

Watershed Agricultural Program

2016 Annual Report and 2017 Workload



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Cover Design: Ben Hendee
Report Photos: WAP Staff



New Opportunities to Improve Water Quality and Economic Viability

The Watershed Agricultural Program (WAP) had another great year of implementing Best Management Practices (BMPs) that addressed multiple resource concerns on participant farms. A major focus was on the USDA Conservation Reserve Enhancement Program (CREP) BMPs based on the 19 re-enrollment and 7 new contracts developed in 2015. The West of Hudson program had a total of 32 projects completed totaling over \$2.0 million.

The conservation planners were immersed in determining the re-enrollment eligibility for 42 CREP contracts and revising Whole Farm Plans (WFPs) to capture the eligible BMP re-enrollments. In July, as part of the Riparian Buffer focus for water quality, the WAP Committee members saw a presentation by Dr. Bern Sweeney from the Stroud Water Research Center in Pennsylvania on Stream and Buffer Ecology. A total of 75 participants attended the presentation and 50 people attended a streamside discussion. The presentation provided scientific information on how a healthy stream with a proper buffer width and tree canopy can cool and widen the streams that allows further breakdown of harmful nitrogen in the drinking water supply.

The Precision Feed Management (PFM) program is a science based program that develops feed management plans to deal with the large quantity of feed nutrients managed annually on participant farms. 2016 was the first full year of the PFM program. The staff completed 22 PFM Feed Management Plans and 87 PFM Benchmarks. The staff will continue the ranking and selection of additional farms to plan up to 40 PFM plans by the end of 2017. The Nutrient Management Credit (NMC) program currently has 117 participants. Through the support of Department of Environmental Protection funding this program will be expanding to allow up to 135 participants into the NMC program. This should allow all those that meet the eligibility criteria to be included in the NMC program. Through the recommendation of a private consultant the WAP has restructured the Agricultural positions to include more department coordinators to efficiently address program concerns and deliver water quality programs. The program partners with local county Soil and Water Conservation Districts (SWCD) and the USDA Natural Resources Conservation Service (NRCS) provides technical design and implementation of water quality BMPs. Farm participants actively followed 288 WFPs and 248 Nutrient Management Plans (NMPs) in the Catskill/Delaware Watersheds. Funding provided by New York City DEP, USDA and other sources helped the program realize its goals. The WAP continues to partner with Delaware County Cornell Cooperative Extension (CCE) to provide educational programs to area farmers. In 2016, 800 farmers and farm advisors attended 27 educational programs.

The Filtration Avoidance Determination (FAD) is due to be renewed in 2017 for another 10 years. The NYS Department of Health, NYS Department of Environmental Conservation and U.S. Environmental Protection Agency known as the regulators of the FAD have reached out to the WAC for recommendations on potential changes to Agriculture, Forestry, Easement and Economic Viability deliverables and metrics based on improving water quality. We look forward to the release of the new FAD in 2017.

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

Watershed Agricultural Program 2016 Planning Goals and Accomplishments

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

Annual Status Reviews					
187	214	96	105	67	70

New Whole Farm Plans					
as identified	1	as identified	1	as identified	1



2016 Implementation Accomplishments – Funding

BMP - Funding Sources	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
Watershed Agricultural Program				
- Non-CREP BMPs	\$ 700,562	\$ 177,503	\$ 145,900	\$ 1,023,965
- CREP (WAP)	\$ 234,684	\$ 10,832	\$ -	\$ 245,515
Total Watershed Agricultural Program Funding	\$ 935,245	\$ 188,335	\$ 145,900	\$ 1,269,480
Other Funding Sources				
- CRP (FSA)			\$ -	\$ -
- CREP (FSA)	\$ 220,519	\$ 9,388	\$ -	\$ 229,907
- DCSWCD	\$ 166,570		\$ -	\$ 166,570
- EQIP			\$ 1,402	\$ 1,402
- Landowner			\$ 18,888	\$ 18,888
- AWEP				\$ -
- NRCS	\$ -	\$ -	\$ -	\$ -
Total Other Funding Sources	\$ 387,089	\$ 9,388	\$ 20,290	\$ 416,767
Total Funding	\$ 1,322,334	\$ 197,723	\$ 166,190	\$ 1,686,247
* In Progress Payments				

