

Watershed Agricultural Program 2015 Annual Report and 2016 Workload



**New York City Catskill/Delaware and Croton Watersheds
March 2016**

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Cover Photos: WAP Staff
Report Photos: WAP Staff

PRIMARY FUNDING SOURCES



Conservation Efforts Improve Water Quality and Economic Viability

The Watershed Agricultural Program (WAP) had a tremendous year of implementing of Best Management Practices (BMPs) that addressed multiple resource concerns on participant farms. A major focus was on covered barnyards to ensure they meet the higher standards required to solve the water quality issues on the farm.

In October 2015 the Precision Feed Management (PFM) program was launched. PFM is a science based program that develops feed management plans to deal with the large quantity of feed nutrients managed annually on participant farms. Several group meetings with participants were held as well as individual consultations with over 60 dairy farmers to determine their interest. The initial ranking and selection of 20 farms to receive a PFM plan in 2016 was made. Another 20 farms will be selected in 2017 and the final 20 farms would be eligible for 2018.

Conservation Footprint is "The actions an organization conducts which result in a positive impact on the environment." It is critical that WAP identify the land owned, leased or loaned to the farmers that are managed under their Whole Farm Plans (WFPs). The Conservation Footprint for the WAP encompasses 165,000 acres that are needed for agricultural production both owned and leased.

In 2015 the West of Hudson program had a total of 121 projects comprised of 240 BMPs were implemented on 66 farms totaling over \$4.3 million. Including the farms with new or updated Nutrient Management Plans the WAP worked with 48% of the active participants in 2015. The Program partners with local county Soil and Water Conservation Districts (SWCD) and the USDA Natural Resources Conservation Service (NRCS) provided technical design and implementation of water quality BMPs. Farm participants actively followed 289 WFPs and 248 Nutrient Management Plans (NMPs) in the Catskill/Delaware Watersheds. Funding provided by New York City Department of Environmental Protection (DEP), the USDA and other sources helped the Program realize its goals.

The Nutrient Management Credit (NMC) program has enrolled all the eligible Agriculture Water Enhancement Program (AWEP) participants that have completed their 3 year contract. The DEP has been very supportive of the NMC program and has committed to expand the program in future years with additional funding.

A significant effort for our staff this year was the coordination of the USDA Conservation Reserve Enhancement Program (CREP). There were 19 CREP re-enrollments and 7 new CREP contracts signed to help buffer the streams, which are a very high priority for water quality. In 2016, there are 44 CREP re-enrollment contracts that planning staff will be immersed in to determine re-enrollment eligibility and revising Whole Farm Plans (WFPs) to capture the eligible BMP re-enrollments.

The WAP continues to partner with Cornell Cooperative Extension (CCE) to provide educational programs to area farmers. In 2015, 683 farmers and farm advisors attended 26 educational programs.

Larry Hulle, Watershed Agricultural Council
 Rick Weidenbach, Delaware County Soil & Water Conservation District
 Dale Dewing, Cornell Cooperative Extension
 Dennis DeWeese, USDA Natural Resources Conservation Service

Watershed Agricultural Program

2015 Planning Goals and Accomplishments

Catskill/Delaware Large Farms		Catskill/Delaware Small Farms		Croton Watershed	
Goal	Accomplishment	Goal	Accomplishment	Goal	Accomplishment

Annual Status Reviews					
187	187	100	100	67	70

New Whole Farm Plans					
as identified		1	1	3	2*

*Cumulative WFP goal reduced. Additional WFPs not required.

2015 Implementation Accomplishments – Funding

BMP - Funding Sources	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
Watershed Agricultural Program				
- Non-CREP BMPs	\$ 2,628,044	\$ 823,832	\$ 513,998	\$ 3,965,873
- CREP (WAP)	\$ 122,417	\$ 92,357	\$ -	\$ 214,774
Total Watershed Agricultural Program Funding	\$ 2,750,461	\$ 916,189	\$ 513,998	\$ 4,180,647
Other Funding Sources				
- CRP (FSA)	\$ 4,375		\$ -	\$ 4,375
- CREP (FSA)	\$ 108,744	\$ 71,972	\$ -	\$ 180,716
- DCSWCD			\$ -	\$ -
- EQIP				\$ -
- Landowner			\$ 9,905	\$ 9,905
- AWEP				\$ -
- NRCS	\$ -	\$ -	\$ -	\$ -
Total Other Funding Sources	\$ 113,119	\$ 71,972	\$ 9,905	\$ 194,996
Total Funding	\$ 2,863,580	\$ 988,161	\$ 523,903	\$ 4,375,644
* In Progress Payments	\$ 702,891	\$ -	\$ -	\$ 702,891

