

# Early Flood Detection System



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Lewis County Soil and Water Conservation  
District

# What Does Early Flood Detection Mean?

- Monitoring water levels in the Black River Watershed using field sensors that communicate electronically
- Data is sent via radio to a computer system and sent to the website
- Information is tracked and river level status discussed with EM Committee



# Emergency Management Team

- Lewis County
  - Director of Emergency Management
  - Soil and Water Conservation District
  - Planning Department
  - Cornell Cooperative Extension
  - Highway Department

# Where Do We Monitor?

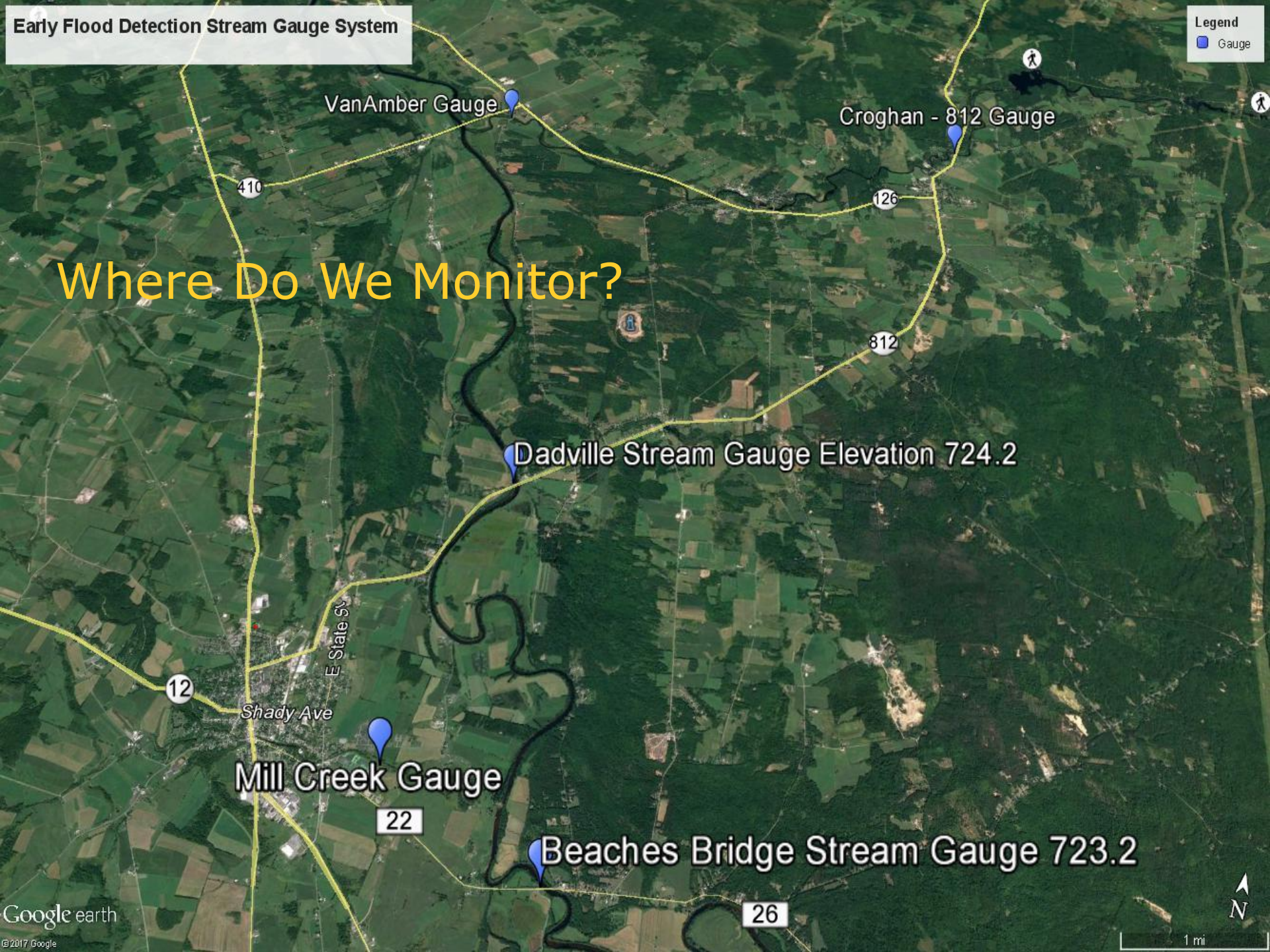
VanAmber Gauge

Croghan - 812 Gauge

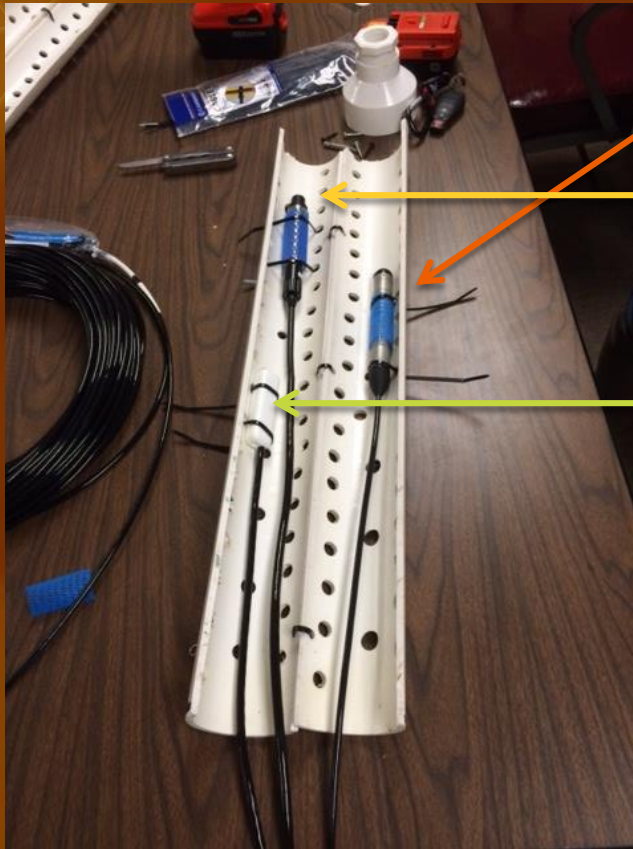
Dadville Stream Gauge Elevation 724.2

Mill Creek Gauge

Beaches Bridge Stream Gauge 723.2



# What Are We Monitoring?



- Water Level and Temp (Pressure Transducer)
- Turbidity or a measure of how turbid the water is (Optic Sensor)
- Conductivity