2016 Implementation Accomplishments – Number of BMPs

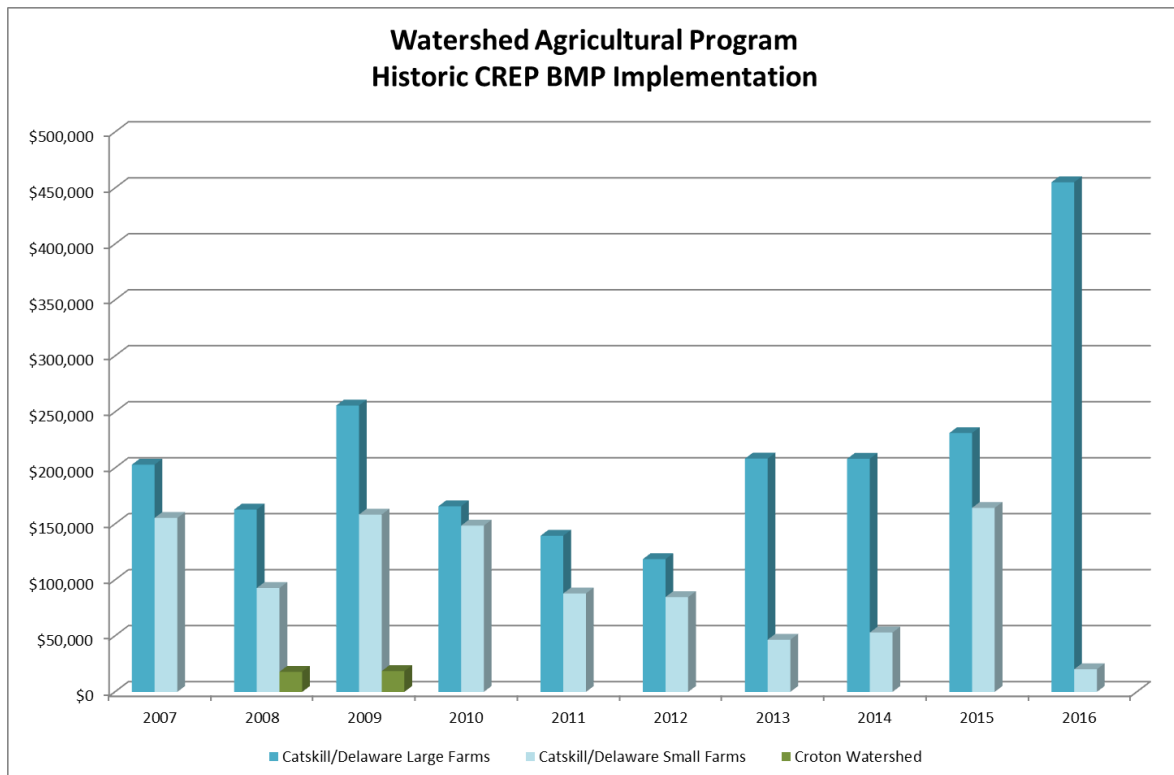
NRCS/WAC BMP Code	Best Management Practices	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
313	Waste Storage Facility	1			1
314	Brush Management				0
317	Manure Composting Facility				0
340	Cover Crop	1		4	5
360	Closure of Waste Impoundment				0
362	Diversion *	2		1	3
378	Pond*				0
382	Fencing *	28		2	30
391	Riparian Forest Buffer	13			13
393	Filter Strip		3		3
412	Grassed Waterway			3	3
468	Lined Waterway*		1		1
490	CREP Natural Regeneration	8	2		10
500	Obstruction Removal	6			6
512	Forage and Biomass Planting - Lime			4	4
516	Pipeline*	3	1		4
528	Prescribed Grazing			1	1
533	Pumping Plant				0
558	Roof Runoff Management System				0
560	Access Road Improvement *	4	1	3	8
561	Heavy Use Area Protection *		1	4	5
574	Spring Development *	15	1		16
575	Animal Trails and Walkway *	9		1	10
578	Stream Crossing	8	1		9
580	Streambank Protection	3			3
587	Structure for Water Control			2	2
590	Nutrient Management Plan	16	3	6	25
606	Subsurface Drain			1	1
612	Tree & Shrub Planting	18	4		22
614	Watering Facility*	9			9
620	Underground Outlet	1		1	2
634	Waste Transfer System*	5			5
635	Vegetated Treatment Area*			3	3
638	Water & Sediment Control Basin		1		1
642	Well		1		1
657	Wetland Restoration				0
3010	Roofed Barnyard*	3			3
3020	Portable Run-in Shed			2	2
3050	Waste Storage Facility*				0
3060	Covered Manure Storage/Barnyard	1	2		3
3100	Calf Housing structure - Timber - Permanent	1			1
3110	Calf Greenhouse*	3			3
3115	Calf Housing - Replacement Pens	1			1
3130	Ventilation & Lighting				0
3178	Manure Transportation Credit	2			2
3230	Manure Transfer - Agitator Pump			1	1
3310	AG Fuel Storage				0
3410	Manure Spreader				0
3420	Bucket Loader				0
3425	Dump Wagon				0
3430	Manure Truck	1			1
3499	Misc Manure Handling Equipment	1			1
3700	Miscellaneous Equipment				0
3710	Water Wagon				0
3730	Solar Pump	1			1
4100	Wash Water Infiltration				0
5004	Fencing - High visibility	3			3
Total		167	22	39	228
	* Contains a modification, emergency repair, repair or repair and replacement BMP.				