2015 Implementation Accomplishments – Number of BMPs 2015

NRCS/WAC BMP Code	Best Management Practices	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
309	Agrichemical Handling Facility			1	1
313	Waste Storage Facility	3			3
314	Brush Management		1		1
317	Manure Composting Facility	1			1
340	Cover Crop	2		4	6
360	Closure of Waste Impoundment			2	2
362	Diversion *	1			1
378	Pond*	1	1		2
382	Fencing *	31	19	4	54
391	Riparian Forest Buffer	4	1		5
393	Filter Strip	1			1
412	Grassed Waterway			1	1
468	Lined Waterway*		1	1	2
490	CREP Natural Regeneration	4	1		5
500	Obstruction Removal	5			5
512	Forage and Biomass Planting - Lime	2		5	7
516	Pipeline*	11	6	3	20
528	Prescribed Grazing	1	1	1	3
533	Pumping Plant	1			1
558	Roof Runoff Management System	1	2	2	5
560	Access Road Improvement *	4		1	5
561	Heavy Use Area Protection *	5	1	8	14
574	Spring Development *	14	6		20
575	Animal Trails and Walkway *	14	2	1	17
578	Stream Crossing	1	2	1	4
580	Streambank Protection		1		1
587	Structure for Water Control	1	1		2
590	Nutrient Management Plan	42	25	6	73
612	Tree & Shrub Planting	4	1		5
614	Watering Facility*	18	7	4	29
620	Underground Outlet		2	5	7
634	Waste Transfer System*	9			9
635	Vegetated Treatment Area*	1		7	8
642	Well	2	2		4
657	Wetland Restoration	1			1
3010	Roofed Barnyard*	6	2	1	9
3050	Waste Storage Facility*	1	1		2
3060	Covered Manure Storage/Barnyard		1		1
3110	Calf Greenhouse*	3			3
3130	Ventilation & Lighting	2			2
3178	Manure Transportation Credit	1			1
3230	Manure Transfer - Agitator Pump	1			1
3410	Manure Spreader	2	2		4
3420	Bucket Loader	1			1
3425	Dump Wagon	2			2
3430	Manure Truck	2			2
3499	Misc Manure Handling Equipment	2			2
3700	Miscellaneous Equipment	2			2
3710	Water Wagon	1			1
4100	Wash Water Infiltration			1	1
5004	Fencing - High visibility	5	1		6
Total		216	90	59	365
	* Contains a modification, emergency repair, repair or repair and replacement BMP.				

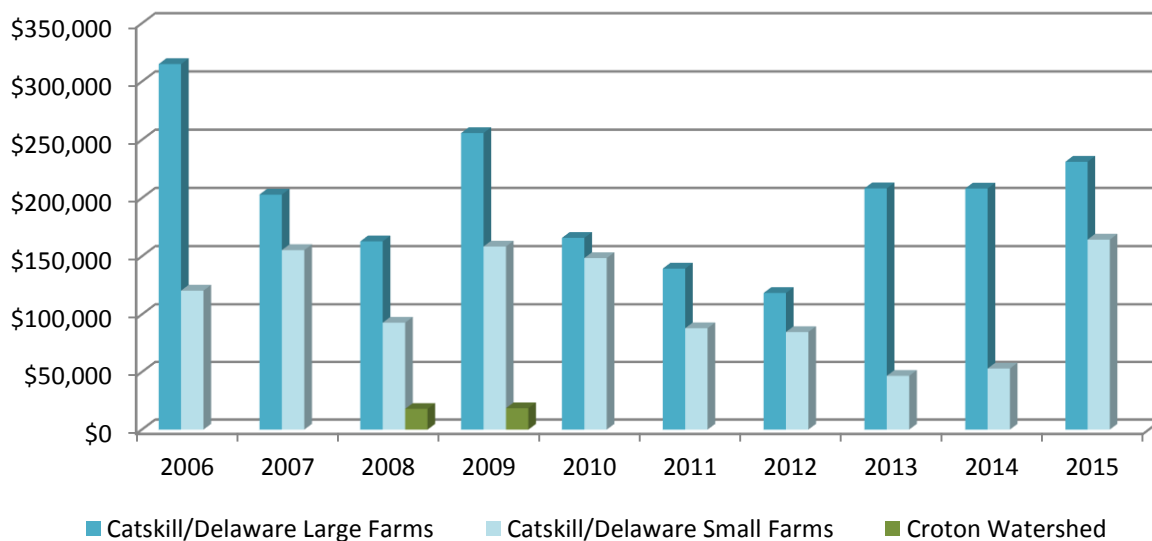
USDA Conservation Reserve Enhancement Program (CREP) 2015 Accomplishments (as of 12/31/15)