# System Field Elements

Below Water Surface

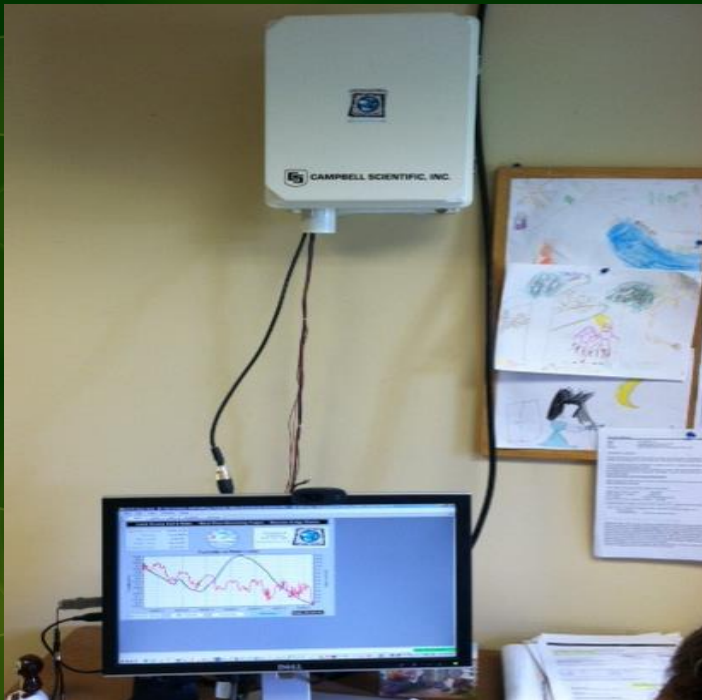


Above Ground

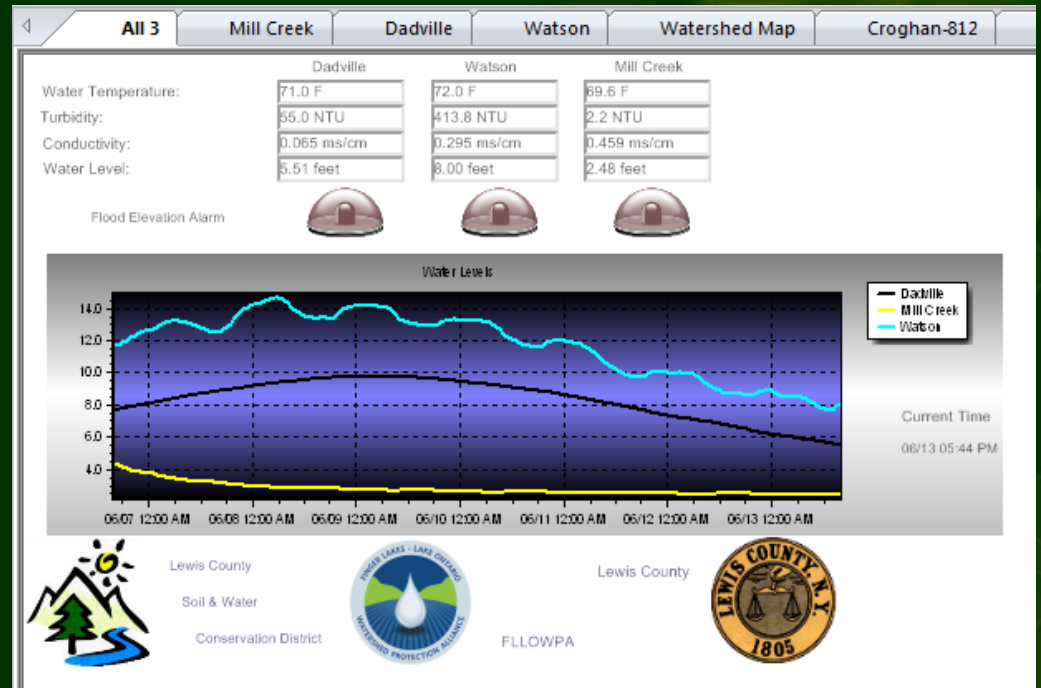


# System Office Elements

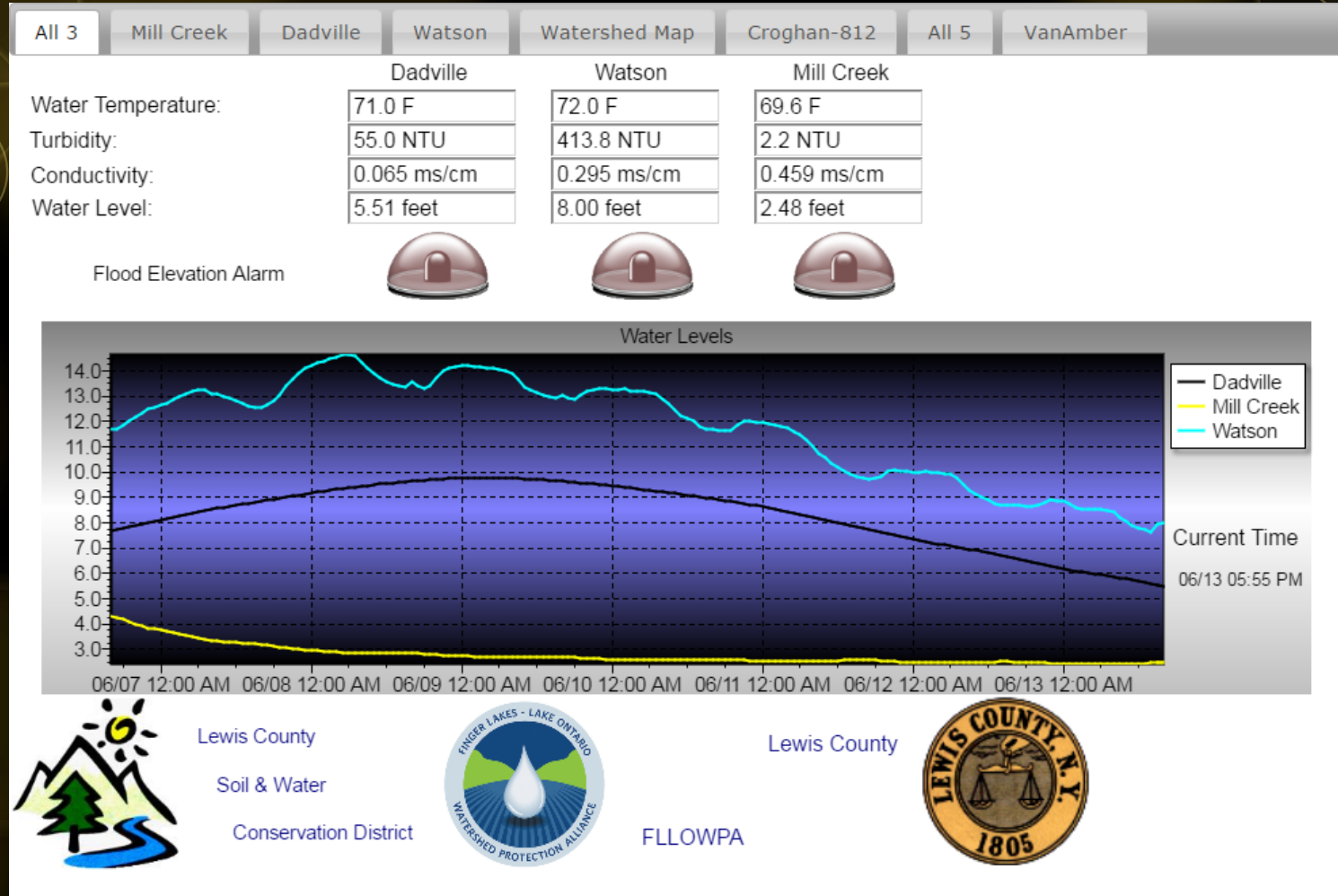
## Office Communication



## Loggernet Software



# Electronic Display





# Individual Gauge Tab

- All 3
- Mill Creek**
- Dadville
- Watson
- Watershed Map
- Croghan-812
- All 5
- VanAmber

