

# Incorporating the Next Generation of Water Monitoring in Vermont

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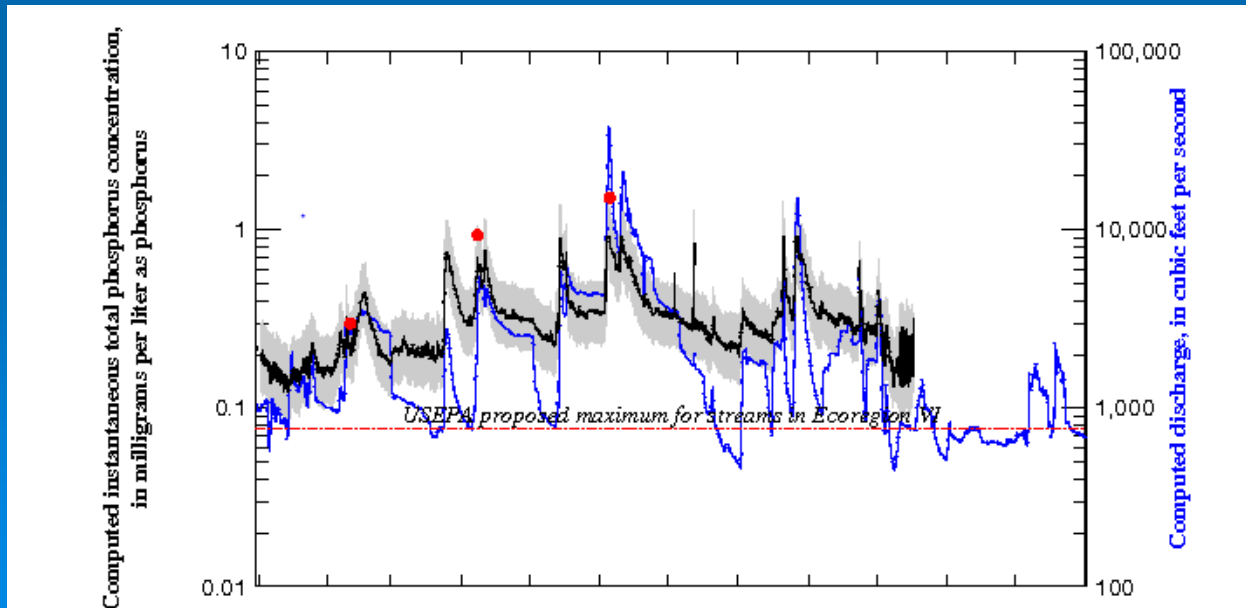
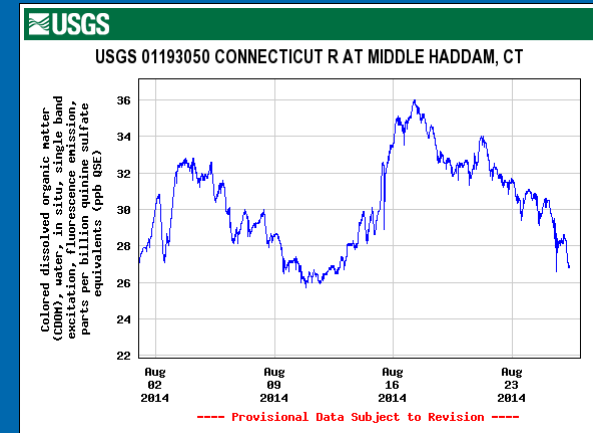
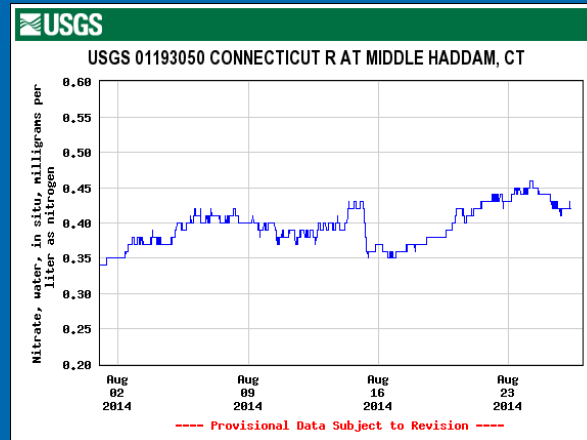


