HAMILTON COUNTY SOIL AND WATER
CONSERVATION DISTRICT

PROTECTING WATER QUALITY WITH GREEN INFRASTRUCTURE INNOVATION



Black River Watershed Conference June 7, 2022



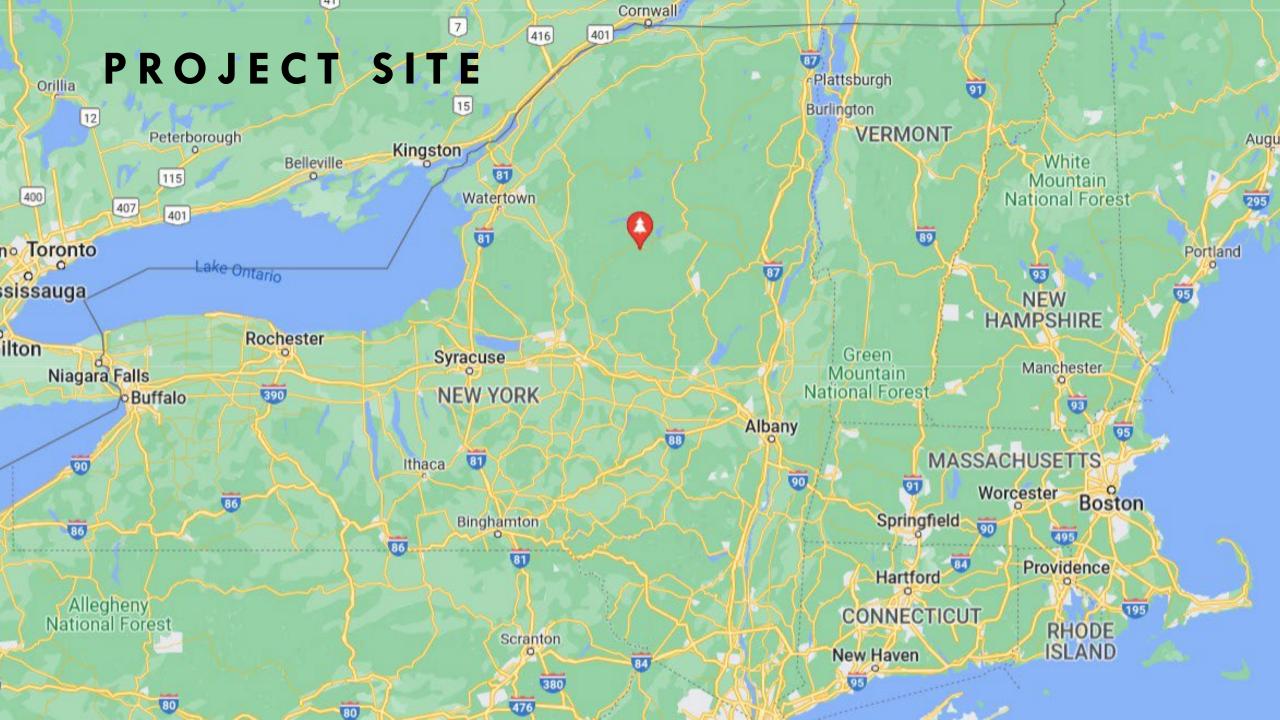
THANK YOU!

- Black River Advisory Committee
- Tug Hill Commission
- Conference Planning Committee
- Partners

HELLO! I'M
CAITLIN
STEWART,
AND I'M
GLAD YOU
ARE HERE
TODAY!







