

Appendix A-Tracking Table

Goal	Objective	FFY 2014	FFY2015	FFY 2016	FFY 2017
		<i>Actual Amount Achieved</i>	<i>Actual Amount Achieved</i>	<i>Actual Amount Achieved</i>	<i>Actual Amount Achieved</i>
Improve and protect the Waters of the Commonwealth from non-point source pollution associated with Acid Mine Drainage and other energy resource extraction activities.	1.1 Provide for the operation and maintenance of 46 Pennsylvania-operated AMD treatment systems each year for the next five years.	BCR is providing operation, maintenance, and repair (O,M&R) for 49 systems	BCR is providing operation, maintenance, and repair (O,M&R) for 49 systems	BCR is providing operation, maintenance, and repair (O,M&R) for 51 systems	BCR is providing operation, maintenance, and repair (O,M&R) for 51 systems
	1.2 Engage in land reclamation projects resulting in the reclamation of 500 acres of abandoned mine lands (AML) each year for the next five years.	626 acres	750 acres	361 acres	527 acres
	1.3 Provide funding and other assistance for the installation of four new AMD treatment systems annually for the next 5 years.	5 systems completed in 2014	4 systems completed in 2015	5 systems completed in 2016	6 systems completed in 2017
	1.4 Authorize 7 WPCAMR Quick Response projects each year for the next five years.	6 projects	3 projects	3 projects	10 projects
	1.5 Plug 40 oil and gas wells each year for the next five years.	51 wells	23 wells	32 wells	3 wells
	1.6 Annually, through load-reduction efforts with the installation of four new AMD treatment systems, an additional 10,000 lbs of Iron will be reduced from the non-point source pollutant stream each year.	6,935 lbs	62,831 lbs	23,645 lbs	10,862 lbs
	1.7 Annually, through load-reduction efforts with the installation of four new AMD treatment systems, an additional 3,000 lbs of Aluminum will be reduced from the non-point source pollutant stream each year.	11,096 lbs	12,476 lbs	7,446 lbs	7,778 lbs
	1.8 Annually, through load-reduction efforts with the installation of four new AMD treatment systems, an additional 10,000 lbs of Acidity will be reduced from the non-point source pollutant stream each year.	127,531 lbs	122,549 lbs	286,781 lbs	97,054 lbs

	1.9 Annually, through load-reduction efforts with the current operational passive treatment systems, 1,000,000 lbs of Iron will continue to be reduced from the non-point source pollutant stream each year.	16,745,455 lbs With 265 systems	16,739,588 lbs with 271 systems	17,075,435 lbs with 285 systems	17,236,981 with 299 systems
	1.10 Annually, through load-reduction efforts with the current operational passive treatment systems, 200,000lbs of Aluminum will continue to be reduced from the non-point source pollutant stream each year.	3,314,314 lbs With 265 systems	3,071,817 lbs with 271 systems	3,042,452 lbs with 285 systems	2,977,203 with 299 systems
	1.11 Annually, through load-reduction efforts with the current operational passive treatment systems, 9,000,000lbs of Acidity will continue to be reduced from the non-point source pollutant stream each year.	18,086,174 lbs With 265 systems	14,828,452 lbs with 271 systems	17,358,242 lbs with 285 systems	22,913,730 with 299 systems
	1.12 Annually, through load-reduction efforts with state operated active treatment systems, 750,000lbs of Iron will continue to be reduced from the non-point source pollutant stream each year.	1,369,480 lbs	1,241,365 lbs	1,053,390 lbs	1,104,052 with 8 active systems
	1.13 Annually, through load-reduction efforts with state operated active treatment systems, 150,000 lbs of aluminum will continue to be reduced from the non-point source pollutant stream each year.	265,355 lbs	208,050 lbs	177,025 lbs	221,117 with 8 active systems
	1.14 Annually, through load-reduction efforts with state operated active treatment systems, 6,500,000 lbs of Acidity will continue to be reduced from the non-point source pollutant stream each year.	8,179,650 lbs	7,791,290 lbs	6,290,410 lbs	5,993,629 with 8 active systems
	1.15 Annually, through load-reduction efforts with state operated active and passive treatment systems, 8 billion gallons per year (BGY) of water will be treated reducing non-point source pollutant entering Waters of the Commonwealth each year.	12.3 BGY	64.9 BGY	12.1 BGY	11.3 BGY

