



Federal Facility BMP Reporting

Progress + Milestones + Phase 6 History

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Federal Facility BMP Reporting

2015 Progress

- For the 2015 Progress model scenarios, federal BMP data was successfully reported to the CBP office through NEIEN by only 3 jurisdictions = VA, WV and DC
- MD tried to submit but there were data input errors – so will be corrected with MD's 2016 Progress submission.
- There COULD be other federal information on new implementation, but it was not “tagged” as specific to federal facilities.



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2015 Progress – Virginia

Virginia	Unit (New)	2009	2010	2011	2012	2013	2014	2015
• Forest Harvesting Practices	Acres	-	-	-	-	588	300	-
• Reduction of Impervious Surface	Acres	-	-	-	-	7.18	-	-
• Tree Planting	Acres	-	-	-	-	0.36	0.20	-
• Permeable Pavement	Acres	-	-	-	-	0.62	-	-
• Bioretention	Acres	-	-	-	-	11.87	14.30	-
• Dry Extended Detention Ponds	Acres	-	-	-	-	57.25	-	-
• Riparian Forest Buffer	Acres	-	-	-	-	3.40	-	-
• Constructed Wetland	Acres	-	-	-	-	161	-	-
• Tree Planting	Acres	-	-	-	-	3.50	-	-
• Infiltration Basin	Acres	-	-	-	-	3.37	-	-
• Wet Pond	Acres	-	-	-	-	-	2.25	-
• Reduction of Impervious Surface	Acres	-	-	-	-	-	1.71	-
• Septic Tank Pumpout	Count	-	-	-	-	-	44	-
• Urban Infiltration Practices	Acres	-	-	-	-	-	3.15	-
• Constructed Wetland	Acres	-	-	-	-	-	0.20	-
• Urban Forest Buffer	Acres	-	-	-	-	-	0.60	-
• Dry Detention Ponds	Acres	-	-	-	-	-	0.75	-
• Erosion & Sediment Control	Acres	-	-	-	-	-	0.15	-
• Street Sweeping	Lbs	-	-	-	-	198,380	426,300	-
Totals	Acres	-	-	-	-	837	368	-



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2015 Progress – West Virginia

West Virginia	Unit (New)	2009	2010	2011	2012	2013	2014	2015
• Tree/Shrub Establishment	Acres	1.7	3.0	-	0.1	-	-	-
• Forest Harvesting Practices	Acres	-	-	-	-	-	67.0	124.0
Totals	Acres	1.7	3.00	-	0.1	-	67.0	124.0



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2015 Progress – District of Columbia

District of Columbia	Unit (New)	2009	2010	2011	2012	2013	2014	2015
• Permeable Pavement	Acres	-	-	-	-	0.35	-	-
• Filtering Practices	Acres	-	-	-	-	1.30	1.61	-
• Green Roofs	Acres	-	-	-	-	1.76	0.49	-
• Dry Detention Ponds & Hydrodynamic Structures	Acres	-	-	-	-	0.00	1.83	-
• Bioretention	Acres	-	-	-	-	-	3.03	-
• Bioswale	Acres	-	-	-	-	-	7.52	-
Totals	Acres	-	-	-	-	3.41	14.48	-



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2015 Progress – District of Columbia

- For DC 2015 data, DOEE's new stormwater management database led to errors with submission and validation.
- What's missing for 2015 includes the following:

AREA_NAME	BMP_type
• McMillan Reservoir	Bioretention
• KLINGLE VALLEY PARKWAY	Bioretention + Open Channel + Permeable Pavement
• Congress and Supreme Court Buildings	Green Roof
• Federal Office Buildings	Infiltration
• ROCK CREEK PARK & PINEY BRANCH PARKWAY	Bioretention + Permeable Pavement
• National Mall, Smithsonian Grounds	Rainwater harvesting + Proprietary Practice
• VEHICLE MAIN. FACILITY	Open Channel
• Washington Navy Yard	Permeable pavement + Bioretention + Filtering Systems
• National Arboretum	Urban Nutrient Management Plan



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2015 Progress – Maryland

- Also difficulties with NEIEN submission – identification of federal facilities.

Implemented Federal	175.88
Bioretention	51.86
Dry Detention Ponds & Hydrodynamic Structures	3.79
Dry Swale	1.08
Filtering Practices	6.36
Infiltration Practices	3.13
Rain Garden	0.24
Reduction of Impervious Surface	0.05
Wet Pond	21.39
Wet Ponds & Wetlands	87.98



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2017 Milestones

- A scan of data submitted for the 2015-2017 Milestone indicates only DC has federal-specific BMP data in the 2-year plans.
- There COULD be other federal information on new planned implementation, but it was not identified as specific to federal segments.



