



# Rural Stormwater Management Model Project



## Monitoring

Technical Workshop July 18, 2013  
Alec M. Scott – Ausable Bayfield Conservation Authority



# Where?



**Healthy  
Lake Huron**  
Clean Water, Clean Beaches

 **AUSABLE BAYFIELD  
CONSERVATION**  
CREATING AWARENESS | TAKING ACTION



# Five Priority Watersheds

[healthylakehuron.ca](http://healthylakehuron.ca)

- Pine River
- North Shore (Garvey Creek and Glenn Drain)
- Bayfield North (Gullies)
- Main Bayfield
- Lambton Shores

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sauford\_shore\_3\_watersheds\_v1

# How?



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# Monitoring



- Three new permanent water quality / quantity stations
- Two existing water quantity stations upgraded for water quality
- Five new water quantity and limited water quality stations for the project period
- Five new meteorological monitoring stations





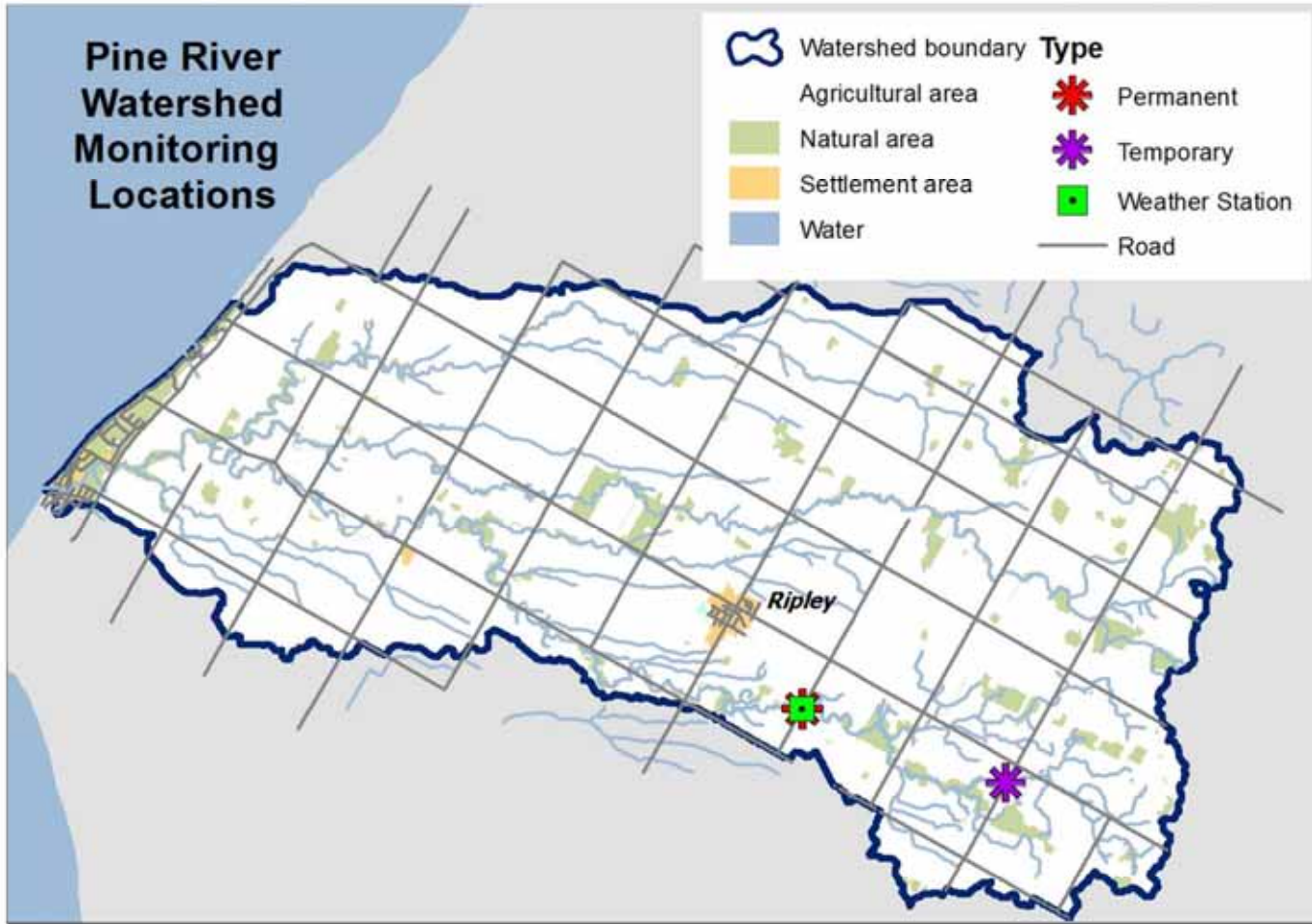


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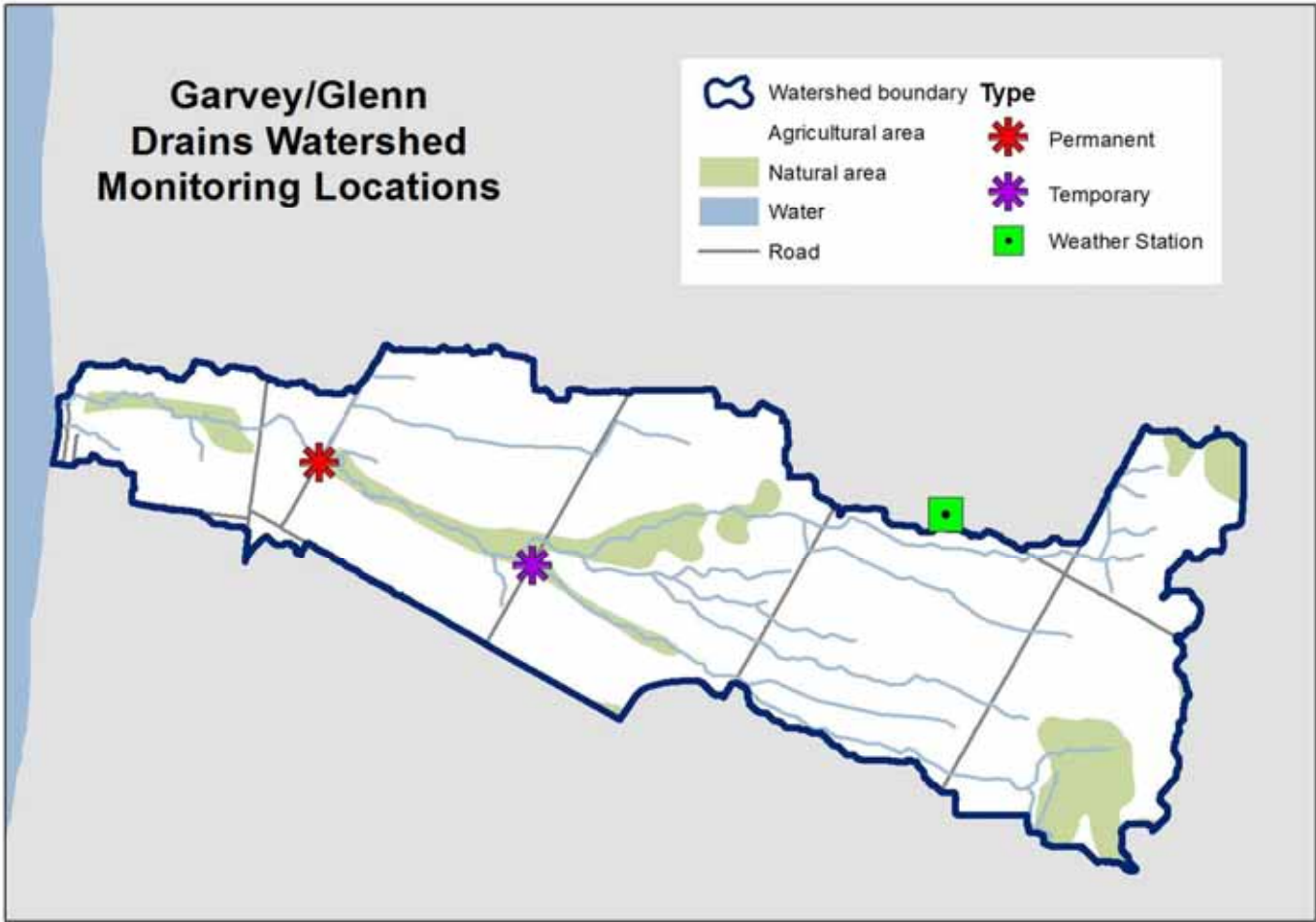
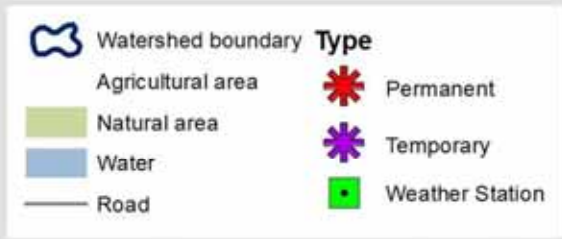
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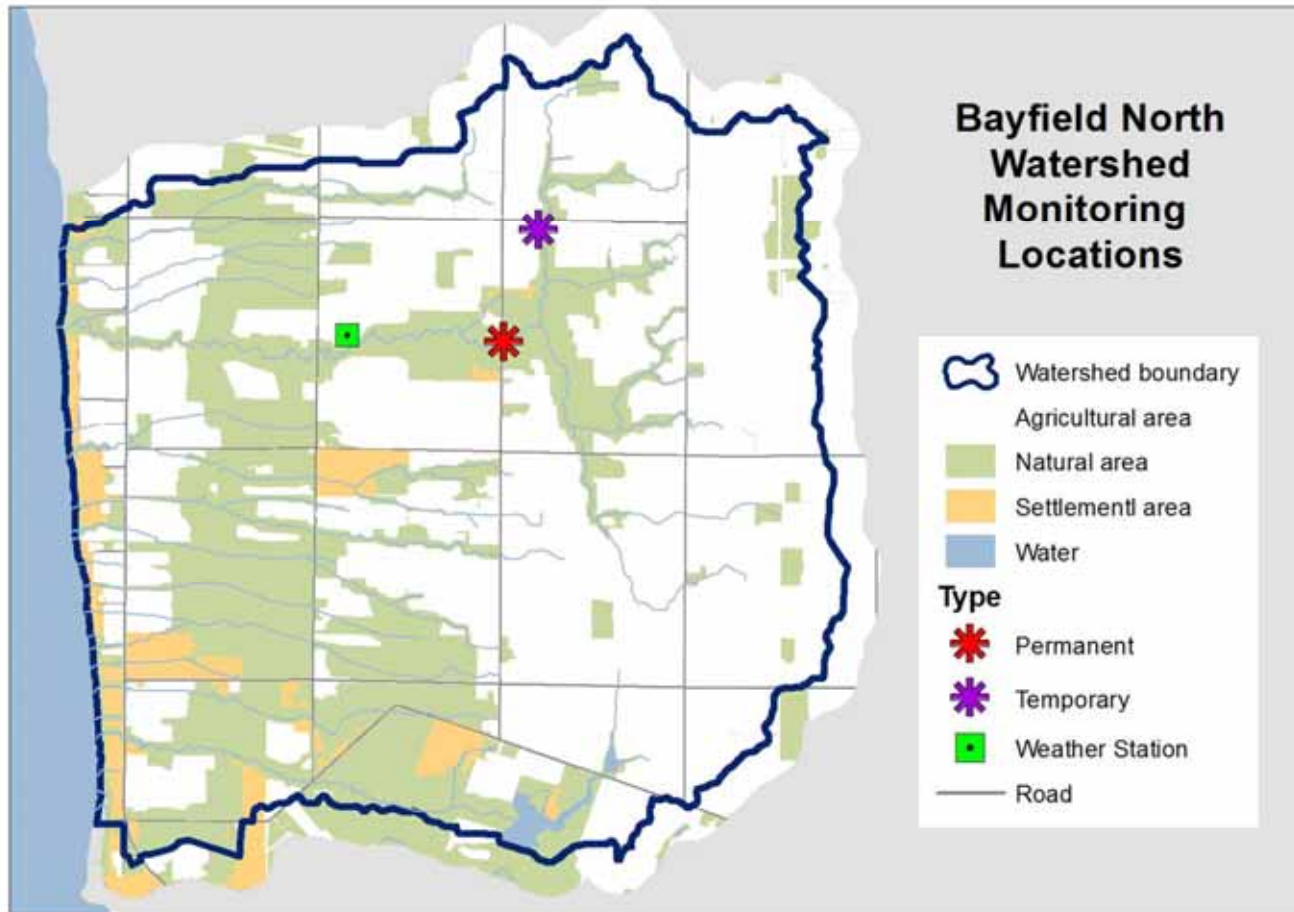
# Pine River Watershed Monitoring Locations