USDA Conservation Reserve Enhancement Program (CREP) 2016 Accomplishments

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.

2016 Total Implementation Expenditures

Total Rental Payments (USDA)	\$202,147
Sign-Up Incentive Payment (SIP-FSA)	\$ 2,195
Practice Incentive Payment (PIP-FSA)	\$ 70,204
BMP Cost (FSA)	\$195,625
BMP Cost (WAP)	\$475,423



Program	99-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Catskill/Delaware Large Farms	\$4,176,597	\$202,979	\$162,811	\$255,789	\$165,823	\$139,466	\$118,538	\$208,339	\$208,197	\$231,161	\$455,203	\$6,324,903
Catskill/Delaware Small Farms	\$ 644,529	\$155,360	\$ 92,777	\$158,378	\$148,507	\$ 87,957	\$ 84,673	\$ 46,613	\$ 53,000	\$164,329	\$ 20,220	\$1,656,343
Croton Watershed			\$ 17,968	\$ 18,547	\$0	\$0	\$0	\$0	\$0			\$ 36,515

Nutrient Management Program 2016 Accomplishments

In 2016, the Nutrient Management Team completed 54 Nutrient Management Plans (NMP) that consisted of 36 large farms and 18 small farms. Throughout the year 8 farms from our goal list were marked as deleted and not needing a NMP. These farms either went out of business, are not cooperating, or have no need for a NMP.

Current NMP Percent Analysis

	Large Farms 167		Small Farms 86		Combined 253	
	Number	% of Total	Number	% of Total	Number	% of Total
Current	158	94.6%	76	88.3%	234	92.5%
1 year out of date	6	3.6%	8	9.3%	14	5.5%
2 years out of date	0	0%	0	0%	0	0%
3 years out of date	1	0.6%	0	0%	1	0.4%
>3 years out of date	1	0.6%	1	1.2%	2	0.8%
Needs NMP	1	0.6%	1	1.2%	2	0.8%
Total	167	100%	86	100%	253	100%

Nutrient Management Credit (NM Credit)

The NM Credit Program was offered to 117 farms participating. Four farms did not submit records (no animals or records kept).

The 2015-2016 Credit year saw the third and final wave of Agricultural Water Enhancement Program (AWEP) nutrient management farms transition to regular NM Credit. Of the twelve AWEP nutrient management farms that came off the AWEP program, only nine were eligible for NM Credit. Three regular nutrient management credit farms left the program due to no animals or sale of the farm. Five new farms were selected from the prioritized general list of NM Credit eligible farms.

For the 2017 Nutrient Management Credit Program year, we will be increasing participants up to 135 farms.



