The mission of the Albany County Soil and Water Conservation District (SWCD) is to improve local land management practices and provide technical assistance to residents, landowners, and units of government throughout Albany County.
Background Information

Our Agricultural Environmental Management (AEM) Strategy has been compiled by Soil and Water Conservation District staff with direction from an AEM working group representing the following agencies:

- Albany County Soil and Water Conservation District (SWCD)
- USDA Farm Service Agency (FSA)
- USDA Natural Resources Conservation Service (NRCS)
- Cornell Cooperative Extension of Albany County (CCE)
- Albany County Water Quality Coordinating Committee (ACWQCC)
- Albany County Office of Natural Resource Conservation
- Local AEM Working Group
- CGRASS Working Group - Columbia, Greene, Rensselaer, Albany, Schoharie, Schenectady Counties

Vision: Promote economically viable and environmentally sound farms in Albany County.

Mission: Through the voluntary AEM process of farm assessment, planning, implementation and evaluation we will strive to promote the economic sustainability of farms and the agricultural community within the County while protecting and enhancing the environment. The approach will be locally led to efficiently and cost effectively address all natural resource concerns on farms.

Ag NPS Abatement & Control Grant Program

Led by the New York State Soil and Water Conservation Committee, in coordination with the Department of Agriculture and Markets, the goal of the Agricultural Nonpoint Source Abatement and Control Program is to reduce and or prevent the nonpoint source contribution from agricultural activities in watersheds across the state by means of supporting the Agricultural Environmental Management (AEM) framework. Cost-share funds are provided through Soil and Water Conservation Districts for plans and the implementation of Best Management Practices (BMPs) Systems, as defined in Section 3 of the Soil and Water Conservation Districts Law.

Grants can cost-share up to 75% of project costs or more if farm owners or operators contribute, in planning or implementation. Planning funds are awarded to conduct environmental planning while implementation funds are awarded to construct or apply management practices.

AEM Base Funding

Launched in 2005, AEM Base Funding has increased the number of new farms involved in AEM and advanced more farms through the AEM framework from year to year. The State Environmental Protection Fund provides non-competitive grants for Soil and Water Conservation Districts to prioritize watershed concerns, document environmental stewardship, develop and implement conservation plans, evaluate effectiveness, and conduct educational outreach efforts. Since its inception the SWCD has been effective in encouraging new and old farms to participate in the program. Through AEM Base Funding, 226 farms have completed Tier I while 123 farms have moved onto Tier II. Perhaps most exciting and hopeful is the completion of 13 new conservation plans (Tier IIIa) a sign of farmer willingness to address resource concerns their farm may be contributing to and plan to mitigate these issues.
Planning Units Defined

There are 3 major watersheds in Albany County. They are: Middle Hudson Watershed, Schoharie Watershed and Mohawk Watershed.

(See map below)
Priority Unit #1 Middle Hudson Watershed
The Middle Hudson Watershed covers the majority of Albany County. It is comprised of several watersheds that were previously used as planning units for our original county AEM Strategy. The following list displays the watersheds and 12 digit Hydrologic Unit Codes (HUC) that make up the Middle Hudson Watershed in Albany County:

