



## Improving Manure Management | A Fourteen-Point Countywide Agenda for Action

### Introduction

The agenda for action presented in this document is the result of a community-driven effort coordinated by the Cayuga County Manure Management Working Group, a committee organized by County Legislators Keith Batman and Michael Didio to investigate how practices involving the storage, application, processing, and transport of manure can be improved so that their negative impacts on water quality are minimized. Formation of the Working Group was prompted by manure runoff incidents that occurred on frozen and saturated ground during the winter of 2013-2014 in Cayuga County and across the State.

After considering public input provided at a community forum held on October 29<sup>th</sup>, 2014, the Working Group appointed an Advisory Committee to make recommendations addressing concerns regarding manure management. The Advisory Committee released a report summarizing its conclusions on May 13<sup>th</sup>, 2015 and presented it on June 25<sup>th</sup> at a second community meeting where attendees had the opportunity to offer additional input.\*

Over the course of five months following the release of the Advisory Committee's Recommendation Report the Working Group met to consider all of the suggestions that had been made and discuss how best to put the Advisory Committee's report into action. A draft of this *Agenda for Action* was presented at a third community meeting held on November 16<sup>th</sup>, 2015 and revised in response to comments received at that meeting and since.

The measures listed in the following pages are proposed as the key points in a broad based, participatory program of action toward improving manure management throughout Cayuga County.

The Working Group looks forward to the continued support of the citizens of the county and their elected officials as it now commences what it anticipates will be its final task—to facilitate the initial work required to set the proposed program in motion.

\*The Advisory Committee's report is available online at <http://www.cayugacounty.us/Portals/0/planning/WQMA/Documents/RecommendationReport.pdf> and at <http://blogs.cornell.edu/cccecayuga/manure-management-recommendation-report/>.



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# Action Items



## PLANNING & RESEARCH

**1** Analyze the results of a literature search recently undertaken as part of the Cayuga Lake Watershed Plan Update Project to identify priority nutrient management research needs; Continually update the literature search and the analysis and distribute the results of the analysis in periodic reports; Meet with representatives of universities and other research institutions and organizations to identify and endorse proposals that address the priority needs and to assist in the creation of strategic, cooperative research partnerships.

Responsible party: The Cayuga County Water Quality Management Agency (WQMA)

**2** Include the elements identified by the U.S. Environmental Protection Agency as critical for achieving improvements in water quality in any and all watershed management plans that are prepared; Expand the Owasco Lake Watershed Management Plan to include the EPA elements; Propose methods and approaches to including the EPA elements in the Owasco Lake Watershed Management Plan that would enhance the Plan's usefulness in serving as a model for other watershed management plans.

Responsible party: The Cayuga County Department of Planning and Economic Development

- Assessing the risk of applying manure on any given field at any given time of the year, such as through the use of Application Risk Management (ARM) worksheets;
- Storage of surplus manure;
- Practices such as cover crops, crop rotations, crop rotations with perennials, strip cropping and contour farming;
- Installation and maintenance of conservation systems such as grassed waterways and vegetative barriers in areas of concentrated flow;
- Cropping systems that include planting strips of harvestable soil stabilizing and soil enhancing crops along the edges of farm property in cases where sheet flow would result in the transport of sediment containing manure off of farm property (if determined, based on research, to be practical and effective).
- Incorporation of surface-applied manure as soon as possible after application; Incorporation of surface-applied liquid manure within 48 hours of application unless it is applied to growing crops or on soil with more than 30% plant residue ground cover; and
- Other practices that will act as buffers to trap nutrients before entering surface waters.

Responsible party: WQMA



## STANDARDS & PRACTICES

**3** Direct the WQMA to expand the membership of one of its working groups to insure greater participation and input from the agricultural community and assign that working group the tasks of reviewing existing standards for manure management (including the NRCS Code 590 Standard) and developing its own set of locally appropriate standards addressing issues and practices including:

- Soil testing and manure testing;
- Application rates for individual fields determined by Cornell guidelines and adjusted to avoid runoff or loss to subsurface tile drains;
- Manure application setback from surface water sources including ditches;
- Manure application on frozen, snow covered and/or saturated conditions;

**4** Determine what field conditions must exist and what management practices must be followed in order for manure application on frozen, snow covered and/or saturated soil to be considered acceptable; Seek advice and guidance on this issue from representatives of the Natural Resources Conservation Service (NRCS), The NYS Department of Environmental Conservation (NYSDEC), Cornell University; In discussing standards for application on saturated soil, address issues relating to the Code 590 Standard including but not limited to:

- The current allowability of surface application of manure when the moisture levels of soils are high but still not "saturated" as described by Code 590;
- Apparent flaws in the description of what indicates when soils are saturated; and
- The prohibition of application of manure on soils that are saturated as it may or may not apply to injection or incorporation.