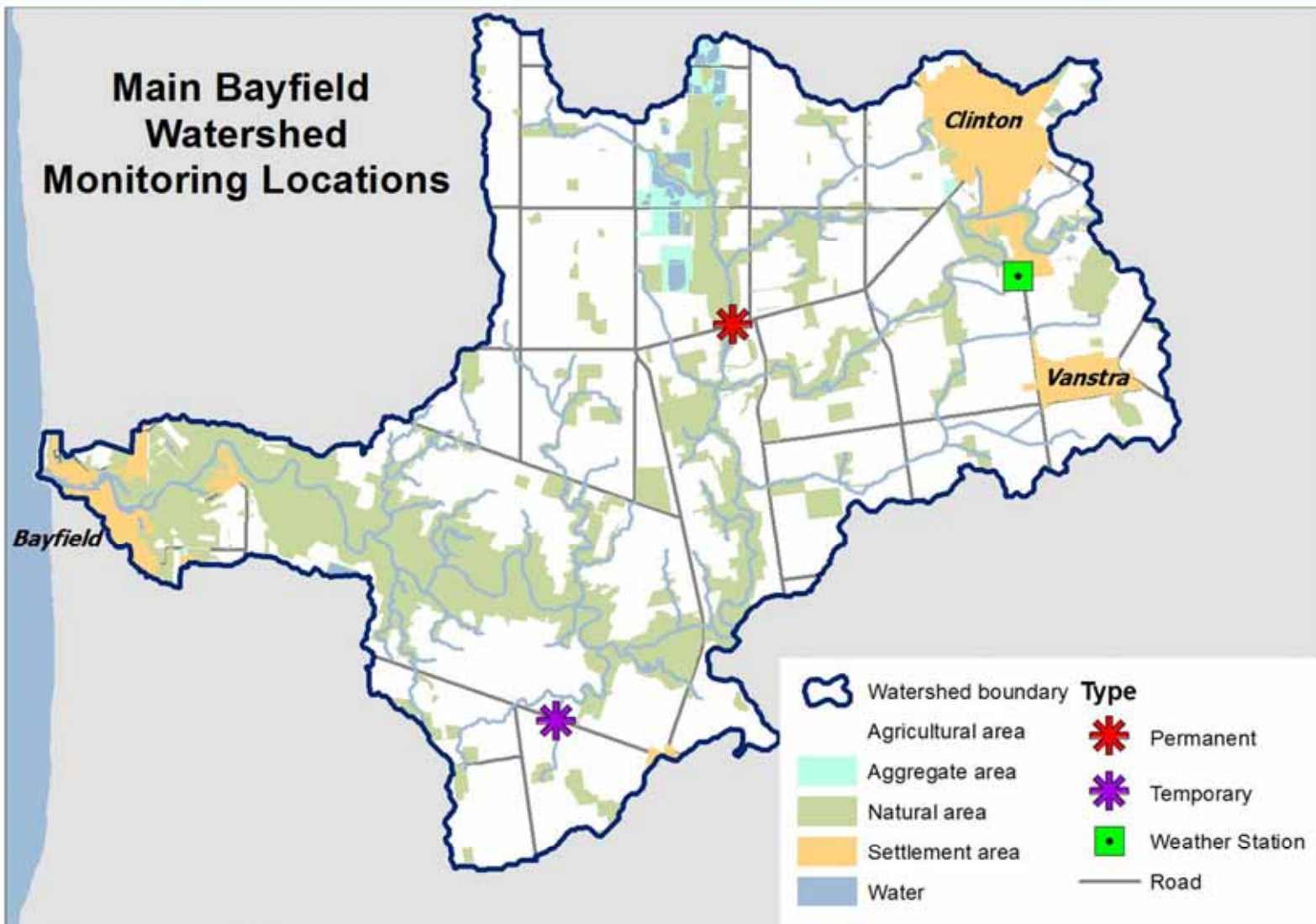
## Garvey/Glenn Drains Watershed Monitoring Locations