The USDA CREP Program within the NYC Watershed Agricultural Program utilizes the talents found within the multi-agency team assigned to work in the Watershed to promote, design and establish both Riparian Forest Buffers and Vegetative Buffers along watercourses. This year marked the 16th full year of the New York City Watershed Conservation Reserve Enhancement Program (CREP) Memorandum of Agreement between New York City, New York State and the United States Department of Agriculture (USDA). In 2015, 26 Riparian Forest Buffer contracts (7 new and 19 renewals) enrolled an additional 268.69 acres, bringing the total number of enrolled acres to 2,016.02.

2015 Total Implementation Expenditures

Total Rental Payments (USDA)	\$357,661
Sign-Up Incentive Payment (SIP-FSA)	\$ 3,604
Practice Incentive Payment (PIP-FSA)	\$361,924
BMP Cost (FSA)	\$238,648
BMP Cost (WAP)	\$285,493

Watershed Agricultural Program Historic CREP BMP Implementation



Program	99-2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Catskill/Delaware Large Farms	\$3,861,563	\$315,034	\$202,979	\$162,811	\$255,789	\$165,823	\$139,466	\$118,538	\$202,339	\$208,197		\$5,632,539
Catskill/Delaware Small Farms	\$ 523,995	\$120,534	\$155,360	\$ 92,777	\$158,378	\$148,507	\$ 87,957	\$ 84,673	\$ 46,613	\$ 53,000		\$1,471,794
Croton Watershed				\$ 17,968	\$ 18,547	\$0	\$0	\$0	\$0	\$0		\$ 36,515

Nutrient Management Program 2015 Accomplishments

The Nutrient Management Team is a multi-agency team that assists farmers in improving phosphorus and pathogen management through manure, fertilizer and animal feed management. Nutrient Management Plans (NMPs) are compliant with the NRCS-NY 590 nutrient management and CAP 108 feed management planning standard, and use the NY Phosphorus and Nitrogen Leaching Indices and Cornell University crop and feed management guidelines.

In planning year 2015, the Nutrient Management team completed 74 nutrient management plans (49 large farms and 25 small farms). The breakdown of each category and percent current as of 12/31/2015 follows below.

Table 1. Large Farm NMP status as of 12/31/2015

Status	Number of Farms	% of Farms with NMPs
Current NMPs	168	96.6%
Plans 1 years out of date	3	1.7%
Plans 2 years out of date	0	0%
Plans 3 years out of date	1	1%
Plans >3 years out of date	1	1%
Needs NMP	1	0.6%
Total	174	100%

Table 2. Small Farm NMP status as of 12/31/2015

Status	Number of Farms	% of Farms with NMPs
Current NMPs	75	97.4%
Plans 1 years out of date	0	0%
Plans 2 years out of date	0	0%
Plans 3 years out of date	0	0%
Plans >3 years out of date	1	1.3%
Needs NMP	1	1.3%
Total	77	100%

Nutrient Management Credit (NM Credit)

The NM Credit Program encourages good stewardship of manure resources to improve water quality and provides the WAP a means to enhance implementation of NMPs. In 2015, the NM Credit Program was offered to 105 farms, with 101 submitting records. A total of \$ \$435,891.36 was allocated in credit for farms to utilize on nutrient management related expenses. The WAP also reviewed and approved manure spreading records for 12 remaining farms participating in the NRCS AWEPP program, which is similar to NM Credit. Those farms of that group which are eligible to participate in the NM Credit program will be invited to join the program for the 2016 credit year.

