

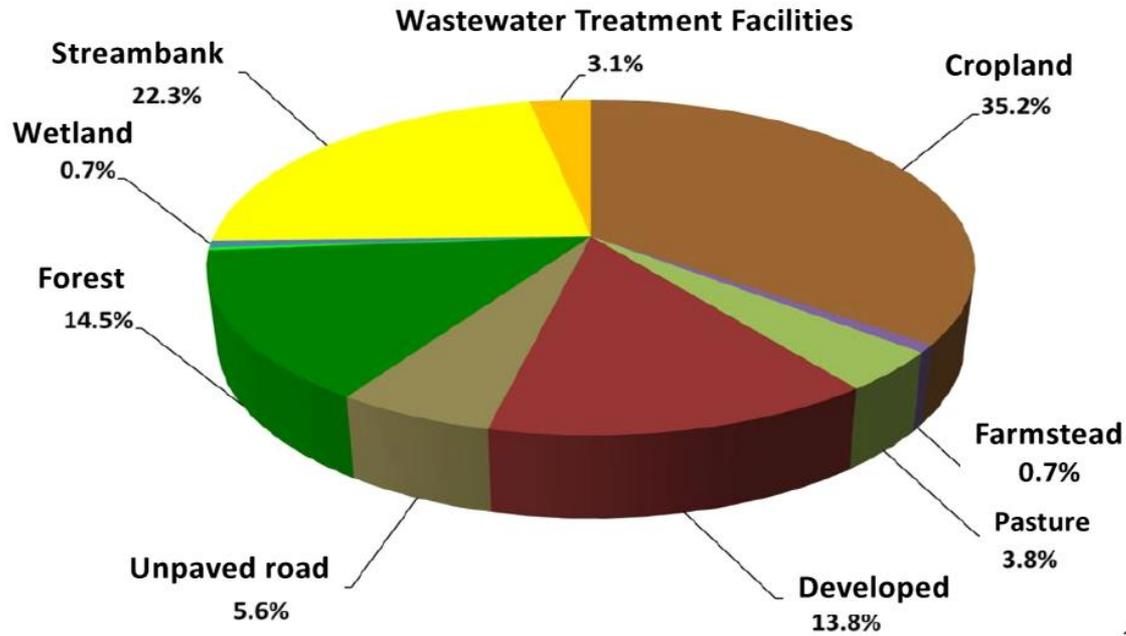
House Committee on Corrections and Institutions

April 10, 2014

James L. Jutras
Village of Essex Junction
Water Quality Superintendent

Sources of phosphorus in the Vermont portion of the Lake Champlain Basin

(from EPA – Tetra Tech, 2013)



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Sources of Phosphorus

Point Sources

- Wastewater Treatment Plants
- Stormwater Discharges
- Stormwater Discharges:
 - Phase II Permitted communities
 - All communities
- Other

Non Point Sources

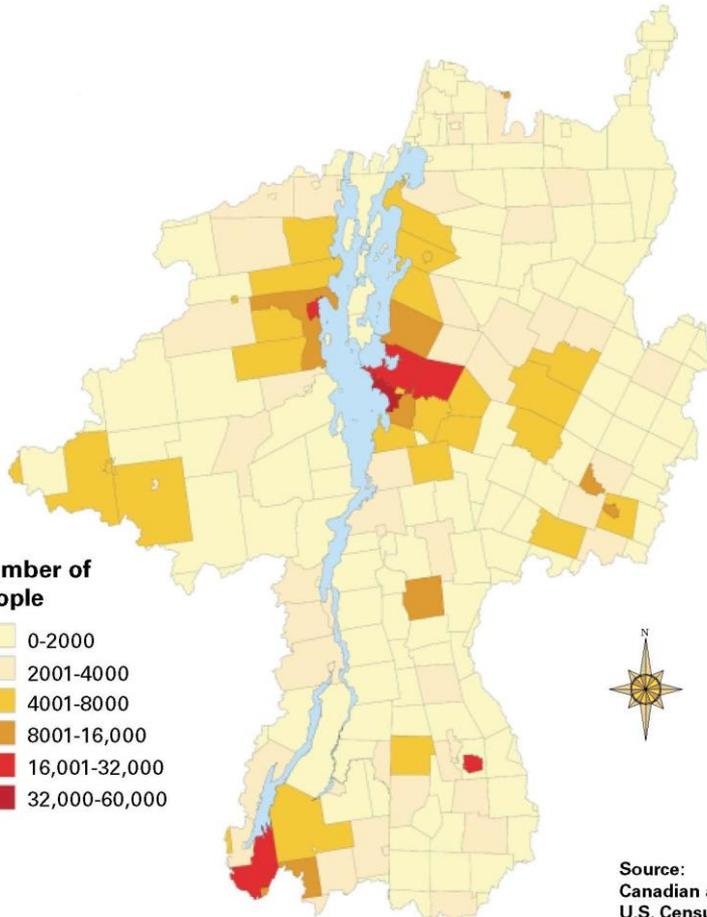
- Agricultural Runoff
- Forestry
- Open Land
- Stream sediment loading
- Stream bank Erosion
- Non Phase II municipalities
- Natural Stormwater Runoff
- Un Paved Roads
- Other