Precision Feed Management

The Watershed Agricultural Program initiated efforts for the implementation of Precision Feed Management (PFM) as part of the Nutrient Management Program of the WAP in October of 2015, allowing for the implementation of PFM on up to 60 dairy and beef farms in the WOH watershed. Accomplishments of the PFM Team in 2016 are summarized below followed by a table providing accounting of the PFM Quality Management Assistance (QMA) planning and monitoring (PFM Benchmarking) activities as well as the Feed Management Plans completed in 2016.

Farm Sign up and Ranking:

- PFM farm sign ups and applications were completed by 45 dairy farms and 1 beef farm in 2015/2016.
- There are still approximately 18 known dairy farms WOH who have not completed either sign up and/or ranking applications in 2015/2016. These farms will be contacted again in 2017 to assess their interest in participating at that time. If these farms choose to fill out a PFM application they will be ranked and considered for implementation.
- During 2017 the PFM Team will develop a PFM Application for beef farms and will do outreach, and sign up, of a target group of beef farms for PFM.
- Farms that signed up in 2015/2016 were scored and ranked for implementation according to their applications and the scoring tool developed by the program. The first 20 farms that were ranked were contacted and PFM monitoring and planning began on these farms. Farms that ranked below the first 20 were contacted and informed that their PFM monitoring and planning would begin in 2017.
- The PFM Team staff assembled PFM planning and monitoring tools and had PFM added to the WFP2 (Whole Farm Plan document) for each of the first 20 farms.
- Annual QMA implementation strategies were developed for the first 20 farms, plus four additional year two farms.
- PFM benchmarking began on the first 20 farms.
- Three year Feed Management Plans were developed according to the NRCS 592 Feed Management planning standard.
- Throughout the year, PFM planners visited farms to assist in the development and implementation of feed management goals and strategies, and to assist the farms in decision making. The visits which met criteria of engaging the farms directly in feed management functions were considered PFM QMA events, and recorded and tracked. On average, there were nearly 100 QMA events per PFM planner, and on average nearly 12 QMA events per farm per year (one per month). This intense level of farmer engagement is typical of Precision Feed Management and is necessary for long term success of both PFM and the WAP.

PFM Program 2016 Achievements as of 12/27/2016

		Goal
Total Farm PFM QMA Events	290	-
Total PFM Benchmarks completed to date	87	80
Total PFM QMA Annual Implementation Plans	24	20
Total Feed Management Plans completed	21	20

Farmer Education Program

The Watershed Agricultural Program Farmer Education efforts ended 2016 with more than 800 farmers and farm advisors attending 27 events.

This year for the first time, we are including our Quality Management Assistance (QMA) efforts. There is often no substitute for timely, one-on-one coaching to assist a farm with a new practice or a challenging problem.

Date	Event	Watershed Farmers	Other Farmers	Students	Agri-Service	Agency	Other	Total
1/14	Catskill Regional Ag Conference	36	52	0	21	32	0	141
2/6	Goat Kidding Clinic	8	16	0	0	0	0	24
2/11	Winter Manure Spreading Research	8	0	0	0	16	0	24
2/18	Business Planning Workshop	18	17	0	2	0	0	37
2/23	Manure Treatment Presentation	6	0	0	1	11	0	18
2/26	Herd Vaccinations	6	2	0	6	2	0	16
3/2	Pesticide Applicator Certification Training	3	3	0	1	0	0	7
3/12	Sheep Production School	13	10	0	0	0	1	24
3/23	Sprayer School	9	8	0	2	6	0	25
3/30	Spring Crop School	11	19	0	0	11	0	41
4/25	Refractometer Use on the Dairy Farm	16	3	4	0	0	0	23
4/30	FAMACHA Training	1	2	30	0	0	0	33
5/2	2016 Cow-Calf seminar	18	3	0	0	2	0	23
6/1	Pasture Walk – Eisele Farm	8	2	1	0	0	0	11
6/4	Herding Sheepdog Demonstration	4	15	0	0	0	1	20
6/17	Lazy Crazy Acres Pasture Walk	7	1	0	0	1	0	9
7/25	Stocker Summit	24	25	0	1	9	1	60
8/22	Maidens Creamery Goat Tour	6	7	1	0	1	1	16
8/25	Grass Finishing Beef Field Day	20	36	0	3	6	0	65
8/30	Cover Crop / Seed plot Field Day	5	25	0	3	11	1	45
9/8	Strip-Till No Till Demo Day	0	9	0	2	10	0	21
9/9	Corn Dry Down Day in Franklin	13	10	0	0	0	0	23
9/20	Corn Dry Down Day in Franklin	11	1	0	0	0	0	12
10/22	Forage Quality Walk & Presentations	12	14	0	0	0	0	26
11/12	Toebe Farm Tour & NYSSGHAP Program	12	8	0	0	0	0	20
11/18	Plan a Successful Farm Business	4	2	0	0	0	1	7
12/12	2016 Beef Producers Meeting	11	4	0	0	3	0	18
2016	Quality Management Assistance Projects	81						81