Precision Feed Management

2015 marked the beginning of offering feed nutrient management to dairy farms in the WOH watershed with program staffing, initial program roll out, and sign up of farms occurring in the last quarter of the 2015. By 12/31/2015, forty six farms had signed up to participate, with additional farm interest continuing in 2016. Farms were ranked for implementation order in January 2016, with implementation of feed management planning and monitoring thereafter with the top twenty farms. The program will be developing criteria for and conducting sign up for a select number of beef farms in 2016.

Farmer Education Program

The Farmer Education Program supports the water quality protection and farm viability mission of the Watershed Agricultural Council by providing educational programs that enhance farmers' abilities to manage their operations more profitably and in a way that nurtures their natural resources. In total, 26 educational programs were offered during 2015 with 683 attendees.

In 2015, our farmer education efforts focused on the hands-on training and practical tools for profitable production. We held both classroom workshops and on farm tours for various audiences, addressing new technology, new crops, new markets, for both new and established farmers.

Date	Event	Watershed Farmers	Other Farmers	Students	Agri-Service	Agency	Other	Total
1/15	Catskill Regional Ag Conference	37	27	0	14	29	0	107
2/12	Calf Health Webinar I	0	4	0	3	0	0	7
2/24	Sheep & Goat Group: Marketing	7	7	0	0	0	0	14
2/26	Calf Health Webinar II	0	6	0	5	2	0	13
3/17	Nutrient Management Workshop Walton	27	0	0	0	3	0	30
3/18	Nutrient Management Workshop Delhi	85	0	0	0	1	0	86
3/20	Hop Farm Start-Up	38	56	0	0	0	0	94
3/24	Farm Transfer	8	5	0	0	1	0	14
3/25	Delaware County Crop School	15	8	0	2	8	0	33
4/7	Manure Managers Round Table	6	8	0	0	8	0	22
4/15	Nutrient Management Workshop Hamden	8	0	0	0	0	0	8
4/21	Cover Crop Field Tour	4	8	0	1	10	0	23
4/29	Sheep & Goat Group: Nepal							
4/30	Blueberry Pruning & IPM	21	20	0	0	0	0	41
6/24	Grazing Tour	4	1	0	0	10	1	16
6/26	Sheep and Goat – Windy Hill Goat Dairy	2	7	0	0	0	1	10
7/31	Dairy Tour – Corn Fertility Demonstration	6	2	0	1	1	0	10
8/29	Pasture Walk – Slope Farm	7	16	4	0	1	2	30
9/11	Corn Dry Down Days I	5	7	0	0	0	0	12
9/23	Pasture Walk – DiBenedetto Farm	13	0	0	0	1	1	15
9/24	Corn Dry Down Days II	8	2	0	1	0	0	11
10/3	Beef Quality Assurance Training	7	6	0	0	0	0	13
10/21	Side Hill Goat Dairy Tour	3	3	0	0	0	0	6
11/14	Sickler Farm Goat Tour	9	14	0	0	0	0	23
12/9	Raising Quality Dairy Heifers	20	11	0	1	10	0	42
12/12	Sheep and Goat Group Winter Feed Planning Workshop	9	2	0	0	0	0	11


Total Attendance (year to date)	350	220	4	28	85	5	692
Number of Events	26						
Number and percent of participating Watershed Farms attending at least one event:*						123	43%
Number of non-participating Watershed Farms attending at least one event:							34

Farmers 570
 Advisors 113
 Total 683

Pure Catskills Marketplace

In 2015, one of the main focuses of the Economic Viability Program was to build off of the success of last year's Pure Catskills rebranding, and continue to showcase the high-quality products coming from the NYC Watershed region. Pure Catskills is a regional, buy local campaign developed by the Watershed Agricultural Council (WAC) to improve the economic viability of the local community, sustain working landscapes and preserve water quality in the NYC watershed region. Currently, Pure Catskills represents nearly 300 farm and forest-based businesses, restaurants, local artisans, accommodations and other non-profit organizations

throughout Delaware, Greene, Otsego, Schoharie, Sullivan and Ulster Counties.



FRESH
From the Catskills
RIGHT TO YOUR DOOR!