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2017 Milestones – District of Columbia

District of Columbia	Unit (New)	2014-2017
• Tree Planting	Acres	3.47
• Bioretention	Acres	14.21
Totals	Acres	14.65



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Phase 6 Model History

- For the BMP history for the next version of modeling tools (Phase 6), federal-specific data is better.
- Reported by 4 jurisdictions to the CBP office through NEIEN = DC, MD, PA and VA.
- No information for NY, WV and DE.
- There COULD be other federal information on historic implementation, but it was not “tagged” as specific to federal facilities.



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Phase 6 Model History; 2000 and 2013 Samples

		DC	DC	MD	MD	PA	PA	VA	VA
BMP	Units	2000	2013	2000	2013	2000	2013	2000	2013
BioRetention	acres	0.1	863	5	122				
BioSwale	acres		77	74	40				
Combined Sewer Connect	acres				1		8		
Dry Ponds	acres	86	174	399	612				2
E & S	acres								
Extended Dry Ponds	acres	0.02	65	39	96			1	19
Filtering Practices	acres	308	191	7	83				
Forest Buffers	acres			3	1				
Impervious Surface Reduction	acres				6				
Infiltration Practices	acres	20	90	0.1	54				
Nutrient Management	acres								1,982
Permeable Pavement	acres		93	2	7				0.1
Runoff Reduction	acres							7	0.4
Shoreline Erosion Control	feet				408				
Tree Planting	acres	120	465						
Vegetated Open Channel	acres				0.3				26
WetPonds & Wetlands	acres	47	139	506	2,466				13
		580	2,157	1,037	3,896		8	8	2,042
		DOD	DOD	DOD	DOD		DOD	DOD	DOD
		FEDOTH	FEDOTH	NASA	FEDOTH		NPS		
		ER	ER		ER				
		GSA	GSA		FWS				
		NPS	NPS		GSA				
			SI		NASA				
					NPS				



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Phase 6 Model History

AGENCY_CODE	AGENCY_CODE_SB	AGENCY_LAND_HOLDER
FS	FS	US Forest Service
NPS	NPS	National Park Service
USA	DOD	US Department of the Army
FWS	FWS	US Fish and Wildlife Service
USMC	DOD	US Marine Corps
USN	DOD	US Department of the Navy
USACE	DOD	US Army Corps of Engineers
USAF	DOD	US Department of Air Force
DOD	DOD	Department of Defense
USDA	USDA	US Department of Agriculture
SI	SI	Smithsonian Institution
USARNG	DOD	Army National Guard
GSA	GSA	General Services Administration
FEDOTHER	FEDOTHER	Other Federal Land
NASA	NASA	National Aeronautics and Space Administration
DOI	DOI	Department of Interior
USVA	FEDOTHER	US Department of Veterans Affairs
USCG	FEDOTHER	US Coast Guard
FLETC	FEDOTHER	Federal Law Enforcement Training Center
NIH	FEDOTHER	National Institute of Health
AFRH	FEDOTHER	Armed Forces Retirement Home
CIA	FEDOTHER	Central Intelligence Agency
AOC	FEDOTHER	Architect Of The Capitol



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Phase 6 Model History

AGENCY_CODE	AGENCY_CODE_SB	AGENCY_LAND_HOLDER
NOAA	FEDOTHER	National Oceanic and Atmospheric Administration
FHWA	FEDOTHER	Federal Highway Administration
FRA	FEDOTHER	Federal Railroad Administration
USPS	FEDOTHER	US Postal Service
FAA	FEDOTHER	Federal Aviation Administration
NONFED	NONFED	Non-Federal
USEPA	FEDOTHER	US Environmental Protection Agency
DHS	FEDOTHER	Department of Homeland Security
DOT	FEDOTHER	Department of Transportation
MDE	NONFED	Maryland Department of the Environment
DNREC	NONFED	Delaware Department of Natural Resources and Environmental Control
RSH	NONFED	Riversmart Homes
DDOE	NONFED	District Department of the Environment
UFA	NONFED	DDOT Urban Forestry Administration
CASEYTREES	NONFED	Casey Trees
DDOT	NONFED	District Department of Transportation
ARS	ARS	Agricultural Research Service
WVDEP	NONFED	West Virginia Department of Environmental Protection
USC	NONFED	Upper Susquehanna Coalition
PADEP	NONFED	Pennsylvania Department of Environmental Protection
MDA	NONFED	Maryland Department of Agriculture
MDSHA	NONFED	Maryland State Highway Administration
MDDNR	NONFED	Maryland Department of Natural Resources



Federal Facility BMP Reporting

Opportunities for Improvement

- Need better cooperation and coordination among state agencies and federal facilities.
 - Summary of Action Items from March Meeting:
 - Action: Fill out the 2014-2015 table that reflects how the federal agencies worked with the jurisdictions to report BMP implementation process. Completed
- Emphasis on Phase 6
 - BMP historic record covers period 1985 – 2013 with focus on 2000 – 2013
 - Guidance documents for historical data clean-up at http://www.chesapeakebay.net/channel_files/22163/ii.a._historic_bmp_and_wastewater_data_cleanup_01212015.pdf
- Questions and Discussion