

# McKenzie Brook 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 McKenzie Brook Watershed.**

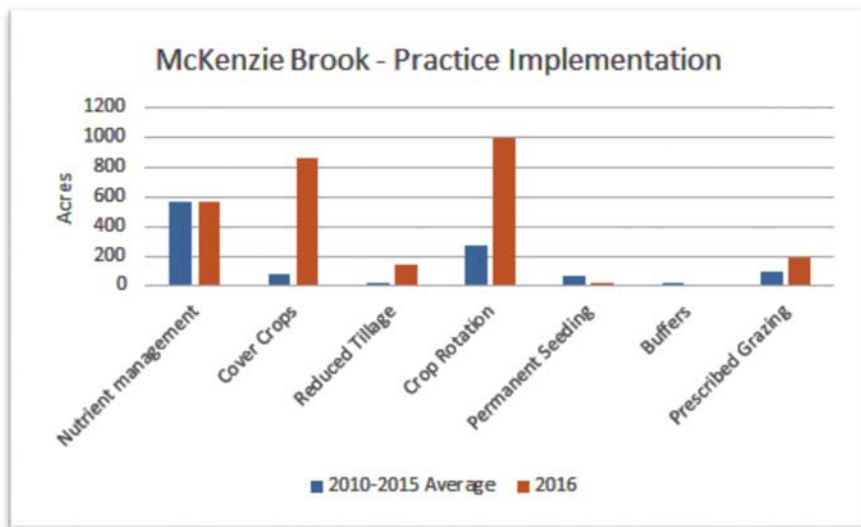
Accelerated and targeted implementation of agricultural conservation practices in this watershed aims to result in **measurable improvements to water quality.**

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.

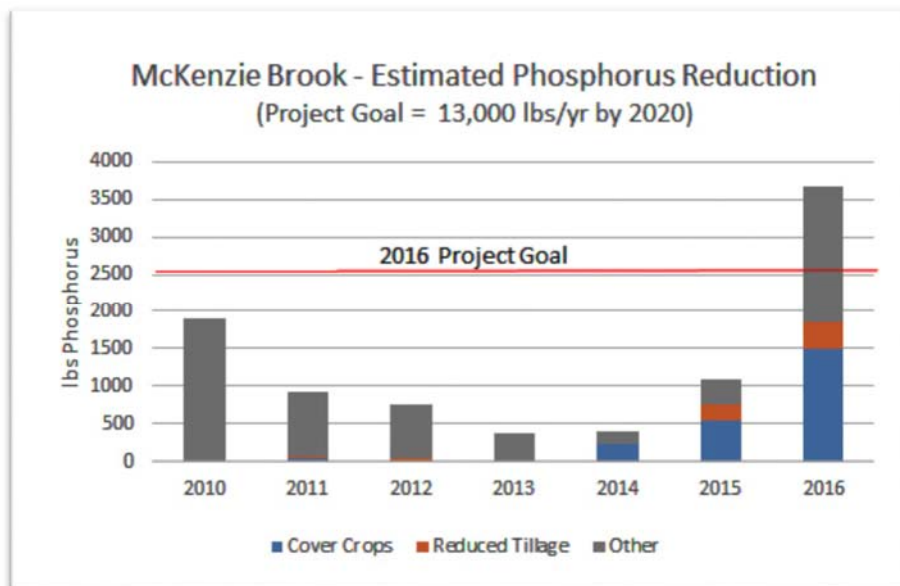
Phosphorus reductions were estimated using modeled cropland loading rates, acres of practices implemented, and practice efficiencies developed by the State of Vermont for TMDL tracking.

**TMDL Phosphorus Reduction Goal for Agriculture: 63%**  
**Watershed 5-Year Project Goal for Phosphorus Reduction: 13,000 lbs/year** (50% of the TMDL goal)

Natural Resources Conservation Service  
 @VermontNRCS  
[www.vt.nrcs.usda.gov](http://www.vt.nrcs.usda.gov)



*The amount of cover crops planted and use of reduced tillage increased significantly in 2016, as well as the amount of crops in rotation. 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.*



*Because of the accelerated rate of practice implementation in 2016, the estimated amount of phosphorus reduction tripled compared to 2015 and exceeded the reduction goal established for 2016.*