<table>
<thead>
<tr>
<th>12 Digit HUC</th>
<th>Watershed Name</th>
<th>PWL ID</th>
<th>Class</th>
<th>AEM NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>020200060202</td>
<td>Indian House Creek</td>
<td>1311-0018</td>
<td>A</td>
<td>Upstream of Watervliet Reservoir, suburban encroachment</td>
</tr>
<tr>
<td>020200060203</td>
<td>Black Creek</td>
<td>1311-0024</td>
<td>C</td>
<td>Flows to Watervliet Reservoir, highly developed, Black Creek Marsh. High gradient in escarpment area</td>
</tr>
<tr>
<td>020200060204</td>
<td>Bozen Kill</td>
<td>1311-0017</td>
<td>C</td>
<td>Flows to Watervliet Reservoir, high gradient, Karst topography, many active farms</td>
</tr>
<tr>
<td>020200060205</td>
<td>Hunger Kill</td>
<td>1311-0002</td>
<td>B</td>
<td>Urban-suburban development</td>
</tr>
<tr>
<td>020200060205</td>
<td>Watervliet Reservoir</td>
<td>1311-0001</td>
<td>A</td>
<td>Water supply, aquatic life and recreational uses in Watervliet Reservoir may experience minor impacts due to algal blooms and aquatic weed growth</td>
</tr>
<tr>
<td>020200060206</td>
<td>Normanskill</td>
<td>1311-0010</td>
<td>C</td>
<td>Highly erodible land, active horse farms, urban development</td>
</tr>
<tr>
<td>020200060206</td>
<td>Vly Creek</td>
<td>1311-0021</td>
<td>C(T)</td>
<td>Village of Voorheesville, diverse watershed. Gravel deposits and wetlands</td>
</tr>
<tr>
<td>020200060401</td>
<td>Vioman Kill</td>
<td>1301-0239</td>
<td>C(T)</td>
<td>Active farmland, nutrients</td>
</tr>
<tr>
<td>020200060401</td>
<td>Vioman Kill</td>
<td>1301-0240</td>
<td>C</td>
<td>Highly erodible, entrenched stream, buffer potential.</td>
</tr>
<tr>
<td>020200060402</td>
<td>Onesquethaw-Coeymans</td>
<td>1301-0095</td>
<td>C(T)</td>
<td>High nitrate levels found in municipal wells, nutrient enrichment from nonpoint source runoff, fauna vulnerable to pollutants in karst bedrock</td>
</tr>
<tr>
<td>020200060402</td>
<td>Onesquethaw Headwaters</td>
<td>1301-0233</td>
<td>C(TS)</td>
<td>Aquatic life support in Onesquethaw Creek is thought to experience minor impacts due to nutrient enrichment, siltation and other pollutants from agricultural and other nonpoint sources.</td>
</tr>
<tr>
<td>020200060403</td>
<td>Hannacrois Creek</td>
<td>1301-0020</td>
<td>C(T)</td>
<td>Cropland in floodplain, public drinking water in Ravena</td>
</tr>
<tr>
<td>020200060403</td>
<td>Hannacrois Creek</td>
<td>1301-0230</td>
<td>A(TS)</td>
<td>Cropland in floodplain, public drinking water in Ravena</td>
</tr>
<tr>
<td>020200060403</td>
<td>Hannacrois Creek</td>
<td>1301-0231</td>
<td>A(TS)</td>
<td>Cropland in floodplain, public drinking water in Ravena</td>
</tr>
<tr>
<td>020200060801</td>
<td>Vlockie Kill</td>
<td>1301-0238</td>
<td>C</td>
<td>Near Hudson, cropland in floodplain</td>
</tr>
<tr>
<td>020200060802</td>
<td>Lake Creek</td>
<td>1309-0011</td>
<td>C(T)</td>
<td>High gradient streams</td>
</tr>
<tr>
<td>020200060802</td>
<td>Squirmer Valley</td>
<td>1309-0011</td>
<td>C(T)</td>
<td>High gradient streams</td>
</tr>
<tr>
<td>020200060803</td>
<td>Ten Mile/Eight Mile</td>
<td>1309-0030</td>
<td>C(TS)</td>
<td>Livestock farms</td>
</tr>
<tr>
<td>020200060805</td>
<td>Basic Creek Above</td>
<td>1309-0028</td>
<td>A(TS)</td>
<td>Threats due to nutrient enrichment from agricultural and other nonpoint sources</td>
</tr>
<tr>
<td>020200060805</td>
<td>Basic Creek Below</td>
<td>1309-0027</td>
<td>C(T)</td>
<td>Active farmland, mostly hay/ pasture</td>
</tr>
<tr>
<td>020200060805</td>
<td>Basic Creek Reservoir</td>
<td>1309-0001</td>
<td>A</td>
<td>Algal blooms, excessive aquatic vegetation heavy nutrient and sediment loads</td>
</tr>
</tbody>
</table>

Classification of waters
AA or A is assigned to waters used as a source of drinking water.
B indicates a best usage for swimming and other contact recreation, but not for drinking water
C is for waters supporting fisheries and suitable for non-contact activities
(T) indicates the potential for supporting trout, (TS) indicating it may support trout spawning.
The following sub-watersheds drain to the Normanskill and eventually to the Hudson.

