SFY 2024

Maryland's CWA **§**319 Nonpoint Source Program Annual Report



Photo Credits: "Exploring Jug Bay" by Christina Olney, "October 2024 Aurora – Tilghman Island" by Anthony Burrows, "Snowy January Sunrise at Weverton Cliffs" by Andrew Rimel, and "Black Eyed Susan Sunrise" by Megan Curry. Source: Maryland Dept. of Natural Resources Flickr page.

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Nonpoint Source Pollution in Maryland | Tracking and Mitigation

Nonpoint Source Pollution Threatens Maryland's Waterways

Water is inextricably tied to Maryland's identity and culture. The State is traversed by innumerable rivers and streams that provide residents with drinking water, places for recreation, and critically important habitat for Maryland's abundant wildlife. The Chesapeake Bay supports a vibrant fishing industry that provides over 50% of the annual United States blue crab harvest. The primary nonpoint source pollutants that threaten this resource are excess nitrogen and phosphorus.

Nonpoint Source (NPS) pollution threatens the health of Maryland's waterways and comes from both agricultural and developed areas (**Figure 1**). Natural loads include anthropogenic impacts within the natural system, like erosion flows from stormwater runoff that can scour stream banks, as well as true natural sources of nitrogen and phosphorus, such as forests and wetlands. While the NPS pollution focus for Maryland's Chesapeake Bay watershed includes nitrogen, phosphorus, and sediment, those same watersheds are also impaired by other NPS pollution, such as acid mine drainage and toxic contaminants. Approximately 95% of the land in Maryland is part of the Chesapeake Bay watershed.¹ Any nutrient and sediment loads from the other 5% are considered negligible and are not included in this report. Further information about those loads is reported by the Chesapeake Bay Program.

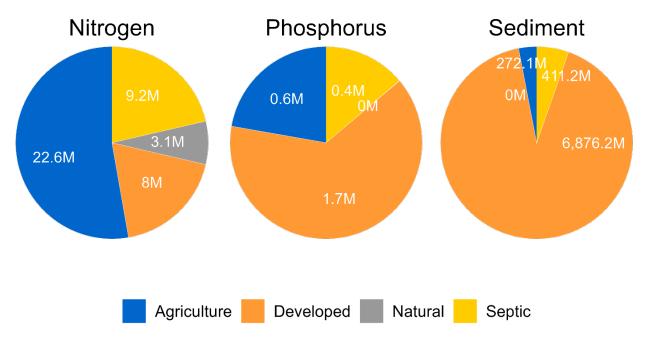


Figure 1: Maryland's nitrogen, phosphorus, and sediment loads from NPS delivered to Chesapeake Bay in 2024 (million pounds/year).

¹ <u>https://www.chesbay.us/library/public/documents/Fact-Sheets/Bay-Factoids-FINAL.pdf</u>

NPS pollution is costly to manage because it originates from diffuse sources across wide areas. The high cost and difficulty of managing this pollution is challenging for local governments that must balance local needs with protecting and restoring aquatic resources.

Reducing NPS pollution is accomplished through implementing best management practices (BMPs). This generic name for pollution reduction practices covers a collection of actions, policies, and physical structures that are used to reduce pollution entering waterways². Funding for BMPs comes from local, state, federal, and NGO funding sources, including the §319(h) Grant.

Watershed Modeling

Maryland uses the Chesapeake Assessment and Scenario Tool (CAST) outputs to estimate its load reductions/increases as more of a "real time" assessment of how our efforts are going. CAST uses several data inputs that can affect the loads in our watersheds, BMP implementation being only one of them. Consequently, even with increased BMP implementation the model may assign greater loads to a watershed which offset any reductions achieved through BMP implementation. This variability may be reflected in the tables, graphs, and watershed profiles in this report. In addition, previous reports utilized data from CAST-2019, which has since been updated. The newest version, CAST-2023, was released on May 21, 2024³, and was utilized for this report. As such, calculated loads may have fluctuated from what was shown in previous reports.

The CAST load calculations used for this report include data from SFY23, which ended on June 30, 2023. Data from SFY24 is still being finalized at the time this report is due. As such, load calculations data from SFY24 will be reported in the next annual report. Typically, our model inputs submission is due Dec. 1st of the following SFY so that there is time allowed to collect information, provide adequate quality assurance/control of the data, and to make sure there are no errors in the modeling results.

Overall Load Reductions for Nitrogen, Phosphorus, and Sediment

Maryland has tracked nutrient and sediment reductions since 2010 to align with the Chesapeake Bay Restoration Blueprint. Decreases in nitrogen, phosphorus, and sediment loads can be attributed to land use changes and the implementation of BMPs, including BMPs funded by the §319(h) Grant (**Figure 2**).

² Examples of BMPs – Maryland's Chesapeake Cleanup Center:

https://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Pages/pollution-in-the-chesapeake.aspx ³ More information on the history of upgrades to CAST: <u>https://cast.chesapeakebay.net/About/UpgradeHistory</u>

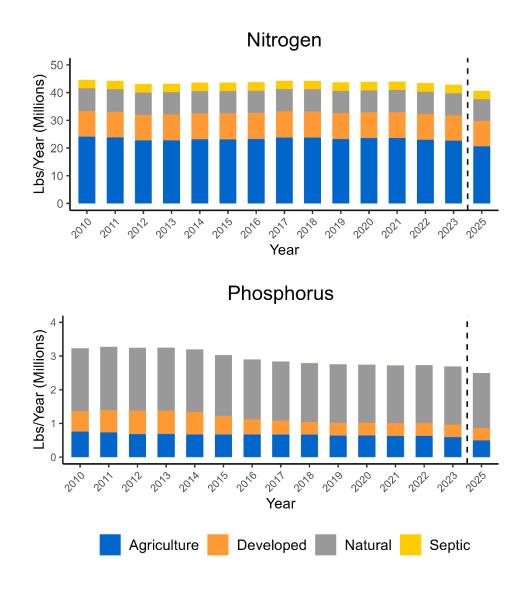


Figure 2: Maryland's total nitrogen and phosphorus reduction progress (NPS sources only) towards its 2025 Chesapeake Bay cleanup target

Progress toward nutrient reductions derived from NPS sources using the CAST model is separated by sector. The total 2025 target loads from NPS sources entering the Chesapeake Bay are 40,643,123 pounds per year and 2,494,483 pounds per year for nitrogen and phosphorus, respectively. Maryland has made strides toward these goals with loads from NPS sources for 2023 calculated to be 42,885,954 pounds per year for nitrogen and 2,688,815 pounds per year for phosphorus, which is 43.6% and 73.6% progress toward 2025 target loads, respectively.

Program Highlights | Maryland's NPS Management Program

Overview: Maryland's Clean Water Act Section 319 Nonpoint Source Management

Maryland's Nonpoint Source Management Program is required by the Federal Clean Water Act (CWA) Section 319 to protect the State's waterways from nonpoint source pollution. Maryland has aligned this program with its commitments and responsibilities in the Chesapeake Bay Agreement⁴, the Chesapeake Bay Total Maximum Daily Load (TMDL)⁵, and Maryland's Phase III Chesapeake Bay Watershed Implementation Plan (WIP)⁶. This annual FY24 report covers §319 project implementation from July 1, 2023, through June 30, 2024.

Program Administration

Maryland's NPS Management Program, including the §319(h) Grant Program, is administered by Maryland Department of the Environment (MDE) with the assistance of the Maryland Departments of Agriculture and Natural Resources; implementation is carried out by Maryland's local governments and non-governmental organizations MDE coordinates with local partners to provide grant funding for inground projects and report annual progress to EPA.

Annual Reporting for Maryland's 319 Program

EPA requires MDE to produce annual reports demonstrating progress of Maryland's 319 NPS Management Program that document how the State meets §319(h) Grant conditions. This report records the implemented BMPs and funding allocations for each project.

MDE simplified BMP accounting by tracking projects by funding date rather than project completion date. This report also tracks funds allocated to projects rather than project expenditures to more accurately reflect the funds given to a particular watershed for restoration.

This approach was approved in the FFY19 annual report submission. Our modeling/loading results only include actual implementation. In the future we will still do this for overall expenditures in watersheds, but actual reductions will be from completed projects.

Project Selection

To receive 319(h) Grant funding, projects must be implemented within a 319 Priority Watershed (**Figure 3**) that has an A-I Watershed Plan approved by the U.S. Environmental Protection Agency (EPA). A-I plans are submitted to EPA by any combination of Maryland State Agencies, local governments, and non-government organizations.

⁴ Chesapeake Bay Agreement: <u>https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement</u>

⁵ Chesapeake Bay TMDL: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document

⁶ MD P3 WIP: <u>https://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Pages/Phase3WIP.aspx</u>

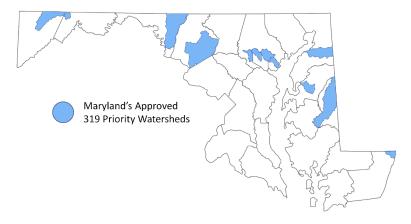


Figure 3: Maryland's §319 Priority Watersheds

Funding: Federal and State Contributions

Over the past 19 years⁷, the state of Maryland has spent approximately \$66.2 million dollars in State funding along with about \$14.6 million additional dollars from the 319(h) Grant to fund projects within \$319 watersheds (**Figure 4**).

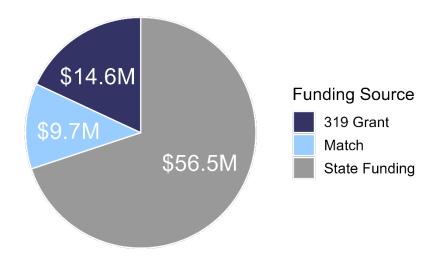


Figure 4: Funding spent on NPS pollution in §319 watersheds from SFY2004 - SFY2024.

While the §319(h) Grant is a small part of Maryland's total spending on NPS pollution (**Figure 5**), it helps local governments leverage limited funds. Helping local governments maximize their potential resources is a core component of Maryland's Chesapeake Bay Phase III WIP, which was designed to be locally driven and achievable. For detailed funding information, see the *Priority Watersheds* section of this

⁷Maryland's first A-I Plan (*Corsica River*) was accepted in 2004.

report (*page 9*). Maryland also receives other sources of federal funding to implement nonpoint source pollution best management practices. This year alone, the state of Maryland has spent \$126.5 million on projects to address nonpoint source pollution with \$2.3 million of that coming from the §319(h) Grant.

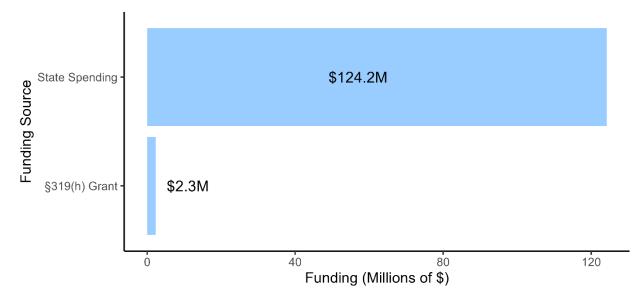


Figure 5: Funding spent on projects addressing NPS pollution across the state of Maryland in SFY2024.

Incorporation of Changing Environmental Conditions in Maryland's NPS Management Program

The §319(h) Grant Program has integrated changing environmental conditions into the criteria that is used to rank and select project proposals.

Progress | Maryland's §319 NPS Management Program

How Maryland Tracks Progress for its NPS Management Program

The State's §319 Priority Watersheds continue to make steady progress in reducing nitrogen and phosphorus loads (**Table 1**); **Appendix A** tracks all NPS pollution in greater detail. For detailed information on individual watershed progress, please see the *Priority Watersheds* section of this report (*page 9*).

	Target Reduction	Current Reduction	Percent Progress
Nitrogen	1.73M	0.15M	8%
Phosphorus	0.11M	0.08M	68%
Sediment	216.15M	13.55M	6%

Table 1: Overall 2023 NPS pollution reductions and percent progress toward target reductions in §319Priority Watersheds (Million Pounds/Year)⁸

Overall, Maryland and its partners made significant progress in addressing the seven programmatic NPS goals identified in the 2021-2025 Maryland Nonpoint Source Pollution Management Plan. This includes citing pollutant load reductions of 145,400 pounds per year of nitrogen, 76,454 pounds per year of phosphorus, and 13,545,892 pounds per year of sediment resulting from the implementation of all reported structural best management practices (BMPs) in 319 priority watersheds with EPA-accepted watershed-based plans (WBPs), regardless of funding source. These totals include data only for 319 priority watersheds whose WBPs address nutrients and sediment (excludes Casselman River and Upper Jennings Run watersheds).

§319 Success Story

Section 319 nonpoint source pollution success stories highlight water bodies identified by states as being primarily nonpoint source-impaired and having achieved documented water quality improvements. Projects leading to Success Stories received funding from CWA §319 and/or other funding sources dedicated to solving NPS impairments. These stories also describe innovative strategies used to reduce NPS pollution, the growth of partnerships, and a diversity of funding sources.

The success stories offer an opportunity for states to highlight where their restoration efforts have resulted in water quality improvements in NPS-impaired water bodies. Developing the stories also

⁸ This is not solely an evaluation of installed BMPs that were funded by the §319(h) grant but an assessment of all modeled aspects of a watershed, including land use change, animal numbers, septic counts, etc. CAST was used to produce these data. This includes everything nonpoint source related that is also within CAST and specifically for the watersheds identified in this report. The reductions shown are for FY23, as FY24 progress is not made available until after this report is due.

allows EPA to track the number of NPS-impaired water bodies that are partially or fully restored—which is a key measure in the effort to document how NPS restoration efforts are improving water quality on a segment basis across the nation.

Each year, Maryland is required to demonstrate a minimum of one successful watershed restoration project. The two FY24 success stories that Maryland submitted were entitled, "Muddy Creek Restoration at Smithsonian Environmental Center Reduces Nutrients with Partial Biodiversity Improvement" and "Broad Creek Park Offers Revitalized Greenspace." These can be found posted, once available, on MDE's §319 website or on EPA's national website.

Additional Funding Information

In addition to §319(h) Grant funds, Maryland supplies significant State resources to finance programs and projects designed to reduce NPS pollution. In particular, Maryland's Chesapeake and Atlantic Coastal Bays Trust Fund (Trust Fund) is one of the State's primary funding sources for reducing NPS pollution. Maryland's Trust fund provides grant money to local governments and nonprofit organizations for implementing NPS pollution water quality restoration projects. For further information, see the <u>Chesapeake and Atlantic Coastal Bays Trust Fund website</u>.

Maintenance of Effort (MOE) vs Federal §319(h) Grant Funds

Maryland contributes more State funds to NPS pollution reduction on an annual basis compared to what it receives through §319(h) Grant funding. In SFY 2024, Maryland's NPS pollution control expenditures totaled over \$124 million which is much greater than EPA's required minimum of \$8.4 million in Maintenance of Effort spending. See **Table 2** for more information on historic §319 Grant Funding.

State Fiscal Year	§319(h) Grant	Non-Federal Match	Total State and Federal Funds
1990 - 2003	\$24,876,369	\$16,584,247	\$41,460,616
2004	\$1,343,290	\$895,527	\$2,238,817
2005	\$1,852,568	\$1,235,045	\$3,087,613
2006	\$2,675,598	\$1,783,730	\$4,459,328
2007	\$2,666,655	\$1,777,776	\$4,444,431
2008	\$2,598,600	\$1,732,401	\$4,331,001
2009	\$2,653,500	\$1,769,000	\$4,422,500
2010	\$2,575,782	\$1,717,188	\$4,292,970
2011	\$2,922,783	\$1,948,522	\$4,871,305
2012	\$2,283,639	\$1,522,426	\$3,806,065
2013	\$2,090,997	\$1,393,998	\$3,484,995
2014	\$1,990,999	\$1,327,333	\$3,318,332
2015	\$2,119,118	\$1,412,745	\$3,531,863
2016	\$2,084,277	\$1,389,518	\$3,473,795
2017	\$2,109,728	\$1,406,486	\$3,516,214
2018	\$2,236,500	\$1,491,000	\$3,727,500

Table 2: State and Federal funding contributing to Maryland's §319 Grant each year

2024	\$2,277,700	\$1,518,467	\$3,796,167
2023	\$2,271,300	\$1,514,200	\$3,785,500
2022	\$2,272,200	\$1,514,800	\$3,787,000
2021	\$2,241,500	\$1,494,334	\$3,735,834
2020	\$2,129,000	\$1,419,335	\$3,548,335
2019	\$2,129,000	\$1,419,335	\$3,548,335

Maryland's §319 Priority Watersheds

MDE tracks progress for §319(h) Grant implementation funding and NPS pollution reductions in its §319 Priority Watersheds. As of SFY 2024, twelve watersheds had accepted A-I Watershed Plans and were eligible for §319(h) Grant funding. An additional three watersheds are developing A-I plans to be eligible for future funding through the §319(h) Grant Program. Four watersheds received §319(h) Grant Project funding in SFY 2024: Assawoman Bay, Upper Back River, Upper Choptank, and Lower Choptank.

MDE tracks nitrogen, phosphorus, and sediment reductions for all watersheds regardless of the watershed plan specifications; for all NPS pollution tracking and detailed nitrogen, phosphorus, and sediment loads tracking, see **Appendix A**. For specific information on load reductions for each §319(h) Grant funded project, see <u>EPA's Nonpoint Source (NPS) Watershed Projects Data Explorer</u>, which is an interface for data uploaded to the <u>Grants Reporting and Tracking System</u> (GRTS).

§319(h) Grant Funding

Maryland tracks annual §319(h) Grant federal vs state contributions since 1990 (**Table 3**). However, tracking Priority Watershed progress did not begin until the first watershed plan for Corsica River was approved in 2004.

