Upper Susquehanna Coalition (USC)

Quality Assurance Project Plan for

New York Work Plan for the Chesapeake Bay Program 2015

USC Administrative Office:
Tioga Soil and Water Conservation District
183 Corporate Dr.
Owego, New York 13827
607-687-3553
DelaneyB@co.tioga.ny.us

USC Watershed Coordinator / Tioga Co. SWCD District Manager Wendy Walsh 183 Corporate Dr. Owego, New York 13827 607-687-3553

Project Organization: Upper Susquehanna Coalition (USC)

Prepared by:

Wendy Walsh, USC Watershed Coordinator / Tioga Co. SWCD District Manager Amanda Barber, USC Agricultural Team Leader / Cortland Co. SWCD District Manager Brian Hall, USC Agricultural Coordinator Chris Yearick, USC GIS Specialist

Approved:
By:
Wendy Walsh, USC Watershed Coordinator / Tioga Co. SWCD District Manager
By:
Rich Batiuk, Associate Director for Science, EPA/ Chesapeake Bay Program
By:
Kevin DeBell, EPA/ Chesapeake Bay Program
By:
Mary Fllen Ley, OA Coordinator, USGS/Chesaneake Bay Program

A2 – Table of Contents

<u>Group A – Project Management</u>

- A1 Title and Approval Sheet
- A2 Table of Contents
- A3 Distribution List
- A4.1 Project / Task Organization
 - A4.2 Data Collection Program and Key Project Staff
- A5 Problem Definition and Background
 - A5.1 USC History and BMP Involvement
 - A5.2 Importance of Data Reporting
 - A5.3 General BMP Reporting Principles
- A6 Project Description BMP Names and Definitions Reporting to NEIEN
- A7 Quality Objectives and Criteria
 - A7.1 Accuracy Objectives
 - A7.2 Completeness Objectives
- A8 Training and Certification of Key Staff
- A9 Documentation and Records
 - A9.1 Data Collection Process and Data Management System
 - A9.2 Data Retention Time and Loss Prevention
 - A9.3 BMP Inspection forms

<u>Group B – Data Generation and Acquisition</u>

Note: Sections B1 through B8 are not applicable to the acquisition and reporting of BMP data.

- B9 Non-direct Measurements
- B10 Data Management (Tracking and Reporting)
 - B10.1 Data Management System and Work-Flow Diagram
 - B10.2 Reporting to the NEIEN
 - B10.3 BMP Lifespans and Tracking
 - B10.4 Prevention of BMP Double Counting

Group C – Assessment and Oversight

- C1 Assessments and Response Action
 - C1.1 Structure of Assessment Protocol
 - C1.2 BMP Verification Protocol General
- C2 Reports to Management Communication

Group D – Data Validation and Usability

- D1 Data Review, Verification, and Validation
- D2 Verification and Validation Methods

Appendices

AEM Tier 1

USC Ag Data Sheet

USC Ag BMP Deff 6.15

NEIEN_NPS_BMP_CBP_Data_Flow_P6Appendix_06252015 (USC).xlsx

Work Flow Figure B10.1

A3: Distribution List -

A4: Project/Task Organization

- 1) New York State reports Agricultural Best Management Practice (BMP) implementation to the Chesapeake Bay Program (CBP) through the Upper Susquehanna Coalition (USC). The USC is a network of 16 New York State Soil and Water Conservation Districts (SWCDs) that encompass the headwaters of the Chesapeake Bay and work together under a Memorandum of Understanding. The USC is the sole data provider of agricultural BMPs.
- 2) The USC relies on the New York State funded Agricultural Environmental Management (AEM) program (http://www.nys-soilandwater.org) as its framework for data collection, reporting, and verification. AEM is the state-wide "umbrella program" that provides a consistent format to efficiently identify and address environmental concerns through a comprehensive on-farm assessment. AEM utilizes a five-tiered process that includes inventory, assessment, plan development, implementation and evaluation (http://www.nys-soilandwater.org/aem/index.html). The inventory and documentation of existing BMPs occurs during any one of the five tiers, depending on where each particular farm is in the process.

The USC has developed its own structure, within the AEM framework, for data collection and reporting of agricultural BMPs to the Chesapeake Bay Program. There is a Watershed Coordinator with an Ag Team.

