



**TITLE:** THE LAMPREY RIVER HYDROLOGIC OBSERVATORY (LRHO)

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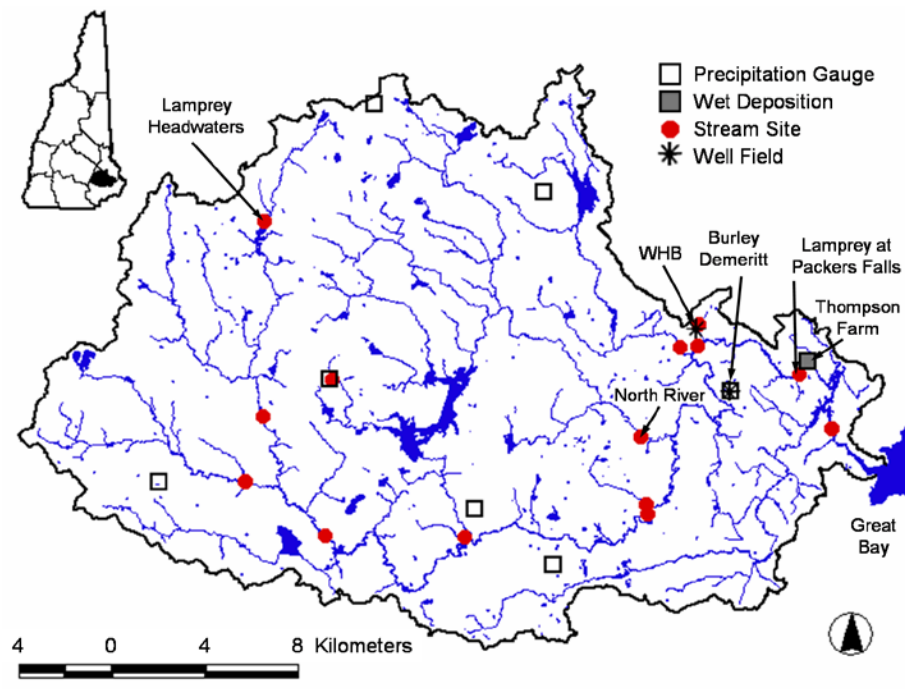
**RESEARCH OBJECTIVE:** Our objective is to develop the infrastructure of the Lamprey River watershed that will allow long term monitoring of biogeochemistry and hydrology in a suburbanizing basin.

**METHODS:**

- Install precipitation collectors, well fields and select long-term sampling sites to collect and characterize chemical constituents in rain and snowfall (wet deposition), groundwater and stream water
- Install precipitation gauges, stream gauges (in collaboration with the USGS), well fields, and soil moisture probes to monitor hydrology

**RESULTS:**

- Precipitation gauges, wet deposition collection, well fields and long-term stream sampling sites are shown in Figure 1
- Stream gauges are installed on the Lamprey River at Packers Falls, the North River and WHB (Figure 1)



**Figure 1.** Infrastructure of the Lamprey River Hydrologic Observatory

**APPLICATIONS:**

Results from ongoing research in the suburbanizing Lamprey River watershed will aid town planners, managers, conservation commission members, and citizens who are concerned with protecting water resources (both water quality and quantity) as development pressures on our natural resources increase.

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