Priority Watershed	Plan Start Date	Chesapeake and Atlantic Bays Trust Fund	State Revolving Fund	Total Non-319 Funds	319(h) Grant	Total Funds
Antietam Creek	2012	\$1,693,635	\$424,600	\$2,118,235	\$3,923,809	\$6,042,044
Assawoman Bay	2020	-	-	-	\$96,000	\$96,000
Back River: Tidal	2010	\$8,905,742	\$0	\$8,905,742	\$556,443	\$9,462,185
Back River: Upper	2008	\$0	\$12,724,100	\$12,724,100	\$1,698,905	\$14,423,005
Casselman River	2011	\$6,440	\$0	\$6,440	\$83,619	\$90,059
Choptank River: Upper	2010	\$2,003,748	\$0	\$2,003,748	\$2,665,892	\$4,669,640
Corsica River	2004	\$1,659,485	\$0	\$1,659,485	\$2,137,406	\$3,796,891
Gwynns Falls: Middle	2014	\$4,920,936	\$9,546,741	\$14,467,677	\$1,383,944	\$15,851,621
Jennings Run: Upper	2019	-	-	-	-	-
Jones Falls: Lower	2008	\$6,853,684	\$100,664	\$6,954,348	\$462,309	\$7,416,657
Monocacy River: Lower	2008	\$2,743,529	\$0	\$2,743,529	\$1,143,305	\$3,886,834
Sassafras River	2009	\$4,893,316	\$0	\$4,893,316	\$425,748	\$5,319,064
Watershed Totals		\$33,680,515	\$22,796,105	\$56,476,620	\$14,577,380	\$71,054,000

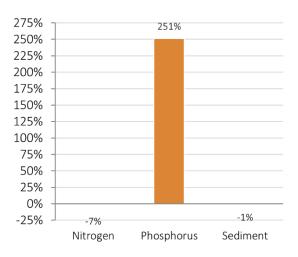
Table 3⁹: Cumulative spending by funding source for each §319 Priority Watershed

⁹ The funding for Back River: Tidal and Upper is linked due to project overlap, even though it is separated in this table.



Percent Progress Towards Target

Nitrogen, Phosphorus, Sediment



*Watershed plan includes bacteria – See Appendix B

NPS Reduction Progress

From 2012 to 2023, Antietam Creek is -7% toward its 71K lbs/yr nitrogen reduction goal, 251% toward its 5K lbs/yr phosphorus reduction goal, and -1% toward its 68.8 M lbs/yr sediment reduction goal.

Total Acres | 119K Agriculture | 39% Developed | 22% Natural | 38%

Land Use

Watershed Funding | SFY12 – SFY24

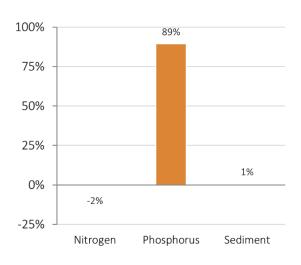


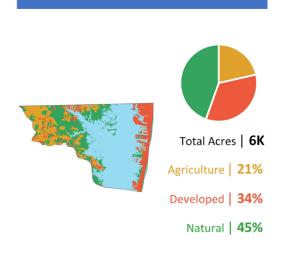
Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	1.9K	1.0K	0.0M
All Else	-6.7K	12.1K	-0.5M
Total	-4.8K	13.1K	-0.5M



Percent Progress Towards Target Nitrogen, Phosphorus, Sediment

Land Use





NPS Reduction Progress

From 2020 to 2023, Assawoman Bay is -2% toward its 25K lbs/yr nitrogen reduction goal, 89% toward its 0.5K lbs/yr phosphorus reduction goal, and 1% toward its 2.3 M lbs/yr sediment reduction goal.

Watershed Funding | SFY20 – SFY24



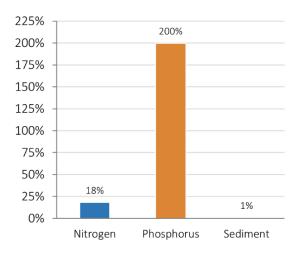
Funding Source	Nitrogen Ibs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	0.1K	0.0K	0.0M
All Else	-0.5K	0.4K	0.0M
Total	-0.4K	0.4K	0.0M

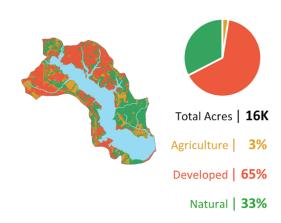


Percent Progress Towards Target

Nitrogen, Phosphorus, Sediment

Land Use





NPS Reduction Progress

From 2010 to 2023, Back River (Tidal) is 18% toward its 15K lbs/yr nitrogen reduction goal, 200% toward its 2K lbs/yr phosphorus reduction goal, and 1% toward its 12.8 M lbs/yr sediment reduction goal.

Watershed Funding* | SFY10 – SFY24

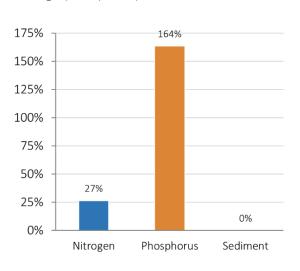


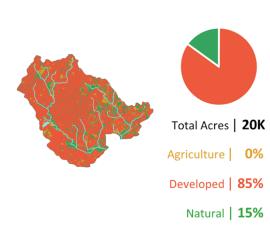
*Funding linked to Back River: Upper due to project overlaps

Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	0.3K	0.1K	0.0M
All Else	2.4K	3.5K	0.1M
Total	2.7 K	3.6K	0.1M



Percent Progress Towards Target Nitrogen, Phosphorus, Sediment





Land Use

NPS Reduction Progress

From 2008 to 2023, Upper Back River is 27% toward its 25K lbs/yr nitrogen reduction goal, 164% toward its 2K lbs/yr phosphorus reduction goal, and 0% toward its 32.5 M lbs/yr sediment reduction goal.

Watershed Funding* | SFY08 – SFY24



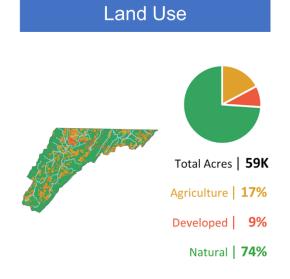
*Funding linked to Back River: Tidal due to project overlaps

Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	1.4K	0.7K	0.0M
All Else	5.2K	2.8K	0.0M
Total	6.6K	3.5K	0.0M



NPS Reduction Progress

The watershed-based plan for the Casselman River only addresses pH impairment. From 2011 to 2024, there has only been one project funded in this watershed greater than \$10k, which was the implementation of limestone sand in multiple locations to address pH impairment. The cause of any reductions in nitrogen, phosphorus, and sediment loads is unknown and may result from natural variations or projects that were funded by organizations not recorded in this report. MDE is working to establish relationships with the local government and other organizations in Garrett County to pursue future projects that may be funded by the §319(h) grant.





Snyder Sand Application Site Photo courtesy of MDE, Abandoned Mine Lands Division

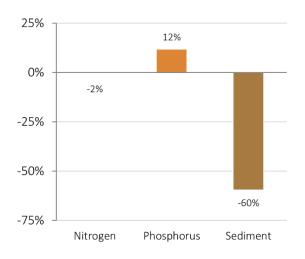
Watershed Funding | SFY11 – SFY24

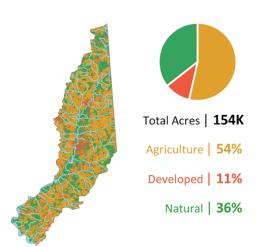
319(h) Grant		\$0.1 M
All Else	\$0.0 M	





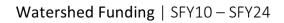






NPS Reduction Progress

From 2010 to 2023, Upper Choptank River is -2% toward its 1.1M lbs/yr nitrogen reduction goal, 12% toward its 28K lbs/yr phosphorus reduction goal, and -60% toward its 24.0 M lbs/yr sediment reduction goal.





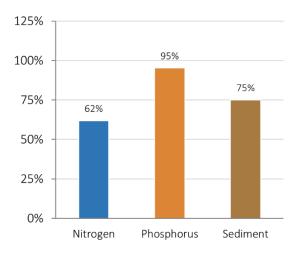
Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	1.6K	0.6K	0.0M
All Else	-20.4K	2.7K	-14.3M
Total	-18.8K	3.3K	-14.3M

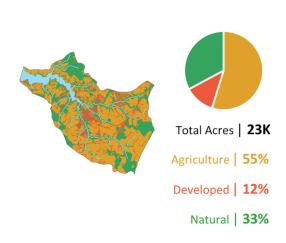


Percent Progress Towards Target

Nitrogen, Phosphorus, Sediment

Land Use

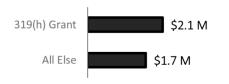




NPS Reduction Progress

From 2004 to 2023, Corsica River is 62% toward its 64K lbs/yr nitrogen reduction goal, 95% toward its 7K lbs/yr phosphorus reduction goal, and 90% toward its 2.0 M lbs/yr sediment reduction goal.

Watershed Funding | SFY04 – SFY24



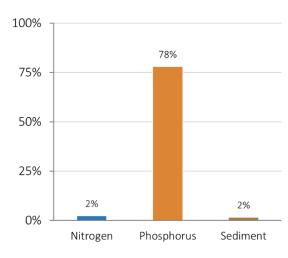
Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	4.9K	0.5K	0.0M
All Else	35.0K	6.7K	1.5M
Total	39.8K	7.1K	1.5M

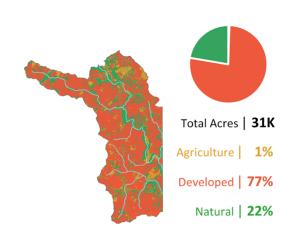


Percent Progress Towards Target

Nitrogen, Phosphorus, Sediment

Land Use





NPS Reduction Progress

From 2014 to 2023, Middle Gwynns Falls is 2% toward its 88K lbs/yr nitrogen reduction goal, 78% toward its 12K lbs/yr phosphorus reduction goal, and 2% toward its 22.9 M lbs/yr sediment reduction goal.

Watershed Funding* | SFY14 – SFY24

319(h) Grant	\$1.4 M
All Else	\$14.5 M

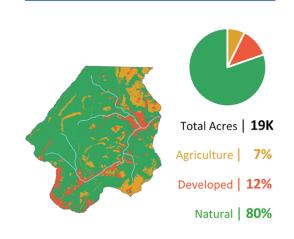
*Funding calculations include 2 projects starting in SFY2013. The watershed plan was being drafted in 2013 and was accepted by EPA in 2014.

Funding Source Nitrogen | Ibs/yr Phosphorus | lbs/y Sediment | lbs/yr 319(h) Grant 4.3K 1.7K 0.0M All Else -2.3K 7.5K 0.4M Total 2.1K 9.1K 0.4M



NPS Reduction Progress

Currently, the watershed-based plan for the Upper Jennings Run only addresses pH impairment. From 2019 to 2024, there have been no implementation projects funded by the §319(h) grant or other state funding sources included in this report. The cause of any reductions in nitrogen, phosphorus, and sediment loads is unknown and may result from natural variations or projects that were funded by organizations not recorded in this report. MDE is working to establish relationships with the local government and other organizations in Allegany County to pursue future projects that may be funded by the §319(h) grant.



Land Use



Photo courtesy of MDE, Upper Jennings Run Watershed Implementation Plan

Watershed Funding | SFY19 – SFY24

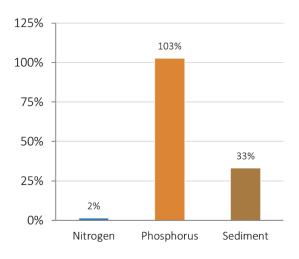
\$0.0 M	319(h) Grant
\$0.0 M	All Else



Percent Progress Towards Target

Nitrogen, Phosphorus, Sediment

Land Use



Total Acres | 37K Agriculture | 4% Developed | 67% Natural | 30%

NPS Reduction Progress

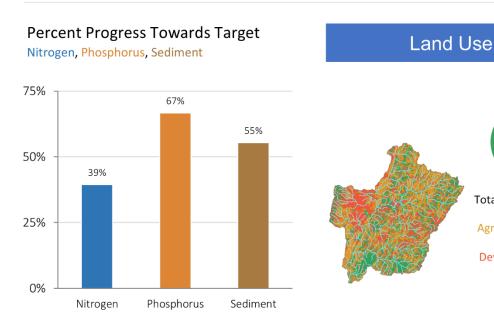
From 2008 to 2023, Lower Jones Falls is 2% toward its 100K lbs/yr nitrogen reduction goal, 103% toward its 6K lbs/yr phosphorus reduction goal, and 33% toward its 6.1 M lbs/yr sediment reduction goal.

Watershed Funding | SFY08 – SFY24



Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	0.1K	0.1K	0.0M
All Else	1.4K	6.5K	2.0M
Total	1.5K	6.6K	2.0M





NPS Reduction Progress

From 2008 to 2023, Monocacy River: Lower is 39% toward its 228K lbs/yr nitrogen reduction goal, 67% toward its 41K lbs/yr phosphorus reduction goal, and 55% toward its 41.0 M lbs/yr sediment reduction goal.

Watershed Funding | SFY08 – SFY24

Total Acres | 195K

Agriculture | 34%

Developed | 26%

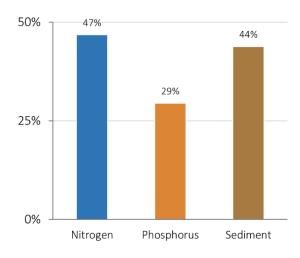
Natural | 39%

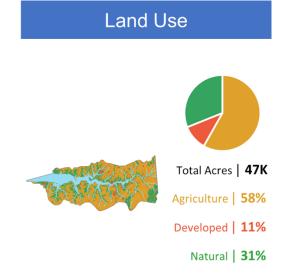


Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	0.7K	0.2K	0.0M
All Else	89.3K	27.1K	22.7M
Total	90.0K	27.2K	22.7M









NPS Reduction Progress

From 2009 to 2023, Sassafras River is 47% toward its 57K lbs/yr nitrogen reduction goal, 29% toward its 9K lbs/yr phosphorus reduction goal, and 44% toward its 3.6 M lbs/yr sediment reduction goal.

Watershed Funding | SFY09 – SFY24



Funding Source	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment lbs/yr
319(h) Grant	4.2K	0.3K	0.0M
All Else	22.5K	2.3K	1.6M
Total	26.7K	2.5K	1.6M

Appendix A | NPS Load Tracking

Nutrient and Sediment Tracking

Maryland tracks nutrient and sediment reductions for §319 Priority Watersheds using the Chesapeake Assessment Scenario Tool (CAST). In the following tables (**A - 1 to A - 3**), *Reduction Source Document* refers to how the *Percent Reduction Required* (PRR) was determined. All loads are reported as Edge of Stream: the nutrient and sediment entering directly into local waterbodies from the adjoining land.

The percent reduction for *Watershed Plan* was taken from the approved watershed plan. If no such number was given, PRR was calculated as the percent reduction of the watershed's Plan Start Date (PSD) NPS load necessary to achieve the watershed's TMDL for nitrogen, phosphorus, or sediment. If no TMDL was available, or the TMDL was exceeded, PRR was calculated as the percent reduction required of the watershed's PSD NPS load to achieve the watershed's Phase III WIP nutrient or sediment goals.

Maryland uses the Chesapeake Assessment and Scenario Tool (CAST) outputs to estimate its load reductions/increases as more of a "real time" assessment of how our efforts are going. CAST uses a number of data inputs that can affect the loads in our watersheds, BMP implementation being only one of them. Consequently, even with increased BMP implementation the model may assign greater loads to a watershed which offset any reductions achieved through BMP implementation. This variability is reflected in the tables and watershed profiles included in this section. Baseline loads were extracted directly from CAST and represent the load during a watershed's PSD. Target loads were calculated as ((1 - PRR) * Baseline Loads). Current Loads represent 2023 Progress loads in CAST for each watershed.

As previously mentioned, the load calculations data from CAST is up to SFY23, which ended on June 30, 2023. SFY24 progress has yet to be finalized at the time that this report is due. Progress in SFY24 will be included in the next annual report.

§319 Reductions come from the individual project calculations provided to MDE in the watershed work plans. Non-§319 Reductions are calculated as ((PSD - Current Loads) - §319 Reductions).

Negative values in the charts below connotate increases in load. CAST is a dynamic model whose output may show variation from year to year due to BMP retirement or annual BMP variation that may increase loads in some areas based on land use conditions.