Key Project Staff

USC Watershed Coordinator - Wendy Walsh, walshw@co.tioga.ny.us

USC Agricultural Team Leader – Amanda Barber, amanda barber@cortlandswcd.org

USC Agricultural Coordinator - Brian Hall, bhall@u-s-c.org

USC GIS Specialist - Chris Yearick, cdy3@cornell.edu

USC Wetland Coordinator - Melissa Yearick, melissa@u-s-c.org

USC Stream Team Leader - Mike Lovegreen, mike.lovegreen@u-s-c.org

USC Chairperson-Jeff Parker, jgparker@stny.rr.com

SWCD Technicians – All USC-member SWCD

AEM BMP data collection is administered by the USC Ag Team which is comprised of the Key Project Staff. The Ag Coordinator and the GIS Specialist are responsible for QA/QC of data management, tracking, verification, record reviews, and reporting. The Technicians at the local level through member county SWCDs are the lead data collectors responsible for on-site inspections, data collection, and data entry.

A5: Problem Definition/Background

1) The USC, established in 1992, is a network of county SWCDs whose mission is to protect and improve water quality and natural resources in the Upper Susquehanna River Basin of the Chesapeake Bay. USC implements nonpoint source pollution control and abatement projects to address watershed concerns which includes agricultural. USC's data collection effort became more formal in 2000 when the AEM program was enacted into New York State Ag & Markets Law, however efforts began well before that by the SWCDs that are members of the USC. SWCDs have a long history of implementing agricultural nonpoint source BMPs and retain extensive hard copies of their projects in cooperator files. Data was solicited from USDA, NRCS, FSA, and SWCD files since 1985 - 2005. This represents the baseline BMP data for New York State. All

baseline data collection was completed by December 2005. Data collection has continued from 2006 and is on-going. In 2013, a new online AEM Data Management Application was developed to manage historical and future BMP data collection that would be reported to the Chesapeake Bay Program Office (CBPO). The USC is the sole agricultural data provider which is aggregated on the county level and reported to the NYS Department of Environmental Conservation (DEC). The NYS DEC manages the NEIEN exchange and reports the data to the CBPO.

- 2) The goals of collecting agricultural BMP data is to provide information to the Environmental Protection Agency's Chesapeake Bay Program that will assist in a more accurate estimate of baseline practices and future conservation needs on agricultural lands in the New York portion of the Chesapeake Bay Watershed. The data are reported in standardized formats and codes via the NEIEN. The CBPO creates annual progress scenarios using the CBP Watershed Model (WSM) to describe, assess and report the status of the restoration efforts, and anticipated reductions in nitrogen, phosphorus and sediment loadings to Chesapeake Bay and its tidal tributaries. The CBPO uses these assessments to track progress towards meeting the New York State Phase II Watershed Implementation Plan.
- 3) To facilitate data reporting accuracy, the USC has developed an online AEM Data Management System for SWCDs to use to report agricultural data directly from their offices to a server for storage. The tool has a basis in GIS and mapping capabilities that identifies BMPs and geographically references them to a specific farm. Annual reporting only consists of new BMPs implemented that particular year or not previously captured but identified that year. Previously reported structural multi-year BMPs are only reported once. This is historical data and is not reentered even if the BMP name is changed by the CBP. Annual or single year BMPs are reported once they are verified for that year. BMP units are not estimated but are reported directly in the units established by the CBP and field verified. The USC accesses the USDA federal cost-share practice data annually through a 1619 data sharing agreement. This USDA data is only used as reference to be sure that BMP data was not missed and if so would then be field verified and reported by the USC.

It is important to mention that there are often cases where non-cost shared conservation practices fail to meet CBP or Natural Resources Conservation Service (NRCS) standards, but the Resource Improvement BMPs (RI BMPs) are practices that will have functional equivalency. The AEM Tier 2 worksheets can capture this information and the USC continues to collect data on resource improvement practices in the event that the Bay Program develops protocols to accept RI BMPs in the future. More detail and definition of RI BMPs is contained in Section A7: Quality Objectives and Criteria.

