

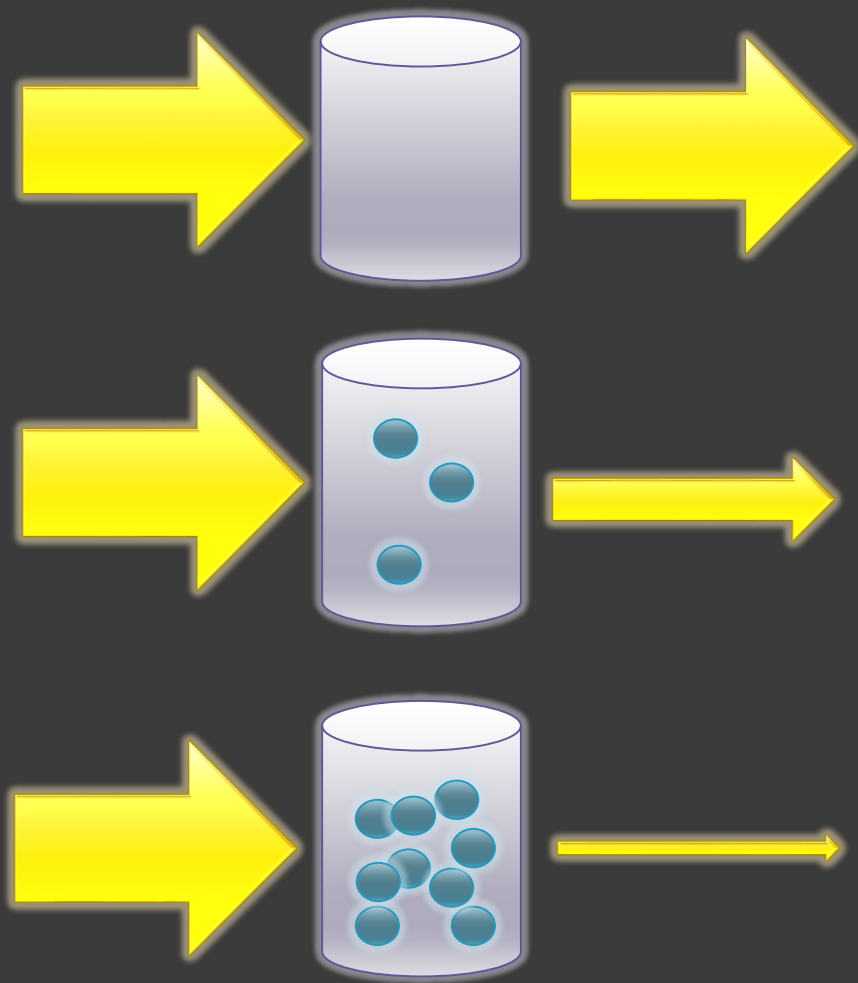
Vermont EPSCoR Retreat

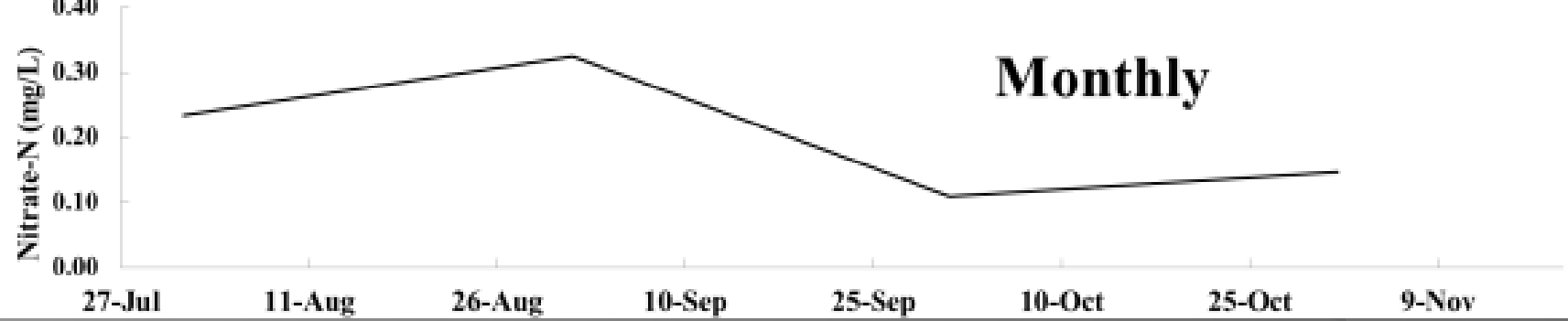
Matthew Vaughan



A photograph of a waterfall cascading over a rocky cliff in a forest. The water is white and frothy as it falls. The surrounding area is covered in green moss and small plants. Several