Black Creek 020200060203
Bozenkill 020200060204
Hunger Kill 020200060205
Watervliet Reservoir 020200060205
Vly Creek 020200060206
Normanskill 020200060206

**Water Quality Problem Statement:**

The Normanskill Watershed contains several waterbodies that have been listed in the NYSDEC Lower Hudson River Basin Priority Waterbodies List. Many of the impairments are attributed to the large degree of urbanization within this watershed, however pollutants impacting the Bozenkill, Black Creek, Indian House Creek, Vly Creek and Watervliet Reservoir may stem from agricultural practices. The Watervliet reservoir is owned by the City of Watervliet and is the City’s sole drinking water source. It is also the primary drinking water source for the Town of Guilderland. Water supply use of the Watervliet Reservoir is stressed by algal blooms and excessive aquatic vegetation. The Reservoir is fed by Indian House Creek, Black Creek, Bozenkill, and parts of the Hunger Kill.

Significant development pressure within this watershed renders responsible farming practices a necessity for open space preservation and good community relations.

The Watervliet Reservoir Watershed Protection Study authored by the Capital District Regional Planning Commission examines water quality/non-point source pollution problems of the Watervliet Reservoir located in Guilderland NY. Development pressures and a lack of water quality protection measures continue to threaten the long-term viability of the reservoir as a drinking water source.

**Suspected sources of nutrients and sediment as related to agriculture are:**

- Streambank Erosion
- Over grazed pasture - Livestock
- Manure/fertilizer spreading and storage
- Cropland Erosion - silt/sediment
- Heavy use areas including barnyards

**Desired Future Condition:**

Achieve a considerable reduction in agricultural sources of nutrient and sediment delivery in the watershed. Encourage riparian buffers along pasture and cropland. Promote soil health principles that will reduce incidence of bare soil- reduce tillage, cover cropping etc.

**Onesquethaw-Coeymans Watershed 020200060402**

Onesquethaw Creek 020200060402

**Water Quality Problem Statement:**

*Onesquethaw Creek* is a Class C waterbody [portions are class C(T) or C(TS)]. Municipal wells located near Clarksville have been known to exhibit high nitrate levels. An assessment indicated that resident fauna in Onesquethaw Creek is especially vulnerable to pollutants that may be rapidly transported through the highly fractured [Karst bedrock]. Aquatic life support in Onesquethaw Creek is thought to experience minor impacts due to nutrient enrichment, siltation and other pollutants from agricultural and other nonpoint
sources. The habitat, particularly the loss of stream flow through fractures in limestone stream bed, may influence the sample results.

Coeymans Creek is a Class C(T) waterbody. Aquatic life support in Coeymans Creek is known to experience minor impacts due to nutrient enrichment (phosphorus), siltation and other pollutants from agricultural and other nonpoint sources.

Water quality sampling through NYSDEC Rotating Intensive Basin Studies Intensive Network monitoring of Coeymans Creek in Coeymans, Albany County, (at Route 140) is conducted periodically. The biological (macroinvertebrate) sampling results indicated slightly impacted water quality conditions. Water column sampling revealed nutrients (nitrate), total dissolved solids and iron to be parameters of concern.

Through AEM the SWCD has inventoried farms in the watershed and identified and prioritized environmental practices and concerns. This information has been used to identify the highest priorities. Practices include: improvement of manure storage facilities and manure spreading practices, drainage improvements and stream buffers.

Suspected sources of nutrients and sediment as related to agriculture are:

- Barnyards
- Livestock
- Manure/fertilizer spreading and storage
- Silage storage and nutrient rich leachate
- Cropland Erosion
- Streambank Erosion

Desired Future Condition:

While agricultural activity in this watershed is viewed as having an impact on water quality there is opportunity to work with farmers, who are stewards of large areas of undeveloped land, toward goals of water quality improvement and stream corridor protection. Cover cropping should be encouraged in this watershed, to build organic matter in the soil. Better nutrient management on the larger farms will help to allocate nutrients according to soil test results. Many farms need 3-6 month manure storage systems in order to stay off the hydrologically sensitive areas during adverse weather conditions.