A6: Project Description

The BMP Definitions are attached in the Reference Section as a Microsoft Word file (USC Ag BMP Deff6.15). The last page of that document has a spreadsheet showing USC BMP to Scenario Builder BMP Mapping using -

NEIEN NPS BMP CBP Data Flow P6AppendixA 1 06092015.xlsx.

The final version of the NEIEN NPS BMP CBP Data Exchange Table is a separate Excel file attached.

NEIEN NPS BMP CBP Data Flow P6Appendix 06252015 (USC).xlsx

The table represents the current 2015 BMP information all BMP names and units are cross-walked between the USC BMP names and the CBP BMP names. All BMPs are up to date and with only one changed BMP, the stream exclusion fencing BMP which the CBP has changed. We adopted this change and they are included in the NEIEN table. The USC is requesting a new Scenario Builder BMP for cover crop BMPs highlighted in yellow on the Scenario Builder spread sheet.

Farms in each county are mapped by creating location points on USGS topo maps and Aerial Photography. The data is then transferred (digitized) to GIS. USC and SWCD Technicians then collect BMP data for each farm, which is captured as the latitude/ longitude coordinates of the farm where the BMPs are applied. BMP data is tagged with a Chesapeake Bay identifier to indicate that the BMPs are geographically part of the Chesapeake Bay Watershed. Data is then aggregated by county and processed into the required XML data exchange files for the NEIEN. NYS Ag and Markets law requires that data be aggregated to protect farmer confidentially.

A7: Quality Objectives and Criteria

- 1) BMP projections are made annually based on the CBP Model reduction requirements and projects scheduled for that year. These projections are compared to the actual BMPs reported at the end of the year. The USC is in the process of generating reports from the AEM Data Management System, by county, that will allow an end of year BMP report for the current year and a total of the historical for comparison to previous years.
- 2) There is low potential for double counting BMPs, the inclusion of expired and non-functional BMPs or failure to implement annual BMPs. These issues will be addressed in greater detail in the Group B: B10: Data Management section.
- 3) Each USC-member SWCD collects BMP data throughout the year and data is submitted by October first. A single BMP data transfer XML file is created for each county, for each year. This creates a data calendar year that starts on October first and ends on October first of the following year. All new BMPs reported are field verified by technicians. The verification of historical, expired, or annual practices (BMP data is coded by year of implementation) is under development and will be contained in D2: Verification and Validation Methods section.

A8: Training and Certification -

The mission of the Upper Susquehanna Coalition is to protect and improve water quality and natural resources in the Upper Susquehanna River Basin with the involvement of citizens and agencies through planning and implementation of conservation projects, education and advocacy for water resources. Each of the 19 Soil and Water Conservation Districts (SWCD) that make up the USC is designated as the "lead" for water quality issues in their county and each has over 60 years of experience working with local landowners, natural resource partners, municipalities, industries and regulators on water quality issues.

The USC currently communicates to its 19 member Districts using existing infrastructure and well-established relationships and traditions. Furthermore, our strategies are shared through a basin-wide array of professional partnerships that are focused on the CBP effort. Other communication tools include USC Bi-monthly meetings, partnerships with Crop Consultants, Nutrient Management and CAFO Planners, New York Farm Bureau and the Northeast Dairy Producers Association. Moreover, the USC has strong partnerships with the USDA-NRCS, FSA, NYS DEC, NYS Department of Ag & Markets, and the Soil and Water Conservation Committee (SWCC) in

New York. As a result, USC is in a strong position to communicate our approach or changes accurately and efficiently.

The USC uses a "multiple barrier approach" for planning and implementation that addresses issues at the source, across the landscape, and in the stream corridor. At the basin-wide scale, the USC uses its success in soil and water conservation to be an active partner in the multi-state effort to restore the Chesapeake Bay and is the lead in New York for developing the agricultural nonpoint source implementation portion of the Phase I and Phase II Watershed Implementation Plans.

While individual Soil and Water Conservation Districts implement BMPs across a wide variety of land uses, the USC focuses our efforts on three key core areas: Environmentally and Economically Sustainable Agriculture, Stream Corridor Rehabilitation and Wetland Restoration. Each core area has a team leader and coordinator to facilitate effective and efficient implementation within each SWCD and across the basin to meet local and regional water quality goals. Central to the success of the USC is its 'vertical and horizontal' integration. The USC represents a basin wide distribution of natural resources professionals that has established relationships and partnerships with stakeholders at every level (local, state, multi-state and federal). The result has been a productive decades-long history of strengthening and promoting environmental stewardship and protecting water quality at all scales.