Total Attendance (year to date)	371	294	36	42	121	6	870
Number of Events	28						
Number and percent of participating Watershed Farms attending at least one event:*						81	28%
Number of non-participating Watershed Farms attending at least one event:						28	
Farmers	665						
Advisors	163						
Total	828						

*Based on 287 active large and small farms West of Hudson (Dec. 2015)

Expanding Market Opportunities with Pure Catskills

Each year, the Economic Viability Program supports numerous local events in a variety of ways including financial sponsorships, providing promotional avenues through social media, helping develop print materials, and much more. Through Pure Catskills 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, we attended/ sponsored over 15 events in 2016 alone.

This year, we want to highlight two annual events we participate in, helping to foster new customer relationships while bringing our members profitability, and expanding their market opportunities.

One of our successful technical and marketing assistance events is the Cauliflower Festival held on September 24th in Margaretville, NY. This old-fashioned country fair is held at the start of the colorful fall season, and offers a Pure Catskills sponsored tent filled with seven of our members selling products, programs on local food, history and agriculture, and entertainment for the entire family. It has become a signature event for our program with members returning each year.



Wyatt Frisbee of Riverdale Farm and Forest enjoying the Cauliflower Festival.

KyMar Farm Winery and Distillery had this to say about the Cauliflower Festival, “This was a fabulous event for us. Good Job Pure Catskills. What a great program and thank you for having us in your tent. Pure Catskills team was welcoming and organized as always. It’s always a pleasure.”

The second successful event is Taste of the Catskills, held two weeks later on Columbus Day Weekend at Maple Shade Farm in Delhi, NY. The Taste of the Catskills Festival is a family-friendly event that showcases the diversity of the products coming from this region including food, beer, crafts and wine. This year, the Pure Catskills tent was the largest we have had in the three years we have attended. With 20 vendors under our tent, we are continuing to collect data to show the positive impact both financially and informatively Taste of the Catskills has on our members businesses.



*Chloe and Ryan Annetts tabling at Taste of the Catskills.
Photo credit: Heather Magnan, Kristan Morley*

Tree Juice Maple Syrup’s thoughts on Taste of the Catskills, “The Pure Catskills team was amazing! So nice to have such an incredible support network that really helps get our products out there. Best festival we attend.”

Dr. Bern Sweeney of the Stroud Water Research Center Educates Staff on Riparian Forest Buffers

Dr. Bern Sweeney, Senior Research Scientist of the Stroud Water Research Center, joined the NYC Watershed Agricultural Program to give a presentation on Stream Ecological Services and Riparian Forest Buffers. Dr. Sweeney reviewed the existing water quality conditions of our rivers and streams around the country. He explained the difference between forested streams and un-forested streams. Forested streams are wider, fed with leaves, have different algae communities, and are consistently cooler than un-forested streams. These characteristics of forested streams allow the organisms that have evolved in these environments for thousands of years to flourish in these improved habitats. The habitats provided with forested streams, allow the organisms that live here to process two hundred to eight hundred percent more nitrogen and five times the amount of organic matter as un-forested streams.

The group went on a field visit to look at an un-forested stream and forested one. The first stop showed the ecological consequences of streams that have no forest cover on land that is in intensive agricultural production. The site observed had a drainage area of sixteen square miles.