Catskill Creek Watershed
Tenmile Creek 020200060803

Water Quality Sampling A biological (macroinvertebrate) survey of Tenmile Creek at multiple sites between Oak Hill and Rensselaerville was conducted in 1997. Sampling results presented in the Tenmile Creek Biological Stream Assessment Report (Bode, et al., April 1998) indicated slightly to non-impacted water quality conditions. Four of five sites were assessed as slightly impacted, while the farthest downstream site was found to be non-impacted. Nutrient enrichment was identified as the primary source of the impacts. However, nutrient biotic evaluation determined these effects on the fauna to be minor. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses.] (DEC/DOW, BWAM/SBU, June 2005) Previous Assessment Previously reported minor impacts below the Hamlet of Rensselaerville may be the result of wastewater treatment overflows serving a small cluster of homes. Rensselaerville is now served by a community wastewater system (septic tank, sand filter with subsurface disposal). There have been no sanitary sewer overflows in the area since the system is installed. (DEC/DOW, Region 4, May 2008)
The data is very old, sampling should be conducted again in this watershed to see if there are changes to the stream health.

Squirmer Valley 020200060802
Lake Creek 020200060801

A biological (macroinvertebrate) survey of Catskill Creek at multiple sites between Leeds and Livingstonville was conducted in 1997. Sampling results presented in the Catskill Creek Biological Stream assessment Report (Bode, et al., September 1998) at two sites, including one at Preston Hollow in this reach, were assessed as slightly impacted but were very similar to the non-impacted sites. Nonpoint sources of nutrient enrichment were identified as the primary source of the impacts. However, nutrient biotic evaluation determined these effects on the fauna to be minor.

**Water Quality Problem Statement:**

Catskill Creek is a Class B waterbody [portions are class B(T)]. Investigations have identified possible water use impairments stemming from certain agricultural activities in this watershed. The 1999 NYSDEC Lower Hudson River Basin Priority Waterbodies List reports that public bathing and aesthetics in Catskill Creek may be impaired by pathogens, nutrients and sediment. Although the portion of Catskill Creek listed in the PWL is within Greene County (downstream), a biological assessment by the NYSDEC found slight water quality impacts from nutrient enrichment and siltation in Preston Hollow (Albany County).

**Suspected sources of nutrients and sediment as related to agriculture are:**

- Albany County Department of Health Source Water Assessment of Ten Mile Creek Watershed (subwatershed of Catskill) found agricultural land cover (i.e., pasture) to be a potential source of contamination. They have deemed the potential impacts to water sources as High with the contaminant of concern - **Protozoa**
- Streambank erosion and cropland erosion
- Barnyards
- Livestock
- Manure/fertilizer spreading and storage

**Desired Future Condition:**

Determine the farms in the Preston Hollow area that might be contributing to the nutrient enrichment and siltation issues and employ proper techniques to correct the problems. There are observed severe streambank erosion problems in the area of Preston Hollow that must be addressed when considering water quality enhancement. Identifying soil erosion concerns on farms in the Eight and Tenmile Creek area should be a priority.

**Basic Creek Watershed**
Basic Creek 020200060805

**Water Quality Problem Statement:**

Basic Creek is a Class A(TS) stream that extends for 54.1 miles. The aquatic life is thought to experience minor threats due to nutrient enrichment from agricultural and other nonpoint sources. Although aquatic life is supported in the stream, nutrient biotic evaluation suggests the level of eutrophication is sufficient to threaten aquatic life support.
In 2008 the NYSDEC Lower Hudson River Basin Priority Waterbodies List reported the water supply use in the Basic Creek Reservoir is impaired by algal blooms and excessive aquatic vegetation. The report identified poor agricultural conservation practices as the source of heavy nutrient and sediment loads. A NYSDEC Lake Classification and Inventory Program conducted in 2004 showed Phosphorus levels in the lake often exceed state guidance values indicating impacted/stressed recreational uses.