AEM Training, Outreach, and Education –

Training of resource professionals from the public and private sectors is a vital component of AEM. Training is regularly provided to Soil and Water Conservation Districts and their partners at NRCS, Cornell Cooperative Extension, Private AEM Certified Planners, Certified Crop Advisors, Technical Service Providers, and agri-businesses. Training is overseen by the AEM State-wide Interagency Committee that reports to the SWCC. Training is guided by a Technical Development Curriculum developed by the Conservation Partnership and endorsed by the SWCC and the NYS Conservation Districts Employee's Association (CDEA). The curriculum has two tracks; one for planners who generally identify environmental concerns and opportunities and work with the farmer to plan solutions, and another for technicians who generally develop detailed designs of BMPs and oversee the installation. Training on the curriculum and related topics is provided annually at three venues:

- NYS Water Quality Symposium (WQS) 3 days of concurrent training held annually in March. Over 300 participants attend including Conservation District staffs and conservation partners from NRCS, Cooperative Extension, AEM Certified Planners, DEC staff, some farmers and agribusiness representatives. The WQS annually hosts the classroom component of the AEM Planner Certification requirements. The WQS has occurred annually since 1979 and is funded through State Funds and participant registrations.
- NYS Conservation Skills Workshop (CSW) 4.5 days of concurrent field training in support of the curriculum is held annually in October. Training at the CSW is often the field component of classroom training initiated at the WQS. The audience is similar to the WQS and averages 130 participants annually. The CSW has occurred annually since 1997 and is supported through participant registrations and contributions from CDEA, SWCC, and NRCS.
- Northeast Region Certified Crop Advisor Annual Training Session (NRCCA) 3 days of
 concurrent training is held annually in December for Certified Crop Advisors and all
 conservation partners. Sessions are awareness oriented related to conservation programs,
 regulatory issues, current events, and new technology. Offerings at the NRCCA are coordinated
 with the Interagency Training Committee. The audience is predominantly CCAs from the
 public sector (Cooperative Extension, NRCS, and SWCD) and agri-businesses averaging

around 150 participants annually. A training component for Professional Engineers associated with AEM Certified Planners is often held in conjunction with the NRCCA or the WQS annually. The training is supported through participant registrations and has been held since 1992.

In addition to the three annual training events described above, numerous other statewide and regional sessions are offered through the AEM Interagency Training Committee as needed to support the curriculum, programs, and regulations, as well as address emerging needs, issues, and technology. Examples of training opportunities held annually that are available to the conservation partnership, CCAs, TSPs, and agribusiness include:

- AEM: Overview of Procedures and Tools for Inventory and Assessment
- AEM: Overview of Procedures and Tools for Conservation Planning
- AEM Communications Training Phase 1, 2, and 3
- Cropland Conservation Planning Field Session
- Farmstead Resource Concern Identification
- Nutrient Management and Groundwater
- Cover Crops Field Day
- Soil Health Training Course
- Conservation Planning on Pasture
- Cornell Cropware Nutrient Management Planning and RUSLE2 Training
- NRCS Phase 3 Conservation Planning Training

The USC takes an Agricultural Team approach to all of the agricultural issues within the Chesapeake Bay watershed which includes BMP data collection. The USC has key project staff identified in A4:2 that consist of a Watershed Coordinator, Ag Team Leader, Ag Coordinator, GIS Specialist, and SWCD Technicians that are responsible for the BMP data collection efforts. USC Staff and the USC-member SWCDs staff maintain a variety of professional certifications that include Certified Crop Advisor (CCA), Certified Agricultural Environmental Management Planner (AEM Planner), Certified Professional in Erosion and Sediment Control (CPESC), and USDANRCS Technical Service Provider (TSP) and those resources are available to all USC-member counties through our collaboration.