At the next location, which was forested, the stream had a five square mile drainage area and the width of the stream was approx. three times wider than the previous site. In the forest it was easy to witness how much more habitat there was for the stream organisms to process nutrients and pollutants. Not only was the surface area significantly greater, but the stream velocities were much lower to allow nutrients and pollutants to be assimilated into the life of the stream.

Dr. Bern Sweeney made a very compelling case that if we are serious about improving water quality in the NYC Watershed that we need to reforest our streams.



Photo credit: Ben Hendee

Protecting the Legacy of Riparian Forest Buffers in the NYC Watershed

In 1998 the NYC CREP program was created to establish riparian forest buffers to exclude livestock and reforest stream corridors that supplied the NYC drinking water reservoir system. The new program got off to a slow start until practice incentive payments (PIP) were made as an additional incentive to the program. Once this occurred and word got out into the farm community, enrollments in the CREP program skyrocketed in 2001 and 2002.

The majority of these contracts expired in 2015 and 2016 which created a one-time unprecedented workload for the NYC Watershed Agricultural Program (WAP). Over the past two years (2015/2016) there were a total of 91 contracts that expired. To manage this concentrated workload, the Conservation Planners had to work with the farms two years in advance of contract expiration for re-enrollment.

By October 1, 2015, WAP successfully re-enrolled 19 contracts for all participants that were interested in protecting their riparian forest buffers in the future. By October 1, 2016, WAP re-enrolled 43 contracts at the peak work load year. In 2016 alone, WAP made commitments to re-invest in 83 supporting conservation practices for a total of \$ 440,000.

To date the NYC CREP program has re-enrolled 75 total contracts for 786.35 acres.



Ben Hendee, Brandon Dennis, Brent McKeon installing tree tubes.

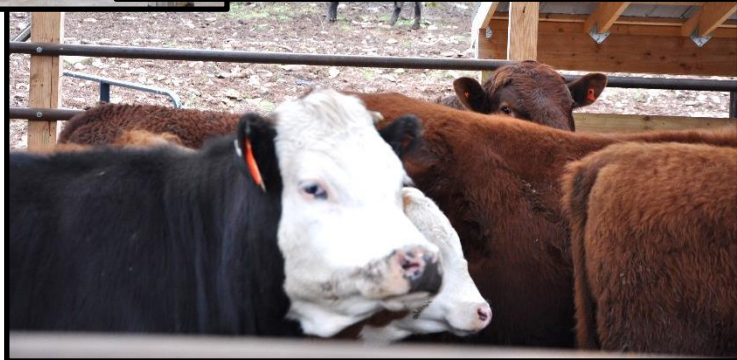
2016 Watershed Agricultural Program - Ag Tour

On May 3, 2016, the Watershed Agricultural Program (WAP) had their spring Farm Tour. Members of the Delaware County Soil & Water Conservation District, Natural Resource Conservation Service, Farm Service Agency, Environmental Protection Agency, Department of Health, United States Department of Agriculture, NYC Department of Environmental Protection, Cornell Cooperative Extension, WAC Council and committee members and staff attended the tour.

The farms visited on the tour this year were: 1.) Windswept Acres, an equine operation 2.) Mallaber Farm, a beef operation 3.) Wildflower Farm, a beef, hay, fertilizer and fish operation that also has a Conservation Easement and 4.) Byebrook Farm, a dairy and cheese operation. Best Management Practices implemented on the farms range from Covered Manure Storages, Covered Barnyards and Covered Calf Housing.



Photo credit: Heather Magnan



Town of Hobart, Delaware County Calf Housing Facility

A new calf housing facility was completed at the Pineyvale Farm in Hobart this past year. The Posts had one of the first calf housing built by the Watershed Ag Program in 1995. The original calf greenhouse structure, with a lifespan of ten years, survived numerous storms over the past twenty years. The longevity of the original facility is due to the Post's dedication of following the operation and maintenance for the facility.

The calf housing facility project was temporarily placed on hold when the farmstead barn sustained significant storm damage and collapsed. Once the farm was "back on its feet" from the barn collapse, planning moved forward for the calf facility replacement and was completed in the summer of 2016.

