# **Upper Susquehanna Coalition (USC)**

Quality Assurance Project Plan for New York Work Plan for the Chesapeake Bay Program **2010** 

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# **Project Description**

Two tasks have been selected for Quality Assurance Project Planning. Below is a short description of each task, a description of the data and how the data will be used.

- **1. GIS Support** The USC relies on a Geographical Information System (GIS) for strategic watershed planning efforts. It uses an ArcView GIS Stream and Wetland Assessment Tool that it developed in partnership with Penn State University. The relevant GIS data collection procedures will be discussed under the two tasks described below rather than separately under this task.
- **2. Baseline Data Collection** We will collect agricultural information needed for CBP modeling efforts. We will collect information as either point data or as a location within a CBP Version 5 watershed. We will report data by CBP Version 5 Watershed or other polygon as requested by the CBP. All information collected will follow CBP protocols and use the NYS NEIEN node for data submission.

#### **Project Statement of Objectives**

#### Goals:

The goal of the **Baseline Data Collection** efforts is to provide additional data for the CBP so they can better model the nutrient and sediment loading rates and reductions made in NY.

#### Level of Confidence:

The **Baseline Data** will be from USDA NRCS records and USC on-the-farm-surveys so it will be of comparable quality to the other data in the CBP model. The USC farm surveys are "Tier 1 and Tier 2" surveys developed by the NYS Department of Ag and Markets under the NY Agricultural Environmental Management (AEM) Program. The worksheets can be viewed at <a href="http://www.nys-soilandwater.org">http://www.nys-soilandwater.org</a>. These worksheets must be completed to obtain NY funds for cost sharing best management practices.

#### **Key Project Staff**

Overall Project Management: James Curatolo, USC Watershed Coordinator, <u>jac3@htva.net</u> Overall QA/QC: and Computer software: Chris Yearick, USC GIS Specialist, <u>cdy3@cornell.edu</u> Data processing and data verification: Chris Yearick, USC GIS Specialist, <u>cdy3@cornell.edu</u>

## Time Line

Baseline Data Collection: ongoing

# Data Types

#### **Baseline Data Collection**

Attachment 1 includes the USC-modified AEM Tier 1 worksheet and BMP data forms. That sheet summarizes all of the Ag and BMP data categories to be collected. The BMP categories are those used by the CBP and provided by Jeff Sweeney, CBP, to the USC as the correct categories for CBP modeling.

All information will come from USDA NRCS files and farm inventories conducted by the USC. Only data from the NRCS and USC files are acceptable. The original data in the NRCS files was collected to document implementation projects funded under EQIP, CRP and other programs. The USC data was originally collected to develop a database to help with watershed planning efforts. As the data is being collected in a CBP format for the CBP, the relevance to the project is self-evident.

### **Data Management Scheme**

Baseline Data Collection: Data for each farm will be written on the USC-modified AEM Tier 1 worksheet and BMP Assessment form. The descriptors on the top of the page will allow for the data to be tracked back to the original source document (AEM ID). The data from the hard copy will be entered into a MS Access database and delivered to the CBP (Jeff Sweeney) through the NYS NEIEN node. We will do a simple analysis in Access to search for outliers in the database and compared with the appropriate hard copy when found. We will select 50 data sheets and compare the hard copy to the data entered. We will use this test as an estimate of data entry reliability and report the results. All hard copies will be available to the CBP for review if requested. The USC will store data on read only CD's guaranteeing the data cannot be changed or lost due to computer malfunction. Additional data storage, retrieval, data reduction and data entry in the computer model will be handled by and a responsibility of the CBP.

#### Data Processing and Agency Requirements

**Baseline Data Collection**: All data processing, compiling and analysis will be handled by the CBP.

#### **Quality Assurance**

**Baseline Data Collection**: We will do a simple analysis in Access to search for outliers in the database and compared with the appropriate hard copy when found. We will select 50 data sheets and compare the hard copy to the data entered. We will use this test as an estimate of data entry reliability and report the results.

# Agency Information Resource Management Requirements

All data sets developed for a farm under the **Baseline Data Collection** located using an 10 digit WBD descriptor.

# Reconciliation

**Baseline Data Collection:** Under this project we are providing data in a format defined by the CBP. The CBP, after analysis, will provide information to the USC for review with potential anomalies highlighted. The USC will suggest reasons for anomalies that have arisen in the CBP modeling efforts.