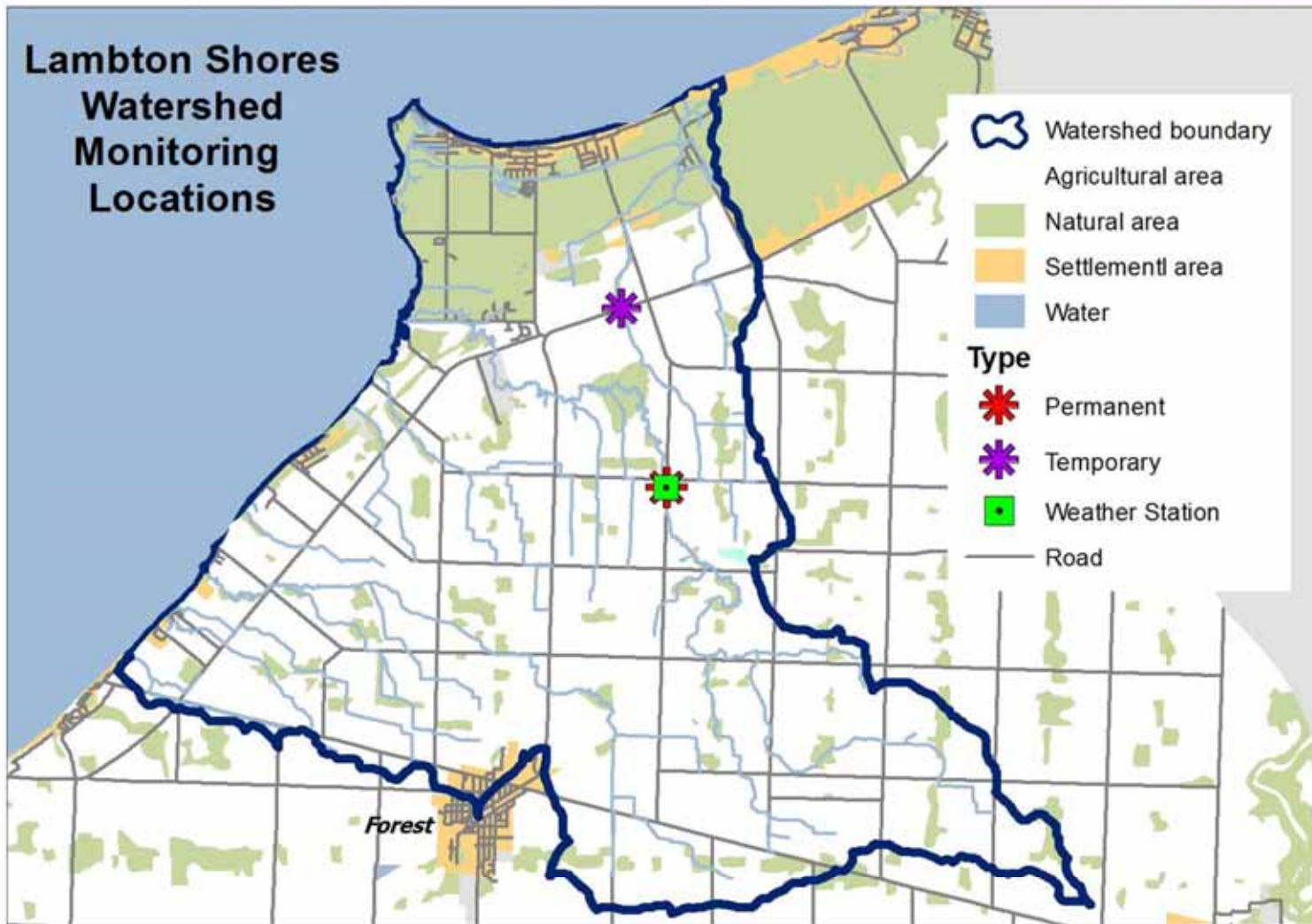




# Main Bayfield Watershed Monitoring Locations



# Lambton Shores Watershed Monitoring Locations



# Monitoring

- Meteorologic Data
- Water level and Flow
- Water Quality





# Monitoring

- Meteorologic Data
  - Snow data
  - Precipitation
  - Temperature, wind speed
  - Measure of Evapotranspiration



# Monitoring

- Water level and flow Data
  - Permanent sites
  - Temporary sites