<p>Improve and protect the Waters of the Commonwealth from Non-Point Source Pollution associated with Agricultural activities.</p>	<p>2.1 Implement the Regional Agricultural Watershed Assessment Program Initiative (RAWAPI) in one ag-impaired watershed per DEP region per year for the next five years.</p>	<p>See FFY 2014 Appendix A</p>	<p>See Appendix B</p>	<p>See Appendix B</p>	<p>See Appendix B</p>
	<p>2.2 Conduct inspections on 350 CAFO operations in the Commonwealth within the next five years.</p>	<p>242 inspections</p>	<p>268 CAFO operations were inspected by DEP</p>	<p>257 CAFO operations inspected by DEP during FFY 2016</p>	<p>261 CAFO operations inspected by DEP during FFY 2017 (NOTE: there are now 429 CAFOs operating in PA)</p>
	<p>2.3 Implement BMPs on 50 agricultural operations per year using state directed funds. These BMPs will be for the mitigation of soil loss and/or wise management of nutrients.</p>	<p>(13+) §319 funded projects (15+) CBP funded projects (18) Growing Greener funded projects</p>	<p>(3) §319 funded projects (54) CBP funded projects (18) Growing Greener funded projects</p>	<p>(13) §319 funded projects (0) CBP funded projects (40) Growing Greener funded projects</p>	<p>(5) 319 Funded projects (23) Growing Greener funded project</p>
	<p>2.4 Support the review of 30 Nutrient Credit trade applications annually.</p>	<p>151 Trades (N and P combined) 805,000 N credits traded 85,000 P credits traded</p>	<p>112 Trades (N and P combined) 609,999 N credits traded 56,893 P credits traded</p>	<p>For Compliance Year 2016: 5 NPS Certification requests were reviewed, 67 of 162 total trades (N & P combined) involved NPS-generated credits, 113,218 of 602,487 total N credits traded were NPS-generated credits, 7,183 of 44,427 total P credits traded were NPS-generated credits Also, See APPENDIX B.</p>	<p>For Compliance Year 2017:</p> <ul style="list-style-type: none"> • 9 NPS credit certification requests were reviewed • 36 NPS credit verification requests were reviewed • 10 of 82 total trades (registrations) involved NPS-generated credits • 20,410 of 272,399 total N credits traded were NPS-generated credits • 2,969 of 35,143 total P credits traded were NPS-generated credits <p>Also, See Appendix B.</p>
	<p>2.5 Conduct 2,000 agricultural compliance outreach/education visits on farms in the Chesapeake Bay watershed each year until all farms in the Chesapeake Bay watershed have been visited.</p>	<p>4,272 outreach 22,000+ contacts</p>	<p>1,957 outreach 6,999 contacts</p>	<p>1,669 outreach 7,520 contacts</p>	<p>2,080 small farms (non-CAFO) inspected Also, See Appendix B</p>
	<p>2.6 Provide 6 FTEs under the PACD TAG Grant for designing and installing Ag BMPs.</p>	<p>9 FTE's; Full time engineering and technical positions</p>	<p>7.5 FTE's; Full time engineering and technical staff.</p>	<p>8.0 FTE's Full time engineering and technical staff.</p>	<p>8.0 FTE's Full time engineering and technical staff.</p>
	<p>2.7 Support a minimum of 35 Chesapeake Bay Program Agricultural Technicians and 4 Agricultural Engineers each year for the next five years.</p>	<p>43 ag techs 6 ag engineers in the Chesapeake Bay watershed</p>	<p>45.25 ag techs 7 ag engineers are funded in the Chesapeake Bay watershed</p>	<p>27 Bay techs 6 Bay engineers</p>	<p>25 Bay techs 6 Bay engineers</p>
	<p>2.8 Provide support for the implementation of five innovative environmental technology projects (focused on agriculture) within the next five years.</p>	<p>USDA-NRCS Conservation Innovation Grants (CIG): 2013: 5 CIG Grants 2014: 1 CIG Grant</p>	<p>USDA-NRCS Conservation Innovation Grants (CIG): 2015: 1 PA award 1 National award</p>	<p>USDA-NRCS Conservation Innovation Grants (CIG): 2016: 1 PA award 1 National award</p>	<p>USDA-NRCS CIG grant 2016: 1 PA award</p>