Priority Watershed	Plan Start Date	Reduction Source Document	Percent Reduction Required	Baseline Loads	Target Loads	Current Loads (2022)	319 Reductions	Non-319 Reductions	Total Reductions	Target Reductions	Percent Progress
Antietam Creek	2012	Phase III WIP	5%	1,300,084	1,229,075	1,304,881	1,855	-6,652	-4,797	71,009	-7%
Assawoman Bay	2020		19%	131,750	106,765	132,183	50	-482	-432	24,985	-2%
Back River: Tidal	2010	Watershed Plan	15%	98,847	84,020	96,157	280	2,410	2,690	14,827	18%
Back River: Upper	2008	Watershed Plan	15%	166,230	141,296	159,620	1,419	5,191	6,610	24,935	27%
Casselman River	2011	Phase III WIP									
Choptank River: Upper	2010	Watershed Plan	39%	2,700,212	1,647,129	2,719,056	1,554	-20,398	-18,844	1,053,083	-2%
Corsica River	2004	Local TMDL	20%	322,428	258,108	282,592	4,873	34,963	39,836	64,320	62%
Gwynns Falls: Middle	2014	Watershed Plan	29%	302,954	215,097	300,894	4,340	-2,280	2,060	87,857	2%
Jennings Run: Upper	2019	Phase III WIP									
Jones Falls: Lower	2008	Watershed Plan	22%	446,290	346,321	444,766	90	1,434	1,524	99,969	2%
Monocacy River: Lower	2008	Phase III WIP	7%	3,336,578	3,108,395	3,246,553	726	89,299	90,025	228,183	39%
Sassafras River	2009	Watershed Plan	9%	627,891	570,753	601,162	4,204	22,525	26,729	57,138	47%
Watershed To	otals (Nitroger	n)		9,517,616	8,117,480	9,744,213	19,391	-245,988	-226,597	1,400,136	

Table A - 1: Nitrogen Tracking for 2023 (Edge of Stream loads - Pounds/Year)

Table A - 2: Phosphorus Tracking for 2023 (Edge of Stream loads - Pounds/Year)

Priority Watershed	Plan Start Date	Reduction Source Document	Percent Reduction Required	Baseline Loads	Target Loads	Current Loads (2022)		Non-319 Reductions	Total Reductions	Target Reductions	Percent Progress
Antietam Creek	2012	Local TMDL	7%	72,390	67,196	59,333	957	12101	13058	5,194	251%
Assawoman Bay	2020		9%	5,079	4,625	4,674	16	390	406	454	89%
Back River: Tidal	2010	Watershed Plan	15%	11,945	10,153	8,367	94	3484	3578	1,792	200%
Back River: Upper	2008	Watershed Plan	15%	14,444	12,277	10,900	737	2807	3544	2,167	164%
Casselman River	2011	Phase III WIP									
Choptank River: Upper	2010	Watershed Plan	28%	100,317	72,228	97,004	596	2717	3313	28,089	12%
Corsica River	2004	Phase III WIP	50%	14,846	7,386	7,739	458	6649	7107	7,460	95%
Gwynns Falls: Middle	2014	Watershed Plan	45%	25,979	14,263	16,836	1,690	7453	9143	11,717	78%
Jennings Run: Upper	2019	Phase III WIP									
Jones Falls: Lower	2008	Watershed Plan	30%	21,635	15,253	15,074	91	6,471	6,562	6,382	103%
Monocacy River: Lower	2008	Phase III WIP	40%	101,112	60,276	73,875	169	27,069	27,238	40,837	67%
Sassafras River	2009	Watershed Plan	34%	25,096	16,588	22,590	254	2,252	2,506	8,507	29%
Watershed To	otals (Phospho	orus)		396,724	302,168	344,799	5,061	46,863	51,924	94,556	

Table A - 3: Sediment Tracking for 2023 (Edge of Stream loads - Pounds/Year)

Priority Watershed	Plan Start Date	Reduction Source Document	Percent Reduction Required	Baseline Loads	Target Loads	Current Loads (2022)	319 Reductions	Non-319 Reductions	Total Reductions	Target Reductions	Percent Progress
Antietam Creek	2012	Watershed Plan	52%	132,811,072	63,992,098	133,332,473	11,918	(533,319)	(521,400)	68,818,974	-1%
Assawoman Bay	2020		27%	8,560,125	6,237,597	8,545,257	1	14,867	14,868	2,322,528	1%
Back River: Tidal	2010	Local TMDL	68%	18,880,593	6,041,790	18,773,248	428	106,917	107,345	12,838,803	1%
Back River: Upper	2008	Local TMDL	68%	47,781,280	15,290,010	47,747,842	981	32,457	33,438	32,491,270	0%
Casselman River	2011	Phase III WIP									
Choptank River: Upper	2010	Phase III WIP	34%	71,068,967	47,059,716	85,364,465	3,162	(14,298,660)	(14,295,498)	24,009,252	-60%
Corsica River	2004	Phase III WIP	19%	10,528,898	8,553,115	9,045,586	1,520	1,481,793	1,483,313	1,975,783	75%
Gwynns Falls: Middle	2014	Local TMDL	37%	61,902,596	38,998,635	61,528,252	3,768	370,576	374,344	22,903,960	2%
Jennings Run: Upper	2019	Phase III WIP									
Jones Falls: Lower	2008	Watershed Plan	8%	74,493,210	68,384,766	72,466,952	173	2,026,085	2,026,258	6,108,443	33%
Monocacy River: Lower	2008	Phase III WIP	16%	259,544,915	218,511,178	236,819,083	75	22,725,758	22,725,833	41,033,738	55%
Sassafras River	2009	Watershed Plan	15%	24,619,654	20,975,946	23,022,262	187	1,597,205	1,597,392	3,643,709	44%
Watershed To	otals (Sedimer	nt)		728,735,848	583,150,047	808,148,444	22,214	(79,434,810)	(79,412,596)	145,585,801	

Other NPS Pollution – Bacteria

MDE does not currently have a system for tracking bacteria reductions within priority watersheds. Bacteria concentrations and loads tend to be highly variable and difficult to track, particularly when assessing the effectiveness of restoration. The State will continue to evaluate new tools, technologies, and monitoring designs to track progress towards applicable bacteria TMDLs in the future. This largely applies to the Antietam Creek priority watershed plan, which addresses the Bacteria TMDL for the watershed.

Other NPS Pollution – pH Impairments

The Casselman River and Upper Jennings Run priority watershed plans were developed to address the low pH impairment listings due to acid mine drainage. Rather than directly tracking pH, Maryland tracks pH remediation by evaluating how many streams within these watersheds have been successfully delisted for a pH impairment (**Table A - 4**), based on pre and post BMP implementation monitoring. Currently, four water quality segments within the Casselman River watershed have been delisted for pH.

In the Casselman River and Upper Jennings Run, restoration efforts to remediate low pH impairment listings are reported by MDE's Abandoned Mine Land program in an annual report.

Casselman River p	H Delistings		
River Name	HUC-12 Watershed	Impairment	Listing Category
Alexander Run	050202040032	pH, Low	2 – Meets water quality criteria for the specified pollutant
Big Laurel Run	050202040033	pH, Low	2 – Meets water quality criteria for the specified pollutant
Spiker Run	050202040034	pH, Low	2 – Meets water quality criteria for the specified pollutant
Tarkiln Run	050202040032	pH, Low	2 – Meets water quality criteria for the specified pollutant

Table A - 4: Casselman River sub-watersheds delisted for pH impairments

Estimating BMP Reductions

The following tables provide information on active Best Management Practices that were accepted in the CAST tool. Many of the priority watersheds received funding and completed projects before any watershed plan was approved, and other BMPs will have been implemented through a number of different funding sources and partners. The results below use CAST BMP efficiency assumptions that have been altered by local delivery factors for the Priority watersheds to better simulate the potential reductions BMPs would be able to produce if no baseline changes altered. These tables also reflect active BMPS in SFY23 and will change in SFY24 as BMPs are not verified and no longer receive credit. The BMP implementation numbers are taken from CAST inputs, which may vary year to year as BMPs fail, do not get verified, new reporting partners come online, or get included in other model data inputs (e.g. tree planting BMPs become forests). Annual variability is to be expected.

MD-0207000410 - Antietam Creek Permit Approval 2012/Washington Co.	Duration	Unit	Measure	Nitrogen	LBS Reduced Phosphorus	Sediment
Agriculture Practices	Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Nutrient Management						
Core Nitrogen	annual	Acres	40,455.10	46,753.55	-	-
Rate Nitrogen	annual	Acres	10,916.98	4,240.48	-	-
Placement Nitrogen Timing Nitrogen	annual	Acres	1,225.80	1,003.45 623.94		
Core Phosphorus	annual annual	Acres Acres	758.12 40.455.10	623.94	2,723.03	
Rate Phosphorus	annual	Acres	3,898.08	-	100.65	-
Placement Phosphorus	annual	Acres	1,102.08	-	13.93	-
Timing Phosphorus	annual	Acres	-	-	-	-
TOT	AL			52,621.42	2,837.61	
Tillage Management Conservation	annual	Acres	7,129.31	15,181.15	1,508.70	5,915,932.61
Continuous High Residue	annual	Acres	11,860.79	35,356.55	3,134.57	18,964,049.74
Low Residue	annual	Acres	-	-	-	-
TOT	AL			50,537.70	4,643.27	24,879,982.35
Cover Crop						
Traditional	annual annual	Acres Acres	4,849.53	22,259.62 8,135.86	46.99	226,659.45
Commodity TOT		Acres	4,584.91	30,395.48	46.99	226,659.45
Pasture Management						
Alternative Watering	cumulative		3,202.22	1,656.77	312.41	4,288.70
Prescribed Grazing	cumulative		1,347.74	1,318.90	394.47	5,474.78
Horse Pasture Management	cumulative		11.22	2 095 20	2.75	60.53
Forest Buffers on Fenced Pasture Corridor Grass Buffers on Fenced Pasture Corridor		Acres in Buffers Acres in Buffers	48.64 17.62	3,985.20 1,408.68	856.63 305.42	606,996.66 219,394.11
TOT		Acies in Buriers	17.02	8,369.55	1,871.68	836,214.78
Forest Buffers		Acres in Buffers	711.77	27,523.31	328.15	1,666,415.39
Wetland Restoration	cumulative	Acres	17.71	538.50	10.64	35,047.17
Wetland Creation	cumulative		3.85	64.73	1.23	4,644.43
Wetland Enhancement and Rehabilitation	cumulative		-	-		-
Land Retirement to Open Space Land Retirement to Pasture	cumulative		516.23 274.65	6,366.20 8,540.69	48.52	669,657.67 661,342.27
Grass Buffers		Acres in Buffers	2/4.65 116.95	3,636.81	48.52 20.66	661,342.27 281,613.90
Tree Planting	cumulative		342.59	4,846.73	61.54	373,119.15
Alternative Crops	cumulative					
Soil and Water Conservation Plan	cumulative		21,296.10	19,281.70	984.94	4,870,688.15
Crop Irrigation Management	cumulative		-	-	-	-
Manure Incorporation Capture & Reuse	annual annual	Acres Acres	2,462.14	4,438.28	244.13	
Non Urban Stream Restoration	cumulative		6,331.90	430.00	274.17	887,962.54
Non Urban Shoreline Management	cumulative		-	-	-	-
TOT	AL			75,666.95	1,973.98	9,450,490.69
Agricultural Drainage Management	1.4		74.06	210.26		
Denitrifying Ditch Bioreactors Saturated Buffer	cumulative		74.86 74.86	319.36 3,916.05		150,117.49
Sorbing Materials in Ag Ditches	cumulative		74.86	-	12.29	-
Water Control Structures	cumulative	Acres	74.86	329.11	-	-
Animal Waste Management Systems	AL		299.46	4,564.52	12.29	150,117.49
Broiler Mortality Freezers	annual	Dry Tons (Carcasses)	0.02	-	-	
Barnyard Runoff Control & Loafing Lot Management	cumulative		59.52	8,822.33	380.41	162,172.99
Ag Stormwater Management		Acres Treated			-	
Manure Transport	annual	Dry Tons	0.44	0.08	0.13 398.10	-
Dairy Precision Feeding Ammonia Emission Reductions (Litter Amendments)	annual	Animal Units Animal Units	1,531.73	3,562.96	398.10	94,798.77
	annual					
	annual	Animal Units				
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers)	cumulative cumulative		-	•	-	-
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT	cumulative cumulative	Animal Units	-	12,385.36	- - 778.64	256,971.76
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices	cumulative cumulative	Animal Units	-	12,385.36	778.64	256,971.76
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management	cumulative cumulative AL	Animal Units Animal Units				256,971.76
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard	cumulative cumulative AL cumulative	Animal Units	- - - 125.33 92.93	- 12,385.36 417.95 313.71	13.53 30.68	256,971.76
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands	cumulative cumulative AL cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated		417.95	13.53	
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands	cumulative cumulative AL cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond)	92.93 6.78	417.95 313.71 13.37	13.53 30.68 1.77	62,255.72 4,228.85
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	92.93 6.78 - 649.85	417.95 313.71 13.37 - 134.81	13.53 30.68 1.77 - 24.09	62,255.72 4,228.85 52,205.90
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91	417.95 313.71 13.37 - 134.81 18.34	13.53 30.68 1.77 - 24.09 3.38	62,255.72 4,228.85 52,205.90 5,353.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	92.93 6.78 - 649.85	417.95 313.71 13.37 - 134.81	13.53 30.68 1.77 - 24.09	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47	417.95 313.71 13.37 - 134.81 18.34 235.91 442.61 173.85	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47 3.98	417.95 313.71 13.37 	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47	417.95 313.71 13.37 - 134.81 18.34 235.91 442.61 173.85	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Fikering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47 3.98 -	417.95 313.71 13.37 	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stornwater Management Stornwater Management Storn Water Treatment Performance Standard Wet Ponds & Wetlands Photing Treatment Wetlands Dry Ponds Extended Dry Ponds Extended Dry Ponds Extended Dry Ponds Extended Dry Ponds BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47 3.98	417.95 313.71 13.37 	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastruture (IDDE)	cumulative cumulative	Animal Units Animal Units Arres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47 3.98 -	417.95 313.71 13.37 	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoor Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices	cumulative cumulative	Animal Units Animal Units Acres Treated Acres Treated	92.93 6.78 (40.85 40.91 131.51 59.84 48.47 3.98 - -	417.95 313.71 13.37 	13.53 30.68 1.77 	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.45 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioRetention BioRetention BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastruture (IDDE) Impervious Disconnection Conservation Landscaping Practices	cumulative cumulative	Animal Units Animal Units Arres Treated Acres Treated	92.93 6.78 - 649.85 40.91 131.51 59.84 48.47 3.98 - - -	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegatated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices Toto Erosion and Sediment Control	cumulative annual cumulative annual	Animal Units Animal Units Arres Treated Acres Treated	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - -	13.53 30.68 1.77 	62,255.72 4,228.85 52,205.90 5,333.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoor Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices Frosion and Sediment Control Impervious Surface Reduction	cumulative cumulative	Animal Units Animal Units Arres Treated Acres Treated	92.93 6.78 649.85 40.91 131.51 59.84 48.47 3.98 - - - - - - - - - - - - - - - - - - -	417.95 313.71 13.37 - 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 103,245.23 74,378.45 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wer Ponds & Welands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioStention BioStention BioStention BioStention BioStale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers	cumulative cumulative	Animal Units Animal Units Arens Treated Acres Treated	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,333.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilrers) Ammonia Emission Reductions (Lagoor Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Watter Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Filter Strips	cumulative cumulative	Animal Units Animal Units Arres Treated Acres Treated Acre	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,333.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wer Ponds & Welands Floating Treatment Performance Standard Wer Ponds & Welands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infistructure (IDDE) Impervious Disconnection Conservation Landscapting Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Forest Buffers	cumulative cumulative	Animal Units Animal Units Arens Treated Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.55 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoor Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds. & Welands Floating Treatment Performance Standard Wet Ponds. & Welands Dry Ponds Estended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Ersoion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Forest Planting Urban Restoration	cumulative cumulative	Animal Units Animal Units Aries Treated Acres Acres Acres in Bulffrs Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,509.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Disconnection Conservation Landscaping Practices Urban Forest Buffers Urban Forest Buffers Urban Forest Planting Urban Striem Restoration Storm Drain Cleanout	cumulative cumulative	Animal Units Animal Units Arens Treated Acres Treated Acre	92.93 6.78 40.95 131.51 59.84 48.47 3.98 - - - - - - - - - - - - - - - - - - -	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,333.55 103,245.23 74,378.81 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilers) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stornwater Management Runoff Reduction Performance Standard Storn Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Extended Dry Ponds Extended Dry Ponds Extended Dry Ponds BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Forest Planting Urban Forest Planting Urban Stream Restoration Storn Drain Cleanout Storn Drain Cleanout	cumulative annual annual cumulative cumulati	Animal Units Animal Units Arens Treated Acres Institute Acres Institute Acres Streated Acres	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,309.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoor Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Welands Floating Treatment Welands Dry Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Fiber Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Forest Planting Urban Nurient Management Urban Streat Restoration Storm Drain Cleanout Street Sweeping Urban Storeleine Management	cumulative cumulative	Animal Units Animal Units Arres Treated Acres Treated Acres Freate Acres Freate Acres	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - 2.26 17.74 80.84 101.64 16,712.83 1,757.01 - -	417.95 313.71 13.37 	13.53 30.68 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 103,245.23 74,378.41 50,740.71 3,909.55
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention Emission Reduction (DDE) Infilter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Disconnection Conservation Landscaping Practices Urban Forest Buffers Urban Forest Planting Urban Nutrient Management Urban Stream Restoration Storm Dain (Caenout Streat Sweeping Urban Shoreline Management Ensoin Conservations Ensoin Conservation Ensoin Control Streat Sweeping Urban Shoreline Management Ensoin Conservation Ensoin Control Streat Sweeping Ensoin Control Streat Sweeping Ensoin Control Ensoin Contr	cumulative cumulative	Animal Units Animal Units Arens Treated Acres Institute Acres Institute Acres Streated Acres	92.93 6.78 40.95 131.51 59.84 48.47 3.98 - - - - - - - - - - - - - - - - - - -	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 1.77 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,333.55 103,245.23 74,378.81 50,740.71 3,909.55 356,318.31 17,534.64 39,617.80 96,346.73 10,2534.64,368.08
Ammonia Emission Reductions (Biofilers) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Dry Ponds Floating Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infistrutture (IDDE) Impervious Disconnection Conservation Landscaping Practices Urban Tece Planting Urban Torest Planting Urban Torest Planting Urban Tree Planting Urban Torest Planting Urban Street Planting Urban Street Stweeping Explice Connections Septic Connections Septic Denirtification Septic Punging	cumulative cumulative	Animal Units Animal Units Arens Treated Acres	92.93 6.78 	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,335.35 103,245.23 74,378.81 50,740.71 3,909.55 - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioStwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infistrutture (IDDE) Impervious Disconnection Conservation Landscaping Practices Urban Forest Buffers Urban Forest Buffers Urban Forest Buffers Urban Forest Buffers Urban Stream Restoration Storm Drain Cleanout Kenden Stream Restoration Storm Drain Cleanout Kenden Store Management Urban Storeline Management Septic Onnections Septic Denkrification Septic Punerities Septic Onnections Septic Denkrification Septic Punetions Septic Denkrification Septic Punetions Septic Denkrification Septic Punetions Septic Denkrification Septic Punetions Septic Denkrification Septic Punetices	cumulative cumulative	Animal Units Animal Units Arens Treated Acres	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - - - - - - - - - - - - - - - -	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - 1,771.39 - 88.30 703.80 90.97 110.939.76 5.088.77 - 0.00 - 0.17 3,177.55	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,353.55 103,245.23 74,378.81 50,740.71 3,909.55 - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Weltands Duy Ponds Extended Dry Ponds Infiltration Practices Fidering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Fitter Strips Grey Infinstructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Urban Tive Planting Urban Forest Planting Urban Forest Planting Urban Storeline Management Urban Storeline Management Septic Connection Septio Plantification Septio Plantificat	cumulative annual annu	Animal Units Animal Units Arimal Units Acres Treated Acres Treated Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres Acres No. Systems No. Systems No. Systems No. Systems	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - 2.26 17.74 80.84 101.64 16,712.83 1,757.01 - 1.88 - 2.00 254.54 - - 0.01	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - - - - - - - -	13.53 30.68 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 103,245.23 74,378.81 50,740.71 3,090.55 - - - - 356,318.31 - - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention Conservation Landscaping Practices Urban Tiker Strips Grey Infistratices Returns Urban Tiker Strips Conservation Landscaping Practices Urban Tiker Strips Conservation Landscaping Practices Urban Tores Planting Urban Stores Plan	cumulative annual annual annual annual annual cumulative cumulativ	Animal Units Animal Units Animal Units Arces Arc	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - - - - - - - - - - - - - - - -	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - 1,771.39 - 88.30 703.80 90.97 110.939.76 5.088.77 - 0.00 - 0.17 3,177.55	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 52,205.90 5,33355 103,245.23 74,378.81 50,740.71 3,909.55 - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilers) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filer Strips Grey Infinstructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Filer Planting Urban Forest Planting Urban Stream Restoration Storet Storet S	cumulative annual annu	Animal Units Animal Units Animal Units Anres Arces Arc	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - 2.26 17.74 80.84 101.64 16,712.83 1,757.01 - 1.88 - 2.00 254.54 - - 0.01	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - 1,771.39 - 88.30 703.80 90.97 110.939.76 5.088.77 - 0.00 - 0.17 3,177.55	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 103,245.23 74,378.81 50,740.71 3,090.55 - - - - 356,318.31 - - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention BioRetention Conservation Landscaping Practices Urban Tiker Strips Grey Infistratices Returns Urban Tiker Strips Conservation Landscaping Practices Urban Tiker Strips Conservation Landscaping Practices Urban Tores Planting Urban Stores Plan	cumulative annual annual annual annual annual cumulative cumulative annual annua	Animal Units Animal Units Animal Units Arces Arc	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - 2.26 17.74 80.84 101.64 16,712.83 1,757.01 - 1.88 - 2.00 254.54 - - 0.01	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - 1,771.39 - 88.30 703.80 90.97 110.939.76 5.088.77 - 0.00 - 0.17 3,177.55	13.53 30.68 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.85 103,245.23 74,378.81 50,740.71 3,090.55 - - - - 356,318.31 - - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Welands Floating Treatment Performance Standard Wet Ponds & Welands Floating Treatment Welands Dry Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Fiber Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Disconnection Conservation Restoration Urban Forest Buffers Urban Nortest Buffers Urban Nortest Restoration Storm Drain Cleanout Street Sweeping Urban Storeines Septic Connetification Septic Connetification Septic Connetification Septic Pontrification Septic Pontrif	cumulative annual annual annual annual annual cumulative cumulative annual annua	Animal Units Animal Units Animal Units Anres Arces Arc	92.93 6.78 40.91 131.51 59.84 48.47 3.98 - - - - 2.26 17.74 80.84 101.64 16,712.83 1,757.01 - 1.88 - 2.00 254.54 - - 0.01	417.95 313.71 13.37 134.81 18.34 235.91 442.61 173.85 20.84 - - - - - - - - - - - - -	13.53 30.68 1.77 - 24.09 3.38 21.70 41.86 23.94 2.24 - - - - - - - - - - - - - - - - - - -	62,255.72 4,228.55 103,245.23 74,378.81 50,740.71 3,909.55