Vermont Monitoring Cooperative  
Annual Meeting  
Burlington VT



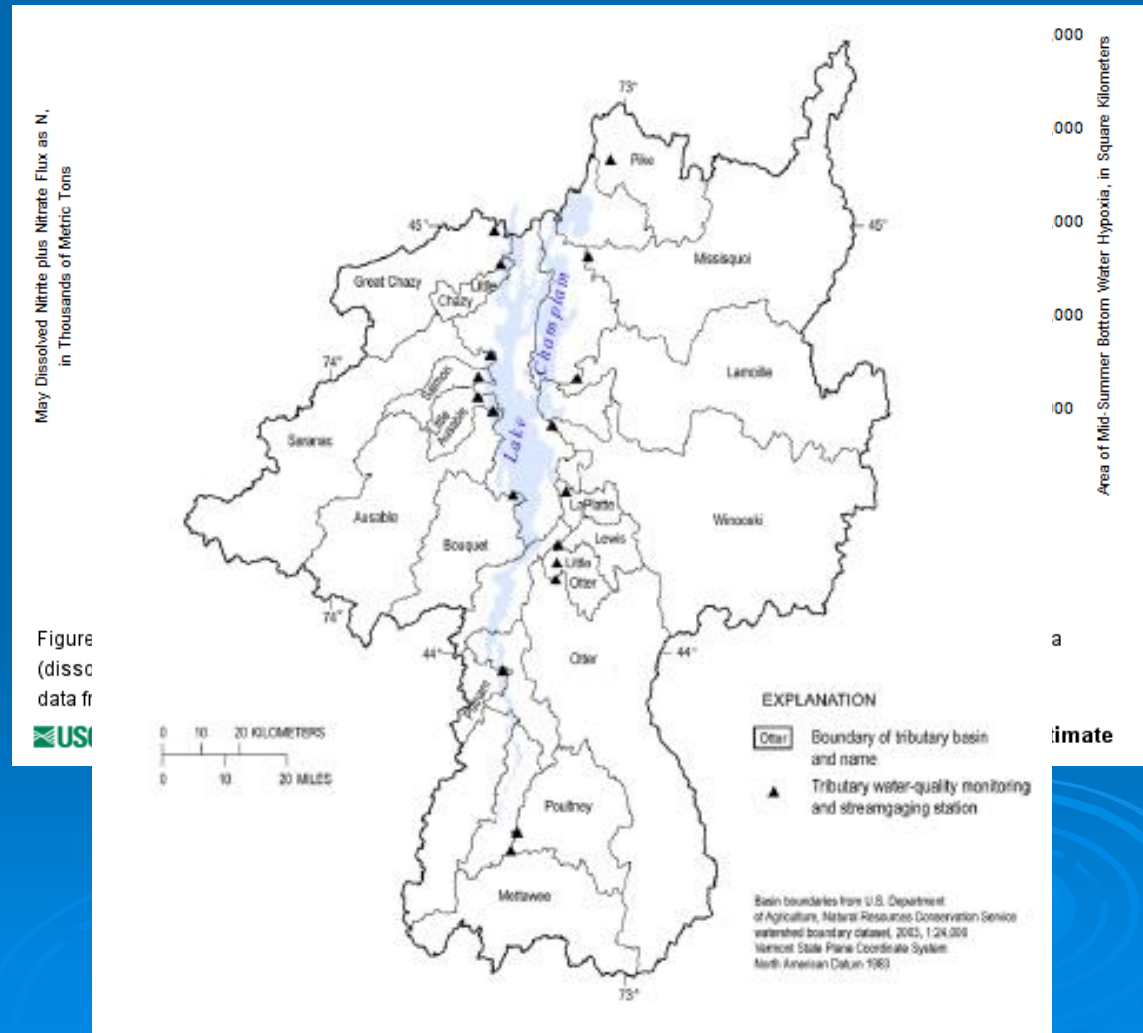
# Linking Continuous Data Collection to Resource Quality and Conditions