	2.9 Support the certification of 600 certified manure haulers within the Commonwealth annually.	569 certified haulers	666 certified manure haulers and brokers certified and supported over the past year	615 certified haulers in FY2016	731 certified haulers in FFY 2017
	2.10 Support the certification of 300 certified Nutrient Management Specialists within the Commonwealth annually.	306 certified Specialists	299 certified Nutrient Management Specialists certified and supported over the past year	325 certified Specialists	300 certified Specialists
	2.11 Maintain the implementation of approved Act 38 Nutrient Management Plans on 300,000 acres of farmland regulated as CAOs and CAFOs each year for the next five years.	300,000+ acres (CAO and VAO) through 2013	475,117 acres (CAO and VAO) through 2014	473,996 acres (CAO and VAO) through 2015 and a total of 1,934 plans	457,673 acres (CAO and VAO) through June of 2017 and a total of 1,996 plans.
	2.12 Establish a baseline number of non-CAO/CAFO farmed-acres under an NMP or MMP by the end of FFY 2015 and increase that number by 5% annually.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B
	2.13 Continue the use of the PA One Stop program such that the number of fields entered into that system increase by 10% each year over the next five years.	60,000+ fields through 2014	80,000+ fields (33% increase)	115,934 fields (44% increase)	137,311 fields (31% increase)
Improve and protect the Waters of the Commonwealth from non-point source pollution associated with stormwater run-off, as well as streambank and shoreline degradation.	3.1 Conduct 11,000 inspections under the Chapter 102 and Chapter 105 programs annually for the next five years.	12,082 inspections	7,849 Inspections under the 105 Program 12,853 Inspections under the 102 program	951 Inspections under the 105 program during FFY 2016 9,568 Inspections under the 102 program during FFY 2016	830 inspections under the 105 program during FFY 2017 13,208 inspections under the 102 program during FFY 2017
	3.2 Continue to implement the MS4 program through oversight and verification that MS4 communities abide by their permit requirements.	See program summary in text of Annual Report.	See Appendix B	See Appendix B	See Appendix B
	3.3 Continue to administer the Act 167 program directing counties to obtain and implement county wide stormwater management plans.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B

	3.4 Implement 40 new, state-funded stream restoration and/or stormwater management projects annually for the next five years.	18 storm 30 stream 4 buffer	20 Storm 22 Stream 1 Buffer	13 Storm 24 Stream 5 Buffer	14 Storm 35 Stream 3 Buffer
	3.5 Address 500 new Dirt, Gravel, and Low Volume (DGLV) Road sites each year for the next five years.	167 sites	336 projects* \$9,248,240 total expenditure \$27,525 avg. cost/project	479 projects* \$17,086,200 total expenditure \$35,671 avg. cost/project	492 projects \$20,181,397 \$41,019 avg. cost/project *Note: quantities reported in 2015 and 2016 were corrected for this report. Values expressed in this table are accurate, but are different than those reported in the previous two annual reports. Program partners (PDA) report enhanced use of GIS and more accurate accounting of both DG and LV roads resulted in the discrepancies.
	3.6 Support using state managed funds, the completion of 15 miles of stream restoration and/or bank stabilization projects over the next five years.	See Appendix A of FFY 2014 Annual Report.	From GG Program: <u>3.1 mi</u>	From GG Program: <u>9.7 mi</u> From 319 Program: <u>0.8 mi</u> Sub-Total: <u>10.5 mi</u> Running Total: <u>13.6</u>	From GG Program: <u>13.03 mi</u> From 319 Program: <u>0.35 mi</u> Sub-Total: <u>13.38 mi</u> Running Total: <u>26.98 mi</u>
	3.7 State wide, enroll and maintain 50,000 acres of new land in the CREP program over the next five years.	4,883.7 acres	626 acres Running total of 5,509.7 acres	614 acres were added Running total of 6,123 acres	948 acres were added Running total of 7,071
	3.8 Plant and protect 5,000 acres of riparian forest buffer for the next five years.	392.1 acres (Forest Riparian Buffer-CREP Program only)	409 acres Running total: 801.1 acres	106.7 new acres Running total: 907.8 acres	948 CREP 473 NFWF 63 Other 1,484 new acres Running total: 2,391.8
	3.9 Through a forest land-owner stewardship program, develop 30 new plans annually which should account for 5,000 new acres of privately owned forest land each year for the next five years.	72 plans 8,500 acres	59 new forest stewardship plans were developed over the past year 17,367 acres of privately owned forest land addressed in those plans	33 new plans developed over the past year 5,096 acres addressed in those plans	29 new Plans were developed over the past year covering 4,943 acres Constituting a total of 3099 A statewide grand total of 527,831 acres
	3.10 Plant 10,000 new trees under the TreeVitalize program each year for the next five years.	37,818 trees	23,483 trees	14,855 trees planted statewide 441,575 trees planted (program total)	1,028 trees were planted with Treevitalize funds last year