  - Develop rating curves





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# Monitoring

- Water Quality
  - Permanent sites – monthly and event with ISCO
  - Temporary sites – spot samples



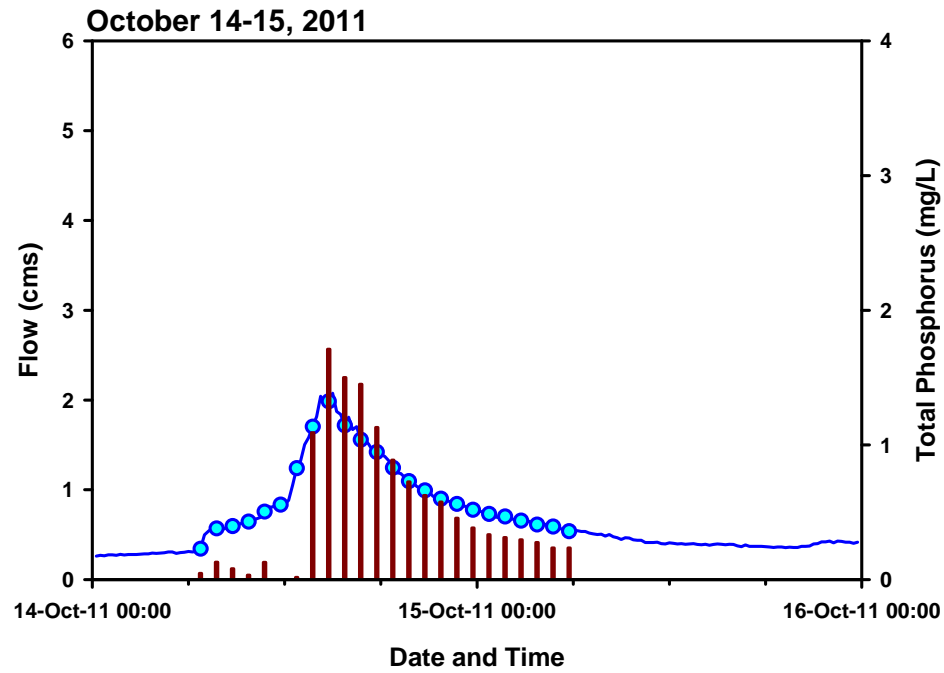
# Monitoring

- Water Quality

Nitrate-N and Nitrite-N
Ammonia-N
Dissolved Ortho-Phosphorus
Total Phosphorus
Total Dissolved Solids
Total Solids
Total Suspended Solids
Total Kjeldahl Nitrogen



