

St. Albans Bay Watershed Results

Evaluating the impacts of the strategic watershed approach in Vermont



Goal: Measurable Water Quality Improvement

In an effort to assist the State of Vermont in meeting the phosphorus TMDL (Total Maximum Daily Load) for Lake Champlain, the USDA-Natural Resources Conservation Service (NRCS) initiated a **strategic planning approach** to water quality improvement for those watersheds in the Lake Champlain Basin that were **most impaired and contribute heavy concentrations of agricultural phosphorus runoff to the lake. This included the St. Albans Bay Watershed.**

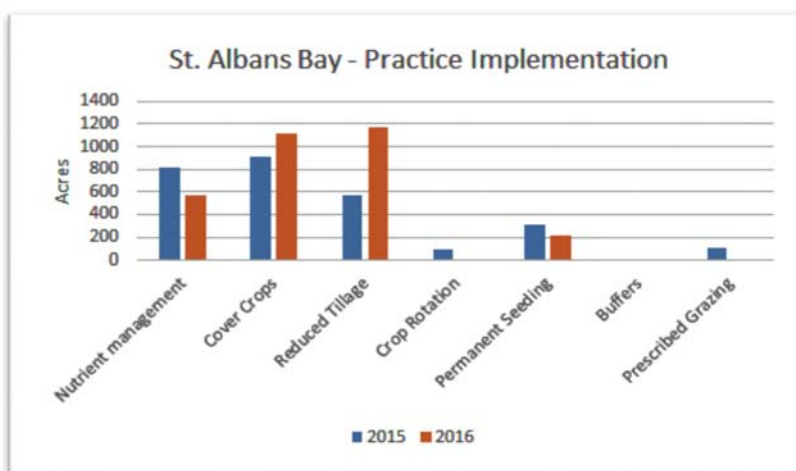
Accelerated and targeted implementation of agricultural conservation practices in this watershed aims to result in **measurable improvements to water quality.**

2016 was the first year of funding and practice implementation through NRCS' strategic watershed effort. These graphs illustrate practice implementation rates and estimated phosphorus reductions.

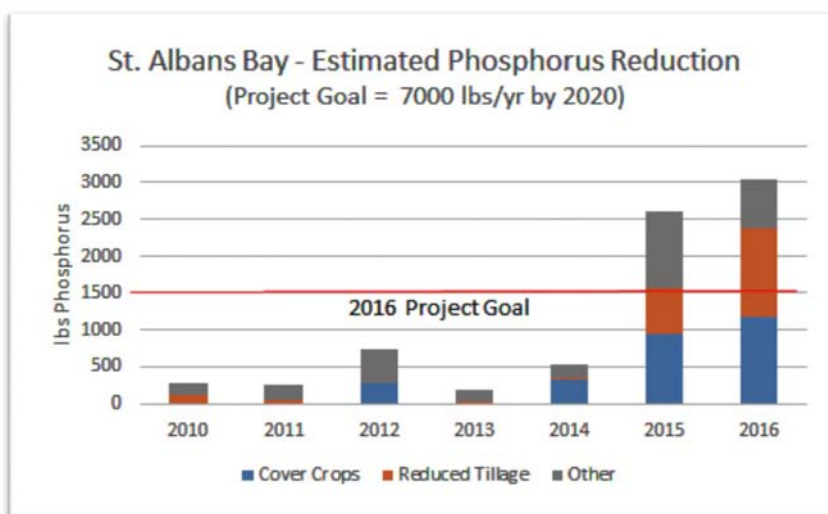
Phosphorus reductions were estimated using modeled cropland loading rates, acres of practices implemented, and practice efficiencies developed by the State of Vermont for TMDL tracking.

TMDL Phosphorus Reduction Goal for Agriculture: 35%
Watershed 5-Year Project Goal for Phosphorus Reduction: 7,000 lbs/year (87% of the TMDL goal)

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The amount of cover crops planted and use of reduced tillage increased significantly in the St. Albans Bay Watershed in 2016. Implementation of other agronomic practices remained the same or were very low. Active farmer adoption of conservation practices is a primary reason for the success of this project.



In this watershed, accelerated rates of practice implementation started in 2015, due in part to efforts led by UVM Extension. Practice implementation and associated phosphorus reductions increased in 2016 as well. The estimated amount of phosphorus reduction in 2016 was more than double the reduction goal established for that year.