tce
ENGINEERING · SURVEY
PLANNING · ENVIRONMENTAL

Ryan is a recent addition to Trudell Consulting Engineers and is currently working as a staff engineer. He performs a variety of engineering tasks and assists with survey fieldwork as needed.

Ryan is originally from Hauppauge, New York and graduated from SUNY ESF. Ryan's summer internships allowed him to work in the forests of the Adirondacks and on the industrial forest lands of northern Maine. He was responsible for forest inventory surveys, harvest boundary layout, wood scouting operations, logging crew management/prescription execution and stand mapping. Ryan also worked on Long Island at a striped bass/oyster fish farm and hatchery on Napeaugue Bay. Working in the aquaculture field allowed Ryan to gain valuable knowledge and experience with wastewater systems and discharge permits.

Ryan Ruggiero, E.I.
Staff Engineer

Less than 1 year at TCE

Education
B.S. Environmental Resources Engineering '18
State University of New York College of Environmental Science and Forestry

Certifications
Licensed Engineer Intern
State of Vermont

Work History
Weyerhauser
Bingham, ME 2017
Multi-Aquaculture Systems
Amagansett, NY 2016-2017
SUNY ESF Forest Operations
Newcomb, NY 2015

Volunteer Work
Baldwinsville Golden Harvest Festival
Balwinsville, NY 2017

Recent Project Experience

Grace Round Barn 3 Bedroom Septic Design, Duxbury, VT Ryan was involved in from start to finish with the design and permitting for a mound septic system on a residential lot. His responsibilities included performing percolation tests, drafting the system layout and design and generating contours that fell outside the boundary survey.

Stormwater and Wastewater Annual Inspections
When Ryan started at TCE he was quickly immersed into the company's annual inspection program for both Stormwater Discharge General Permits and State Wastewater permits. Inspections are completed each year to ensure systems were built to the permit and are working properly. Additionally, TCE works to notify clients if issues are found or potential future problems could occur. Ryan's ability to jump into the program and become familiar with Vermont State Stormwater and Wastewater permits helped TCE wrap up the inspection season on time and on budget.

ArcMap LiDAR Program Builder
Within his first week at TCE, Ryan proved his ability for innovative thinking, efficiency, and in-depth GIS processing by creating an ArcMap model builder to download, project, and transfer data from the internet to CAD files for everyday use. TCE regularly uses the Vermont Center for Geographic Information's 1ft contours generated from LiDAR collected across the State. Before Ryan joined TCE, these individual LiDAR files were downloaded one at a time, opened in GIS, projected from State Plane Meters to State Plane Feet and exported to CAD, a process that took 5-10 min per file. When Ryan's expressed interest in building an ArcMap model that would perform the same process automatically without user input for each file, TCE quickly supported his work effort. A few days later, TCE's 1ft contour database had been populated with over 9,000 individual contour files in CAD format.

Key Skills
- Construction Observation/Reporting
- Topographic Survey
- GIS based modeling for data driven watershed management decisions
- NYS Erosion/Sedimentation and Storm Water design manual
- Onsite and Municipal Wastewater design
- Soil Investigation
- Data Manipulation Programing

Civil Engineering   Land Surveying   Landscape Architecture   Environmental Services

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