	3.11 Encourage activities within US Forest Service selected priority watersheds identified under the USFS Watershed Condition Framework within the borders of the Allegheny National Forest (ANF) to the extent that these priority watersheds within the ANF are categorized as "Functioning Properly."	See Program summary in text of Annual Report.	See Appendix B	See Appendix B	See Appendix B
Demonstrate the efficacy of Pennsylvania's non-point source pollution management efforts through enhanced data collection.	4.1 Establish a process to collect BMP data at the state, watershed and sub-watershed level.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B
	4.2 Further develop and maintain PA One Stop to allow the NPS Program to collect the number of fields and acres planned through the use of this tool and to spatially summarize data by watershed.	PA OneStop can document # farm fields planned; 60,000+ through 2014.	80,000+ fields. Acres planned can be tracked. Data can be summarized by HUC-12 watersheds.	Fields (total): 115,934 Acres: 933,694 Farms: 16,319 Data can be summarized by HUC-12 watershed.	Fields (total): 137,311 Acres: 1,119,722 Farms: 18,894 Data can be summarized by HUC-12 watershed.
	4.3 Continue to develop and improve our Reclaimed Abandoned Mine Land Inventory System (RAMLIS) GIS Tool.	Version 14 completed	Version 15 completed	Version 16 completed	Version 17 completed
	4.4 Ensure that the Datashed GIS web tool adequately describes available information relating to the approximate 300 AMD Treatment Systems sites that are treating mine discharges across PA, and ensure that access to this information is available to the public.	265 systems are currently in Datashed	271 systems are currently in Datashed	285 systems are currently in Datashed	299 systems are currently in Datashed
	4.5 In addition to monitoring efforts implemented outside of DEP, the DEP will monitor 900 sites each year for the next five years.	1,114 sites	1,057 sites (macros, fish, chem) 935 sites (pathogens) 27 sites (potable) Total: 2,019	749 sites (macros, fish, chem) 562 sites (pathogens) 17 sites (potable) Total: 1,328	1,410 sites (macros, fish, chem) 214 sites (pathogens) 10 sites (potable) Total: 1,634
	4.6 In addition to other monitoring efforts, the DEP will monitor 20 lakes each year for the next five years.	10 lakes/region = 60 lakes 13 lakes (WQN) 2 Lakes (RAWAPI)	18 Regional DEP 13 WQN lakes 23 TSI lakes 5 Conservation District 5 CO DEP (Rec. Use) 20 CO DEP (Fish Tissue) Total: 84	9 Regional DEP 13 WQN lakes 13 TSI lakes 4 Conservation District 11 CO DEP (Rec. Use) 15 CO DEP (Fish Tissue) Total: 65	12 Regional DEP 13 WQN lakes 13 TSI lakes 4 Conservation District 3 CO DEP (TSI) 8 CO DEP (Rec. Use) CO DEP (Fish Tissue) Total: 53

	4.7 Through monitoring and assessment efforts conducted by the DEP, 60 miles of streams previously impacted by NPS related causes shall be documented as newly delisted from Category 5 and/or Category 4a in the bi-annual Pennsylvania Integrated Water Quality and Monitoring Report.	198.6 stream miles in 2014	The Integrated Reported is published bi-annually. No new information is available at this time.	218 stream miles in 2016	The Integrated Reported is published bi-annually. No new information is available at this time.
	4.8 Through monitoring and assessment efforts conducted by the DEP, 1,500 lake acres previously impacted by NPS related causes shall be documented as newly delisted from Category 5 or Category 4a over the next five years.	12,301.15 Lake Acres in 2014	The Integrated Reported is published bi-annually. No new information is available at this time.	8,536 Lake Acres in 2016	The Integrated Reported is published bi-annually. No new information is available at this time.
	4.9 Implement grant funded projects designed to determine BMP effectiveness on at least three priority watersheds.	See FFY 2014 Appendix A	See Appendix B	See Appendix B	See Appendix B
	4.10 Within the next five years, establish a process to input all monitoring data collected by the PA DEP NPS Program into STORET.	See FFY 2014 Appendix A	See Appendix B	See also Appendix B	See Appendix B
	4.11 Annually, through state-wide NPS pollutant load-reduction efforts, 1,000,000 lbs of Nitrogen will be reduced from the non-point source pollutant stream each year.	2,875,854.15 lbs	17,239,747 lbs	18,177,884.4 lbs	14,906,363.3 lbs
	4.12 Annually, through state-wide load-reduction efforts, 50,000 lbs of Phosphorus will be reduced from the non-point source pollutant stream each year.	145,293.08 lbs	602,176 lbs	590,822.8 lbs	545,641.2 lbs
	4.13 Annually, through state-wide load-reduction efforts, 15,000 tons of sediment will be reduced from the non-point source pollutant stream each year.	162.51 tons	286,070.3 tons	296,626.1 tons	243,806.0 tons
	4.14 Prevent waterbodies currently not listed as impaired for the aquatic life use designation from being listed as impaired for that designated use through implementation of existing regulatory programs.	See program summary in text of Annual Report.	See Appendix B.	See Appendix B	See Appendix B