Black River Watershed

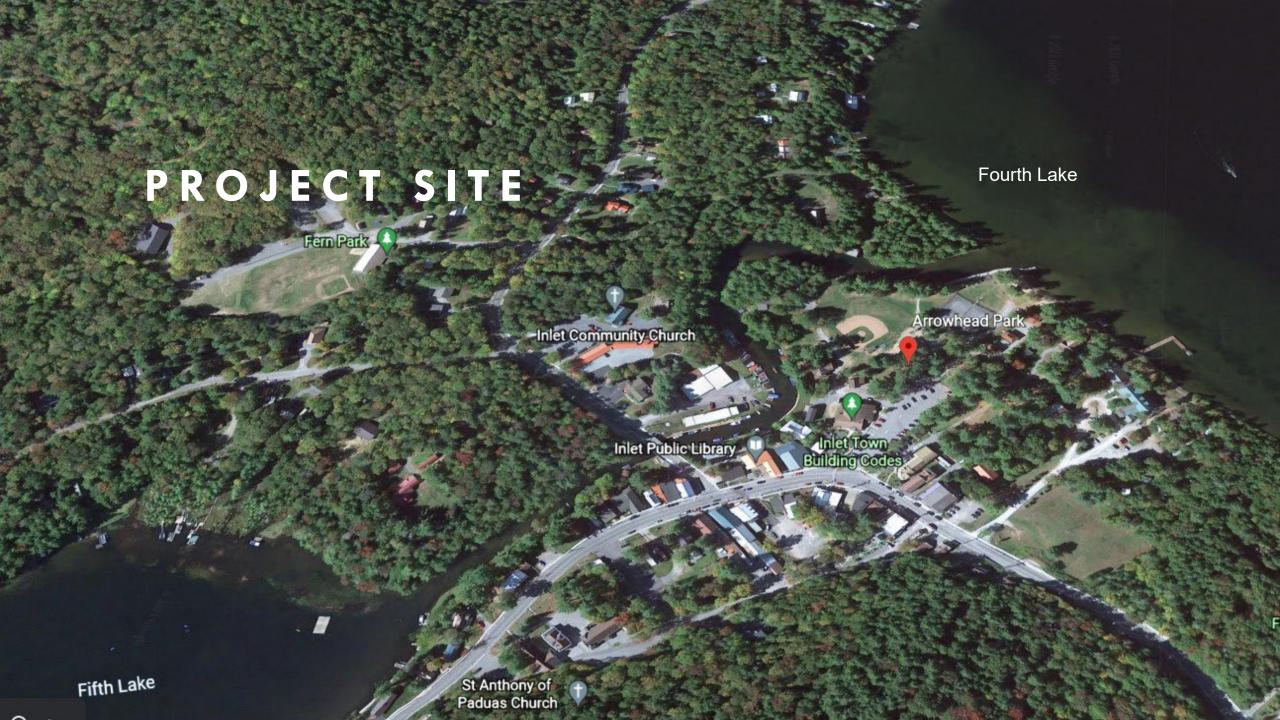
THIS GREEN INFRASTRUCTURE PROJECT

- Maintains water quality
 - Stormwater issues
- Provides an educational opportunity



ENVIRONMENTAL ISSUE

- Stormwater runoff
 - Landscape, parking area
 - Puddles
 - Flows directly into channel
- Stormwater runoff carries pollutants
- Infiltrates into True Grid pavers instead of discharging into channel





PARTNERS

- Warren County SWCD
- TOI Highway Department
- TOI Parks and Rec
- Hamilton County SWCD
- Finger Lakes Lake Ontario
 Watershed Protection
 Alliance

GI INSTALLATION

- Step 1: survey property and look for areas that would benefit from green infrastructure
- Step 2: remove impervious surfaces by excavating the landscape to desired depth
- Step 3: lay down the geotextile fabric liner allows H2O to infiltrate, keep out sediment
- Step 4: place uniform stone 3/4-inch diameter on top of liner and tamp down (load-bearing)
- Step 5: install TRUEGRID® PRO PLUS® permeable pavers on top of rock base
- Step 6: place uniform stone $\frac{1}{2}$ -inch diameter on top pavers and tamp down (load-bearing)



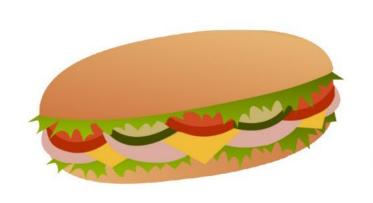


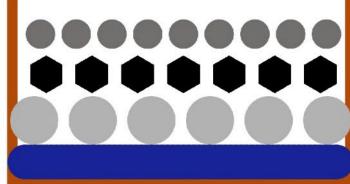






GI INNOVATION





1/2 - inch diameter stone

TRUEGRID® PRO PLUS® permeable pavers

3/4 - inch diameter stone

Geotextile fabric liner



FIELD NOTES

- Same sized rocks = limit compaction, increased void space
 - Max. infiltration
- TRUEGRID® pavers = 40% 60% void space
 - fills with water during a storm
- Fabric = water percolates into subsoil
- Collects water without an issue
- Reservoir



MAINTENANCE

- Hardly any
- Immune to wear, tear, weathering, degradation
- Silt / sediment decay passes through
- Rake / carefully blow leaves and garbage
- Hose / carefully power wash sediment through system
- Snowplow with truck mounted blade 1" from surface
- Life span = 25 60 years



TANGIBLE OUTCOMES PART 1

- 1,200 ft2 area of TRUEGRID® installed
- 100% of stormwater runoff is captured from a quarter acre of impervious surfaces during a 1.5" storm event
- ~7,100 g H2O infiltrated, instead of running off into channel

GRID ON THE GROUND

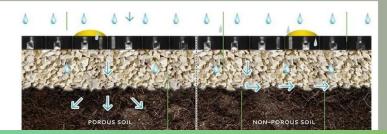
In the fall of 2020, the Town of Inlet, along with Hamilton County Soil and Water Conservation District partnered to installed approximately 1,200 square feet of TRUE GRID pavers to reduce flooding at Arrowhead Park. These permeable pavers help protect the Fifth Lake channel and Fourth Lake from stormwater runoff.

What is Stormwater Runoff?
Storm water runoff is rain or snowmelt that flows over impermeable surfaces such as sidewalks, driveways, and roads.

As stormwater runoff flows over the land, it picks up pollutants such as oil, fertilizers, dirt, trash and animal waste.

These pollutants catch a ride with the runoff and end up in our lakes and streams harming the water quality.

HOW IT WORKS



TANGIBLE OUTCOMES PART 2

- Decreased flooding at Arrowhead Park, including the Town of Inlet's municipal parking lot and building facility
- Maintains the integrity of water quality in the surrounding surface waters
- Educational poster



ASK ME QUESTIONS

Working to manage and promote the wise use of natural resources in Hamilton County since 1965



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This project was made possible by FLLOWPA