A9: Documentation and Records

1) The USC and its member SWCDs are the data providers and use the NYS AEM Program as its framework as described in section A4:2. Each county uses the AEM on-farm framework which is highly interactive and utilizes resource professionals and peers working with the farmer throughout the process. This framework and associated process increases farmer awareness of the impact farm activities have on the environment and by design; it encourages farmer participation and seeks behavioral change, which are important overall goals. AEM utilizes the NRCS Planning Process that is enhanced through a five-tiered framework. Initial BMP data collection starts with AEM Tier 1 worksheet. (attached in reference section)

USC staff or SWCD Technician uses AEM Tier 1 to collect farm contact information; inventories farm infrastructure, land use, and livestock; determines the farm's future plans; informs the farmer of their watershed(s) and watershed concerns, and identifies potential environmental concerns and opportunities. (www.nyssoilandwater.org/aem/techtools.html) This information is kept confidential and coded with an individual farm AEM ID.

BMP data collection can be conducted throughout any of the 5 AEM Tiers by using the USC CBP Ag BMP Data Entry Sheet (attached in reference section). All relevant BMP data that will be reported to the CBP can be captured on this sheet and in the correct form for the data to be entered into the online AEM Data Management System. Each SWCD keeps track of BMPs installed under different contracts associated with NYS Ag and Markets grants or other non-Federal cost share funding. Each district will meet with NRCS and FSA staff to document and review the list of USDA cost-shared projects. All of this data is compiled and entered into the AEM Data Management System.

2) Each SWCD keeps a back-up copy of their own data in a hard copy, Excel spreadsheet or Access database in the individual SWCDs paper Cooperator Files and/or stored on the SWCD servers. Back up procedures are determined by the District. Once the BMP data is entered into the online AEM data management application the USC GIS Specialist can provide data feedback reports about the data to the individual SWCDs and other entities.

AEM plans, on-farm surveys, and assessments filed with the Department of Ag and Markets or filed with or prepared by county SWCDs shall be considered confidential and not subject to public disclosure, except such documents shall not be considered confidential as deemed necessary by the Agricultural Commissioner or the SWCDs to implement the purposes of confidentiality. The retention time of AEM and SWCDs cooperator files are permanent.

The AEM Database Management system is housed on servers located at the Southern Tier Central Regional Planning and Development Board. The SQL databases are backed up internally daily. The server is set up with RAID 5 and has an extra drive installed. That extra drive will have data written to it if a drive fails. Backup copies are created on RD1000 tape media periodically depending on new data installed or created.

3) Inspection forms are currently being considered and investigated by the USC Ag Team working with the USC Ag Committee, which includes additional partners and experts. This process is under development and included in the BMP verification program in Section D. The BMP information is captured using the AEM Tier 2 and USC CBP Ag BMP Data Entry Sheet under the current process.

GROUP B: DATA GENERATION AND ACQUISITION

Note: Sections B1 through B8 are not applicable to the acquisition and reporting of BMP data.

B9: Non-direct Measurements

B10: DATA MANAGEMENT (Tracking and Reporting Procedures)

1) Each SWCD is responsible for collecting, verifying, and entering data in their county. Each SWCD keeps track of BMPs installed under different contracts associated with NYS Ag and Markets grants or other non-Federal cost share funding. Each district meets with NRCS and FSA staff and reviews the list of USDA cost-shared projects. The SWCD staff also participates in NYS DEC Concentrated Animal Feeding Operation (CAFO) visits and reviews previous year CAFO reporting as another means of ensuring that all BMPs are reported. All of this data is compiled and entered into the AEM Data Management System using a standardized USC CBP Ag BMP Data Entry Sheet. Additional details of how BMP data are obtained are explained in the previous Section A9:1.

The AEM Data Management System has a user guide provided to all USC staff and USC-member SWCD staff called "User Guide for Agricultural Environmental Management Web Application". The guide is used as part of the annual training and updated annually as changes are made to the AEM Data Management System.