The Pure Catskills Marketplace is an online collection of high-quality and authentic farm, food and forest products grown, raised and made throughout the region.

purecatskillsmarketplace.com

PURE CATSKILLS

An achievement we are proud to report is the launch of the Pure Catskills Marketplace. The Marketplace (purecatskillsmarketplace.com) is an online collection of high-quality and authentic farm, food and forest products grown, raised and made throughout the region. This is another way WAC is achieving its mission to improve the economic viability of our region by providing Pure Catskills members an online avenue to sell products and reach a larger customer base. Purchasing a product on the Marketplace invests in healthy forests, farmland protection, working landscapes and clean drinking water.

Contributing to the success of the Economic Viability Program is our partnerships with other organizations. From the New York City Department of Environmental Protection, to the Lucky Dog Local Food Hub, to the Center for

Agricultural Development and Entrepreneurship, and many of the Cornell Cooperative Extensions- we all strive to help farmers sustain their land and become economically viable. The multitude of collaboration efforts is a testament to our dedication of preserving farm and forest entities, and the strength of this region. We are proud to be working together in a joint effort to sustaining farms and forests in the Catskills.

Town of Andes, Delaware County

Calf Housing

The Dar-View Dairy farm (Darling Family), located in the Pepacton Reservoir watershed, milks approximately 160 registered Jerseys, twice a day. The original solar calf housing structure was built in 2000 and had exceeded its expected fifteen (15) year lifespan. The original structure housed calves and heifers from 0 to 6 months of age and was overcrowded for all age groups due to space constraints. Challenges with the old facility included the overhead doors, which had been repaired numerous times and were no longer functioning properly. The side ventilation curtains no longer worked as designed and new animal pens were needed.



WAP staff planned and designed a new calf kennel to house 0 to 3 month old calves. The new structure is 101' x 30' and was sized to accommodate 39 calves. The kennel construction design incorporated the installation of concrete floors, a covered manure stacking pad, covered bedding storage bay, a utility room, side ventilation curtains and an overshot roof with a ventilation curtain. Construction of the new kennel was completed in January of 2016. The old calf facility will be used by the operators to house older heifer calves.



Town of Delhi, Delaware County

Covered Manure Storage

In 2000, the Watershed Agricultural Program installed a gravel heavy use area pad at Windswept Acres Farm, owned by Kevin and Carol Gutliph, to stockpile animal waste.

Fifteen years later, the project was well past its life expectancy and no longer met the USDA/NRCS standard for heavy use areas. The practice was eligible for the Watershed Agricultural Program Repair and Replacement Program.

A 40' x 32' roofed manure storage was planned, designed and constructed. As a roofed structure, the new waste storage will now meet the current standard as well as eliminate any nutrient or pathogen runoff which previously drained into a nearby CREP buffer.

A new 67' lane from the barn to the storage was also installed to facilitate the delivery of the manure to the storage.



Town of Walton, Delaware County

Manure Storage - Covered Feed Area

The MacGibbon Farm, owned by Mark MacGibbon, manages a 300 head beef operation. The cattle were fed using round bale feeders in various pasture locations, most typically within the flood plain for the West Branch of the Delaware River directly adjacent to these pastures. The heavy traffic of the animals around the feeder locations would quickly degrade the ground and manure would accumulate in the pastures during winter months. This created the potential for excessive runoff of nutrients and soil loading to the West Branch of the Delaware River which is only 1-2 miles from where it enters the Cannonsville Reservoir.

A 176' x 60' covered feed area with a concrete floor and a 85' round in ground concrete manure storage were implemented. These best management practices (BMP's) were accompanied by an animal trail, access road, and various water control BMP's. Together these BMP's have created a winter feeding area and manure collection system for the approximately 300 beef cattle managed on the farm.

The covered feeding area allows for the feeding and watering of the beef cattle in a controlled area where animal waste can be collected in the manure storage and managed, according to the farm's Nutrient Management Plan. This minimizes negative impacts on both the West Branch and Cannonsville Reservoir previously contributed to by the nutrients and soil loading associated with the farmstead.



In addition to the water quality improvements, the facility will also help to improve animal and manure management for the producer. Mark MacGibbon will now have a covered feed pad that will serve as an area to collect manure and headlocks (provided by the landowner) will allow him to manage his herd for sales or medical attention when needed. The manure storage will allow Mark to manage the manure application with flexibility.