bare tree branches are visible in the foreground, some crossing the frame. In the background, a house with a red roof is partially visible through the trees.

High-frequency optical water quality sensors





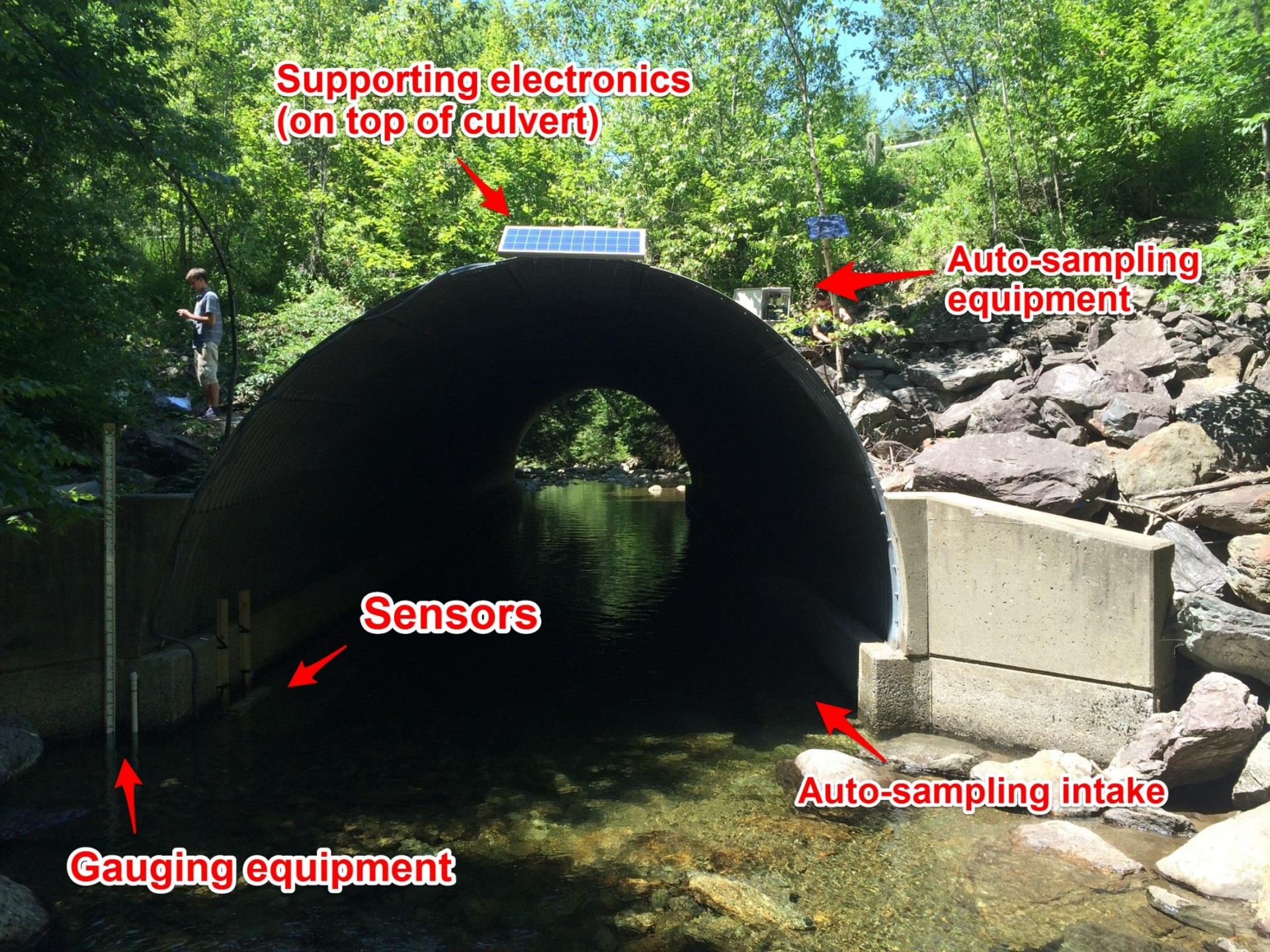
**Supporting electronics
(on top of culvert)**

