

YASHASWINI RAVILLU

raviilluyashaswini@gmail.com

(814) 207-3597

Buffalo, NY

EDUCATION

Gannon University **Master of Environmental Science** August 2017

Relevant Course Work: Careers in Toxicology, Wetlands, Soil/ ground pollution, Air pollution control engineering, Waste treatment engineering, Principle environmental science engineering, and Environmental Law and Hazardous waste treatment

Sri Venkateshwara College of Engineering **Bachelor of Engineering, Civil** May 2015

Relevant Course Work: Surveying 1 and 2, Fluid mechanics, Hydraulics and hydraulic machines, Air pollution and control, Environmental engineering, Applied engineering geology, Industrial waste water treatment, Geotechnical engineering, Hydrology and irrigation engineering and Rural water supply and sanitation

RELEVANT EXPERIENCE

Gannon University- Master thesis fall 2016- summer 2017

Mass loadings of nutrients and other substances into Presque Isle Bay from its watershed in support of understanding the occurrence of algae bloom.

- The values of nutrients measured during the summer research were used to analyze the impact of the nutrients on Algae bloom in Presque Isle Bay.
- Using the known base flow and storm flow nutrients and discharge values from Cascade Creek and Mill Creek, the total nutrients and discharge values were determined for the remaining watersheds.
- Francis Weir and Manning's equations were used to calculate the velocity for the streams.
- Regression curve was plotted to determine relationship between discharge and nutrient concentration in order to develop values for unaccounted base and storm flow events.

Gannon University - Research Assistant; Erie, Pennsylvania Summer 2016 - Fall 2016

Research the impact of nutrients and temperature on the algae bloom in Lake Erie

- Sample collection was done in the Bay starting at 1m below the surface at intervals of 0.5 m until it reached 0.5m above the bottom at East, Center and West of Presque Isle Bay
- Using the pH meter, pH, specific conductivity, DO, temperature were noted down.
- ISCO samplers were set up at the Cascade Creek and Mill Creek to collect water samples during storm flow and base flow at intervals of 10 minutes.
- Samples were tested for BOD, suspended solids, total phosphorous, total nitrogen, phosphate and nitrate.

Gannon University- Research Assistant; Erie, Pennsylvania July 2017- September 2017

Research the impact of nutrients on the algae bloom in Lake Erie

- Sample collection was performed at 1m below the surface at East, Center and West of Presque Isle Bay.
- ISCO samplers set up at the Creeks were used to collect samples during storm event.
- Samples were tested for Suspended Solids, Total Phosphorous, Total Nitrogen, Phosphate and Nitrate.
- Using the results from previous summer it was observed that storm events had higher impact on the nutrients flow and Algae bloom due to washing away of excess sediments.

Sri Venkateswara College of engineering - Independent Research; Bangalore, India

Spring 2015

Research the effectiveness of natural coagulants in place of artificial coagulants to treat waste water in order to overcome the health effects due to artificial coagulant

- Collected water from Sorki Lake at three different locations: surface of the lake, 0.6m below the surface and center.
- Extracted powder from green peas and sunflower seed to be used as natural coagulants to treat waste water
- Treated the sample with extracted powder using jar test at various rpms (100,125,150) and dosages (40, 60mg/l)
- Detected the amount of solids presented in raw water and treated water using filtration method. Analyzed the pH, BOD and turbidity of both raw and treated water using pH meter, 5 days BOD test and turbidity. Evaluated the difference in pH, turbidity and solids level in raw and treated water.
- It was observed that natural coagulants were equally good as artificial coagulants at treating water.

CERTIFICATES

OSHA 40 Hour Hazardous Waste Operator Training Certification

ADDITIONAL INFORMATION

Skills: MS office, Balsamiq, HSPF, HACH program, Minteq, HELP model, water sampling, sample analyzing, surveying, Auto CADD, Ansys, FEM.