MD-020600020409 - Corsica River Permit Approval 2006/Queen Anne's Co.		Duration	Unit	Measure	Nitrogen	LBS Reduced Phosphorus	Sediment
Permit Approval 2006/Queen Anne's Co. Agriculture Practices		Duration	Unit	Measure	Nitrogen	rnosphorus	Sediment
Nutrient Management							
Core Nitrogen		annual	Acres	11,475.29	21,542.46	-	
Rate Nitrogen		annual	Acres	5,257.95	3,087.52	-	-
Placement Nitrogen		annual	Acres	2,603.02	3,773.28	-	
Timing Nitrogen Core Phosphorus		annual annual	Acres	751.82 11,475.29	934.86	2,398.57	
Rate Phosphorus		annual	Acres	118.08	-	8.04	-
Placement Phosphorus		annual	Acres	2,083.52	-	69.92	-
Timing Phosphorus		annual	Acres	-	-	-	-
	TOTAL				29,338.11	2,476.53	
Tillage Management Conservation		annual	Acres	3,066.44	2,664.46	494,89	504,061.98
Continuous High Residue		annual	Acres	7,780.06	20,280.52	1,753.24	2,464,203.98
Low Residue		annual	Acres			-	-
	TOTAL				22,944.98	2,248.13	2,968,265.96
Cover Crop					26.024.72	26.20	6 602 60
Traditional Commodity		annual annual	Acres	5,586.56 1,518.01	26,924.73 3,078.78	26.38	6,592.69
	TOTAL	umuu		1,510.01	30,003.50	26.38	6,592.69
Pasture Management							
Alternative Watering		cumulative		61.67	27.57	6.49	9.73
Prescribed Grazing Horse Pasture Management		cumulative cumulative		15.71 5.25	12.81	5.78 1.66	6.20 2.76
Forest Buffers on Fenced Pasture Corridor			Acres in Buffers	1.24	65.48	20.32	11,571.02
Grass Buffers on Fenced Pasture Corridor		cumulative	Acres in Buffers	0.59	30.08	9.42	5,504.74
	TOTAL		A : D		-	-	-
Forest Buffers Wetland Restoration		cumulative cumulative	Acres in Buffers	79.45 132.04	5,735.11 5,917.80	88.33 158.45	65,940.61 90,717.29
Wetland Restoration Wetland Creation		cumulative		34.29	883.81	27.77	14,712.22
Wetland Enhancement and Rehabilitation		cumulative	Acres	-	-	-	-
Land Retirement to Open Space		cumulative		232.62	4,373.66	11.67	92,148.58
Land Retirement to Pasture		cumulative		30.89	580.78	1.55	12,236.36
Grass Buffers Tree Planting		cumulative cumulative	Acres in Buffers Acres	698.46 14.58	38,930.32 323.00	433.62 9.12	578,958.57 5,709.64
Alternative Crops		cumulative		5.55	117.14	0.64	2,202.82
Soil and Water Conservation Plan		cumulative		7,249.15	11,155.28	566.59	633,673.92
Crop Irrigation Management		cumulative		-	-		-
Manure Incorporation Capture & Reuse		annual annual	Acres	1,146.26	2,314.52	106.57	-
Non Urban Stream Restoration		cumulative		-			
Non Urban Shoreline Management		cumulative	Feet	-	-		-
	TOTAL				70,331.43	1,404.30	1,496,300.02
Agricultural Drainage Management		1.0		24.24	140.10		
Denitrifying Ditch Bioreactors Saturated Buffer		cumulative cumulative		34.24 34.24	149.19 2,195.90	4.54	13,841.24
Sorbing Materials in Ag Ditches		cumulative		34.24	-	7.79	-
Water Control Structures		cumulative	Acres	34.24	221.76	-	-
	TOTAL				2,566.85	12.33	13,841.24
Animal Waste Management Systems Broiler Mortality Freezers		annual	Dry Tons (Carcasses)	780.88	1,008.96	20.39	
Barnyard Runoff Control & Loafing Lot Management		cumulative		2.61	481.87	42.83	697.66
Ag Stormwater Management		cumulative	Acres Treated	11.86	3,816.05	544.10	5,497.00
Manure Transport		annual	Dry Tons	209.34	533.27	20.12	-
Dairy Precision Feeding Ammonia Emission Reductions (Litter Amendments)		annual annual	Animal Units Animal Units	47.26 82.67	102.35 39.06	13.99 0.18	3,903.03
Ammonia Emission Reductions (Enter Amendments)			Animal Units	-	-	-	-
Ammonia Emission Reductions (Lagoon Covers)		cumulative	Animal Units	-	-	-	-
	TOTAL				5,981.57	641.61	10,097.69
Urban/Suburban Practices Stormwater Management							
Runoff Reduction Performance Standard		cumulative	Acres Treated	-	-		
Storm Water Treatment Performance Standard		cumulative	Acres Treated	-	-	-	-
Wet Ponds & Wetlands			Acres Treated	-			
Floating Treatment Wetlands Dry Ponds			Acres Treated (Wet Pond) Acres Treated	-	-	-	-
Extended Dry Ponds			Acres Treated	-			
Infiltration Practices			Acres Treated	-			
Filtering Practices		cumulative	Acres Treated		-	-	-
BioRetention			Acres Treated Acres Treated	-	-		-
BioSwale Permeable Pavement			Acres Treated Acres Treated		-	-	-
Vegetated Open Channel			Acres Treated	-	-	-	-
Urban Filter Strips		cumulative	Acres Treated		-	-	-
Grey Infrastructure (IDDE)		annual	Acres Treated		-	-	-
Impervious Disconnection Conservation Landscaping Practices			Acres Treated Acres Treated			-	-
		- annualive					
Erosion and Sediment Control	TOTAL						-
		annual	Acres	-	-		
Impervious Surface Reduction	:	cumulative	Acres	-	-	-	-
Impervious Surface Reduction Urban Forest Buffers		cumulative cumulative	Acres Acres in Buffers	- 2.02	- 17.28	3.11	- 560.79
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting		cumulative	Acres Acres in Buffers Acres	-	-		- 560.79
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Forest Planting Urban Nutrient Management	:	cumulative cumulative cumulative cumulative annual	Acres Acres in Buffers Acres Acres Acres	2.02 0.46	- 17.28 0.46	3.11 0.08	- 560.79 42.20
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Forest Planting Urban Nutrient Management Urban Stream Restoration		cumulative cumulative cumulative cumulative annual cumulative	Acres in Buffers Acres Acres Acres Feet	- 2.02 0.46 2.17	- 17.28 0.46 14.19	3.11 0.08 2.35	- 560.79 42.20
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Forest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout		cumulative cumulative cumulative cumulative annual cumulative annual	Acres Acres Acres Acres Acres Acres Feet Lbs of Sediment	2.02 0.46 2.17 1,832.99	- 17.28 0.46 14.19	3.11 0.08 2.35	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Torest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Storet Sweeping		cumulative cumulative cumulative cumulative annual cumulative annual annual	Acres Acres in Buffers Acres Acres Acres Acres Lbs of Sediment Acres	- 2.02 0.46 2.17	17.28 0.46 14.19 1,141.13	3.11 0.08 2.35 81.02	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Torest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Street Sweeping Urban Shoreline Management		cumulative cumulative cumulative cumulative annual cumulative annual cumulative	Acres Acres in Buffers Acres Acres Acres Acres Lbs of Sediment Acres	2.02 0.46 2.17 1,832.99	17.28 0.46 14.19 1,141.13	3.11 0.08 2.35 81.02	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Torest Planting Urban Torest Planting Urban Stream Restoration Storm Drain Cleanout Storet Sweeping Urban Shoreline Management Septic Connections Septic Denirfication		cumulative cumulative cumulative cumulative annual cumulative cumulative cumulative cumulative	Acres suffers Acres in Buffers Acres Acres Acres Feet Lbs of Sediment Acres Feet Number of Systems Number of Systems	- 2.02 0.46 2.17 1,832.99 - - - - 5.56 40.05	17.28 0.46 14.19 1,141.13	3.11 0.08 2.35 81.02	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Tree Planting Urban Nutrient Management Urban Storam Restoration Storm Drain Cleanout Street Sweeping Urban Shoreline Management Septic Connections Septie Denitrification Septie Denitrification		cumulative cumulative cumulative annual cumulative annual annual <u>cumulative</u> cumulative	Acres Acres Buffers Acres Acres Feet Lbs of Sediment Acres Feet Number of Systems	2.02 0.46 2.17 1,832.99	17.28 0.46 14.19 1,141.13 - - - 45.27	3.11 0.08 2.35 81.02	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Tree Planting Urban Streiam Restoration Storm Drain Cleanout Street Sweeping Urban Shoreline Management Septic Connections Septic Denitrification Septic Pumping Resource Practices		cumulative cumulative cumulative annual cumulative annual annual cumulative cumulative cumulative annual	Acres Acres Acres Acres Acres Acres Acres Acres Acres Feet Lbs of Sediment Acres Feet Number of Systems Number of Systems Number of Systems	2.02 0.46 2.17 1,832.99 - - - 5.56 40.05	- 17.28 0.46 14.19 1,141.13 - - - - - - - - - - - - - - - - - - -	3.11 0.08 2.35 81.02 - - - - -	560.79 42.20 340.98 - - - - - - - - -
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Torest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Storet Sweeping Urban Shoreline Management Septic Connections Septic Denirfication Septic Punnping Resource Practices Forest Harvesting Practices		cumulative cumulative cumulative annual cumulative annual cumulative cumulative cumulative annual annual	Acres Acres n Buffers Acres Acres Acres Acres Feet Lbs of Sediment Acres Feet Number of Systems Number of Systems Number of Systems Acres Acres	- 2.02 0.46 2.17 1,832.99 - - - - 5.56 40.05	17.28 0.46 14.19 1,141.13 - - - 45.27 210.85	3.11 0.08 2.35 81.02	560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Torest Planting Urban Nutrient Management Urban Stream Restoration Storet Sweeping Urban Shoreline Management Septic Concections Septic Denitrification Septic Denitrification Septic Denitrification Septic Punping Resource Practices Forest Harvesting Practices Dirt&Gravel Road E&S Non-Tidal Agal Flow-way		cumulative cumulative cumulative annual cumulative annual annual cumulative cumulative cumulative annual	Acres Acres n Buffers Acres Acres Acres Acres Feet Lbs of Sediment Acres Feet Number of Systems Number of Systems Number of Systems Acres Acres	2.02 0.46 2.17 1,832.99 - - - 5.56 40.05	- 17.28 0.46 14.19 1,141.13 - - - - - - - - - - - - - - - - - - -	3.11 0.08 2.35 81.02 - - - - -	560.79 42.20 340.98 - - - - -
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Tree Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Storet Sweeping Urban Shoreline Management Septic Connections Septic Pointrification Septic Pumping Resource Practices Forest Harvesting Practices Dirt&Gravel Road E&S Non-Tidal Algal Flow-way		cumulative cumulative cumulative annual annual annual cumulative cumulative cumulative annual annual cumulative cumulative annual cumulative	Acres in Buffers Acres in Buffers Acres Acres Fect Lbs of Sediment Acres Fect Number of Systems Number of Systems Number of Systems Acres Fect Acres	2.02 0.46 2.17 1,832.99 - - - 5.56 40.05	17.28 0.46 14.19 1,141.13 	3.11 0.08 2.35 81.02 - - - - - - - - - - - - - - - -	- 560.79 42.20 340.98
Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Tree Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Storet Sweeping Urban Shoreline Management Septic Connections Septic Pointrification Septic Pumping Resource Practices Forest Harvesting Practices Dirt&Gravel Road E&S Non-Tidal Algal Flow-way		cumulative cumulative cumulative cumulative annual cumulative cumulative cumulative cumulative annual annual	Acres Acres in Buffers Acres Acres Acres Acres Acres Ecet Lbs of Sediment Acres Feet Number of Systems Number of Systems Acres Feet Feet Feet Feet Feet Feet Feet Fe	2.02 0.46 2.17 1,832.99 - - - 5.56 40.05	- 17.28 0.46 14.19 1,141.13 - - - - - - - - - - - - - - - - - - -	3.11 0.08 2.35 81.02 - - - - -	560.79 42.20 340.98 - - - - -