Lewis County Soil & Water Conservation District



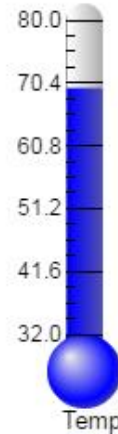
FOLLOWPA



Lewis County

Com  
Enabled

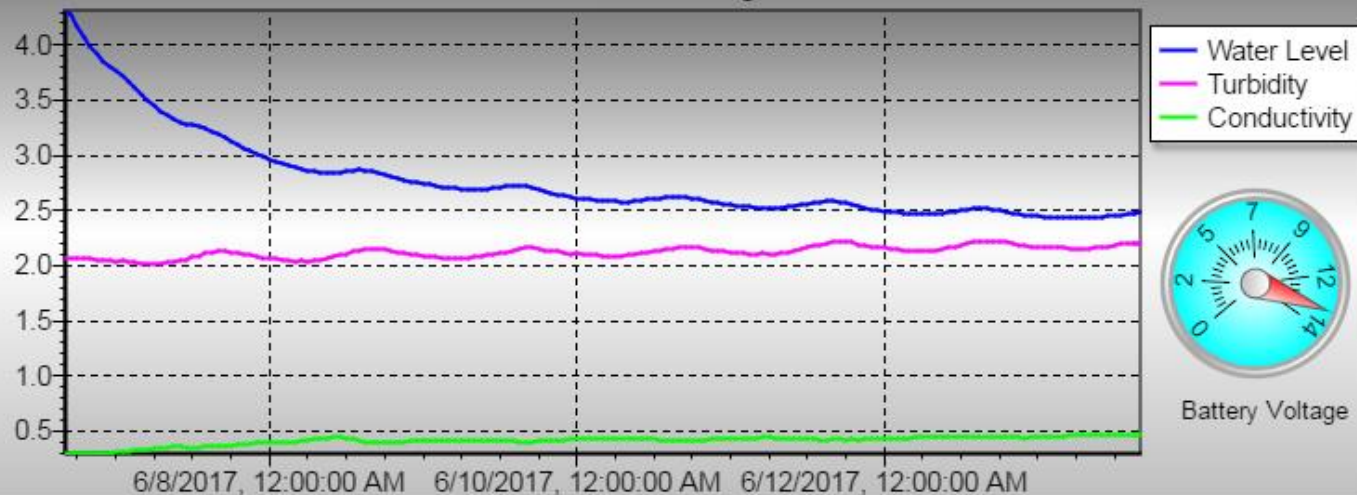
## Mill Creek



6/13/2017, 5:58:06 PM

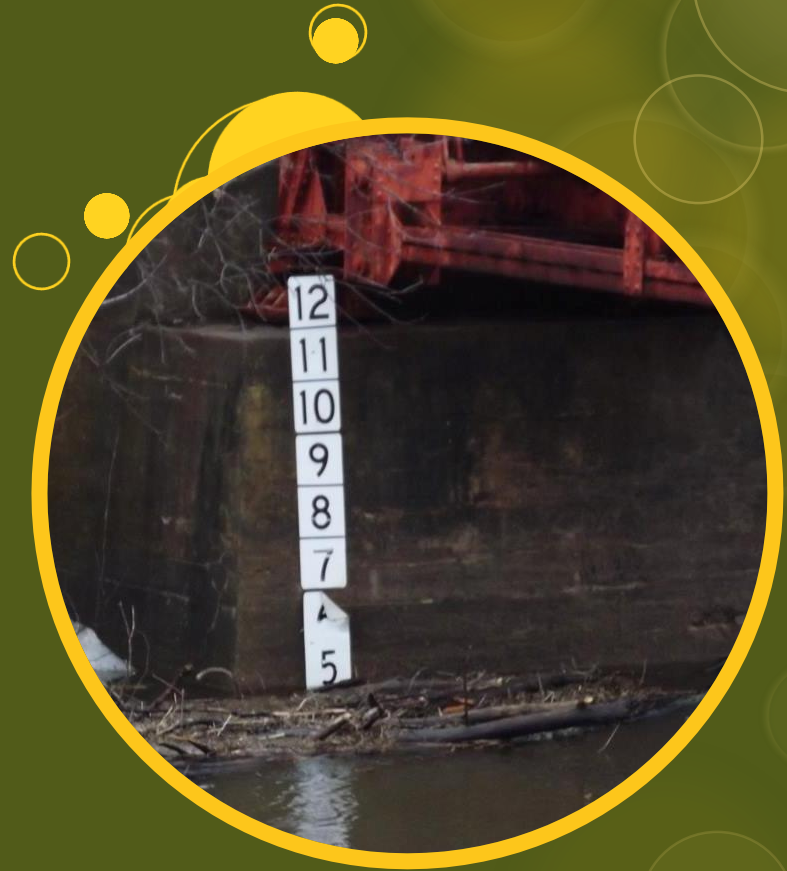
Water Temperature:	69.6 F
Turbidity:	2.2 NTU
Conductivity:	0.459 ms/cm
Water Level:	2.5 feet