Town of Kortright, Delaware County

Covered Barnyard – Animal Trail and Walkway

Wheeler Farms, owned by Chris and Doug Wheeler, was revitalized by covering the existing concrete barnyard to meet the USDA / NRCS standard and refurbishing of the associated animal trail and walkway, both which had exceeded their initial lifespans.

The original concrete barnyard was built in 2001 and presented challenges for the producers due to the inability to properly use the feed alley constructed for the barnyard. The inaccessibility of the feed alley forced the Wheelers to feed the animals using round bale feeders which were placed both on the concrete barnyard and the adjacent animal trail and walkway.



Once the barnyard was covered; the Wheeler's were able to install an I-beam feed rail system that allows them to utilize the previously unusable feed alley. This allows all animals to be fed on the concrete barnyard where there waste can be collected and managed rather than flowing into the nearby CREP area.

The animal trail was resurfaced with fresh gravel and associated clean water exclusion ditches and fencing were installed ending any leaching of organic buildups into the CREP area.



Town of East Meredith, Delaware County

Covered Manure Storage – Covered Barnyard

The SQUAN I LLC, owned by Ronald Cieri, is located on approximately 2000 acres (both inside and outside of the NYC Watershed) in the town of East Meredith. Prior to the installation of the Covered Manure Storage / Covered Barnyard, most of the animals were fed adjacent to streams and hydrologically sensitive areas. To address this concern, a 192' x 60' covered manure storage / barnyard area was designed and implemented. This facility is unique as it has a movable divider in the middle to accommodate different size herds. The current configuration allows it to accommodate 90 beef cattle on one side and 20 cow calf pairs on the other. Each side has a waterer and feeder so the animals spend most of their time in the barnyard. This serves several purposes:

- The animals no longer have access to hydrologically sensitive areas resulting in immediate improvement in water quality.
- Allows for easier collection of manure for spreading on fields resulting in better hay yield.
- Overall animal health improvement.



Town of Delancey, Delaware County

Roofed Barnyard – Streambank Protection

The Julia V Farm, owned by Robert Dolan, mitigated multiple resource concerns present on the farm. Prior to the full stream exclusion along the Bagley Brook, a stream bank protection project was implemented to exclude the beef herd from full access to the water course.

Alternative water was provided to the livestock at three locations on the farm via a spring development on a neighboring property.

Before implementation of the roofed barnyard, the winter feeding area was extremely difficult to manage and clean up was a challenge due to poor drainage and frequent flooding. The nutrients accumulated in the feeding area and were susceptible to runoff in the nearby stream.

The roofed barnyard virtually eliminates any nutrient runoff from precipitation. The roofed feeding was necessary to meet NRCS standards and will facilitate manure clean up to improve overall nutrient management practices across the farm's footprint.



Farming East of the Hudson

The staff East of Hudson had a busy year marking the addition of the 77th participant into the Program. Whole Farm Plans encompass 10,900 acres of land in the Croton and Kensico Watersheds with over 549 BMPs implemented to date. A noteworthy project completed this year includes a pasture renovation at Green Chimneys, which has helped redirect runoff that was flowing through a compacted and overgrazed paddock. Additional fencing was installed and the watering system was expanded making it easier for the farm staff to rest and rotate the two primary pastures on this educational farm in the East Branch Reservoir sub basin.



Outreach efforts by the Agricultural Program in 2015 included an EOH farm tour for staff, board and committee members and farm tours at Hilltop Hanover Farm for several groups including DEP staff members and the Yale School of Forestry where they came to learn about WAC's programs and water quality BMPs. WAC also participated in the annual tours at Snow Hill Farm by New York City school children where first and third graders come to learn about farming and the New York City water supply.



Looking ahead to 2016, the EOH Program has a similarly ambitious workload that has been prioritized based on water quality risk factors such as number of farm animals, proximity to streams and field phosphorus levels. This data is used to rank farms and determine the most urgent projects so they can be addressed first. The BMP implementation budget for 2016 will be approximately \$400,000.