Responsible party: WQMA

- 5** Direct the WQMA to implement a program promoting its standards that includes such strategies as:
- Pursuing funding to assist farms in preparing nutrient management plans consistent with the standards established by the WQMA;
  - Calling on farmers to take a pledge to comply with the standards established by the WQMA and publicizing the commitments of farmers to take the pledge; Evaluating progress and assigning ratings to farms based on their success in complying with the standards;
  - Providing public recognition of farms that are particularly successful in implementing the Committee's standards by awarding them "Farm of Distinction" status.
  - Coordinating with the Cayuga County Soil and Water Conservation District to integrate the programs and initiatives of the WQMA with Agricultural Environmental Management (AEM) Program activities addressing environmental issues on farms.
  - Seek grants to fund the purchase of shared software tools to aid in the design of conservation features such as grassed waterways and the estimation of costs associated with constructing such features.
  - Investigate the feasibility of creating a mechanism for financing WQMA-endorsed manure management practices through voluntary donations.

Responsible party: WQMA

- 8** Publish quarterly or annual reports and press releases summarizing the NYSDEC records relating to complaints regarding manure activities (excluding information identifying individual persons or farms); Share the results of the analysis from #7 above and the concerns that they may raise with the NYSDEC if necessary.

Responsible party: WQMA

- 9** Call upon NYSDEC Environmental Conservation Officers (ECOs) and county watershed inspection staff to be particularly watchful of livestock owners providing direct, unrestricted access to streams by livestock, and to issue citations for this prohibited practice.

Responsible party: Cayuga County Legislature

- 10** Adopt a resolution urging the New York State Legislature to approve using fines collected from farms that have been found to violate water pollution control regulations to fund the establishment of state-of-the-art nutrient management practices on farms in the same region; Use materials describing similar positions of the Northeast Dairy Producers Association, the New York Farm Bureau, and the New York State Conservation District Employees Association in drafting the resolution; Meet with local state representatives to solicit support for the change in policy advocated by the resolution.

Responsible party: Cayuga County Legislature



## EDUCATION & COMMUNICATION

- 11** Direct the Cayuga County Water Quality Management Agency (WQMA) to develop a Request for Proposals from qualified professionals to create a branding and communications plan for the Agency; Seek funds from educational foundations and other potential sources to create the plan.

Responsible party: WQMA

- 12** Direct the WQMA to:
- Seek sponsorship for and convene well-publicized annual conferences and other forums that focus on water quality and sustainable agriculture and provide participants opportunities to review progress in improving environmental stewardship and discuss ways of removing obstacles to greater success; and
  - Submit material highlighting issues relating to water quality and sustainable agriculture to agencies that



## COMPLIANCE & ENFORCEMENT

- 6** Request, on a monthly basis, records compiled by the NYSDEC relating to complaints regarding manure activities and the investigations of them.

Responsible party: Cayuga County Legislature

- 7** Analyze NYSDEC records of complaints and investigations of manure activities over time to determine if enforcement activities are: 1) focused strongly enough on repeat, uncooperative offenders, 2) adequately preventing direct, unrestricted access to streams by livestock, and 3) conducted in a manner that is uniform and consistent across all watersheds.

Responsible party: The Cayuga County Department of Planning and Economic Development



publish newsletters containing information on such topics.

Responsible party: WQMA

**13** Expand the web site of the WQMA by adding material on how to recognize when manure handling practices are adequately accounting for potential negative environmental impacts and when they are not; Use an analysis of NYSDEC records of complaints and investigations to determine priority issues to address on the web site; Solicit input from the NYSDEC and SWCD on specific information to include; Take advantage of photos and video as much as possible to make the information understandable to the widest possible audience; Request that other agencies include links from their web sites to the manure handling information on the WQMA web site.

Responsible party: WQMA

**14** Request local school districts including BOCES to allow representatives of the Working Group to convene meetings of agricultural instructors, members of Future Farmers of America (FFA) chapters and other groups to

discuss how best to improve opportunities for students to learn about the role of agriculture in the food system and the relationships between water quality and farm activities; Suggest taking advantage of superintendents' training days to schedule the meetings. Specific topics intended to be discussed include:

- Expanding training and education on the food system in the curricula of the Auburn Enlarged City School District;
- Expanding Conservation Field Days activities to include opportunities for participants to learn about the relationships between water quality and farm activities; and
- Providing opportunities for students as well as other county residents from a variety of backgrounds to participate in educational, interactive events on working farms and other events highlighting the dependency of farm people and city people on each other for essential products and services.

Responsible party: Cayuga County Manure Management Working Group

## Responsible Parties

The groups or agencies charged with carrying out the actions listed in the previous section are identified at the end of each action item's description. The successful implementation of this *Agenda for Action* depends on the ability of the identified groups to perform specific tasks aimed at achieving real results.

The Manure Management Working Group requests that the responsible parties develop project plans for each action item they will be involved in. Each project plan should include:

- A list of specific tasks
- A twelve-month timeline with key milestones
- A description of resources required

The responsible parties are also requested to report to the Manure Management Working Group on a quarterly basis to review progress being made on the action items. This will allow discussion regarding any obstacles that have been encountered and how, if necessary, any projects should be modified, additional resources employed, or schedules extended.

In turn, the Manure Management Working Group will, to the best of its ability, support the efforts of the responsible parties to execute the action items. Eventually, the Manure Management Working Group will dissolve and support of this *Agenda for Action* will be provided by the Cayuga County Water Quality Management Agency.