Phosphorus in Lake Champlain

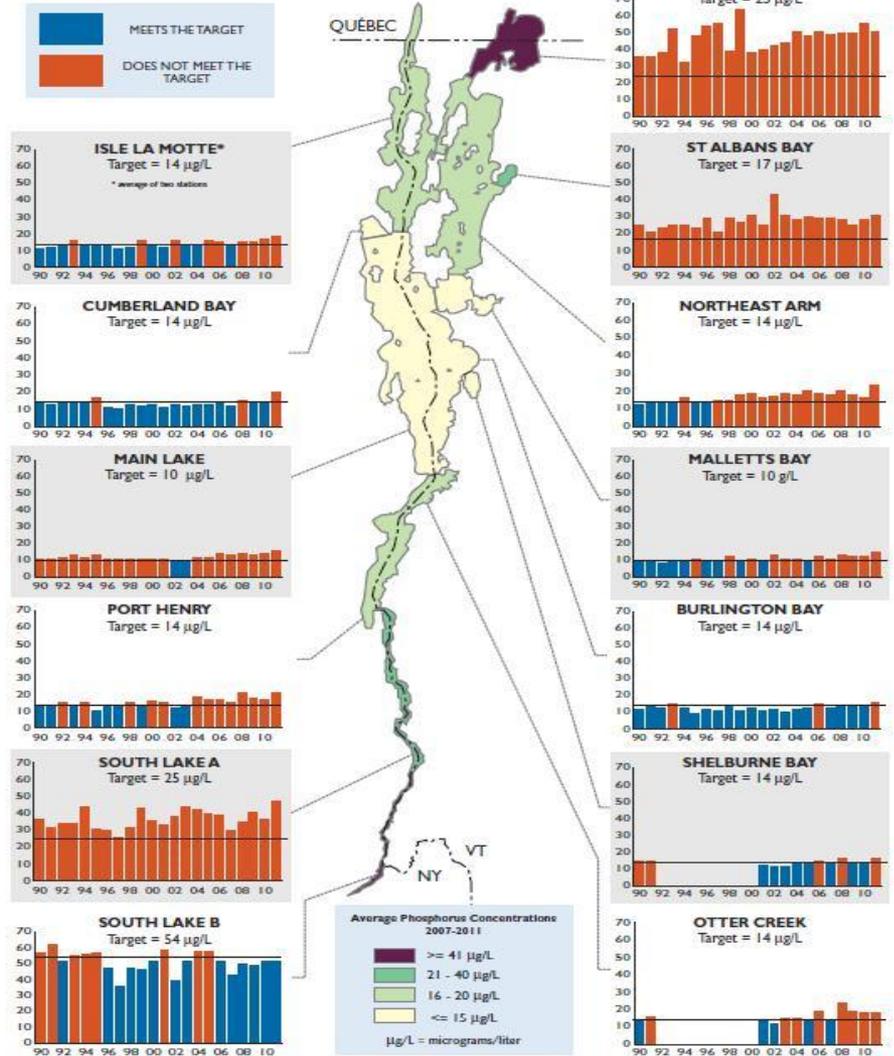
THE LAKE CHAMPLAIN BASIN ATLAS

Population 2000 by Towns



Source:
Canadian and
U.S. Census Data

Map by LCBP



DATA SOURCE: Long Term Monitoring Program (LCBP; VTANR, NYSDC)

FIGURE 3] LAKE CHAMPLAIN PHOSPHORUS CONCENTRATIONS BY LAKE SEGMENT

Permit Uncertainty & Capital Planning

- NPDES Discharge Permit: Wastewater
 - Issued 7/1/2004, expired 6/30/2009: Permit continued
- MS4 Permit: Stormwater
 - Each MS4 permit has been appealed
 - Prior permit expired in 2008
 - Current permit Issued December 2014
 - Flow Restoration Plan
 - Develop April 1, 2014, October 1, 2015
 - Submit October 1, 2016
 - Flow Monitoring Plan
 - Address Expired Permit
 - Low Impact Development: Homeowners
 - Enhance protection: stormwater impaired stream corridors

Permits are also coupled to Lake Champlain TMDL