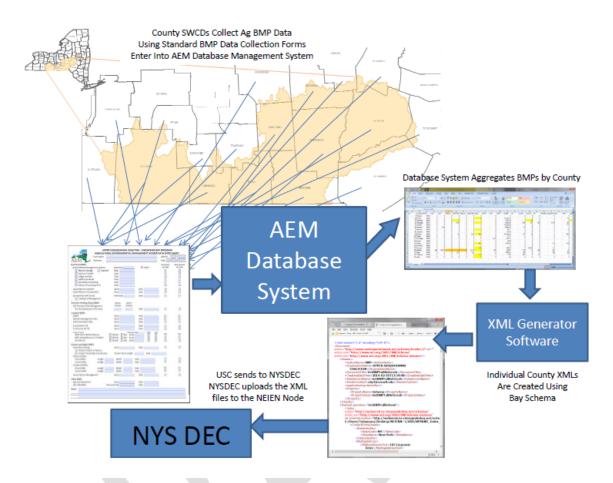
The AEM Data Management System is an online tool developed using ESRI's ArcServer Software and Microsoft Silverlight. The tool allows for a common database standard that is directly formatted to match the Chesapeake Bay Program's Watershed Model schema. The database is created using SQL Server software and is designed as a multi-tiered relational database. The online application has numerous security measures in place. All users are issued a unique password and credentials for their assigned geographic extent.

All New York State BMP data is collected using latitude and longitude coordinates of the farm where the BMPs are applied. BMP data is tagged with a Chesapeake Bay identifier to indicate that the BMPs are geographically part of the Chesapeake Bay Watershed. Data is then aggregated by county to according to NYS Ag and Markets confidentiality laws and processed into the required XML data exchange files for the NEIEN.

All farm point data has been collected under the NYS Ag & Markets Agricultural Environmental Management (AEM) Program and is protected under NYSA&M confidentiality laws. Ag BMP data linked by latitude and longitude for geospatial calculations has been collected and entered into AEM Data Management System. The farms are referenced by an AEM ID. Under agreement with NYSDEC and all parties involved, all BMP data will be distributed by watershed boundary, model segment, or municipal boundary only.

The AEM Data Management System is housed on servers located at the Southern Tier Central Regional Planning and Development Board. The SQL databases are backed up internally daily. The server is set up with RAID 5 and has an extra drive installed. That extra drive will have data written to it if a drive fails. Backup copies are created on RD1000 tape media periodically depending on new data installed or created.

The following figure (attached Work Flow Figure B10.1 PDF in appendix) is a simplified work-flow diagram showing the data flow for BMPs.

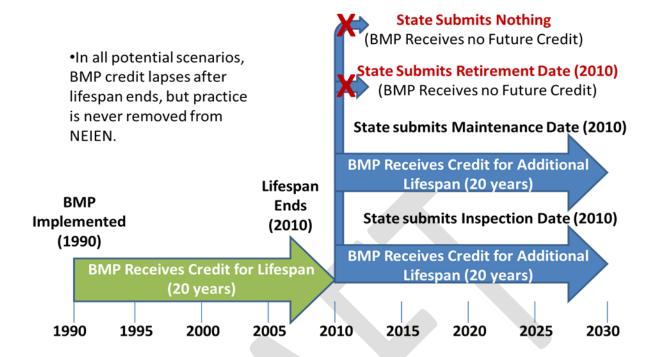


AEM BMP data collection is administered by the USC Ag Team. The Ag Coordinator and the GIS Specialist are responsible for QA/QC of data management, tracking, verification, record reviews, and reporting. Technicians at the local level through USC-member SWCDs are the lead data collectors responsible for on-site inspections, data collection, and data entry.

2) USC is not a state entity, the XML files generated are sent to the NYSDEC to be uploaded into the NEIEN through the NYSDEC NEIEN Network Node located in Albany. The final version of the NEIEN NPS BMP CBP Data Exchange Table is a separate Excel file attached.

NEIEN NPS BMP CBP Data Flow P6Appendix 06252015 (USC).xlsx

3) BMP lifespans are tracked using the implementation date or updated verification date. The CBP standard lifespans for each BMP are used. The USC is in the process of generating reports from the AEM Data Management System to run an annual query and create a report for each county of all BMPs that will expire for that year. This process is under development in the USC Ag Team and USC Ag Committee which will be included in the BMP verification program in Section D.



