

<b>County/Municipality/Organization: Niagara County Soil &amp; Water Conservation District</b>					
<b>Name of Project or Activity: Johnson Creek Agricultural BMP Implementation Project</b>					
<b>Project Contact Information</b>					
Name of Primary Contact & Title: Victor DiGiacomo RAP Coordinator			Physical Address (street, town, state, zip): 4487 Lake Avenue Lockport, NY 14094		
			Mailing Address (if different from physical):		
Phone: 716-434-4949	Fax: 716-434-4985	Email: victor.digiacom@ny.nacdn et.net	Website/E-Link: www.nigaaraswcd.com		
<b>Project Location</b>					
Municipality (City/Town/Village): Royalton, Hartland, NY			County: Niagara		
Time Duration: 5/07 - 5/08			<input type="checkbox"/> Completed	<input type="checkbox"/> On-going	<input checked="" type="checkbox"/> Planned
<b>Type of Project</b> (check all that apply)					
<input checked="" type="checkbox"/> <b>Implementation Project</b> (check which type →)	<input type="checkbox"/> Wastewater treatment and infrastructure	<input type="checkbox"/> Coastal remediation and restoration	<input checked="" type="checkbox"/> Sustainable use / Strategic planning (Protection and Conservation)		
	<input type="checkbox"/> Coastal Education	<input type="checkbox"/> Other (specify):			
<input type="checkbox"/> <b>Research Project</b>					
<b>Source of Funding</b> (check all that apply, i.e. there could be more than one funding source)					
<input type="checkbox"/> Municipal	<input type="checkbox"/> County	<input checked="" type="checkbox"/> State	<input checked="" type="checkbox"/> Federal	<input type="checkbox"/> LOCI	<input checked="" type="checkbox"/> Other (specify): landowner
<b>Summary of Project</b> (include problem being addressed, techniques or methods used, expected outcomes, outcomes if completed, and progress/status if on-going)					
<p>The Johnson Creek Agricultural BMP Implementation Project is a cooperative effort between the Niagara County Soil and Water Conservation District (NCSWCD) and the Natural Resources Conservation Service (NRCS). The Johnson Creek watershed (04130001.060) drains approximately 34,376 acres of land from the Towns of Somerset, Hartland and Royalton in Niagara County. Land use in the watershed is primarily agricultural but also consists of woodlands, wetlands, abandoned farmland and the Village of Middleport. Specific impairments from non-point source pollution have been documented through inspection of the watershed during the AEM process and the Niagara County Water Quality Strategy. In addition, the water quality monitoring stressed stream analysis of the Johnson Creek watershed revealed a large increase in nutrient levels at several areas of this watershed.</p> <p>This watershed is ranked as the number 4 geographical area of concern in the County AEM strategy and is considered a high priority in the County Water Quality Strategy. The AEM tiered planning for the watershed was completed in 2000. To date there have been 120 Tier I's and 80 Tier II's completed in the watershed. The overall goal of the AEM process is to document and prioritize water quality impairments and to identify specific farm practices contributing to these impairments. The AEM Tier I and II have been completed on both the VanBuren and Ginivan farms included in this application and the identified problems are being addressed by this grant application. This project will eliminate the uncontrolled manure laden runoff from one barnyard at a satellite facility rented by the VanBuren Farm and one barnyard at the Ginivan Farm. These facilities and a description of the BMPs are discussed below.</p> <p>VanBuren Farm A Barnyard Water Management System is planned for this farm. The storm water run-off from an</p>					

existing barnyard is not contained at the farm and additional roof water from the adjacent barn drains onto the barnyard. Manure is not contained on the pad during scraping operations due to lack of curbing. During rainfall events the runoff is uncontrolled and runs directly into a tributary to Johnson Creek, located 50 feet south of the barnyard. The run-off from this area impacts the local water quality with nutrient and sediment load. The proposed management system consists of the installation of an approximately 1500 square foot concrete pad, 400 lineal feet of concrete curbing around the barnyard to contain manure during scraping operations and a roof system to prevent the rain water from contacting the manure, which will eliminate over 200,000 gallons of contaminated runoff from the area each year. This will be accomplished by roofing a 20 foot section of the barnyard adjacent to the barn, and eliminating cattle access to the remainder of the barnyard. The VanBuren farm is a large CAFO with 1600 animal units. VanBuren's main farmstead has received previous cost share funding through a Round 7 Agricultural Non-point Source Pollution Abatement program and the USDA NRCS Environmental Quality Incentive Program. This satellite facility is housing 400 head of cattle which has been leased from Mr. Mike Kennedy since 1986. The farm has a 10 year lease for the facility.

#### Ginivan Farm

A Barnyard Water Management System is planned for this farm. The storm water run-off from an existing soil and stone barnyard is not controlled or treated at the farm. Manure is unable to be removed from the area because there is no hard surface area that can be scraped. During rainfall events the barnyard becomes muddy from direct rainfall and the runoff from the adjacent barn roof, which amplifies the problem. The contaminated runoff discharges into a drainage course, which is adjacent to the barnyard, and provides a direct conduit to a tributary of Johnson Creek. The run-off from this area impacts the local water quality with nutrient and sediment load. The proposed system consists of constructing a paved barnyard with concrete curbing to contain manure on the barnyard and the installation of a roof covering system to prevent the rain water from contacting the manure. The project will eliminate approximately 100,000 gallons of contaminated runoff from the existing barnyard each year.

These farms are creating a threat to water quality in Johnson Creek. This proposal offers the most economic and effective solution to remediate the problem identified on the farms. The planned BMPs will tremendously reduce nutrient and sediment loading from the farm, and thereby benefit water quality to Johnson Creek. The improvements will allow for the containment of manure on the existing concrete barnyard and will prevent rain water from contacting any surfaces containing manure, thereby keeping the storm water clean, and decreasing the phosphorus load to the creek that was identified during the stressed stream analysis of the watershed.