Recreational uses in Basic Creek Reservoir are impaired by excessive aquatic weeds and algal growth and elevated nutrient loadings (phosphorus) from various nonpoint sources. Water supply uses of the reservoir are also considered to be threatened due to the potential for the formation of disinfection by-products when water is treated with chlorine for public water use. Water Quality Sampling Basic Creek Reservoir was sampled as part of the NYSDEC Lake Classification and Inventory (LCI) Program in 2004. The results of this sampling indicate that the lake is best characterized as eutrophic, or highly productive. Phosphorus levels in the lake often exceed the state guidance values indicating impacted/stressed recreational uses. Poor conservation practices on agricultural lands in the reservoir watershed contribute heavy nutrient and sediment loads, which encourage plant growth. This water supply reservoir provides water to the City of Albany. This assessment found an elevated susceptibility to contamination for this source of drinking water.

**Suspected sources of nutrients and sediment as related to agriculture are:**

- Barnyard runoff from livestock
- Manure/fertilizer spreading and storage
- Silage storage and nutrient rich leachate
- Cropland Erosion
- Streambank Erosion

**Desired Future Condition:**
Identify farms that might be contributing increased levels of nutrients to the stream above the reservoir. Focus and implement practices that are associated with high levels of Phosphorus. Encourage farmers to adopt cover cropping and better nutrient management, introduce farmers to programs that will increase or create riparian buffers in areas of concern and promote rotational grazing where land base allows.

**Vlomanskill Watershed**
- Vloman Kill 020200060401
- Vlockie Kill 020200060405
- Papscame Creek 020200060305

**Water Quality Problem Statement:**

The Vlomanskill is a Class C waterbody [portions are class C(T)]. Investigations have identified possible water use impairments stemming from certain agricultural activities in this watershed. The 2007 NYSDEC Lower Hudson River Basin Priority Waterbodies Listed this waterbody needing verification with nutrients as a suspected pollutant. AEM investigations conducted by the Albany County SWCD have identified agriculture as a contributor of nonpoint source pollution. Significant development pressure within this watershed renders responsible farming a necessity for open space preservation and good community relations.

**Suspected sources of nutrients and sediment as related to agriculture are:**

- Streambank Erosion
- Barnyard runoff from livestock
- Manure/fertilizer spreading and storage
- Silage storage and nutrient rich leachate
- Cropland Erosion
**Desired Future Condition:**

Identify problematic agricultural areas of concern and implement BMP’s. Encourage conservation tillage, cover crop use, riparian buffers and proper nutrient management.

**Hannacrois Creek Watershed**
Hannacrois Creek 020200060403

**Water Quality Problem Statement:**

The Hannacrois Creek is a Class A(TS) stream. The watershed contains the Alcove Reservoir which acts as the main drinking water source for the City of Albany. A majority of the surrounding land area is City owned and therefore agriculture is not a major detriment to water quality in the Alcove Reservoir. There are a few small farms in the area that have the potential to have a significant impact on the reservoir. The Hannacrois Creek downstream of the Alcove is impounded in Deans Mill for use as a water supply to the Village of Ravena. Investigations have identified possible water use impairments (nutrients, sediment, pathogens) within the lower watershed stemming from certain agricultural activities.

**Suspected Sources of nutrients and sediment are:**

Department of Health Source Water Assessment of the Hannacrois Watershed found agricultural land cover ie, pasture to be a potential source of contamination. They have deemed the potential impacts to water sources as Very High with the contaminant of concern being Protozoa. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: landfills. Additional sources of potential contamination include: septic systems (along 143 and near intake), golf course and pasture (very near intake).

**Suspected sources of nutrients and sediment as related to agriculture are:**

- Streambank Erosion
- Barnyard runoff from livestock
- Manure/fertilizer spreading and storage
- Silage storage and nutrient rich leachate

**Desired Future Condition:**

Identify the farms in the area that have streams on their property making them a priority. Implement water quality practices surrounding these streams, such as properly allocated manure/fertilizer spreading, and encouraging riparian buffers. Prevent nutrient enrichment to waterbodies.