MD-N24510WM0_3650_0001 - Lower Jones Fall		TT:-	M	Niterro	LBS Reduce	
Permit Approval 2008/Baltimore City & Co.	Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices Nutrient Management						
Core Nitrogen	annual	Acres				
Rate Nitrogen	annual	Acres	-	-	-	-
Placement Nitrogen	annual	Acres	-	-		
Timing Nitrogen	annual	Acres	-	-	-	-
Core Phosphorus	annual	Acres	-		-	-
Rate Phosphorus	annual	Acres	-	-	-	-
Placement Phosphorus	annual	Acres	-	-		-
Timing Phosphorus	annual	Acres	-	-	-	
TOT				-	-	-
Tillage Management						
Conservation	annual	Acres	-	-	-	-
Continuous High Residue	annual	Acres	-	-	-	-
Low Residue	annual	Acres	-	-	-	-
TOT	`AL				-	-
Cover Crop						
Traditional	annual	Acres	-		-	-
Commodity	annual	Acres	-	-	-	-
TOT	AL				-	-
Pasture Management Alternative Watering	cumulative	Agree				
Prescribed Grazing	cumulative				-	
Horse Pasture Management	cumulative		-		-	-
Forest Buffers on Fenced Pasture Corridor		Acres in Buffers	-	-	-	-
Grass Buffers on Fenced Pasture Corridor		Acres in Buffers		-	-	-
TOT				-	-	-
Forest Buffers		Acres in Buffers	2.50	33.73	0.40	757.6
Wetland Restoration Wetland Creation	cumulative			-	-	-
Wetland Creation Wetland Enhancement and Rehabilitation	cumulative			-	-	-
Land Retirement to Open Space	cumulative			-	-	-
Land Retirement to Open Space	cumulative			-	-	
Grass Buffers		Acres in Buffers		-	-	-
Tree Planting	cumulative	Acres	-	-	-	-
Alternative Crops	cumulative		-	-	-	-
Soil and Water Conservation Plan	cumulative		-	-	-	-
Crop Irrigation Management	cumulative		-		-	-
Manure Incorporation Capture & Reuse	annual	Acres Acres	-	-	-	-
Non Urban Stream Restoration	cumulative					
Non Urban Shoreline Management	cumulative		-	-	-	-
тот				33.73	0.40	757.6
Agricultural Drainage Management						
Denitrifying Ditch Bioreactors	cumulative		-	-	-	-
Saturated Buffer	cumulative		-	-	-	-
Sorbing Materials in Ag Ditches	cumulative		-		-	-
Water Control Structures TOT	cumulative	Acres	-	-	-	-
Animal Waste Management Systems	AL					
Broiler Mortality Freezers	annual	Dry Tons (Carcasses)			-	
Barnyard Runoff Control & Loafing Lot Management	cumulative		-	-	-	-
Ag Stormwater Management	cumulative	Acres Treated	-	-	-	-
Manure Transport	annual	Dry Tons	-	-	-	-
Dairy Precision Feeding	annual	Animal Units	-	-	-	-
Ammonia Emission Reductions (Litter Amendments)	annual	Animal Units	-	-	-	-
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers)		Animal Units Animal Units	-	-		
TOTA		Animai Onits				
Urban/Suburban Practices						
Stormwater Management						
Runoff Reduction Performance Standard		Acres Treated	23.72	61.57	6.68	10,280.4
Storm Water Treatment Performance Standard		Acres Treated	11.17	16.93	2.47	4,514.8
Wet Ponds & Wetlands		Acres Treated		-	-	-
Floating Treatment Wetlands		Acres Treated (Wet Acres Treated	- 47.12	- 17.10	3.22	- 4,854.5
Dry Ponds Extended Dry Ponds		Acres Treated Acres Treated	47.12	0.04	3.22 0.00	4,854.5
Infiltration Practices		Acres Treated	-	-	-	- 10.5
Filtering Practices		Acres Treated	8.25	23.98	3.40	6,800.2
BioRetention	cumulative	Acres Treated	0.05	0.21	0.02	38.6
BioSwale	cumulative	Acres Treated	-	-	-	-
Permeable Pavement		Acres Treated		-	-	
Vegetated Open Channel		Acres Treated	-	-	-	-
Urban Filter Strips Grey Infrastructure (IDDE)	annual	Acres Treated Acres Treated	-	-	-	-
Impervious Disconnection		Acres Treated Acres Treated		-	-	-
Conservation Landscaping Practices		Acres Treated		-	-	-
TOT	`AL			119.83	15.80	26,507.2
Erosion and Sediment Control	annual	Acres	-	-	-	-
Impervious Surface Reduction	cumulative		-	-	-	-
Urban Forest Buffers		Acres in Buffers	-	-	-	-
Urban Tree Planting	cumulative		112.96	11.71	2.24	1,813.6
Urban Forest Planting Urban Nutrient Management	annual	Acres	4.92 4,088.10	22.46 604.83	3.94 33.04	1,602.6
Urban Nutrient Management Urban Stream Restoration	cumulative				- 55.04	
Storm Drain Cleanout	annual	Lbs of Sediment	246,720.00	536.12	112.75	124,106.5
Street Sweeping	annual	Acres	1,361.50	220.60	43.33	192,009.8
Urban Shoreline Management	cumulative	Feet				
Septic Connections	cumulative	Number of Systems	-	-	-	-
Septic Denitrification		Number of Systems		-	-	-
Septic Pumping	annual	Number of Systems	-	-	-	-
Resource Practices	0	Acres		-	-	-
Forest Harvesting Practices	annual	Acres	-	-	-	-
Dirt&Gravel Road E&S Non-Tidal Algal Flow-way	cumulative annual	Acres		-	-	
			-		-	
Tidal Algal Flow-way	annual	Acres			-	
Tidal Algal Flow-way TOT		Acres		1,395.72	195.30	319,532.7