- Continuous water quality
  - measured
  - calculated



# Relate real-time water quality to Lake Champlain conditions

- Example from Gulf of Mexico
- LC Trib monitoring could lend to similar work

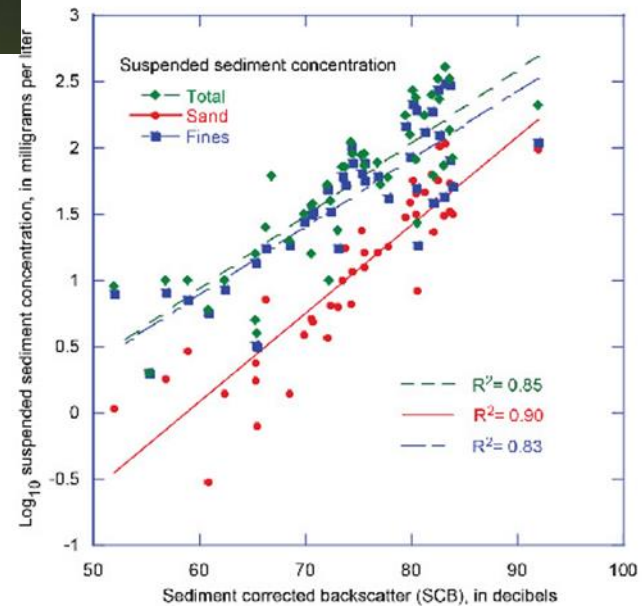


# Using Flow Measuring Devices to Predict Sediments

- Acoustic Doppler Current Profiler (ADCP)



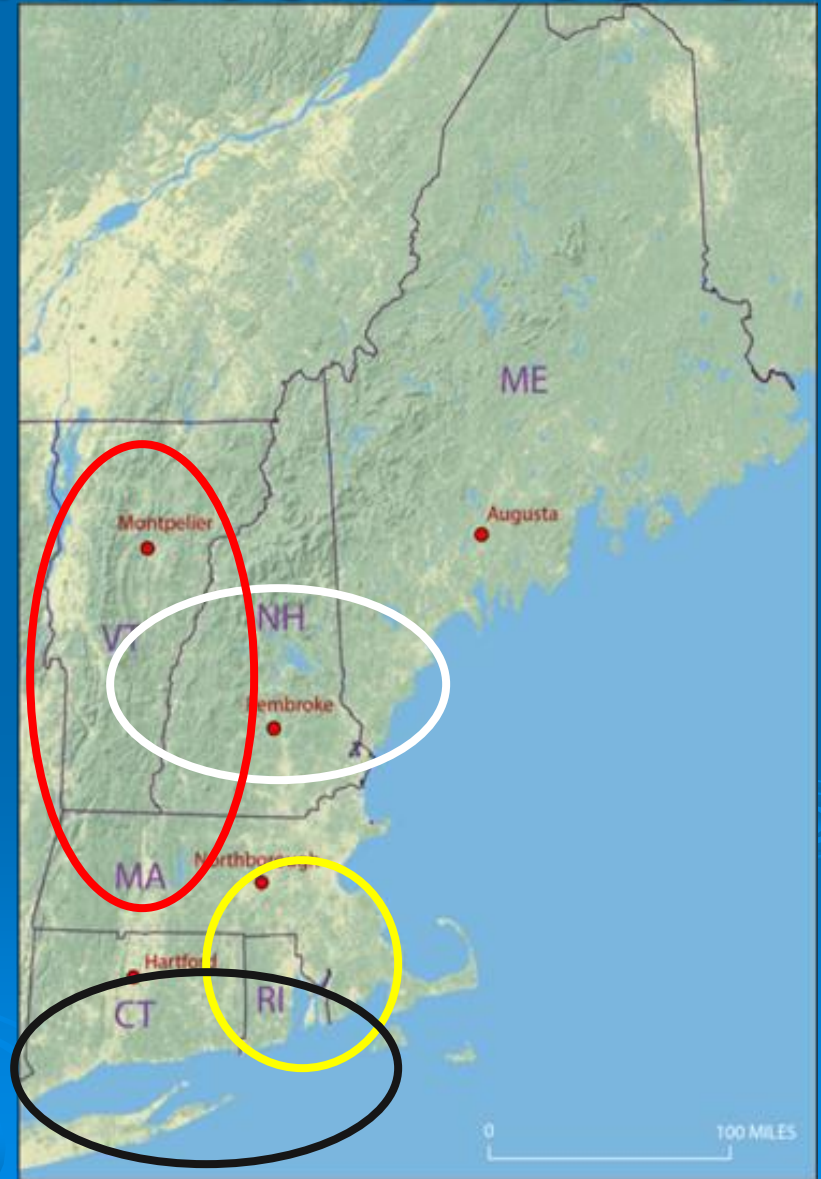
- Estimate sediment loads – Barton River  
<http://pubs.usgs.gov/of/2014/1184/>