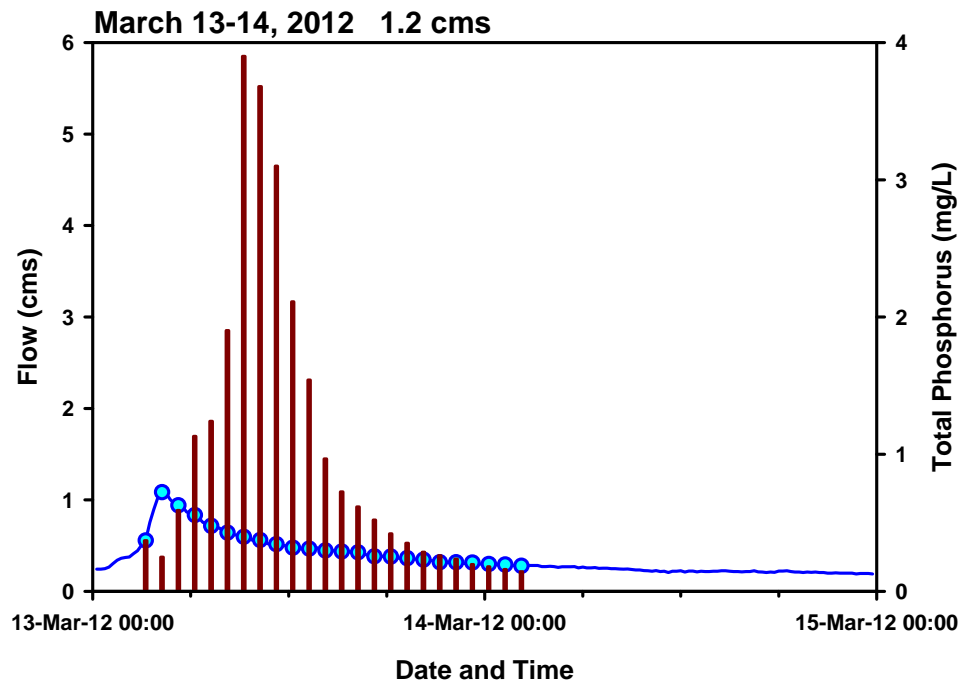




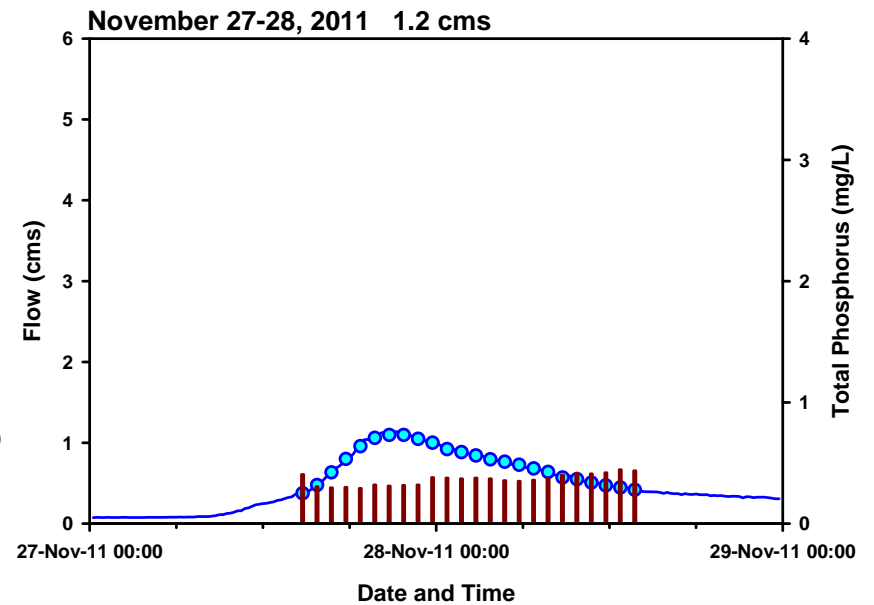
- Flow
- ISCO Sample Collected
- █ Total Phosphorus