Mill Creek Readings

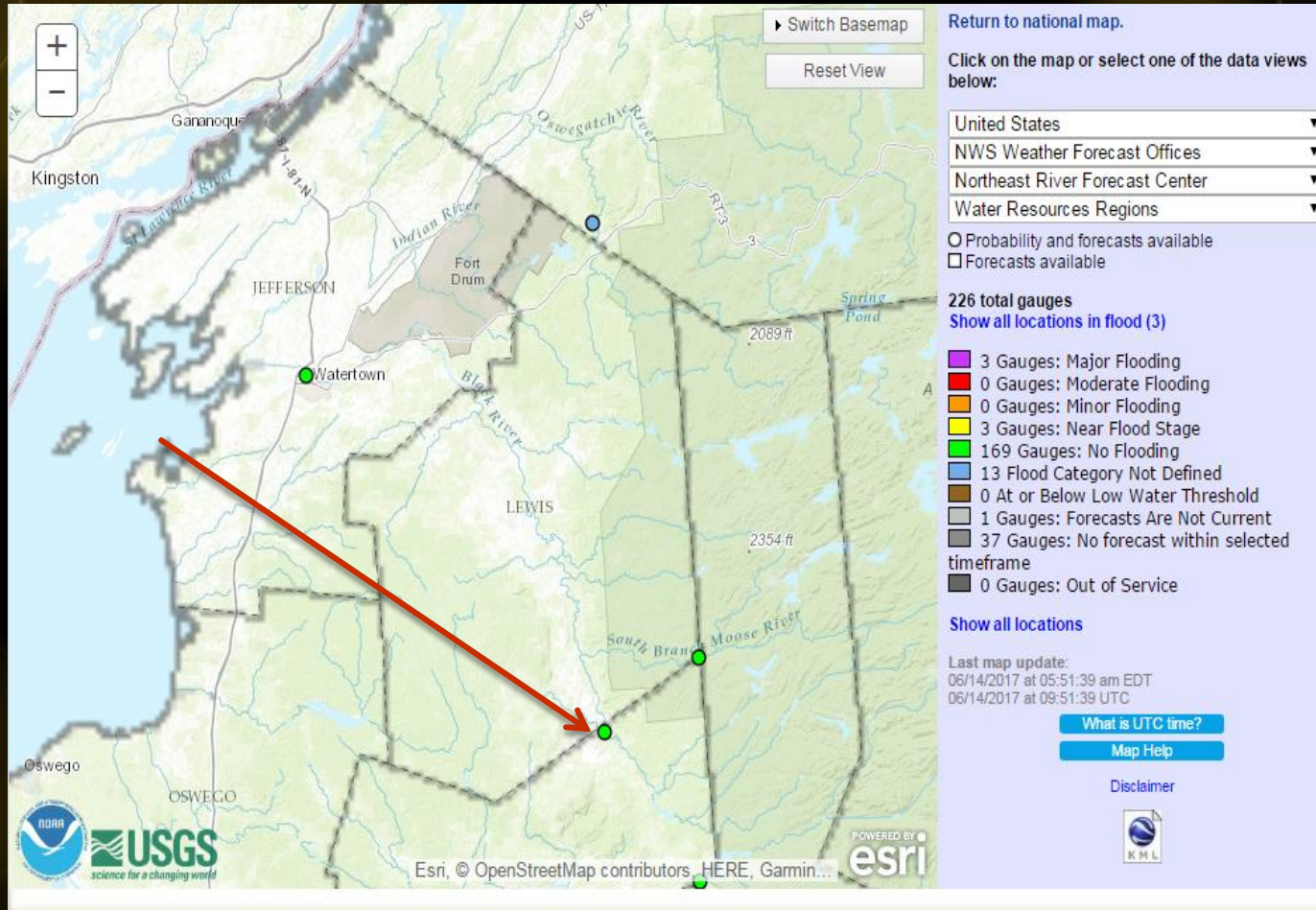


# Purpose For Monitoring Water Levels

- Public Safety
- Emergency Management Response
- Flood warning

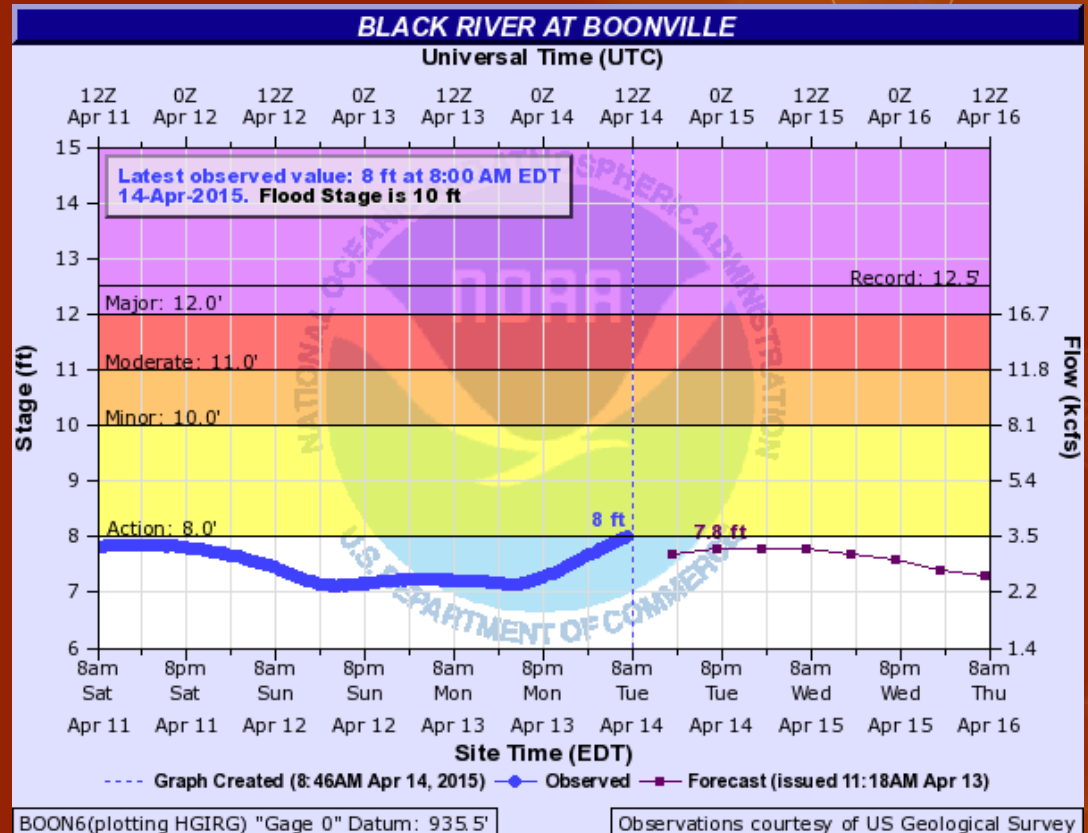


# No Current River Level Prediction Sites in Lewis County



# NOAA/National Weather Service River Prediction Center

- Only Stream gauges on the river are in Boonville and Watertown
- No river prediction sites in Lewis County



# How Can the System Benefit the Community

- ECONOMIC IMPACT
- AGRICULTURAL IMPACT
- ENVIRONMENTAL IMPACT



# Thank You Project Sponsors

## Lewis County

Provided Training for Data Loggers

Purchased Dedicated Computer with Battery Backup

## Assemblyman Blankenbush

Future Deer River Stream Gauge

## Beaver River Advisory Council

VanAmber and Croghan 812 Stream Gauge Funding

## Finger Lakes Lake Ontario Watershed Protection Alliance

Base Funding for Stream Gauges and Staffing to Install Projects

## Hudson River Black River Regulating District

Funding for USGS to Develop Rating Curve for Dadville to Become River Prediction Center

The background is a dark blue gradient with several overlapping, semi-transparent yellow circles of various sizes scattered across the frame.

# Q

UESTIONS

[www.lewiscountysoilandwater.com](http://www.lewiscountysoilandwater.com)