# AGRICULTURAL ENVIRONMENTAL MANAGEMENT

AEM Identification Number: \_\_\_\_\_-

Tier 1

AEM			Date:	/		
Evaluator Name:		Evaluating Agency:				
Watershed Identification (WBD	10):		Lat .			
Farm Name:			Lon			
Owner's Name:		Operator's Name:				
Address:		Address:				
Phone:		Phone:				
Fax:		Fax:				
Email:		Email:				
Preferred Contact Point? (plea Owner	se check only one)  Operator					
Business S Do you plan to sul  2) Basic Farm Information A) What Primary Far Dairy Poultry Sheep/Goa	Structure	rsification of Farm Busin our farm in the next 5 year ribes your operation?  Horses Vineyard (Please Define)	☐ Retires ☐ Sale		□ <b>No</b>	
	e following number of ac Cropland Acres Grazed Land Acres Permanent Hay Land A Woodland Acres		Rented	With Nutrient	s Applied	
C) Does your operati	on qualify for Ag Value A	Assessment?	☐ No			
3) Animal Numbers for you	r <u>Primary</u> Farm Type					
	Number: Number:	Average Weight: _ Average Weight: _		oer: oer:		

Do you spread manure?  Do you have a manure storage facility?  Do you generate process washwater from the cleaning of product or facilities?  (i.e. milkcenter, egg wash, washing of produce)  Is there a barnyard or outdoor feedlot on your farm?  Do you store silage or other high moisture feeds on the farm?		T
Do you have a manure storage facility?  Do you generate process washwater from the cleaning of product or facilities?  (i.e. milkcenter, egg wash, washing of produce)  Is there a barnyard or outdoor feedlot on your farm?  Do you store silage or other high moisture feeds on the farm?		
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Is there a barnyard or outdoor feedlot on your farm?  Do you store silage or other high moisture feeds on the farm?		
Do you store silage or other high moisture feeds on the farm?		
		<u> </u>
Do you utilize pastureland on your farm?		<u> </u>
Do you use commercial fertilizer?		<u> </u>
Do you use pesticides (herbicides, insecticides, fungicides) on your farm?		
Do you store and/or mix pesticides (herbicides, insecticides, fungicides) on your farm?		
Does your operation utilize cropland for row crop production?		
Is the water supply on your farm from a well or a spring?		
Is there a waterbody within or adjacent to your farm?		
Do you presently or do you plan to harvest timber on your farm?		
Do you store fuel or other bulk petroleum products on your farm?		
Have you received odor complaints or do you believe your farm has an odor		Г
NYS Agricultural Interest Assessment – check all that are  Agricultural Tax Relief Agri-Tourism Integrated Pest Management Irrigation Management	e of inter	e
Agricultural Tax Relief		es
NYS Agricultural Interest Assessment — check all that are  Agricultural Tax Relief		es



# AGRICULTURAL ENVIRONMENTAL MANAGEMENT

	BI	/IPS	AEM Ide	entification	Number:	<del>-</del>	
AEM			<del></del>		Date:	/	/
Cropland BMPs							
Riparian Forest Buffer	Length		Width		Date		
Riparian Forest Buffer	Length						
Riparian Grass Buffer	Length		Width		Date		
Riparian Grass Buffer	Length						
Wetland Restoration	0						
Ag Land Retirement		_					
Tree Planting							
Comprehensive Nutrient N	/Janagement Plan	_		Acres	Date		
-							
Hayland with Nutrients Ap							Acres
,	•		 Rate _				
Cereal Cover Crops (Early	/) Rve Acres		Wheat Acres	:	Barley	Acres	
Cereal Cover Crops (Late	•				-		
Conventional Till land con	-				-		
Continuous No-Till							
Pasture BMPs							
Off Stream Watering with	No Fence	_		Acres	Date		
Off Stream Watering with	Stream Fencing	_		Acres	Date		
OSW with Stream Fencing	g & Prescribed Gr	azing _		Acres	Date		
				Acres	Date		
				Acres			
Upland Rotational or Pres	_	_		Acres			
		_		Acres			
Llavas Dagtura Managana							
Horse Pasture Manageme	ent	_		Acres	Date		
Animal Waste Management							
Precision Feeding Dairy -	Animal Units Trea	ated	AMUs		Date		
Ammonia Emmission Red	uctions		AMUs		Date		
Animal Waste Manageme	nt System						
Туре			AMUs		Date		
Type							
Type			AMUs		Date		
Barnyard Runoff Control S	System						
Туре			AMUs		Date		
Туре			AMUs		Date		
Type			ΔΜΠο		Date		