	4.15 Establish a data collection framework by which information regarding the obtainment of nutrient and manure management plans (NMPs/MMPs) on non-CAO/non-CAFO farms is collected and counted in terms of acres covered.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B
	4.16 Establish a process by which data regarding the quantity of biosolids which are mechanically land applied is tracked and reported to program partners and the public on an annual basis. The process should be established within the five year life of this Management Plan.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B
Demonstrate Pennsylvania's non-point source pollution management efforts through enhanced data dissemination efforts.	5.1 Annually provide a clear and concise report to the EPA, the general public, regulators, partners and others interested in Pennsylvania's NPS pollution abatement efforts outlining the major accomplishments of Pennsylvania's NPS Program consistent with EPA reporting guidelines.	See above report	See above report.	See above report.	See above report.
	5.2 Develop 2 success stories per year.	Harveys Lake,	Longs Run,	Lake Wallenpaupack Bennett Branch	Six Mile Run
	5.3 Provide detailed BMP implementation reporting on 10 approved WIPs per year.	10+ per year (2010 to present)	See Appendix D of the FFY 2015 Annual Report	See Appendix D	See Appendix D
	5.4 Implement the BMPs believed to be necessary to restore four sub-watersheds covered under §319 approved WIPs by the end of the 2019 Federal Fiscal Year. (Achievement of this goal may be measured against full implementation of the BMPs listed in those §319 approved WIPs).	30+ §319 WIPs approved; BMP implementation ongoing.	See Appendix A of the FFY 2015 Annual Report.	See Appendix B	See Appendix B
	5.5 Implement the BMPs believed to be necessary to restore three (3) watersheds supported under the Growing Greener Program's Renaissance Initiative by the end of the 2019 Federal Fiscal Year.	See Appendix A of FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B
	5.6 Document farmer compliance with erosion and sedimentation control and manure management regulations in 15 watersheds by the end of the 2019 Federal Fiscal Year.	See Appendix A of the FFY 2014 Annual Report.	See Appendix B	See Appendix B	See Appendix B

	5.7 Report semi-annually on progress implementing active Section 319 grant work plans ensuring status reports are current for at least 90% of the active grant projects in the GRTS database.	(2) SAPR / yr. completed. 90+ % current status reports goal.	(2) SAPR / yr. completed. 95% - 100% of the Project status reports are completed.	(2) SAPR / yr. completed. 100% of the Project status reports are completed.	(2) SAPR / yr. completed. 95% plus of the Project status reports are completed.
	5.8 319 Complete Watershed Plan Tracker (WPT) data entry for all active WIPs by the end of 2017. The DEP will continue to input current information in the WPT throughout the five year life of this Plan to ensure accuracy of data.	30+ active WIPs are updated in WPT to include both GRTS and non-319 project data.	36 WIPs approved as of 12/2015. 35 of 36 are 'complete' in WPT. Both §319, non-319 funded BMP data is included in WPT.	36 WIPs approved as of 12/2016. 36 are 'complete' in WPT. (2) WIPs are identified as "Not Initiated" and (1) WIP is listed as "Initiated" in the WPT.	36 WIPs approved as of 12/2017. 36 are 'complete' in WPT. (2) WIPs are identified as "Not Initiated" and (1) WIP is listed as "Initiated" in the WPT.