2016 Planning Goals

Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed
Goal	Goal	Goal

Annual Status Reviews		
187	99	67

New Whole Farm Plans		
as identified	2	As identified

2016 Projected Design & Implementation Workload

BMP - Funding Sources	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
Watershed Agricultural Program				
- new BMPs	\$ -	\$ 25,000	\$ -	\$ 25,000
- Non-CREP BMPs*	\$ 212,069	\$ 27,300	\$ 417,015	\$ 656,384
- Non-CREP BMPs - repairs	\$ 81,742	\$ 63,200	\$ -	\$ 144,942
- CREP (WAP)	\$ 365,024	\$ 98,260	\$ -	\$ 463,284
- CREP (WAP) - Repairs	\$ 2,500	\$ 12,500	\$ -	\$ 15,000
- Other (WAC)	\$ 270,481	\$ -	\$ -	\$ 270,481
Total Watershed Agricultural Program Funding	\$ 931,816	\$ 226,260	\$ 417,015	\$ 1,575,091
Other Funding Sources				
- CREP (FSA)	\$ 347,704	\$ 91,860	\$ -	\$ 439,564
- CREP (FSA) - Repairs	\$ 2,500	\$ 12,500	\$ -	\$ 15,000
- AWEF	\$ -	\$ -	\$ -	\$ -
- DCSWCD	\$ 312,500	\$ -	\$ -	\$ 312,500
- EQIP	\$ -	\$ -	\$ -	\$ -
- Landowner	\$ -	\$ -	\$ 4,658	\$ 4,658
- Other	\$ -	\$ -	\$ -	\$ -
Total Other Funding Sources	\$ 662,704	\$ 104,360	\$ 4,658	\$ 771,722
Total Projected Workload**	\$ 1,594,520	\$ 330,620	\$ 421,673	\$ 2,346,813

* Includes CREP companion BMPs for Catskill/Delaware Large and Small Farms.

** Does not include \$100,000 for emergency repairs for Catskill/Delaware Large and Small Farms.

2016 Projected Design & Implementation Workload – Number of BMPs

NRCS/WAC BMP Code	Best Management Practices	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
313	Waste Storage Facility *	1		1	2
317	Composting Facility			1	1
340	Cover Crop			2	2
342	Critical Area Planting	1		1	2
360	Closure of Waste Impoundment				0
362	Diversion	2	1	1	4
367	Roof - Existing HUAP				0
378	Pond				0
382	Fencing	34	8	4	46
390	Riparian Herbaceous Cover				0
391	Riparian Forest Buffer	34	9		43
393	Filter Strip	1			1
410	Grade Stabilization Structure			1	1
460	Land Clearing				0
468	Lined Waterway				0
472	Access Control				0
490	Natural Regeneration	10	5		15
500	Obstruction Removal	5			5
512	Pasture & Hayland Planting			2	2
516/614	Pipeline and Trough	5	2	1	8
528	Prescribed Grazing			1	1
533	Pumping Plant				0
558	Roof Runoff Management System			1	1
560	Access Road Improvement	5			5
561	Heavy Use Area Protection *	1	1	4	6
574	Spring Development	15	2		17
575	Animal Trails and Walkway *	8	3		11
578	Stream Crossing	16	5	1	22
580	Streambank Stabilization	3	1		4
587	Structure for Water Control		1		1
590	Nutrient Management Plan	73	26	2	101
606	Subsurface Drain				0
612	Tree & Shrub Planting	29	9		38
614	Watering Facility *	12		2	14
620	Underground Outlet			1	1
634	Waste Transfer System	3			3
635	Wastewater Treatment Strip			5	5
638	WASCOB				0
642	Well*		1	1	2
657	Marginal Pastureland Wetland Buffer (CP30)				0
659	Wetland Enhancement		1		1
3010	Roofed Barnyard *	1	1		2
3020	Portable Run in Shed			1	1
3060	Covered Manure Storage and Heavy Use Area				0
3070	Manure Storage/Heavy Use Area Uncovered				0
3110	Solar Calf Housing *	1			1
3130	Barn Renovations - Curtains *	1			1
3230	Manure Transfer - Agitator Pump				0
3310	Above Ground Fuel Storage Facility				0
3410	Manure Spreader				0
3420	Front-End Loader				0
3425	Dump Trailer				0
3430	Manure Truck				0
3440-01	Tire Scraper				0
3450	Manure Transfer System *	1			1
3499	Misc. Manure Handling Equipment				0
3700	Misc. equipment - Bedding/Feed Chopper				0
3710	Water Wagon		1		1
4100	Washwater Infiltration System			2	2
5001	Utility Pole				0
5004	Fencing - Semi-Permanent				0
Total		262	77	35	374
	* Contains a modification, emergency repair, repair or repair and replacement BMP.				

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