The Post's are extremely happy with the new calf facility and feel that the project was well worth the wait.



Town of Delhi, Delaware County Manure Storage - Covered Feed Area

Greenane Farms, raises beef, hogs, chickens, quail and goats. The farm became a participant in 2008 and grew dramatically, The Watershed Ag Program's top water quality priority was addressing the winter feeding of the beef herd.

Traditionally, the cows had been line-fed outside in different breeding and age groups. In order to bring the farm into compliance with current Natural Resource Conservation Service (NRCS) standards in the most cost effective and practical manner, the proposed feeding areas had to be covered and the manure had to be stored and spread to be in compliance with their Nutrient Management Plan.

A Covered Feeding Area and Manure Storage was implemented, through the 2015 and 2016 construction season, for a segment of the beef herd. One of the most challenging elements in the design of the facility was the need to accommodate several different groups. An "L" shaped structure was designed to effectively separate the livestock. The facility was built for 100 head and store six months of manure, bedding, and feed refusal/waste.



Town of Walton, Delaware County Quality Management Assistance

The staff at the Watershed Agricultural Council was alerted to an odor concern at the Mark MacGibbon Farm this past fall. The manure pit had been emptied on an extremely hot September weekend which caused the odor to be amplified and the prevailing winds to blow the odor into the Village of Walton which affected many of the residences.

Watershed Ag Program Planners and CCE met with the participant and began investigating the cause of the odor and strategize alternatives in an effort to reduce the odors in the future.

The program modified Mark's covered feeding structure in an effort to change the animal behavior so that more of their manure would be collected and disposed of in the storage. This action will assist in changing the consistency of the manure and the whey waste that are added into the storage.

In addition, Mark has plans to modify his manure spreader to allow for fewer waste of whey into the manure storage. The Watershed Agricultural Council will continue to work with Mark to reduce the impact of the odors while continuing to protect the water quality of our streams.



East of the Hudson – Ryder Farm

Ryder Farm in Brewster, NY, a family-owned enterprise for over 220 years, was covered in the September issue of *Modern Farmer* magazine. The article tells the story of how 7th generation family member Emily Simones was affected by her first visit to her ancestral home and meeting her fourth cousin once removed, Betsey Ryder, current manager of the farm and East of Hudson Committee board member.

Emily moved to Brooklyn, NY, after growing up in Minneapolis, MN. In 2009, not knowing much about the farm but practically living “in the neighborhood”, she felt the pull of familial connection and paid her distant cousin a visit.

Since then, Ryder Farm’s impact on Emily, and Emily’s impact on Ryder Farm, cannot be overstated. She has created a nonprofit artists’ residency program, called “SPACE on Ryder Farm”, which helps subsidize the farm’s expenses that regularly outpace the farm’s income generated by farm production alone. In return, Emily has found a part-time home, a business, and a husband, fellow actor Michael Chernus, who visited SPACE in 2013 at the request of a friend.



“SPACE on Ryder Farm”

East of the Hudson –Wilkens Fruit & Fir Farm

Wilkins Fruit and Fir Farm in Yorktown, NY, also a family-owned enterprise, but a relative youngster compared with Ryder Farm. It was celebrated in the September issue of *Yorktown News* for reaching its 100th anniversary. The farm is well-known as a place to go fruit picking and Christmas tree cutting as well as finding seasonal goodies throughout the year. Wilkins is run by family members, including some who are 5th generation.



Over the years, Wilkins has survived by strategically changing their operations as well as their product line when market forces, and occasionally Mother Nature, demand they do so. In honor of the farm's centennial, the family created a corn maze that spelled out "100 years."



East of the Hudson - BMP Implementation

Katonah Nursery is a family run garden center offering retail services for gardens and landscape design. The 9 acre property is also being used to breed and raise pigs and goats. Before design and implementation the animals were housed on an impervious surface where waste and runoff from cleaning the pens ran into a nearby catch basin. WAC designed and implemented several run-in sheds and a fenced in barnyard area away from hydrologically sensitive areas for the benefit of water quality and animal health.