**Auto-sampling
equipment**

Sensors

Auto-sampling intake

Gauging equipment



Phosphorus and Nitrogen



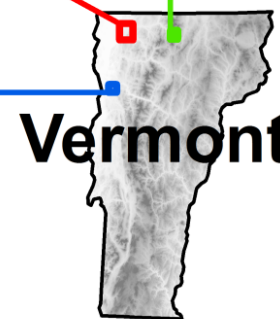
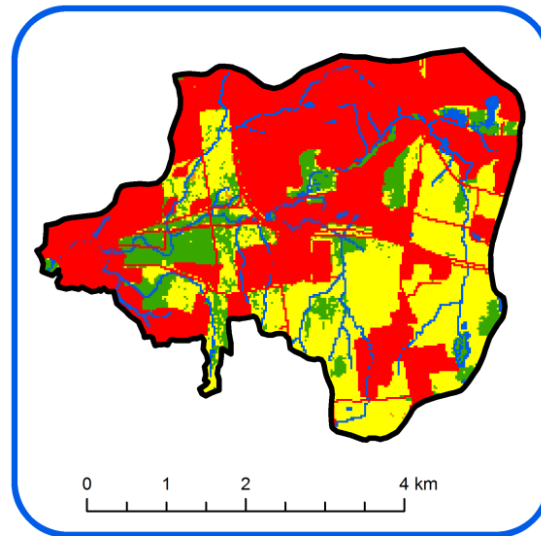
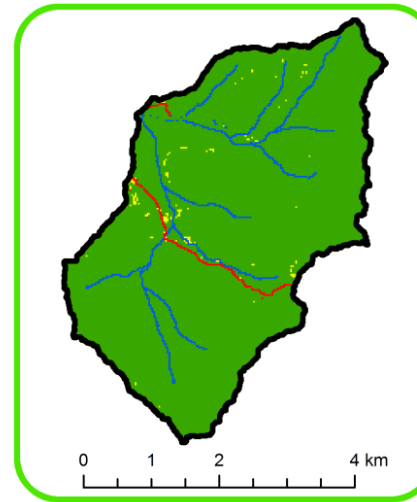
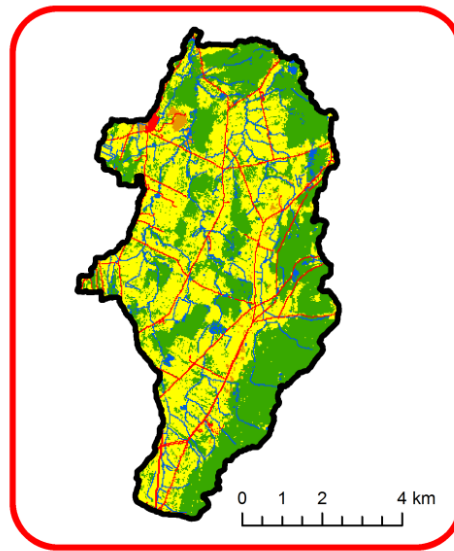
Agricultural