USC BMP Name (NEW MAPPING)	Credit Duration
Animal Waste Management Systems	15
Waste Storage Facility	15
Barnyard Runoff Controls	10
Loafing Lot Management System	10
Conservation Tillage	1
Cover Crops	1
Comprehensive Nutrient Management Plans	1
Conservation Plans	10
Precision Feed Management Dairy	1
Horse Pasture Management	10
Prescribed Grazing	10
Cropland Forest Buffer	10
Cropland Grass Buffer	10
Narrow Cropland Forest Buffer	10
Narrow Cropland Grass Buffer	10
Exclusion Fence with Grass Buffer	5
Exclusion Fence with Forest Buffer	5
Exclusion Fence with Narrow Grass Buffer	5
Exclusion Fence with Narrow Forest Buffer	5
Ag Land Retirement	10
Wetland Restoration	15

4) The USC database includes BMPs funded by state and federal programs and is picture comprehensive source of agricultural BMP implementation in New York. Staff from USC-member SWCDs is the only people who enter data into the USC database. Each year, SWCD staff review

BMP implementation data with NRCS and FSA staff in each county to verify that all federally-funded BMPs are included and that none are double-counted or missed. Once all data is entered each year, the USC requests summary BMP implementation data from NRCS and FSA headquarters to compare to the data in the database for quality control. Once these data entry and quality control processes are complete each year, the USC database is New York's only source of agricultural BMP information that is used for annual Progress Reporting.

GROUP C: ASSESSMENT AND OVERSIGHT

C1: Assessment and Response Action

1) The USC's assessments of data acquisition and verifications are conducted annually and led by the USC Agricultural Coordinator and GIS Specialist. The USC member SWCDs are informed of new information concerning BMP data, definitions, collection procedures, entry procedures, and projected timelines for their BMP data management goals. There is an established infrastructure for communication which includes bi-monthly USC meetings, monthly Ag Team conference calls, and an Ag Team e-mail list. Each of these events offers a mechanism to provide new information, assess progress, answer questions, and have general discussions about all of the BMP data management system.

There are multiple trainings available as described in Section A8 and a mandatory annual training for BMP data management system which ensures the data providers are SWCD Technicians. The SWCD Technicians gather the BMP Data that meets the Specifications and the AEM Data Management System only allows the data that is suitable for reporting to be entered. All the data is obtained by the processes outlined in Section A9 and B10. The data will be verified according to the procedures in Section D.

2) The BMPs and definitions the USC has historically used are identified in Section A6 and the reference section. It is the goal of the USC to fully verify all historical BMP data that has been entered into the model through 2015. All newly implemented BMPs will be field verified and entered for the year of completion. The USC has identified the BMPs based on those that are obtainable under their current organizational structure and best fit the CB model. The BMPs were not specifically or thoroughly investigated to account for the greatest nutrient and sediment pollutant load reductions. A new effort is underway in 2015 to make the assessment of the current BMPs, definitions, and finer details of how to best code the practices to accurately capture the benefit of the nutrient and sediment pollutant load reductions with the new Phase 6 model. The USC Ag Team working with the USC Ag Committee, which includes additional partners and experts, is investigating each practice while it develops the BMP verification program in Section D.

C2: Reports to Management

USC Key Project Staff (listed Section A4:2) will be kept informed of project oversight, assessment activities, and findings by the communication infrastructure which includes bi-monthly USC meetings, monthly Ag Team conference calls, and an Ag Team e-mail list. USC Ag Coordinator and GIS Specialist complete monthly activity reports that are provided to the USC Watershed Coordinator and sent out to the USC Executive Board for review. Any additional reports that are required will be drafted by the USC Key Project Staff.

GROUP D: DATA VALIDATION AND USABILITY

A new effort is underway in 2015 to further develop the USC data validation and usability protocols for this section. The USC Ag Team is working with the USC Ag Committee, which includes additional partners, experts, and outside statistical consulting services. The USC Ag Coordinator guides the USC Ag Committee in a review of agricultural BMPs in New York's Watershed Implementation Plan. For each BMP an assessment is being conducted of the current BMPs, definitions, and finer details of how to best code the practices to accurately capture the benefit of the nutrient and sediment pollutant load reductions. For each BMP, the Committee will identify which New York verification protocols meet the Chesapeake Bay Program BMP verification guidelines. For those protocols that are not a best fit for the CBP guidelines, the USC Ag Committee will develop options for improvement and investigate statistical sampling methods. The outcomes of these efforts will ultimately be documented and submitted to the CBP first as a draft and then revised and included in the final quality assurance project plan.

