



PO Box 4949, Syracuse, NY 13221-4949

TRANSMISSION MAIN IMPROVEMENTS
TOWN OF MARCELLUS
JANUARY 2016

OCWA has several raw water and finished water transmission mains that extend from Otisco Lake into Marcellus and from Marcellus into Fairmount respectively. For a large majority of their length these mains run along Nine Mile Creek and the railroad lines that parallel same. Between Otisco Lake and OCWA's water treatment plant in Marcellus several instances of main exposure were discovered. Due to erosion from the adjacent creek, previously buried pipe had become exposed and was at risk of becoming undermined and washed out. To remedy this issue and restore the stability of the pipe, OCWA worked with an environmental consultant, NYSDEC, and the Army Corp of Engineers to develop restoration designs that protected OCWA's main, while also meeting DEC's needs for the adjacent creek.

There are five sites that required repair. Two of the five were completed in the fall of 2015 and are shown below. The other three are schedule to be completed in 2016 and 2017.

Some of the features of the restoration work include:

- Use of natural stone for primary armoring of the area.
- Restoration of existing streambed features for habitat through the installation of turning vanes (which create pools behind them while also serving to direct the energy of the water away from the pipe) and stone riffles (which recreate the conditions observed in the stream prior to the project).
- The disturbed areas were re-seeded with seed mixes specifically designed for wetland areas to help reestablish the appropriate native plant species.
- Areas with the erosion control fabric were planted with "live stakes", which are essentially live, nursery grown, cuttings of native woody plant species that get hammered into the ground like a spike. These self-root and quickly establish the woody growth that would be expected on a stream bank of this nature.

Site 3 and Site 5 are scheduled to be constructed in Summer/Fall of 2016, when the creek is low. Site 4, which is located closer to Camillus, is still in development with our consultant and DEC.



Examples of the restored Site 1 and Site 2 in Marcellus:



Questions or concerns can be addressed to Andrew Weiss at 315-455-7061 x 3108, or ajweiss@ocwa.org, or at the address above.