Incorporating the Next Generation of Water Monitoring in Vermont

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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
  [Link](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!