Phenner Nampenamaul amaul Area1.225.211.19.40Timely Nampenamaul Area1.095.25'1.19.42'Park Nampenmanul Area1.095.26.1.19.25'Timely NampenTOTA'2.005.27'1.19.25'Constraining Mark Nampenmanul Area3.51.399.464.6977.441.002.211.002.21Constraining Mark Nampenmanul AreaArea3.51.2677.441.002.211.002	MD-0207000907 - Lower Monocacy					LBS Reduced	
Nore Arroym Constrained and a constrained and		Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
non-signamamageArea41,202.735.53,8.41is NampoamageArea1201.811.0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
bics. Nage many bases. Marging bases. M		annual	Acres	41,292.37	55,550.63		
Tamp Respinama ama ama baseArm19.27.3739.49.4.Preserve Provemamad amad baseArm19.91.930.91.930.91Preserve Provemmand amad baseArm19.19.930.91.930.91.9Preserve ProvemTotal30.92.930.91.9Tamp RobustoTotal30.92.930.92.9Cansumed By Robustomand amad baseArm12.204.6144.00.95.1012.50.42.10Cansumed By Robustomand amad baseArm12.204.6144.00.95.1012.50.42.10Cansumed By Robustomand amad baseArm2.204.1074.80.912.50.42.10Cansumed By Robustomand amad baseArm2.204.1074.80.911.10.10Cansumed By Robustomand amad baseArm2.90.1111.81.811.11.81.9Cansumed By Robustomandbase amad baseArm2.90.1111.81.811.11.81.9Cansumed By Robustomandbase amad baseArm1.90.1111.81.811.11.81.9Cansumed By Robustomandbase amad baseArm1.90.1111.81.811.81.811.81.8Cansumed By Robustomandbase amad baseArm1.90.1111.81.811.81.811.81.8Cansumed By Robustomandbase amad baseArm1.91.2111.81.811.81.811.81.8Cansumed By Robustomandbase amad baseArm1.92.11<	Rate Nitrogen	annual	Acres	10,911.96		-	-
Cons ParspontanamageArea41.925.27Trange PregnamamageArea1.01.5Trange PregnamamageArea1.01.5<	Placement Nitrogen						
Ray PagendamamaArms3.988 20.1.84.92.Tange TopologTOTALHeaves Page And Arms1.31.199.04.89.73.412.47.02.15-Construint Pari SolationanandArms1.31.199.04.89.73.41A.12.02.15Construint Pari SolationanandArms2.31.199.04.89.04.81.04.20.21Construint Pari SolationanandArms2.44.101.04.20.21Arms1.04.20.21Construint Pari SolationanandArms2.44.101.04.20.21Arms1.11.14Construint Pari SolationanandArms2.44.101.04.20.21Arms1.11.14Construint Pari SolationanandArms1.04.101.05.211.02.201.02.							-
Reven ProcessorNoteNoteNoteNoteNoteTange NormeTOTALSALASSALASNoteNoteTange NormeNoteSALASSALASNoteNoteConstructionandAreaSALASSALASNoteNoteConstructionAreaSALASSALASNoteNoteNoteConstructionTOTASALASSALASNoteNoteNoteConstructionTOTASALASNoteNoteNoteNoteConstructionConstructionNoteSALASNoteNoteConstructionConstructionNoteNoteNoteNoteNoteConstructionNoteNoteNoteNoteNoteNoteConstructionNoteNoteNoteNoteNoteNoteNoteConstructionNoteNo							
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High MagnamiumalAcron3.51.09MAK 509A.52.01A.2.42.10.02Commune Information and Acron12.06.0045.000.413.2.50.12A.2.42.10.02Commune Information Acron12.06.0045.000.41M.4.50.1M.4.50.12Commune Information Acron2.01.014.000.41M.4.50.11M.4.50.11Commune Information Acron2.01.014.000.41M.4.50.11M.4.50.11Commune Information Acron2.00.14M.4.50.11M.4.50.11M.4.50.11Commune Information Acron2.00.14M.4.50.11M.4.50.11M.4.50.11Commune Information Acron2.00.14M.4.50.11M.4.50.11M.4.50.11Commune Information Acron2.00.14M.4.50.11M.4.50.11M.4.50.11Commune Information AcronCommune Information AcronCommune Information AcronM.5.20.11M.4.50.11Commune Information AcronCommune Information AcronCommune Information AcronM.5.20.11M.4.50.11Commune Information AcronCommune Information AcronCommune Information AcronM.5.20.11M.4.50.11Commune Information Mathemation Mathemation AcronCommune Information AcronM.1.10.11M.4.50.11M.4.50.11Commune Information Mathemation Mathemation Mathemation Mathemation AcronM.1.10.11M.4.50.11M.4.50.11Commune Information Mathemation Mat	Timing Phosphorus	annual	Acres	-	-	-	-
Concrusing Constraint and 		TAL			62,465.79	3,573.82	-
ConvertiendConvertie	Conservation	annual	Acres	3,513.09	9,486.09	736.41	2,421,402.15
TOTAL 53.08.03 408.08.1 10.48.02.04 Tarlical anal Acre 6444.07 81.05.7 45.05 11.154.0 Tarlical anal Acre 2415.07 45.05 11.154.0 Arcaraby Viern Common Acre 2415.07 2.05.01 1.35.2 1.157.0 Strong Managama common Acre 2.06.11 1.06.06 1.35.2 1.157.0 1.35.0 3.00.0 1.35.0 3.00.0 1.35.0 3.00.0 1.35.0 3.00.0 1.35.0	Continuous High Residue		Acres	12,066.63			
Concerning unual Acces Jest Nature Acces Jest Nature Acces Jest Nature Acces Jest Nature Jest Nat	Low Residue	annual	Acres	-			
Tadioal cosmalyAves9444.6995.16.714.8.81111.842Cosmaly AveratAverat22.016.006.714.006111.842Namaro Varian Cosmaly Cosmaly Perched Carging Cosmaly C		TAL			55,096.03	4,006.83	18,446,740.41
Came MargementArea24210.774.8.8811.1184.50TOTAL41.20.5748.8811.1184.50Meres ManagementcamalationAreas20.2149.1319.79.40Inter benchaft and managementcamalationAreas20.213.007.07.90Data MargementcamalationAreas20.213.007.07.907.07.90Data MargementcamalationAreas20.214.07.917.00.207.00.207.00.20Start InformcamalationAreas10.214.0.207.00.207.00.207.00.20Rest InformcamalationAreas1.0.214.0.207.0.207.0.207.0.207.0.20Wated InformercamalationAreas1.0.214.0.217.0.20 <td></td> <td>1</td> <td>Aaraa</td> <td>6444.60</td> <td>25 105 77</td> <td>40.00</td> <td>111 824 60</td>		1	Aaraa	6444.60	25 105 77	40.00	111 824 60
Dirty Mangement Jung Ale						40.00	-
Alexands Waverig emalable Acros 2.09.14 (1.09.06) 15.52 9.13 7.39.9 Frees Parties Freesond Consol emalable Acros 15.52 29.13 20.25 20.25						48.88	111,834.50
Denomba Conseg Acres 202.34 297.12 97.13 79.79 Green Endings on Except Patter Condex consubits? Acres 20.74 3.89 79.79 Green Endings on Except Patter Condex consubits? Acres 20.74 3.89 79.79 Forest Ending consubits? Acres Bindfres 92.20 3.65.21.33 445.42 19.97 21.45.57 Windar Scharzen consubits? Acres 11.34 42.23 49.97 21.45.57 Windar Scharzen consubits? Acres 11.34 42.23 49.97 21.46.57 Windar Scharzen consubits? Acres 11.81 5.04.17 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83 27.05.93 3.83	Pasture Management						
Hore harms are general monitoriesAreas a barling1.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Encore that is a price of points or cardiar or simulations and points of					267.12		
TOTAL June 1000000000000000000000000000000000000	Forest Buffers on Fenced Pasture Corridor				928.17		
Force Halforn cannables Acres 11.24 47.23 36.23.7.3 46.47 1.1.81.62.19 Weind Chranic cannables Acres 1.1 47.23 6.97 21.24.55.76 Weind Chranic cannables Acres 47.3 8.48.10 50.21 53.20.67 Land Retrement to Patares cannables Acres 218.87 3.762.59 116.62 214.69.7 Land Retrement to Patares cannables Acres 117.57 1.11.24 24.30 75.33.11 Tree Planing cannables Acres 117.57 1.11.24 9.40 - Stand Water Conservation Plan cannables Acres 117.61 113.14.84 9.40 - <t< td=""><td>Grass Buffers on Fenced Pasture Corridor</td><td></td><td>Acres in Buffers</td><td>4.03</td><td></td><td></td><td></td></t<>	Grass Buffers on Fenced Pasture Corridor		Acres in Buffers	4.03			
Weind Retard Craits Areas 11.24 472.28 977 21,285.79 Veind Craits Community Areas -<			Aaras in Duff-	500.00			
WeakAreaUnit Returned and BehaliniationcommakineArea403.5S.441.052.6S.572.08.5Lanit Returned to Ope SpacecommakineArea403.5S.441.052.16.0S.727.08.5Coms InfracommakineArea17.171.421.802.40.07.727.08.5Tree ManingcommakineArea7.17.71.81.849.407.727.08.5Numaria CompositioncommakineArea7.17.71.81.849.407.72.08.5Sol and Marcia Commakine AreaArea7.7.11.81.849.407.7.1.1Numaria CompositioncommakineFeet2.7.101.7.2.31.0.2.97.7.1.14.84.8Numaria CompositioncommakineFeet2.7.1.11.7.2.31.2.2.42.426.2.41.16AreaCommakineFeet7.7.11.5.1.47.7.2.31.2.2.42.426.2.41.16Numaria CompositioncommakineArea1.2.4.48.7.2.1.31.2.2.42.426.2.41.16Area CommakinecommakineArea1.2.4.48.7.2.1.31.2.2.42.426.2.41.16Area CommakinecommakineArea1.2.4.48.7.2.1.31.2.2.42.426.2.41.16Area CommakinecommakineArea1.2.4.48.7.2.1.31.2.2.42.426.2.41.16Area CommakinecommakineArea1.2.4.48.7.2.1.31.2.2.4.2.1.161.2.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1	Forest Buffers Wetland Restoration						
Weaked Enhancement and Relaminationcommissive AreasLand Reterment to Postrave Commissive Areas201331.84.10.5122.08.2021.43.00.14Land Reterment to Postrave 	Wetland Creation			-		-	
Land Betramer Lang Betramer Areas 218.87 3,762.59 8,100.2 214.309.14 for shafter Gras Buffers 11.161 5.54.147 1.54.29 3 77.333.19 Activative Areas 71.87 142.183 2,323 77.333.19 Activative Areas 71.97 15.2 10.257 70 307.184.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Wetland Enhancement and Rehabilitation	cumulative	Acres	-		-	-
Grass BufferscumulierArea in Buffers1116.615.01.47.75.1.917.01.91.297.07.91.29 <t< td=""><td>Land Retirement to Open Space</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Land Retirement to Open Space						
Tree Planting cumulative Aces 71.87 1,421.83 29.83 71.87 Soli and Water Conservative Plan cumulative Aces 12.075.68 - 2.99.40 - Soli and Water Conservative Plan cumulative Aces 77.71 1.818.44 9.40 - Copringtion Magnement cumulative Foot 2.79 1 1.813.54 9.00 7.071.14 Ne Urban Steam Restorian cumulative Foot 2.79 1 1.23.5 1.02.97 7.071.14 2.82.64.310.00 Ne Urban Steam Restorian cumulative Foot 2.84 9.72.13 1.22.42 2.52.72.68 Stranda Urban cumulative Aces 12.841 7.8.2 - - Water Constrainterban cumulative Aces 12.841 7.8.2 -	Land Retirement to Pasture Grass Buffers						
Alernal is Coping cumulative Ares . <t< td=""><td>Tree Planting</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Tree Planting						
Corp Insignin Management euraliaire Ares Capter & Rose annal Ares Capter & Rose annal Ares <t< td=""><td>Alternative Crops</td><td>cumulative</td><td>Acres</td><td>-</td><td>-</td><td></td><td>-</td></t<>	Alternative Crops	cumulative	Acres	-	-		-
Manue Resonantion annal Acres \$76.71 1.81.8.48 94.40 - Nea U-barn Scenar Restoration canabiter Feet 2.379.11 132.33 102.97 307.184.03 Nea U-barn Scenar Restoration Comparison Comparison Scenar Restoration 307.184.03 Apricultant Deninest: Management TOTAL Scenar Restoration Scenar Restoration <td></td> <td></td> <td></td> <td>12,703.68</td> <td>-</td> <td>2,309.40</td> <td>-</td>				12,703.68	-	2,309.40	-
Capture & Rose				876.71	1 814 84	94.40	
Nu Una Boordine ManagementFord	Capture & Reuse			-	-	-	-
TOTAL Sta23 3.28 7.4 Sta23 7.4 <	Non Urban Stream Restoration			2,379.11	132.35	102.97	307,184.03
Agriculture Drainage Management unitario Agriculture Ares 128.41 694.72 . . Shrinna Buffer cumulative Ares 128.41 8.792.13 12.2.4 215.272.68 Shrinna Buffer cumulative Ares 128.41 7.83 2.3.4 . Shrinna Buffer cumulative Ares 128.41 7.83 2.3.5 .			Feet		-	-	-
Dentifying Dick Bioreactors cumulative avers 128,41 97,72 . . Swing Matriah in & Dichen cumulative Arres 128,41 7,85,82 21,522,68 Mater Catrol Sincerturus cumulative Arres 128,41 7,85,82 Binder Match Massement System mailable PT ores 128,41 7,85,82 Binder Match Massement System mailable PT ores 23,304,604 Mater 100,472,71 Manner Transport annual Dy Tores 70,317 35,521 309,18 Manner Transport annual Animal Units Armonia Emission Reductions (Boffing) cumulative Animal Units Stronsoft Massement cumulative Arers Tratsel 129,944 2,325,84 .24,023 Mannei Emission Reductions (Boffing) cumulative Arer Tratsel 129,944 .2,354,84 Reduction Performance Sinaded		I AL			58,225.45	5,239.74	2,862,431.06
Sorbing Materials in Ag Diskes cumulative TOTAL Acres 128.41 Marce Cartol Structures IDTAL IDTAL 10.2567 35.59 21.527.68 Antand Marce Management Systems annual Dry Tors (Carcasses) 25.35 <	Denitrifying Ditch Bioreactors	cumulative	Acres	128.41	694.72		
Ward Caroly Structures cumulative Nargement System statuse Values statuseValues	Saturated Buffer				8,792.13		215,272.68
TOTAL 10.245.67 35.59 215.272.68 Annal Mack Mangement Jyuen annual Dry Tons (acrasses) 25.53 - - - Broker Mortally Freezers 35.73 3.046.04 84.69 100,072.71 Ag Sommwater Management cumulative Acres Treated -					-	23.34	
Animal Naste Management Systems numal Dry Tons (Carcasso) 25.53 . . . Banyad Runoff Control & Loring Lot Management cumulative Acres 155.73 3.046.04 84.69 100,472.71 Manuer Transport annual Dry Tons 703.17 356.21 309.18 - Manuer Transport annual Animal Units 48.85 1.163.44 79.95 20,622.66 Ammonia Emission Reductions (Liter Amendments) annual Linits - </td <td></td> <td></td> <td>Acres</td> <td>128.41</td> <td></td> <td>35.59</td> <td>215,272.68</td>			Acres	128.41		35.59	215,272.68
Bamyad Rundi Control & Lording Lot Management cumulative cumulative Acres 35.73 3.046.04 84.69 100.012.71 Manus Transport annual Dry Tonsin 70.17 356.21 309.18 - Manus Transport annual Animal Units 4.85.8 1,16.34 77.95 20.682.66 Annonic Ensision Reductions (Enfers) cumulative Animal Units -	Animal Waste Management Systems						
Ag Stormwater Management cumulative Acres Treated . <td< td=""><td>Broiler Mortality Freezers</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Broiler Mortality Freezers						
Manue Transport annual Dry Tonsis 703.17 356.21 309.18 - Armonis Ensision Reductions (Bindrend) annual Animal Units -				35.73	3,046.04	84.69	100,472.71
Darly Precision Feeding annual Animal Units 498.58 1,163.44 79.95 20,082.06 Anmonis Ension Reductions (Beofflers) cmunduire Animal Units - <td></td> <td></td> <td></td> <td>703.17</td> <td>356.21</td> <td>309.18</td> <td></td>				703.17	356.21	309.18	
Ammoni Emission Reductions (Biofilters)cumulative a Ammoni Emission Reductions (Lagoon Corvers) TOTALAmmoni LinisAmmoni Emission Reductions (Lagoon Corvers) TotALTOTALAmmoni Linis	Dairy Precision Feeding	annual					20,682.66
Annunois Ensision Reductions (Lagoon Covers) cmultitive Animal Units - </td <td>Ammonia Emission Reductions (Litter Amendments)</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	Ammonia Emission Reductions (Litter Amendments)			-	-	-	-
TOTAL 4,565.69 473.83 121,155.37 UbmoSuburbon Protectors Starmayer Management Normayer Ma							
Urban Shakehan Practices Urban Schwarzer Management 0 Runoff Reduction Performance Standard cumulative Acres Treated 1.299,54 2.745,86 247,02 750,710,327 Storm Water Treatment Performance Standard cumulative Acres Treated 1.299,54 2.745,86 247,02 750,710,327 Storm Water Treatment Vellands cumulative Acres Treated 2.288,78 5,030,96 671,73 1,694,297,68 Elasting Treatment Wellands cumulative Acres Treated 791,96 435,36 51,79 97,710,31 Extended Dry Ponds cumulative Acres Treated 1201,17 2,640,29 138,699 888,180,74 Infiltration Practices cumulative Acres Treated 140,90 617,68 55,02 138,679,90 BioR Retinion cumulative Acres Treated 29,03 223,31 14,19 26,613,99 BioSwale cumulative Acres Treated - - - - Cryp Inforts cumulative Acres Treated - - - - Vegestiod Open Chanel			Animai Onits	-	4,565.69	473.83	121,155.37
Runoff Reduction Performance Standard cumulative Acres Treated 63.213 2.283.34 152.84 391.953.27 Storm Water Treatment Performance Standard cumulative Acres Treated 1.299.54 2.745.86 247.02 750.710.13 Wet Ponds & Wetlands cumulative Acres Treated 2.288.78 5.030.96 671.73 1.694.297.68 Ekating Treatment Wetlands cumulative Acres Treated 70.16 435.36 51.79 97.710.31 Extended Dry Ponds cumulative Acres Treated 1.001.7 2.460.29 157.09 888.80.74 Infiltration Practices cumulative Acres Treated 1.40.50 671.76 452.74 40.61.76 BioR Sternion cumulative Acres Treated 1.40.50 671.76 427.97 2.97.4 61.77.81 BioSovak cumulative Acres Treated 2.03 - - - - - - - - - - - - - - - - - -	Urban/Suburban Practices						
Storm Water Treatment Performance Standard cumulative cumulative Acres Treated 1,299-54 2,745.86 247.02 750,710.13 Wet Ponds & Wetlands cumulative Acres Treated 2,288.78 5,030.96 671.73 1,694.297.68 Floating Treatment Wetlands cumulative Acres Treated 791.96 435.36 51.79 97.710.31 Extended Dry Ponds cumulative Acres Treated 1201.17 2,640.29 135.70 888.180.74 Inflictation Practices cumulative Acres Treated 204.90 1.857.81 113.57 240.16.93 BioRetention cumulative Acres Treated 66.76 427.97 29.74 61.73.14 BioStention cumulative Acres Treated 29.03 223.31 14.19 28.651.38 Permeable Pavement cumulative Acres Treated -		aumulativa	Aaras Traatad	632.12	2 282 04	152.84	201 052 27
Wet Ponds & Wetlandscumulative cumulativeAcres Treated2,288.785,030.96671.731,694,297.68Floating Treatment Wetlandscumulative cumulativeAcres Treated (Wet Pond) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Dry Pands cumulative Acress Treated 179.96 435.36 51.79 97,710.31 Extended Dry Ponds cumulative Acres Treated 1201.17 2.640.29 157.09 889,180.74 Infliration Practices cumulative Acres Treated 140.50 617.68 55.02 138,679.90 BioRetention cumulative Acres Treated 140.50 617.68 55.02 138,679.90 BioRetention cumulative Acres Treated 29.03 223.31 14.19 28,651.38 Permeable Pavement cumulative Acres Treated -	Wet Ponds & Wetlands						
Dry Pands cumulative Acress Treated 179.96 435.36 51.79 97,710.31 Extended Dry Ponds cumulative Acres Treated 1201.17 2.640.29 157.09 889,180.74 Infliration Practices cumulative Acres Treated 140.50 617.68 55.02 138,679.90 BioRetention cumulative Acres Treated 140.50 617.68 55.02 138,679.90 BioRetention cumulative Acres Treated 29.03 223.31 14.19 28,651.38 Permeable Pavement cumulative Acres Treated -							
Exereded Dy Ponds cumulative Acress Treated 1,201,17 2,640,29 157,09 889,180,74 Filtering Practices cumulative Acress Treated 204,90 1,857,81 111,57 240,161.91 Filtering Practices cumulative Acress Treated 66,76 427,97 29,74 61,773.14 BioRetention cumulative Acress Treated 2-0 - - - Vegated Open Channel cumulative Acress Treated - - - - Urban Filter Strips cumulative Acress Treated -	0				-	-	-
Infiltration Practices cumulative Acress Treated 204 90 1.857.81 113.57 240.161.91 BiRetention cumulative Acress Treated 140.50 617.68 55.02 138.679.90 BiRetention cumulative Acress Treated 29.03 223.31 14.19 28.651.38 Permeable Pavement cumulative Acress Treated - - - - Vagated Open Channel cumulative Acress Treated - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
BioRetentioncumulative cumulative Acres Treated66.76427.9729.7461,773.14BioRatecumulative Acres Treated29.03223.3114.1928.651.38Permeable Pavementcumulative Acres TreatedVegetated Open Channelcumulative Acres TreatedOrger Infrastructure (IDDE)annual Acres Treated <td>Infiltration Practices</td> <td>cumulative</td> <td></td> <td>204.90</td> <td>1,857.81</td> <td>113.57</td> <td>240,161.91</td>	Infiltration Practices	cumulative		204.90	1,857.81	113.57	240,161.91
BioSwale cumulative Acres Treated 29.03 223.31 14.19 28,651.38 Permeable Pavement cumulative Acres Treated							
Permeable Pavementcumulative vegetated Open ChannelUrban Filter Stripscumulative vegetated Open Channel <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Vegetated Open ChannelcumulativeAcress TreatedTOTALTOTALAcresTOTALAcresCores in Buffers2.5.85267.772.5.752.5				- 29.03		-	28,051.58
Grey Infrastructure (IDDE)annual cumulative Acress Treated	Vegetated Open Channel			-	-	-	-
Impervious Disconnectioncumulative cumulative Acres TreatedConservation Landscaping Practicescumulative cumulativeAcres Treated<	Urban Filter Strips						
Conservation Landscaping Practicescumulative TOTALAcres TreatedTotalnamual AcresAcres <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td>				-	-		-
Erosion and Sediment Control annual Acres - - - - Impervious Surface Reduction cumulative Acres 0.47 2.93 - 948.32 Urban Forset Buffers cumulative Acres in Buffers 25.85 267.77 25.76 26,983.75 Urban Forset Buffers cumulative Acres 138.68 146.00 14.28 - Urban Forset Planting cumulative Acres 138.68 146.00 14.28 - Urban Street Planting cumulative Acres 14.620.42 12,092.94 498.56 - Urban Street Storation cumulative Feet 925.09 51.46 40.04 119.445.27 Storet Storeping annual Acres 0.61 0.16 0.02 134.25 Urban Storet Ine Management cumulative Number of Systems 4.07 42.49 - - Urban Storet Ine Management cumulative Number of Systems 2.23.73 1,510.53 - -	Conservation Landscaping Practices			-	-	-	
Impervious Surface Reduction cumulative Acres 0.47 2.93 - 948.32 Urban Forest Buffers cumulative Acress in Buffers 25.85 267.77 25.76 26,983.75 Urban Forest Buffing cumulative Acress 138.68 146.00 14.28 - Urban Forest Planting cumulative Acres 124.92 989.19 87.01 67.224.20 Urban Stream Restoration cumulative Feet 925.09 51.46 40.04 119.445.27 Storen Stream Restoration cumulative Feet 925.09 51.46 40.04 119.445.27 Storen Stream Restoration cumulative Feet 92.09 51.46 40.04 119.445.27 Storen Stream Restoration cumulative Feet 92.09 51.46 40.04 119.445.27 Storen Storenging annual Acres 0.61 0.16 0.02 134.25 Urban Shoreline Management cumulative Number of Systems 22.37 1,510.53 - </td <td>TO</td> <td>ΓAL</td> <td></td> <td></td> <td>16,263.17</td> <td></td> <td>4,293,118.47</td>	TO	ΓAL			16,263.17		4,293,118.47
Urban Forest Buffers cumulative Acres Acres Buffers 25.85 267.77 25.76 26,983.75 Urban Forest Planting cumulative Acres Acres 138.68 146.00 14.28 - Urban Forest Planting cumulative Acres 124.92 989.19 87.01 67,224.20 Urban Streat Restoration cumulative Acres 14,620.42 12,029.24 498.56 - Urban Streat Restoration cumulative Feet 925.09 51.46 40.04 119.452.27 Storm Drain Cleanout annual Acres 0.61 0.16 0.02 134.25 Urban Streat Restoration cumulative Number of Systems 2.37 1,510.53 - - Steptic Dentification cumulative Number of Systems 2.373 1,510.53 - - Steptic Dentification cumulative Number of Systems - - - - Resource Practices - - - - - - - Porest Harv				- 0.47	2.02		0.48 22
Urban Tree Planting cumulative Acres 138.68 146.00 14.28 . Urban Torest Planting cumulative Acres 124.92 989.19 87.01 67.224.20 Urban Nurrient Management annual Acres 14.60.42 122.92.24 498.56 - Urban Nurrient Management cumulative Feet 925.09 51.46 40.04 119.445.27 Storm Drain Ckanout annual Lbs of Sediment 0.27 0.00 0.00 0.14 Street Sweping annual Acres 0.61 0.16 0.02 134.25 Urban Streint Management cumulative Feet - - - - Septic Dentification cumulative Number of Systems 223.73 1,510.53 - - Septic Dentification cumulative Feet - - - - - Resource Practices annual Number of Systems 223.73 1,510.53 - - - <	Urban Forest Buffers					25.76	
Urban Nutrient Management annual Acres 14,620.42 12,029.24 498.56 - Urban Stream Restoration cumulative Feet 925.09 51.46 40.04 119,445.27 Storm Drain Cleanout annual Lbs of Sediment 0.27 0.00 0.00 0.14 Street Sweeping annual Acres 0.61 0.16 0.02 134.25 Urban Shoreline Management cumulative Feet - - - - Septic Connections cumulative Number of Systems 4.07 42.49 - - - Septic Connections cumulative Number of Systems 223.73 1,510.53 - - - Septic Denitrification cumulative Systems 2.0 -	Urban Tree Planting	cumulative	Acres	138.68	146.00	14.28	
Urban Stream Restoration cumulative Feet 925,09 51.46 40.04 119,445,27 Storm Drain Ckanout annual Lbs of Sediment 0.27 0.00 0.00 0.14 Storet Sweeping annual Acres 0.61 0.16 0.02 1134.25 Urban Shoreline Management cumulative Feet - - - Septic Connections cumulative Number of Systems 42.37 1,510.53 - - Septic Dentification cumulative Number of Systems 223.73 1,510.53 - - Septic Punping annual Acres - 0.00 0.00 - Resource Practices - - 0.00 0.00 - - Porest Harvesting Practices annual Acres - 0.00 0.00 - On-Tidal Agal Flow-way annual Acres - - - - Tidal Agal Flow-way annual Acres - -	Urban Forest Planting						67,224.20
Storm Drain Ckanout annual Lbs of Sediment 0.27 0.00 0.00 0.14 Street Sweeping annual Acres 0.61 0.16 0.02 134.25 Uban Shoreline Management cumulative Feet - <							119 445 27
Street Sweeping annual Acres 0.61 0.16 0.02 134.25 Urban Shoreline Management cumulative Feet - - - - - Septic Onnections cumulative Number of Systems 4.07 42.49 - - Septic Denitrification cumulative Number of Systems 223.73 1,510.53 - - Septic Punpting annual Number of Systems 228.73 1,510.53 - - Resource Practices - - 0.00 0.00 - Drick Gravel Road E&S cumulative Feet 9,298.50 - - 13,426.04 Non-Tidal Agla Flow-way annual Acres - 0.00 0.00 - Tidal Agla Flow-way annual Acres - - - - TOTAL 15,039.78 665.67 228,161.96 - -	Storm Drain Cleanout						
Septic Connections cumulative cumulative Number of Systems 4.07 42.49 - - Septic Denitrification cumulative Number of Systems 223.73 1,510.53 - <td>Street Sweeping</td> <td>annual</td> <td>Acres</td> <td></td> <td></td> <td></td> <td></td>	Street Sweeping	annual	Acres				
Septic Denitrification cumulative Number of Systems 223.73 1,510.53 - - Septic Pumping annual Number of Systems - - - - Septic Pumping annual Number of Systems - - - - Resource Practices - - 0.00 0.00 - Drt&Gravel Road E&S cumulative Feet 9,298.50 - - 13,426.04 Non-Tidal Agal Flow-way annual Acres - - - Tidal Agal Flow-way annual Acres - - -	Urban Shoreline Management				-	-	-
Septic Pumping annual Number of Systems - - - - Resource Practices Forest Harvesting Practices annual Acres - 0.00 0.00 Dirk&Gravel Road E&S cumulative Feet 9,298,50 - - 13,426.04 Non-Tidal Algal Flow-way annual Acres - - - - Tidal Algal Flow-way annual Acres - - - - TOTAL 15,039.78 665.67 228,161.96							-
Resource Practices out starsesting Practices out, Barvesting Practices							
Forest Harvesting Practices annual Acres - 0.00 0.00 - Dirt&Gravel Road E&S cumulative Feet 9,298.50 - - 13,426.04 Non-Tidal Aglal Flow-way annual Acres - - - 13,426.04 Tidal Aglal Flow-way annual Acres - - - - Tidal Aglal Flow-way annual Acres - - - -	Resource Practices						
Non-Tidal Algal Flow-way annual Acres - - - Tidal Algal Flow-way annual Acres - - - TOTAL 15,039.78 665.67 228,161.96	Forest Harvesting Practices				0.00	0.00	
Tidal Algal Flow-way annual Acres - - TOTAL 15,039,78 665.67 228,161.96				9,298.50		-	13,426.04
TOTAL 15,039.78 665.67 228,161.96	Tidal Algal Flow-way			-	-		-
					15,039.78	665.67	228,161.96