**Priority Unit #2 Schoharie Watershed**

The Schoharie Watershed is located in the north western portion of the county. It is comprised of the following sub-watersheds:

<table>
<thead>
<tr>
<th>12 Digit HUC</th>
<th>Watershed Name</th>
<th>PWL ID</th>
<th>Class</th>
<th>AEM NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>020200050501</td>
<td>Headwaters Fox Creek</td>
<td>1202-0004</td>
<td>C(T)</td>
<td>Rotational grazing</td>
</tr>
<tr>
<td>020200050502</td>
<td>Switz Kill</td>
<td>1202-0007</td>
<td>C(T)</td>
<td>Streambank erosion, Rotational grazing</td>
</tr>
<tr>
<td>020200050505</td>
<td>Kings Creek</td>
<td>1202-0008</td>
<td>A</td>
<td>Streambank erosion, Rotational grazing</td>
</tr>
<tr>
<td>020200050504</td>
<td>Ox Kill</td>
<td>1202-0041</td>
<td>C</td>
<td>Streambank erosion, Rotational grazing</td>
</tr>
<tr>
<td>020200050503</td>
<td>Beaverdam Creek</td>
<td>1202-0043</td>
<td>C</td>
<td>Several beef farms, Rotational grazing</td>
</tr>
<tr>
<td>020200050404</td>
<td>Little Schoharie Creek</td>
<td>1202-0047</td>
<td>A(TS)</td>
<td>Silt and sediment loads from streambank erosion</td>
</tr>
</tbody>
</table>
Water Quality Problem Statement:

Fox Creek is a Class C(T) stream throughout most its length in Albany County. Investigations have identified possible water use impairments stemming from agricultural activities in this watershed. Currently all PWL are listed as no known impact. However SWCD AEM assessments indicate opportunities for improvement on a farm by farm basis. Tier 2 analysis indicates resources concerns from improper grazing techniques, lack of riparian buffers, and a need for conservation tillage improvements. There has been an increased interest in rotational grazing in the above mentioned watersheds. There is a need for improved management.

Suspected Sources of nutrients and sediment as related to agriculture are:

- Barnyards
- Overgrazed pasture from livestock
- Manure/fertilizer spreading and storage
- Silage storage and nutrient rich leachate
- Cropland Erosion
- Streambank Erosion – serious problem in many locations

Desired Future Condition:

Identify livestock farms that could implement prescribed rotational grazing into their farm operation, adopt best management practices that prevent the incidence of overgrazing of pasture thereby reducing the sources of contamination. Where possible, prevent or limit livestock access to streams. On cropland, implement cover cropping to prevent non-point source pollution.

Priority Unit #3 Mohawk Watershed

<table>
<thead>
<tr>
<th>12 Digit HUC</th>
<th>Watershed Name</th>
<th>PWL ID</th>
<th>Class</th>
<th>AEM NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>020200041109</td>
<td>Lisha Kill</td>
<td>1201-0074</td>
<td>B(T)</td>
<td>Horse farms and vegetable production</td>
</tr>
<tr>
<td>020200041110</td>
<td>Shaker Creek</td>
<td>1201-0079</td>
<td>C</td>
<td>Vegetable producers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1201-0095</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Water Quality Problem Statement:

This planning unit consists of the small, urbanized watersheds in the northeastern portion of the county that drain to the Mohawk River. Although these watersheds are highly urbanized, there are a few scattered farms that produce vegetables, hay and livestock pasture (mainly equine). Agricultural sources of water pollutants are minimal in comparison to residential/commercial/industrial sources, however it is suspected that nutrients and sediment may be exported from these operations.

Suspected Sources of nutrients and sediment as related to agriculture are:

- Barnyards
- Livestock
- Manure/fertilizer spreading and storage
- Cropland Erosion

Desired Future Condition:

Identify potential sources of contamination and seek to implement practices to prevent non-point source pollution.
Status of Agriculture in the County

2012 Census of Agriculture for Albany County New York

According to the 2012 census conducted by NASS there are 494 active farms* in the County. 63,394 acres of land in farms with an average size farm ~ 128 acres. County farms contribute over $45.9 million to the local economy and hire a significant number of employees. The primary agricultural products sold in Albany County are nursery and greenhouse crops followed by cattle and calves for beef and milk and other dairy products (see Table 1).

