garden, and prevent erosion like Cooley Park has suffered from in the past.

The garden, as seen from Main St. Notice the bed of stones laid at the end of the downspout, and along the back side of the garden.

There are still steps to be taken in order to complete this green infrastructure project. As aforementioned, the rigid green downspout on town hall needs to be removed, and the flexible perforated spout seen in the photos will be attached in its place. Furthermore, the mulch bed and berm in the garden needs to be monitored and maintained, to ensure it retains the water-trapping properties it was put in place for. In time, this garden will hopefully be the first step to a path of remediation for Cooley Park, and other parts of Wilton in need of natural renovations. Green infrastructure like this rain garden makes it easier for the environment around it to survive, thrive, and become beautiful. Given the intense heat wave that plagued the town over the course of this project, it is clearly in need of infrastructure dedicated to making sure the natural beauty of Wilton is preserved.

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