MD-020600030902 - Middle Gywnns Falls (Dead Run)					LBS Reduced	
Permit Approval 2014/Baltimore City	Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices						
Nutrient Management Core Nitrogen	annual	Acres	88.42			_
Rate Nitrogen	annual	Acres	36.81	-	-	-
Placement Nitrogen	annual	Acres	3.23	-		-
Timing Nitrogen	annual	Acres	3.66	-	-	-
Core Phosphorus	annual	Acres	88.42	-		-
Rate Phosphorus	annual	Acres	0.61	-	-	-
Placement Phosphorus	annual	Acres	2.35	-		
Timing Phosphorus TOT	annual	Acres	-	-	-	-
Tillage Management	AL					
Conservation	annual	Acres	12.89			
Continuous High Residue	annual	Acres	51.00	-		-
Low Residue	annual	Acres	-	-	-	-
TOT	AL			-		-
Cover Crop						
Traditional	annual	Acres	14.03	-		
Commodity	annual	Acres	10.11	-	-	-
Pasture Management TOT	AL			-		
Alternative Watering	cumulative	Acres	9.24			
Prescribed Grazing	cumulative		1.24	-		-
Horse Pasture Management	cumulative	Acres	0.27	-		
Forest Buffers on Fenced Pasture Corridor		Acres in Buffers	0.05	-	-	-
Grass Buffers on Fenced Pasture Corridor		Acres in Buffers				
TOT Forest Buffers		Acres in Buffers	5.91			-
Wetland Restoration	cumulative		0.22	-		-
Wetland Creation	cumulative		0.22		-	
Wetland Enhancement and Rehabilitation	cumulative	Acres	-	-	-	-
Land Retirement to Open Space	cumulative	Acres	0.44		-	-
Land Retirement to Pasture	cumulative		1.01	-	-	-
Grass Buffers Tree Planting	cumulative cumulative	Acres in Buffers	0.74 0.10	-		- 3.54
Alternative Crops	cumulative		0.10	-	-	- 5.54
Soil and Water Conservation Plan	cumulative		63.90	-		
Crop Irrigation Management	cumulative	Acres	-	-	-	-
Manure Incorporation	annual	Acres	0.51	-	-	-
Capture & Reuse	cumulative		-	-	-	-
Non Urban Stream Restoration Non Urban Shoreline Management	cumulative cumulative		1,528.78	97.08	85.69	226,631.87
TOT		reet		97.08	85.69	226,635.42
Agricultural Drainage Management				511.00	05.07	220,000.12
Denitrifying Ditch Bioreactors	cumulative	Acres	0.13	-	-	-
Saturated Buffer	cumulative		0.13	-	-	-
Sorbing Materials in Ag Ditches	cumulative		0.13	72.27	5.97	426.88
Water Control Structures TOT	cumulative	Acres	0.13	- 72.27	- 5.97	426.88
Animal Waste Management Systems	nit.			12.21	5.71	420.00
Broiler Mortality Freezers	annual	Dry Tons (Carcasses)	-	-		-
Barnyard Runoff Control & Loafing Lot Management	cumulative		0.11	-	-	-
Ag Stormwater Management		Acres Treated	-	-		
Manure Transport	annual annual	Dry Tons Animal Units	0.51	-		-
Dairy Precision Feeding Ammonia Emission Reductions (Litter Amendments)	annual	Animal Units				
Ammonia Emission Reductions (Biofilters)		Animal Units				
Ammonia Emission Reductions (Lagoon Covers)		Animal Units	-	-	-	-
TOT	AL					
Urban/Suburban Practices						
Stormwater Management Runoff Reduction Performance Standard	cumulative	Acres Treated	209.79	553.68	62.17	100,858.22
Storm Water Treatment Performance Standard		Acres Treated	940.84	1,449.31	219.47	421,850.22
Wet Ponds & Wetlands		Acres Treated	165.02	242.59	53.75	116,077.82
Floating Treatment Wetlands		Acres Treated (Wet Pond)	-	-	-	-
Dry Ponds		Acres Treated	1,461.12	535.90	105.04	171,292.05
Extended Dry Ponds Infiltration Practices		Acres Treated Acres Treated	1,372.15 31.98	2,017.09 193.98	197.27 19.66	965,181.01 35,616.92
Filtering Practices		Acres Treated	0.28	0.81	0.12	258.34
BioRetention		Acres Treated	0.74	3.18	0.37	652.90
BioSwale		Acres Treated	3.02	15.55	1.64	2,834.91
Permeable Pavement		Acres Treated	4.67	16.03	1.69	3,834.15
Vegetated Open Channel Urban Filter Strips		Acres Treated Acres Treated			-	-
Grey Infrastructure (IDDE)	annual	Acres Treated Acres Treated		-		
Impervious Disconnection		Acres Treated	-	-	-	-
Conservation Landscaping Practices	cumulative	Acres Treated	-		-	-
TOT				5,028.12	661.18	1,818,456.54
Erosion and Sediment Control	annual	Acres	-	-		-
Impervious Surface Reduction Urban Forest Buffers	cumulative	Acres Acres in Buffers	0.01 0.47	0.03 2.77	- 0.56	12.16 397.32
Urban Forest Burrers Urban Tree Planting	cumulative		201.82	2.77	0.56	
Urban Forest Planting	cumulative		13.90	60.45	12.04	4,878.90
Urban Nutrient Management	annual	Acres	11,211.53	-	-	-
Urban Stream Restoration	cumulative		2,486.71	157.91	139.38	368,637.62
Storm Drain Cleanout	annual	Lbs of Sediment	6,339.22	14.52	3.11	3,789.33
Street Sweeping Lirban Shareline Management	annual	Acres	1,650.14	261.12 0.09	55.75 0.07	249,829.94
Urban Shoreline Management Septic Connections	cumulative	Number of Systems	43.10	298.80	-	179.66
Septic Connections Septic Denitrification		Number of Systems	5.33	298.80	-	
Septic Pumping	annual	Number of Systems	-	-	-	-
Resource Practices				-	-	-
Forest Harvesting Practices	annual	Acres	2.36	6.50	-	336.58
Dirt&Gravel Road E&S	cumulative		1.60	-		2.65
Non-Tidal Algal Flow-way	annual annual	Acres Acres	-	-	-	-
Tidal Algal Flow-way						
Tidal Algal Flow-way		10105		826.62	210.90	628 064 17
Tidal Algal Flow-way TOT GRAND TOTAL				826.63 6,024.10	210.90 963.73	628,064.17 2,673,583.00

MD-0206000203 - Sassafras River						LBS Reduced	
Permit Approval 2010/Cecil & Kent Co.		Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices Nutrient Management							
Core Nitrogen		annual	Acres	24,364.38	30,552.21		
Rate Nitrogen		annual	Acres	12,936.73	5,876.63		
Placement Nitrogen		annual	Acres	2,113.26	2,100.40		
Timing Nitrogen		annual	Acres	3,084.60	3,049.49	- 3,269.37	-
Core Phosphorus Rate Phosphorus		annual annual	Acres	24,364.38 468.45		24.88	
Placement Phosphorus		annual	Acres	1,624.95		42.63	-
Timing Phosphorus	TOTAL	annual	Acres	-	41,578.73	- 3,336.88	
Tillage Management	TOTAL						
Conservation		annual	Acres	7,835.54	7,775.35	1,361.77	2,241,886.69
Continuous High Residue		annual	Acres	13,170.24	32,453.89	3,109.16	7,260,769.02
Low Residue	TOTAL	annual	Acres		40,229.24	4,470.92	9,502,655.71
Cover Crop	10111				10,227.21	1,170.72	7,502,055.11
Traditional		annual	Acres	12,000.89	53,248.97	98.45	41,515.15
Commodity		annual	Acres	3,436.48	6,875.29	-	-
Pasture Management	TOTAL				60,124.26	98.45	41,515.15
Alternative Watering		cumulative	Acres	176.67	83.19	24.52	90.23
Prescribed Grazing		cumulative		83.80	72.82	34.06	133.32
Horse Pasture Management		cumulative		2.29		0.77	4.80
Forest Buffers on Fenced Pasture Corridor Grass Buffers on Fenced Pasture Corridor			Acres in Buffers Acres in Buffers	8.70 2.52	852.19 143.75	228.18 37.20	121,606.07 21,938.61
Grass Samers on Fenceu Fasture Cornuor	TOTAL	summative	. area in Duritis	2.32	1,151.96	324.73	143,773.03
Forest Buffers		cumulative	Acres in Buffers	140.17	8,714.26	136.73	184,498.11
Wetland Restoration		cumulative		88.26	3,750.18	100.77	101,316.99
Wetland Creation		cumulative		60.15	1,303.49	40.03	39,354.85
Wetland Enhancement and Rehabilitation Land Retirement to Open Space		cumulative cumulative		0.00 833.98	0.01 13,077.35	0.00 54.29	0.12 521,287.42
Land Retirement to Pasture		cumulative		50.40	790.30	3.28	31,502.76
Grass Buffers			Acres in Buffers	580.49	27,771.88	235.01	763,947.07
Tree Planting		cumulative		99.18	1,836.75	48.62	59,030.44
Alternative Crops Soil and Water Conservation Plan		cumulative cumulative		8.42 18,193.44	160.84 23,324.75	1,316.36	5,649.89 2,409,189.80
Crop Irrigation Management		cumulative		-	-	-	-
Manure Incorporation		annual	Acres	2,550.26	4,380.40	239.39	-
Capture & Reuse		annual	Acres	-	-	-	- 85,419.66
Non Urban Stream Restoration Non Urban Shoreline Management		cumulative cumulative		793.06	52.32	43.43	85,419.66
Non Croan Shoreme Management	TOTAL		1000		85,162.53	2,217.92	4,201,197.11
Agricultural Drainage Management							
Denitrifying Ditch Bioreactors		cumulative		362.34	1,453.25		-
Saturated Buffer Sorbing Materials in Ag Ditches		cumulative cumulative		362.34 362.34	19,029.07	8.93 78.76	298,723.19
Water Control Structures		cumulative		362.34	2,004.34	-	
	TOTAL				22,486.65	87.70	298,723.19
Animal Waste Management Systems		1	D T (C)	207.62	(152.57)	15.49	
Broiler Mortality Freezers Barnyard Runoff Control & Loafing Lot Manageme	ont	annual cumulative	Dry Tons (Carcasses)	207.62 21.30	(152.57) 2,759.68	15.48 294.15	33,740.07
Ag Stormwater Management			Acres Treated	12.49	3,087.46	550.03	37,599.90
Manure Transport		annual	Dry Tons	4,783.10		1,891.75	-
Dairy Precision Feeding		annual	Animal Units	450.59	981.99	159.88	30,408.67
Ammonia Emission Reductions (Litter Amendments Ammonia Emission Reductions (Biofilters)	5)	annual	Animal Units Animal Units	-	-		
Ammonia Emission Reductions (Enomers)			Animal Units	-	-	-	-
	TOTAL				6,676.57	2,911.29	101,748.64
Urban/Suburban Practices Stormwater Management							
Runoff Reduction Performance Standard		cumulative	Acres Treated	6.01	29.50	4.18	2,792.25
Storm Water Treatment Performance Standard			Acres Treated	4.73	13.53	2.58	2,042.79
Wet Ponds & Wetlands		cumulative	Acres Treated				
Floating Treatment Wetlands		cumulative	Acres Treated (Wet Pond)				
Dry Ponds			Acres Treated	3.31	1.41	0.35	206.04
Extended Dry Ponds			Acres Treated	1.23	2.09	0.26	458.52
Infiltration Practices			Acres Treated	18.57	130.10	16.66	10,979.17
Filtering Practices BioRetention			Acres Treated Acres Treated	0.12 0.52	0.41 2.57	0.08 0.37	59.86 241.62
BioSwale			Acres Treated	2.92	17.39	2.32	1,456.13
Permeable Pavement		cumulative	Acres Treated	0.01	0.04	0.00	3.88
Vegetated Open Channel			Acres Treated	-		-	-
Urban Filter Strips Grey Infrastructure (IDDE)		cumulative	Acres Treated Acres Treated				
Impervious Disconnection			Acres Treated Acres Treated	-	-	-	-
Conservation Landscaping Practices	TOTAL		Acres Treated	-	-	-	-
Erosion and Sediment Control	TOTAL	annual	Acres		197.02	26.81	18,240.27
Impervious Surface Reduction		cumulative		-	-	-	-
Urban Forest Buffers			Acres in Buffers	2.85	23.51	4.65	1,633.82
Urban Tree Planting Urban Forest Planting		cumulative cumulative		0.61	0.57 7.91	0.11 1.43	17.19 393.20
Urban Nutrient Management		annual	Acres	3,752.64	2,358.34	187.13	-
Urban Stream Restoration		cumulative	Feet	-	-	-	-
Storm Drain Cleanout		annual	Lbs of Sediment	-	-	-	-
Street Sweeping		annual cumulative	Acres Feet	- 11.99	- 1.04	0.73	- 1,966.87
Urban Shoreline Management			Number of Systems	0.73	6.65		1,900.87
				140.18	830.97	-	-
Septic Connections Septic Denitrification		cumulative	Number of Systems	110.10			
Septic Connections Septic Denitrification Septic Pumping			Number of Systems Number of Systems	-			
Septic Connections Septic Denitrification Septic Pumping Resource Practices		cumulative annual	Number of Systems	-	-		-
Septic Connections Septic Dentrification Septic Pumping <i>Resource Practices</i> Forest Harvesting Practices		cumulative annual annual	Number of Systems Acres	-		-	
Septic Connections Septic Denitrification Septic Pumping Resource Practices Forest Harvesting Practices DirtkGravel Road E&S		cumulative annual	Number of Systems Acres	-	-		
Urban Shoreline Management Septic Connections Septic Denirfication Septic Pumping Resource Practices Forest Harvesting Practices Dirt&Gravel Road E&S Non-Tidal Agal Flow-way Tidal Algal Flow-way		cumulative annual annual cumulative annual annual	Number of Systems Acres Feet	-		-	-
Septic Connections Septic Denirtification Septic Pumping Resource Practices Forest Harvesting Practices Dirt&Gravel Road E&S Non-Tidal Algal Flow-way	TOTAL	cumulative annual annual cumulative annual annual	Number of Systems Acres Feet Acres	-	-	- - - 194.06	