Forested

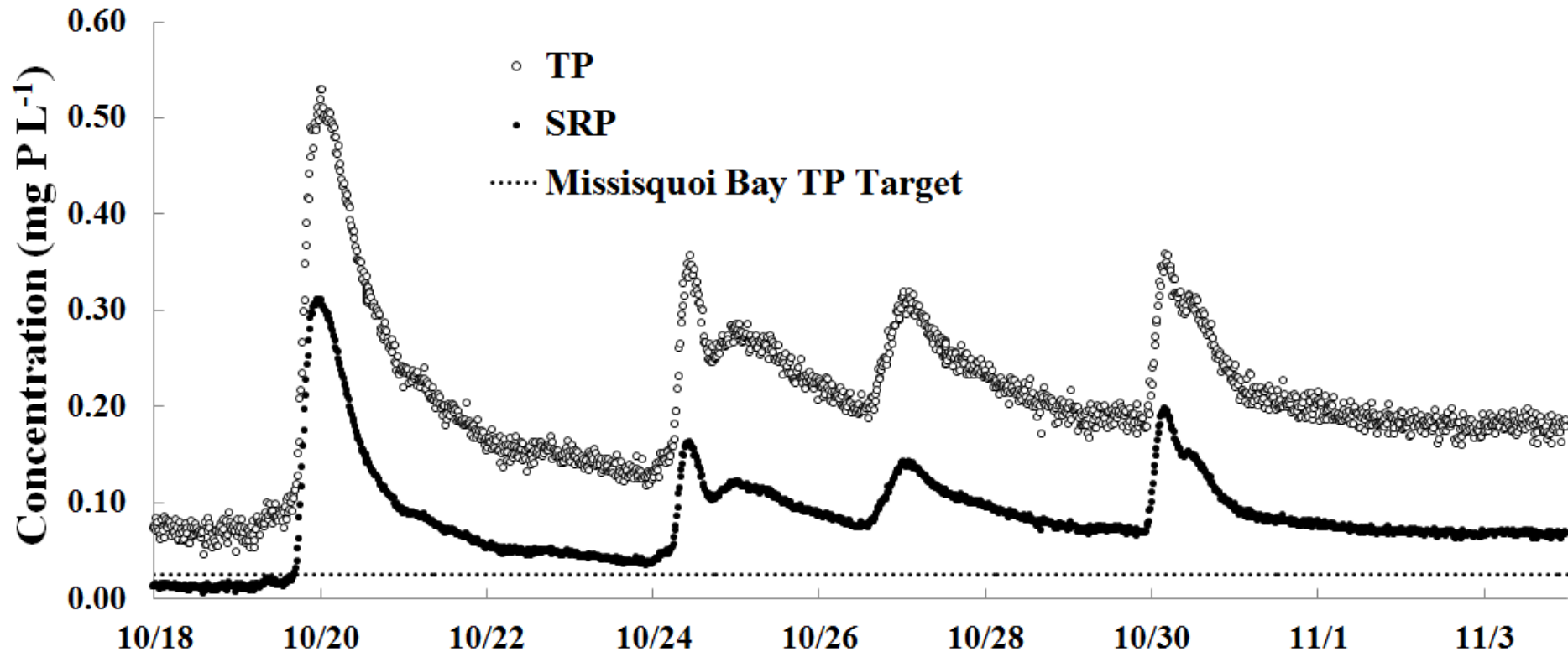


Urban - Suburban

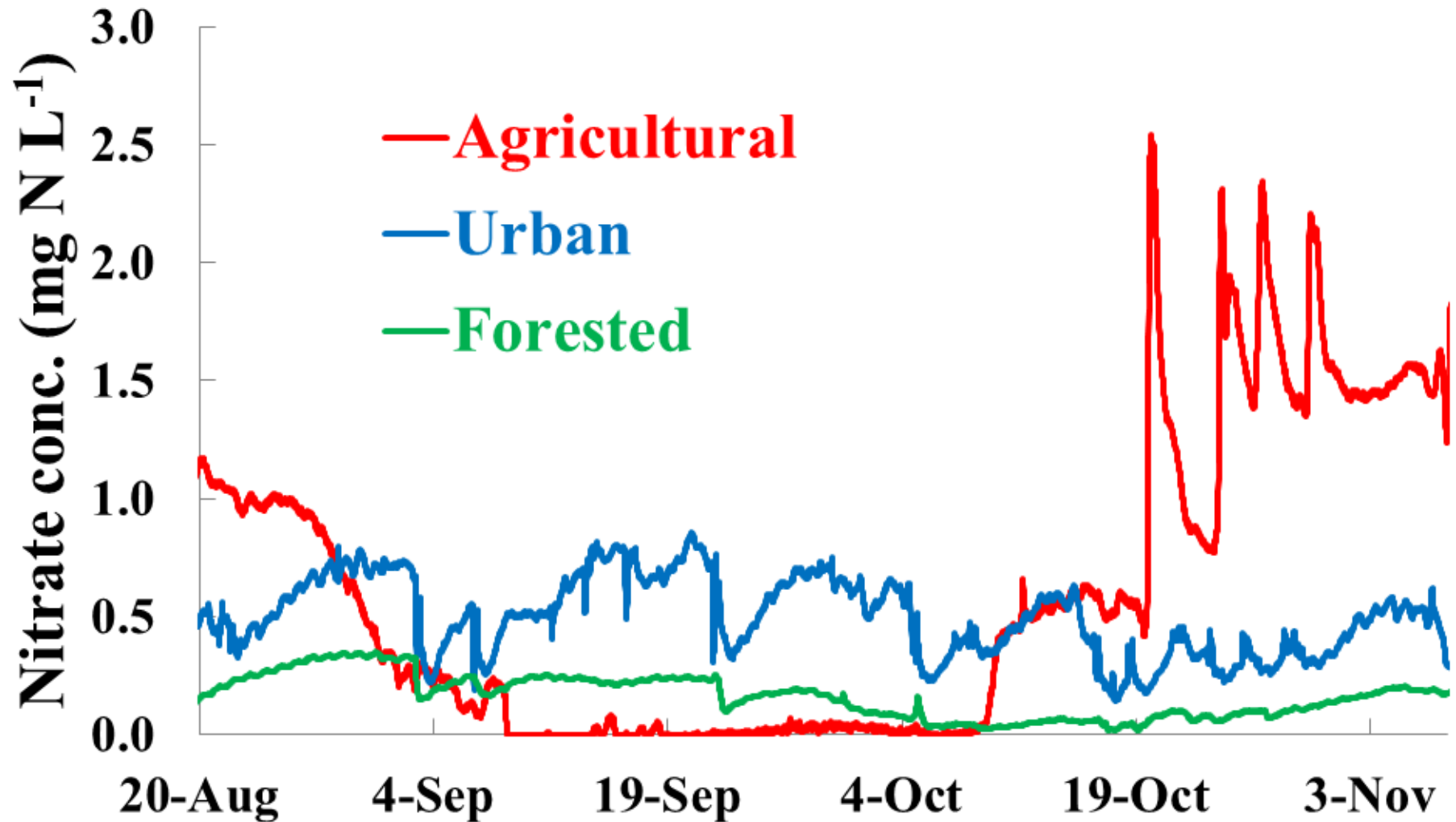


-  Forested
-  Agricultural