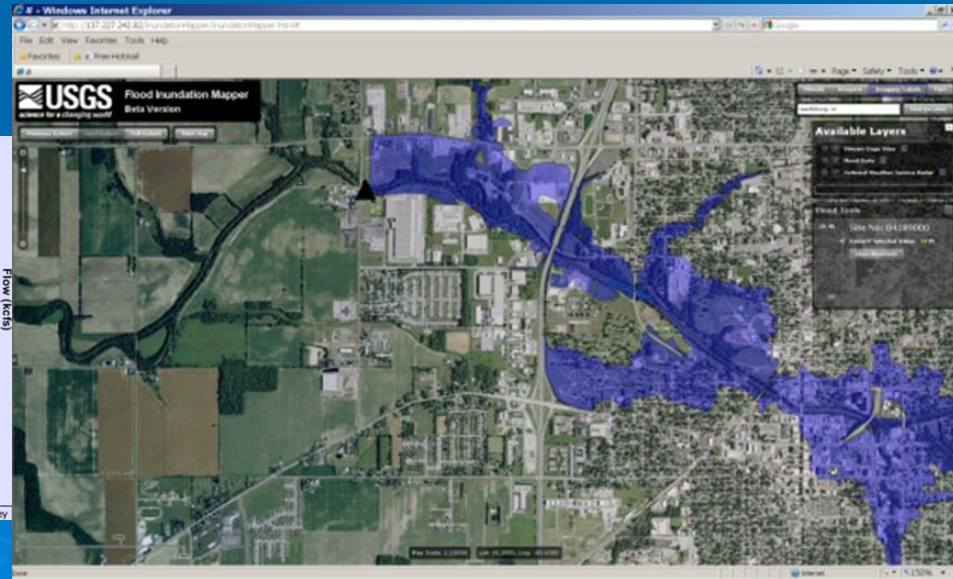
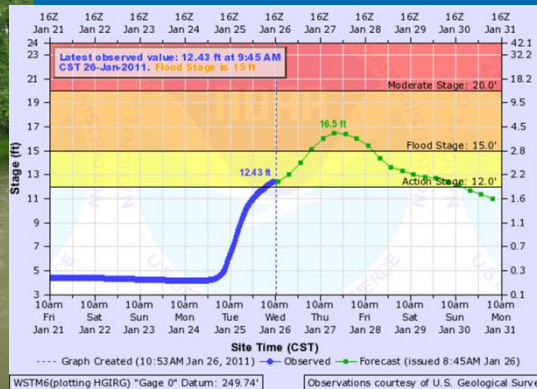
# Major Flooding in Recent Years