Table 1 – Top Ranking Commodities – USDA NY Agricultural Statistics Service

<table>
<thead>
<tr>
<th>2012 CENSUS OF AGRICULTURE</th>
<th>Albany County</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD ($1,000)</td>
<td>Value</td>
</tr>
<tr>
<td>Total value of agricultural products sold</td>
<td>45,957</td>
</tr>
<tr>
<td>Value of crops including nursery and greenhouse</td>
<td>31,072</td>
</tr>
<tr>
<td>Value of livestock, poultry, and their products</td>
<td>14,884</td>
</tr>
<tr>
<td>TOP FIVE ALL COMMODITIES - VALUE OF SALES ($1,000)</td>
<td></td>
</tr>
<tr>
<td>Nursery, greenhouse, floriculture, and sod</td>
<td>21,856</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>7,273</td>
</tr>
<tr>
<td>Milk and other dairy products from cows</td>
<td>5,239</td>
</tr>
<tr>
<td>Other crops and hay</td>
<td>3,633</td>
</tr>
<tr>
<td>Vegetables, melons, potatoes, and sweet potatoes</td>
<td>2,655</td>
</tr>
<tr>
<td>TOP FOUR LIVESTOCK INVENTORY ITEMS (number)</td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>9,765</td>
</tr>
<tr>
<td>Sheep and lambs Layers 20 weeks old and older</td>
<td>3,198</td>
</tr>
<tr>
<td>Horses and Ponies</td>
<td>1,433</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>1,138</td>
</tr>
<tr>
<td>TOP FIVE CROP ITEMS (acres)</td>
<td></td>
</tr>
<tr>
<td>Forage - land used for all hay and haylage, grass silage, and greenchop</td>
<td>24,768</td>
</tr>
<tr>
<td>Corn for grain</td>
<td>3,205</td>
</tr>
<tr>
<td>Corn for silage</td>
<td>1,761</td>
</tr>
<tr>
<td>All vegetables harvested</td>
<td>748</td>
</tr>
<tr>
<td>Oats for grain</td>
<td>349</td>
</tr>
</tbody>
</table>

*The census definition of a farm is any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. This definition is consistent with the definition used for current USDA surveys.

The Albany County Agricultural and Farmland Protection Board completed a Farmland Protection Plan in 2004, their mission: ‘To development goals and strategies to support and enhance Albany County’s agricultural industry and agricultural resources”. Within the plan there is listed many challenges faced by agriculture including an aging farm operator population, increasing development pressure and increasing property taxes. While many challenges are out of our hands, we are fortunate to have AEM as a tool to promote environmentally friendly farms. As the next generation takes over the family farm or considers a new career in farming, they can look to AEM as a model for operating a sustainable business. The AEM model supports farmers’ desire to be stewards of the land, serves as an example of good land management, and allows farmers to provide the earth-friendly products that are becoming very important to consumers.
Natural Resource Concerns

Nutrient Management

During Tier II farm assessment visits it is clear that farmers wish to follow nutrient recommendations and guidelines. Fuel cost and labor issues have been an impediment to properly allocating manure and fertilizer based on Cornell recommends. A growing number of farmers are looking to use soil health management systems to improve the health and function of their soil. Through proper soil health management farmers can save energy and inputs, save water and increase drought tolerance, reduce pests and disease, improve water quality, increase organic matter, increase water infiltration increase soil carbon and reduce CO2 emissions. These results can be achieved with a number of conservation practices, such as:

- Cover Crop
- Conservation Tillage
- Prescribed Rotational Grazing
- Conservation Crop Rotations

Livestock access to waterbodies and inadequate forage

There are many farms that allow livestock to access the waterbody on the farm in order to be sure the livestock can have drinkable water throughout the year. When livestock have full access to streams and other water bodies, they create water quality problems by loafing in these areas. Mud and manure can degrade water resources, and contaminate livestock drinking water sources. By fencing streams and providing an alternative water source, animals have access to clean water, which results in better health and weight gain, while protecting water quality.

In addition the pasture lot is typically over grazed due to inadequate fencing infrastructure. By implementing prescribed rotational grazing systems, animals are provided with adequate forage to meet their nutritional needs without overgrazing pastures. When pastures are overgrazed, bare soil is susceptible to erosion and compaction. Overgrazed pastures can result in muddy conditions during the winter months. The SWCD hopes to encourage the use of rotational grazing as a management tool.