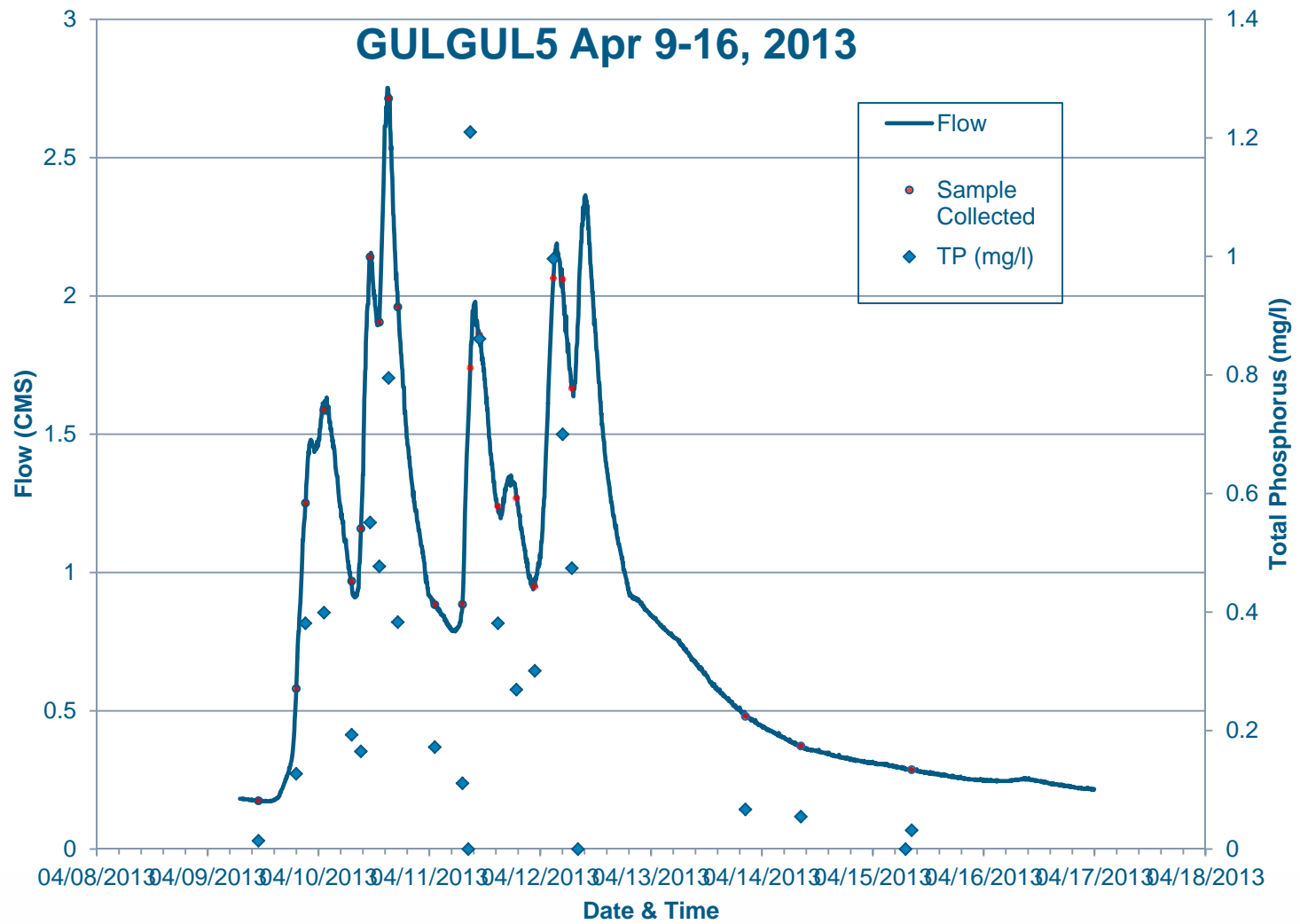


# WBBE Project Flow and TP Seasonal Comparison with Peak Flow ~ 1 cms



- Flow
- ISCO Sample Collected
- █ Total Phosphorus





# Questions?



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