- 2005-07
- 2010
- 2011- Irene
- 2012 - Sandy



# Preparing Communities for Floods

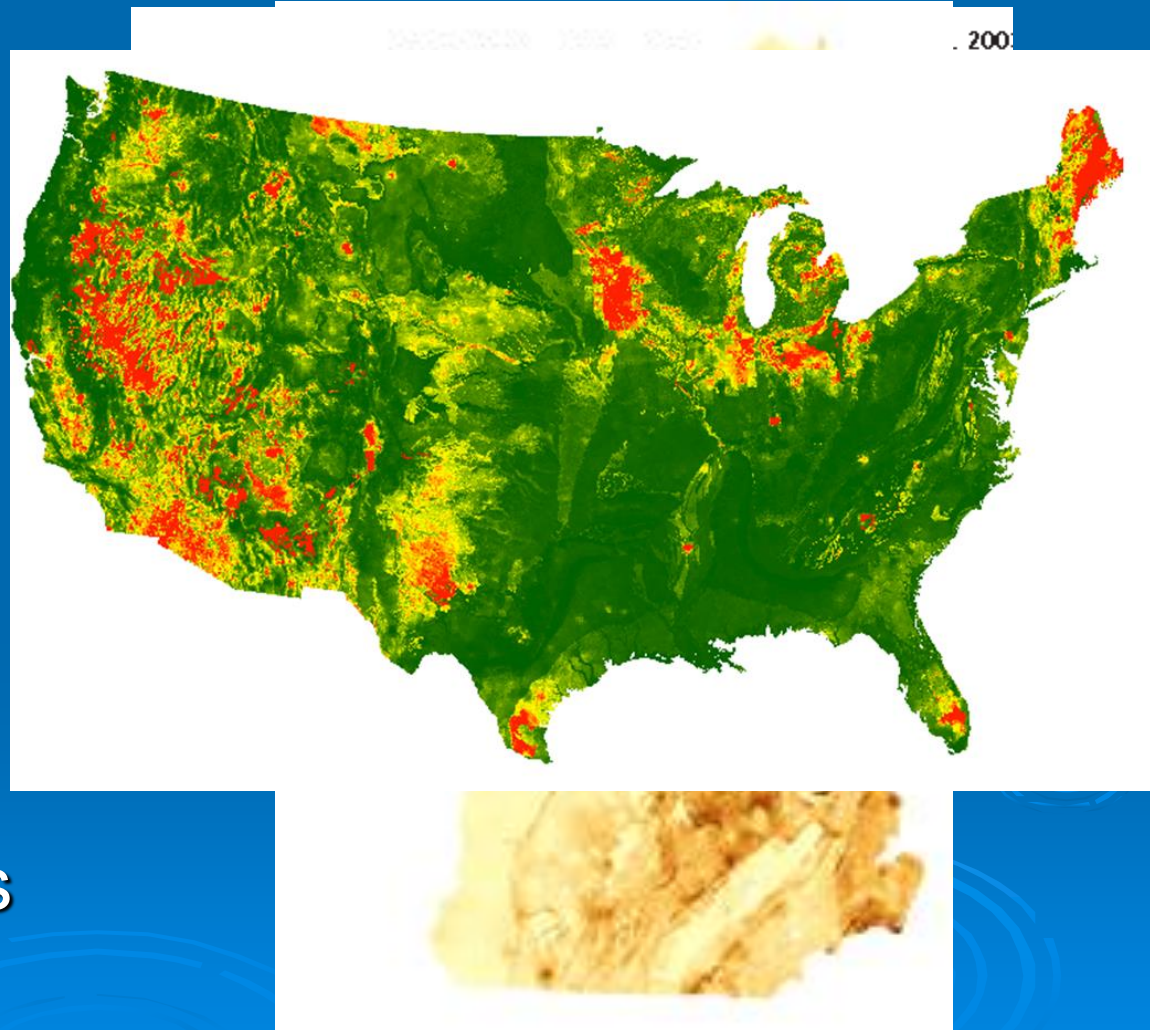
- Inundation maps linking real-time data to flood forecasts and areas that may be inundated





# Arsenic in Ground Water

- Answered where and why arsenic found in our groundwaters
- Local to national models
- Linked to human health studies
- Do similar studies for other natural contaminants



# Thanks!