Water Quality Contamination of Surface and Groundwater (nutrients, sediment, pathogens)

The County’s water supply is obtained from both surface reservoirs and subsurface aquifers. The main surface water aquifers are the Alcove, Basic, Watervliet and Vly Reservoirs. NYS Department of Health Source Water Assessment of public drinking water supplies identified six surface waterbodies and nine municipal wells as having elevated susceptibility to pollution or substantial potential risks. Agricultural activities have been identified as possible sources.

Erosion on Cropland

Soil erosion is a major concern on much of the cropland in Albany County. The hazard of erosion is related to the slope of the land, the erodibility of the soil, the amount and intensity of rainfall and the type of plant cover. Loss of soil through erosion results in loss of nutrients and water, formation of gullies on hillsides, deterioration of tilth, detrimental sedimentation downslope and pollution of streams and water reservoirs. Many tillage and conservation practices help control erosion. Minimum tillage, no-till, cover crops, crop residue on the surface and a cropping system that has a high proportion of sod crops are effective in controlling erosion (Albany County Soil Survey). Reduced tillage and conservation practices could potentially have an economic benefit to farms given fluctuating fuel costs and labor issues.
Streambank Erosion

Streambank erosion has been found to be one the highest concerns in the farming and non-farming community in Albany County. Farmers have expressed concerns about a loss of pasture and cropland; and Tier II assessments correspond with the farmers concerns. While natural stream processes are understood there still seems to be an abnormal increase in frequency and severity of damage to streambanks. This issue can not only be corrected thru work on an individual farm location but must be looked upon in a broad spectrum of issues throughout the community.

AEM Base Funding Strategy

We will continue to actively engage all members of the farming community that display an interest in participation in the program. Preference will be towards watersheds that have a direct impact on the drinking water supplies of citizens in this County.

In the Middle Hudson Watershed we will continue the AEM process by conducting Tier 1 inventories on farms that start up and are referred to us from our partners. From these new Tier 1’s we will determine which farms need to proceed onto Tier 2 assessment. Those farms exhibiting resource concerns will proceed through Tier 3a and where possible we will seek funding to implement practices highlighted during the planning process. We will also continue to work with returning farms seeking assistance. We will be accessible to any farmer seeking conservation technical assistance in Albany County.

Likewise in the Mohawk and Schoharie Watersheds we will continue the AEM process by conducting Tier 1 inventories on farms that have been added to our farm list. These new farms will proceed through the tiered process where appropriate. Rotational grazing is growing in these watersheds, and we hope to encourage new farmers to adopt grazing practices, as a means to maximize home grown forage potential, produce a quality grass fed product and promote a healthy sustainable environment.

Communications and Outreach Strategy

The successful outcome of any strategic plan is an effective communications strategy which actively engages participants in the program and serves to enlighten those which simply seek to satisfy their interest. Our communications and outreach will be geared to all residents of Albany County. The SWCD publishes a biannual newsletter which will continue to promote the AEM program. By doing so we seek to provide educational articles on farming practices to educate those less familiar with farming as well as reiterate environmentally sound production methods such as reduced tillage, grazing, riparian buffers and composting to the farming community.

In addition to newsletter articles and press releases, we will make an effort to strengthen our “Farmers Partnering to Protect Our Environment” AEM signage program. This will provide farms the opportunity to publicize their stewardship. We will strive to make the sign award an annual tradition.

Partnering with our conservation partners we plan to offer educational workshops on topics such as grazing, soil health, field crops and green energy production on farms.

Evaluation Strategy

As the AEM Base Funding contract period runs from May of one year through May of the following year, each year in March we will review our Strategy and reassess our goals for the upcoming year. We will combine our AEM Steering Committee meeting with the NRCS Local Working Group Meeting. This will allow us to get as much input as possible to be used for the yearly update of the Strategic Plan.
The Albany County Soil and Water Conservation District hereby adopts this 2015-2020 Agricultural Environmental Management Strategic Plan.

By [Signature]  Date: March 10, 2015

John J. Santacrose, Chair of the District Board

This action authorized at an official meeting of the Albany County Soil and Water Conservation District on March 10, 2015