-  Urban / developed
-  Water
-  Barren / brush

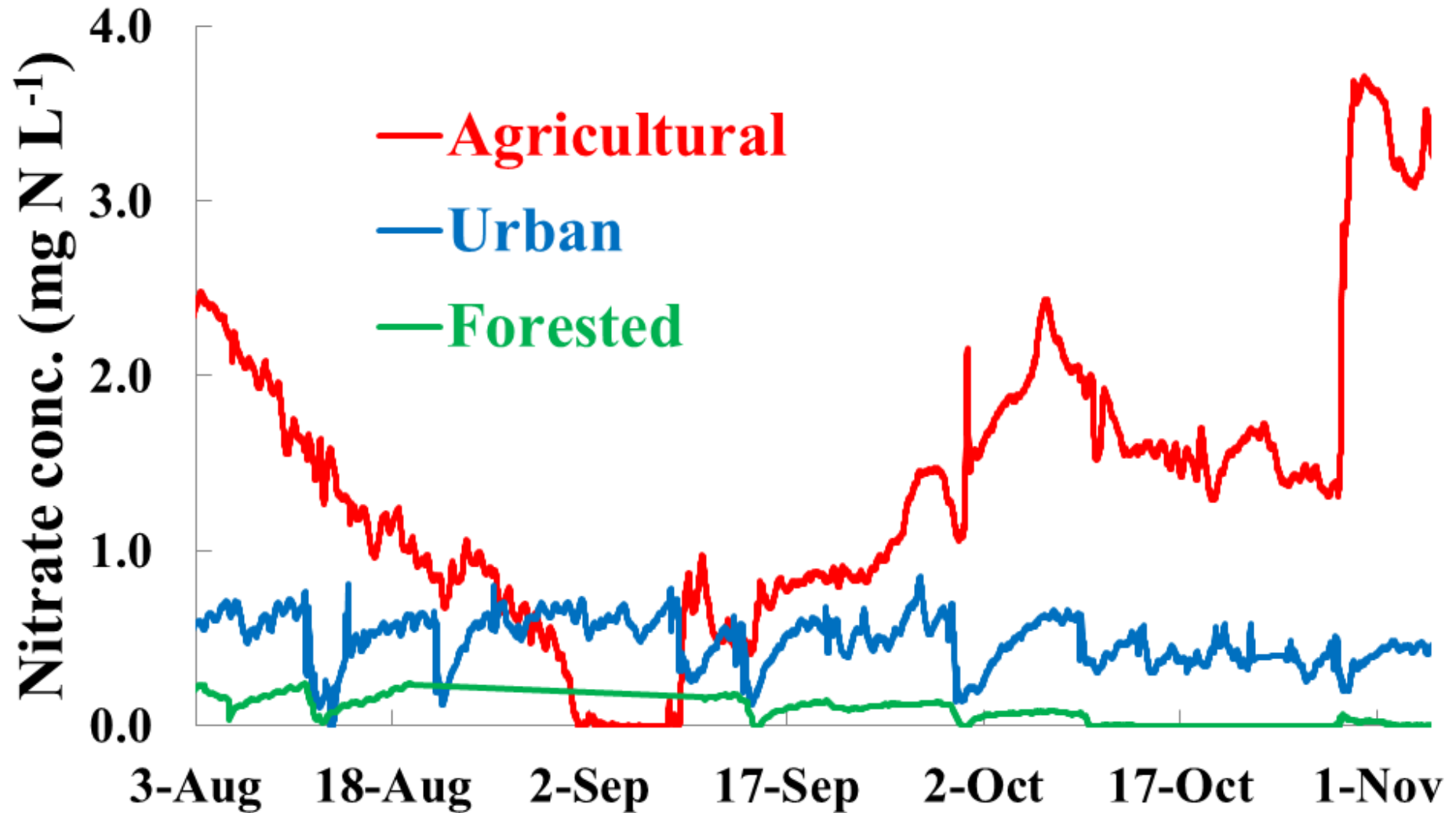
Phosphorus – Agricultural site




Nitrate - Vermont 2014



Nitrate - Vermont 2015



- 
- Expand use of sensor technology
 - Understand influence of land use on nutrient export



Questions?