Before



After

Photo credit: Jamie Tayler

2017 Planning Goals

Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed
Goal	Goal	Goal
Annual Status Reviews		
186	97	66
New Whole Farm Plans		
as identified	1	as identified

2017 Projected Design & Implementation Workload

BMP - Funding Sources	Catskill/Delaware Large Farms	Catskill/Delaware Small Farms	Croton Watershed	Total
Watershed Agricultural Program				
- Non-CREP BMPs*	\$ 420,175	\$ 43,975	\$ -	\$ 464,150
- CREP (WAP)	\$ 482,983	\$ 37,253	\$ 350,000	\$ 870,235
- CP-30	\$ -	\$ 5,075	\$ -	\$ 5,075
- WAP Stream Buffers	\$ 449,151	\$ 284,134	\$ -	\$ 733,285
- Repair, Repair & Replacement & Modification	\$ 667,395	\$ 488,800		
- Agonomic BMPs	\$ 27,000	\$ -		
- Other (WAC)	\$ 309,900	\$ 65,000	\$ -	\$ 374,900
Total Watershed Agricultural Program Funding	\$ 2,356,603	\$ 924,237	\$ 350,000	\$ 2,447,644
Other Funding Sources				
- CREP (FSA)	\$ 329,446	\$ 36,903	\$ -	\$ 366,348
- CP-30	\$ -	\$ 2,925		
- AWEF			\$ -	\$ -
- DCSWCD			\$ -	\$ -
- EQIP			\$ -	\$ -
- Landowner			\$ 7,800	\$ 7,800
- Other			\$ -	\$ -
Total Other Funding Sources	\$ 329,446	\$ 39,828	\$ 7,800	\$ 374,148
Total Projected Workload**	\$ 2,686,049	\$ 964,065	\$ 357,800	\$ 4,007,914
<p>* Includes CREP companion BMPs for Catskill/Delaware Large and Small Farms.</p> <p>** Does not included \$100,000 for emergency repairs for Catskill/Delaware Large and Small Farms.</p>				

2017 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 *	3	1		4
314	Brush Management		1		1
317	Composting Facility			2	2
340	Cover Crop			3	3
342	Critical Area Planting	1		2	3
362	Diversion*	2			2
367	Roof - Existing HUAP*	1			1
378	Pond	1			1
382	Fencing *	88	17	4	109
391	Riparian Forest Buffer	66	8		74
412	Grassed Waterway*	1			1
460	Land Clearing	1			1
468	Lined Waterway*		2	2	4
472	Access Control	1			1
490	Natural Regeneration	2	1		3
500	Obstruction Removal	4			4
512	Pasture & Hayland Planting	2		2	4
516/614	Pipeline and Trough *	14	11	1	26
528	Prescribed Grazing			1	1
533	Pumping Plant	3	1	1	5
558	Roof Runoff Management System *	2		1	3
560	Access Road Improvement*	7	3	2	12
561	Heavy Use Area Protection *	4	2	4	10
574	Spring Development *	32	6		38
575	Animal Trails and Walkway *	22	10		32
578	Stream Crossing*	21	1	1	23
580	Streambank Stabilization *	1			1
590	Nutrient Management Plan	54	27	6	87
612	Tree & Shrub Planting	12	1		13
614	Watering Facility *	24	10		34
620	Underground Outlet*	1	2	4	7
634	Waste Transfer System *	4			4
635	Wastewater Treatment Strip			5	5
638	WASCOB		1		1
642	Well*		2		2
659	Wetland Enhancement	1			1
3010	Roofed Barnyard *	1	2	1	4
3050	Manure Storage - Covered - Gravel*		1		1
3060	Covered Manure Storage and Heavy Use Area		1		1
3100	Calf House Structure - Timber - Permanent*	1			1
3110	Solar Calf Housing *	1			1
3115	Calf Housing - Replacement Pens*	1			1
3130	Barn Renovations - Curtains *	1			1
3730	Solar Pump	1			1
5001	Utility Pole	1			1
5004	Fencing - Semi-Permanent	4	3		7
Total		386	114	42	542
	* Contains a modification, emergency repair, repair or repair and replacement BMP.				

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