Permit Approval 2010/Baltimore City	D			NIL	LBS Reduced	6 H
	Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices Nutrient Management						
Core Nitrogen	annual	Acres	243.30			
Rate Nitrogen	annual	Acres	104.21	-		-
Placement Nitrogen	annual	Acres	9.16	-		
Timing Nitrogen	annual	Acres	10.36	-	-	-
Core Phosphorus	annual	Acres	243.30	-	-	-
Rate Phosphorus	annual	Acres	1.74	-	-	-
Placement Phosphorus	annual	Acres	6.67			
Timing Phosphorus	annual	Acres	-	-	-	-
TOTA	L					
Tillage Management						
Conservation	annual	Acres	38.70			
Continuous High Residue	annual	Acres	153.17	-		
Low Residue	annual	Acres				
TOTA	L					
Cover Crop	1		42.12			
Traditional	annual	Acres	42.12 30.38			
Commodity TOTA	annual I	Acres	30.38	-		
Pasture Management	<u> </u>			-	-	
Alternative Watering	cumulative	Acres	20.59			
Prescribed Grazing	cumulative		2.76	-		-
Horse Pasture Management	cumulative		0.59	-	-	-
Forest Buffers on Fenced Pasture Corridor	cumulative	Acres in Buffers	0.11	-	-	-
Grass Buffers on Fenced Pasture Corridor	cumulative	Acres in Buffers	-	-	-	-
TOTA				-	-	-
Forest Buffers		Acres in Buffers	6.85	-		
Wetland Restoration	cumulative		0.48	-	-	-
Wetland Creation	cumulative		0.09	-		-
Wetland Enhancement and Rehabilitation	cumulative cumulative		-	-		
Land Retirement to Pasture	cumulative		1.31			
Land Retirement to Pasture Grass Buffers		Acres in Buffers	3.02	-	-	
Tree Planting	cumulative		0.27		0.01	9.48
Alternative Crops	cumulative		-	-	-	-
Soil and Water Conservation Plan	cumulative		170.92			-
Crop Irrigation Management	cumulative		-	-	-	-
Manure Incorporation	annual	Acres	1.53	-	-	-
Capture & Reuse	annual	Acres				
Non Urban Stream Restoration	cumulative		1,002.41	63.65	56.19	148,600.58
Non Urban Shoreline Management	cumulative	Feet		-		-
TOTA	L			63.65	56.20	148,610.06
Agricultural Drainage Management	1.0		0.27			
Denitrifying Ditch Bioreactors	cumulative		0.37			
Saturated Buffer Sorbing Materials in Ag Ditches	cumulative		0.37 0.37	199.06	16.44	1,175.74
Water Control Structures	cumulative		0.37	199.00	10.44	1,1/5./4
TOTA				199.06	16.44	1,175.74
Animal Waste Management Systems						
Broiler Mortality Freezers	annual	Dry Tons (Carcasses)	-	-	-	-
Barnyard Runoff Control & Loafing Lot Management	cumulative		0.30	-		-
Ag Stormwater Management		Acres Treated	-			-
Manure Transport	annual	Dry Tons	1.44	-	-	-
Dairy Precision Feeding	annual annual	Animal Units Animal Units				-
Ammonia Emission Reductions (Litter Amendments)		Animal Units		-	-	-
Ammonia Emission Reductions (Biofilters) Ammonia Emission Reductions (Lagoon Covers)		Animal Units				
TOTA		Annai Onits		-		
Urban/Suburban Practices	-					
Stormwater Management						
Runoff Reduction Performance Standard	cumulative	Acres Treated	122.19	322.49	36.21	58,743.99
Storm Water Treatment Performance Standard	cumulative	Acres Treated	1,360.49	2,095.75	317.36	610,008.36
	cumulative	Acres Treated	0.73	1.08	0.24	516.01
Wet Ponds & Wetlands				1.00	0.21	510.01
				1.00	0.21	510.01
Floating Treatment Wetlands		Acres Treated (Wet Pond)		-		-
Floating Treatment Wetlands Dry Ponds	cumulative	Acres Treated	328.64	120.54	23.63	- 38,527.76
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds	cumulative cumulative	Acres Treated Acres Treated	582.90	120.54 856.87	23.63 83.80	38,527.76 410,014.62
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices	cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated	582.90 0.12	120.54 856.87 0.70	23.63 83.80 0.07	38,527.76 410,014.62 128.31
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices	cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated Acres Treated	582.90 0.12 0.11	120.54 856.87 0.70 0.31	23.63 83.80 0.07 0.05	38,527.76 410,014.62 128.31 100.13
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention	cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	582.90 0.12 0.11 0.00	120.54 856.87 0.70 0.31 0.02	23.63 83.80 0.07 0.05 0.00	38,527.76 410,014.62 128.31 100.13 3.46
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale	cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated Acres Treated	582.90 0.12 0.11	120.54 856.87 0.70 0.31	23.63 83.80 0.07 0.05	38,527.76 410,014.62 128.31 100.13 3.46 282.84
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement	cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30	120.54 856.87 0.70 0.31 0.02 1.55	23.63 83.80 0.07 0.05 0.00 0.16	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel	cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50	120.54 856.87 0.70 0.31 0.02 1.55 1.70	23.63 83.80 0.07 0.05 0.00 0.16 0.18	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE)	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50	120.54 856.87 0.70 0.31 0.02 1.55 1.70	23.63 83.80 0.07 0.05 0.00 0.16 0.18	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50	120.54 856.87 0.70 0.31 0.02 1.55 1.70	23.63 83.80 0.07 0.05 0.00 0.16 0.18	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 -	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT/A	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50 - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - 3,401.01	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control	cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 0.50 - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 -	38,527.76 410,014.62 128.31 100.13 3.46 282.48 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - 3,401.01	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated	582.90 0.12 0.11 0.00 0.30 - - - - - - - - - - - - - - - - 0.41	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Grey Infrastructure (IDDE) Conservation Landscaping Practices TOT A Torsion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Acres Treated Acres Treated Ac	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410.014.02 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Tree Planting	cumulative cumulative	Acres Treated Acres Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - 0.41 68.92 5.35	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - 3,401.01	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410.014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Torest Planting Urban Torest Planting Urban Torest Planting	cumulative cumulative	Acres Treated Acres Acres Acres Acres Acres Acres Acres Acres Ac	582.90 0.12 0.11 0.00 0.30 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - 461.70 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Tota Tota Urban Torest Buffers Urban Terse Hunting Urban Forest Planting Urban Forest Planting Urban Kestoration	cumulative cumulative	Acres Treated Acres Acres Acres Acres Acres Acres Acres Acres Ac	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - 0.41 68.92 5.35	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70	38,527.76 410.014.62 128.31 100.13 3.44 407.15
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Forest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout	cumulative cumulative	Acres Treated Acres Acres Acres Acres Acres Acres Freate Acres Feet	582.90 0.12 0.11 0.00 0.30 0.50 - - - - 0.41 68.92 5.35 4,604.63 1,430.76	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - 461.70 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.46 282.84 407.15
Floating Treatment Wetlands Dry Ponds Dry Ponds Extended Dry Ponds Infiltation Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT A Erosion and Sediment Control Impervious Surface Reduction Urban Torest Burling Urban Forest Planting Urban Torest Planting Urban Stream Restoration Storm Drain Cleanout Store Surging	cumulative cumulative	Acres Treated Acres Acres Ac	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.46 407.15 1,118,732.64 1,118,732.64 348.47 1,878.94 241,749.19 882.68
Floating Treatment Wetlands Dry Fonds Dry Fonds Extended Dry Ponds Infiltation Practices BioSwale Permeable Pavement Vegatated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Control Impervious Urban Forest Buffers Urban Forest Planting Urban Forest Planting Urban Street Sectoration Storm Drain Cleanout Street Sweeping Urban Street Sweeping	cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual annual annual cumulative	Acres Treated Acres Acres Ac	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - 461.70 - - - - 4.64 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.44 407.15 1,118,732.64 1,118,732.64 348.47 1,878.94 241,749.19 827.68
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltation Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT A Troop Planting Urban Torest Buffers Urban Torest Planting Urban Stream Restoration Storm Drain Cleanout Stored Shoreline Management Septic Connections Septic Dentification	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative cumu	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - 461.70 - - - - 4.64 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.46 407.15 1,118,732.64 1,118,732.64 348.47 1,878.94 241,749.19 882.68
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltation Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT A Troop Planting Urban Torest Buffers Urban Torest Planting Urban Stream Restoration Storm Drain Cleanout Stored Shoreline Management Septic Connections Septic Dentification	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative cumu	Acres Treated Acres Acres Acres Acres Bauffers Acres A	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.46 407.15 1,118,732.64 1,118,732.64 348.47 1,878.94 241,749.19 882.68
Floating Treatment Wetlands Dry Fonds Extended Dry Ponds Infiltation Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sedment Control Impervious Surface Reduction Urban Forst Buffers Urban Tree Planting Urban Nutrient Management Urban Street Bung Urban Street Bung Urban Street Bung Street Sweeping Urban Street Storeping Septic Denitrification Septic Connections Septic Denitrification	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual annual cumulative annual cumulative cumulative annual cumulative cumul	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410.014.62 128.31 100.13 3.44 407.15 1,118,732.64 1,118,732.64 348.47 1,878.94 241,749.19 827.68 128,704.24
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiliration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Buffers Urban Tree Planting Urban Nutrient Management Urban Street Planting Urban Street Planting Urban Street Meangement Store Drain Cleanout Street Sweeping Urban Street Meangement Septic Connection Septic Plantification Septic Plantification Septic Puncification Septic Puncification Septic Puncing Practices	cumulative annual annual cumulative annual cumulative annual cumulative cumulative annual cumulative cumulative annual cumulative cumulative annual cumulative cumulative annual cumulative cumulative annual cumulative cumulative cumulative annual cumulative cumulative cumulative annual cumulative cumulative annual annual annual cumulative annual annual cumulative annual annual cumulative annual annual annual cumulative annual annua annual annua a	Acres Treated Acres Acre	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410,014.02 128.31 100.13 3.46 282.84 407.15 1,118,732.64 1,118,732.64 1,118,732.64 1,118,732.64 1,118,732.64 1,118,732.68 128,704.24
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Store Management Septic Denirtification Septic Denirtification Septic Denirtification Septic Denirtification Septic Practices Forest Harvesting Practices Dirt&Gravel Reduction Dirt&Gravel Reduction Dirt&Gravel Reduction Dirts Septic Omnections Septic Denirtification Septic Practices DirtsGravel Road E&S	cumulative cumulative	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15 - - - - 1,118,732.64 - - - - - - - - - - - - - - - - - - -
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT / Trosion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Forest Planting Urban Stream Restoration Storm Drain Cleanout Street Sweeping Urban Shoreline Management Urban Shoreline Management Septic Connecticions Septic Denterification Septic Pumping Ressource Practices Forest Harvesting Practices Drt&Ciravel Road E&S Non-Tidal Alga Flow-way	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative annual cumulative annual cumulative annual cumulative annual cumulative annual cumulative cumulative annual cumulative annual cumulative cumulative annual cumulative annual	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15 - - - - 1,118,732.64 - - - - - - - - - - - - - - - - - - -
Floating Treatment Wetlands Dry Fonds Dry Fonds Extended Dry Ponds Infiltation Practices BioRetention BioSwale Permeable Pavement Vegatated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sedment Control Impervious Surface Reduction Urban Forset Buffers Urban Tree Planting Urban Street Buffers Urban Forset Planting Urban Street Buffers Urban Street Buffers Steptic Denitrification Septic Connections Septic Connections Septic Denitrification Septic Connections Septic Denitrification Septic Practices Dirt&Gravel Road E&S Non-Tidal Algal Flow-way Tidal Algal Flow-way	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410,014.62 128.31 100.13 3.46 282.84 407.15 - - - - - - - - - - - - - - - - - - -
Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOTA Erosion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Nutrient Management Urban Stream Restoration Stored Disconnection Stored Management Steptic Connections Septic Denirtification Septic Denirtification Septic Practices Forest Harvesting Practices DirtkGravel Road E&S	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual	Acres Treated Acres	582.90 0.12 0.11 0.00 0.30 0.50 - - - - - - - - - - - - - - - - - - -	120.54 856.87 0.70 0.31 0.02 1.55 1.70 - - - - - - - - - - - - - - - - - - -	23.63 83.80 0.07 0.05 0.00 0.16 0.18 - - - - - - - - - - - - - - - - - - -	38,527.76 410,014,62 128.31 100,13 3,46 282.84 407.15 - - - 1,118,732.64 - - - - - - - - - - - - - - - - - - -

MD-020600030702 - Upper Back River (Redhouse Cro		1			LBS Reduced	
Permit Approval 2009/Baltimore City	Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices						
Nutrient Management			4.15			
Core Nitrogen Rata Nitrogen	annual annual	Acres Acres	4.15 1.45			
Rate Nitrogen Placement Nitrogen	annual	Acres	0.10			
Timing Nitrogen	annual	Acres	0.12		-	
Core Phosphorus	annual	Acres	4.15			
Rate Phosphorus	annual	Acres	0.03			-
Placement Phosphorus	annual	Acres	0.09	-	-	-
Timing Phosphorus	annual	Acres	-	-		-
TOT	AL			-	-	-
Tillage Management						
Conservation	annual	Acres	0.66			
Continuous High Residue	annual	Acres	2.59	-	-	-
Low Residue	annual	Acres				
TOT	AL			-	-	-
Cover Crop Traditional	annual	Acres	0.72			
Commodity	annual	Acres	0.72			
TOT		10.05	0.01	-		-
Pasture Management						
Alternative Watering	cumulative	Acres	0.54	-	-	-
Prescribed Grazing	cumulative		0.08	-	-	-
Horse Pasture Management	cumulative		0.02			
Forest Buffers on Fenced Pasture Corridor Grass Buffers on Fenced Pasture Corridor		Acres in Buffers Acres in Buffers	-	-		-
TOT		Acres in Bullers				-
Forest Buffers		Acres in Buffers	41.23	-		
Wetland Restoration	cumulative		0.01	-		-
Wetland Creation	cumulative		-	-	-	-
Wetland Enhancement and Rehabilitation	cumulative		-	-	-	-
Land Retirement to Open Space	cumulative		0.02	-	-	-
Land Retirement to Pasture	cumulative		0.05	-	-	-
Grass Buffers Tree Planting	cumulative	Acres in Buffers	0.04 0.02	-		0.61
Alternative Crops	cumulative		0.02	-		0.01
Soil and Water Conservation Plan	cumulative		3.82	-		-
Crop Irrigation Management	cumulative		-	-	-	
Manure Incorporation	annual	Acres	0.03	-	-	-
Capture & Reuse	annual	Acres	0.01			
Non Urban Stream Restoration	cumulative		594.56	37.75	33.33	88,139.80
Non Urban Shoreline Management TOT	cumulative	reet	•	37.75	33.33	88,140.41
Agricultural Drainage Management	AL			37.73	33.33	88,140.41
Denitrifying Ditch Bioreactors	cumulative	Acres	0.01			
Saturated Buffer	cumulative		0.01	-		
Sorbing Materials in Ag Ditches	cumulative	Acres	0.01	5.45	0.45	32.19
Water Control Structures	cumulative	Acres	0.01	-	-	-
TOT	AL			5.45	0.45	32.19
Animal Waste Management Systems		Dm: Tana (Canadara)				
Broiler Mortality Freezers Barnyard Runoff Control & Loafing Lot Management	annual cumulative	Dry Tons (Carcasses)	0.01			
Ag Stormwater Management		Acres Treated	-			
Manure Transport	annual	Dry Tons	0.04	-	-	-
Dairy Precision Feeding	annual	Animal Units				
Ammonia Emission Reductions (Litter Amendments)	annual	Animal Units				-
				-	-	
	cumulative	Animal Units	-			
Ammonia Emission Reductions (Lagoon Covers)	cumulative cumulative	Animal Units Animal Units	-	-		-
Ammonia Emission Reductions (Lagoon Covers) TOT	cumulative cumulative		-	-	-	-
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices	cumulative cumulative		-	-	-	
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management	cumulative cumulative AL	Animal Units	-	85.39	9.59	
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard	cumulative cumulative AL cumulative cumulative	Animal Units Acres Treated Acres Treated	- 32.35 163.77	85.39 252.28	9.59 38.20	- - - 15,554.75 73,431.71
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard	cumulative cumulative AL cumulative cumulative	Animal Units Acres Treated	32.35			
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands	cumulative cumulative AL cumulative cumulative cumulative	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated	- 32.35 163.77	252.28	38.20	73,431.71
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard	cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond)	- 32.35 163.77 62.25	252.28 91.51	38.20 20.28	73,431.71 43,789.08
Ammonia Emission Reductions (Lagoon Covers) TOT Trban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated	32.35 163.77 62.25 32.05	252.28 91.51 -	38.20 20.28 - 2.30	73,431.71 43,789.08 - 3,757.44
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storn Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Extended Dry Ponds	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond)	- 32.35 163.77 62.25	252.28 91.51	38.20 20.28	73,431.71 43,789.08 - 3,757.44
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41	252.28 91.51 - 11.76 128.02 0.12 1.21	38.20 20.28 - 2.30 12.52 0.01 0.18	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05	38.20 20.28 2.30 12.52 0.01 0.18 0.01	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetontion BioSwale	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement	cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated Acr	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.41 0.01 0.05 0.00	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28 0.01	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Ploating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28 0.01 -	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 -	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storn Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infistruture (IDDE)	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annulative	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.41 0.01 0.05 0.00	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28 0.01	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28 0.01 -	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 -	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Treatment Wetlands Floating Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection	cumulative cumulative dumulative cumulative	Animal Units Acres Treated Acr	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00	252.28 91.51 - 11.76 128.02 0.12 1.21 0.05 0.28 0.01 -	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 -	73,431.71 43,789.08 3,757.44 61,260.02 22.93 387.13 10.38 50.75 1.29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Ploating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filering Practices BioRetention BioSwale Permeable Payement Vegetated Open Channel Urban Filer Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TO1 Erosion and Sediment Control	cumulative AL cumulative annual cumulative annual cumulative annual cumulative cumulative cumulative cumulative annual cumulative cu	Animal Units Acres Treated Acr	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00 - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - 570.64	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29 - - - - - - - - - - - - - - - - - - -
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Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Proy Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscapting Practices Erosion and Sediment Control Impervious Surface Reduction Urban Forst Buffers Urban Tree Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout	cumulative cumulative AL cumulative annual cumulative annual cumulative annual cumulative cumulative annual cumulative annual cumulative cumulative annual	Animal Units Acres Treated Acr	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00 - - - - - - - - - - - - - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - - - - - - - - - - - - - - - - -	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29
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Ammonia Emission Reductions (Lagoon Covers) TOT Trban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storn Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infistrative (IDDE) Impervious Disconnection Conservation Landscaping Practices Urban Torest Buffers Urban Torest Planting Urban Nurient Management Urban Storen Restoration Storm Drain Cleanout Street Sweeping Urban Street Management Urban Storeline Management	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acr	32.35 163.77 62.25 87.09 0.02 0.41 0.01 0.05 0.00 - - - - - - - - - - - - - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - 570.64 - - 570.64 - - - - - - - - - - - - - - - - - - -	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29 - - - - - - - - - - - - - - - - - - -
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filer Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TO1 Erosion and Sediment Control Impervious Surface Reduction Urban Forest Planting Urban Torest Planting Urban Nitre Management Urban Stream Restoration Storem Davin Cleanout Stream Storealion Storead Storeading Storead Storeading Storead Storeading Storead Storeading Storead Storeading Storeading Storeadin	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acr	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00 - - - - - - - - - - - - - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - 570.64 - - - 570.64 - - - - - - - - - - - - - - - - - - -	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infinstructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TO1 Impervious Surface Reduction Urban Forest Planting Urban Streas Restoration Storm Drain Cleanout Store Storejag Urban Shoreline Management Urban Storein Restoration Store Storejag Urban Shoreline Management Septic Connections Septic Dentification	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated (Wet Pond) Acres Treated Acres Tre	32.35 163.77 62.25 	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - 570.64 - - 570.64 - - - - - - - - - - - - - - - - - - -	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29 - - - - - - - - - - - - - - - - - - -
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Ammonia Emission Reductions (Lagoon Covers) TOT Totan/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dray Ponds Extended Dry Ponds Infiltration Practices Fibering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Fiber Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forest Bunting Urban Forest Planting Urban Shoreline Management Urban Storeline Management Septic Connections Septic Pumping Resource Practices Forest Harvesting Practices	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated (Wet Pond) Acres Treated Acres Acres Ibuffers Acres Acres Acres Acres Acres Number of Systems Number of Systems Acres Acre	- 32.35 163.77 62.25 - - - - - - - - - - - - - - - - - - -	252.28 91.51 	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08 3,757,44 61,260,02 22,93 387,13 10,38 50,75 1,29 - - - - - - - - - - - - - - - - - - -
UrbanSuburban Practices Stormwater Management Runoff Reduction Performance Standard Wet Ponds & Wetlands Floating Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infirstructure (IDDE) Impervious Disconnection Conservation Landscaping Practices	cumulative cumulative AL cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative cumulative annual cumulative annual cumulative cumul	Animal Units Acres Treated Acres Treated Acres Treated Acres Treated (Wet Pond) Acres Treated (Wet Pond) Acres Treated Acres Acres Ibuffers Acres Acres Acres Acres Acres Number of Systems Number of Systems Acres Acre	32.35 163.77 62.25 32.05 87.09 0.02 0.41 0.01 0.05 0.00 - - - - - - - - - - - - - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - 570.64 - - - 570.64 - - - - - - - - - - - - - - - - - - -	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - 83.12 - - - - - - - - - - - - - - - - - - -	73,431,71 43,789,08
Ammonia Emission Reductions (Lagoon Covers) TO1 Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TO1 Erosion and Sediment Control Impervious Surface Reduction Urban Forset Planting Urban Tore Planting Urban Nerset Suffers Stream Restoration Storm Drain Cleanout Stream Restoration Storm Drain Cleanout Stream Restoration Storm Drain Cleanout Erosion Suffers Denirtification Septic Denirtification Septic Denirtification Septic Super Practices Forset Harvesting Practices DirtsGraver Reduces DirtsGraverer Reduces DirtsGraver Reduces Di	cumulative cumulative	Animal Units Acres Treated Acr	- 32.35 163.77 62.25 - - - - - - - - - - - - - - - - - - -	252.28 91.51 	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08
Ammonia Emission Reductions (Lagoon Covers) TO1 Trban/Suburban Practices To1 Trban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Ploating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TO1 Impervious Surface Reduction Urban Treet Planting Urban Storet Planting Urban Storet Management Urban Storet Management Storet Swerging Urban Shoreline Management Septic Connections Septic Pumping Resource Practices Forest Harvesting Practices Dra&Gravel Road E&S Non-Tidal Algal Flow-way	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acr	- 32.35 163.77 62.25 - - - - - - - - - - - - - - - - - - -	252.28 91.51 11.76 128.02 0.12 1.21 0.05 0.28 0.01 - - - - - - - - - - - - - - - - - - -	38.20 20.28 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08
Ammonia Emission Reductions (Lagoon Covers) TOT Urban/Suburban Practices Stormwater Management Runoff Reduction Performance Standard Storm Water Treatment Performance Standard Wet Ponds & Wetlands Floating Treatment Wetlands Dry Ponds Extended Dry Ponds Infiltration Practices Filtering Practices BioRetention BioSwale Permeable Pavement Vegetated Open Channel Urban Filter Strips Grey Infrastructure (IDDE) Impervious Disconnection Conservation Landscaping Practices TOT Erosion and Sediment Control Impervious Surface Reduction Urban Forst Buffers Urban Tree Planting Urban Nutrient Management Urban Stream Restoration Storm Drain Cleanout Street Stweeping Urban Nutrient Management Septic Connections Septic Denitrification Septic Denitrification Septic Denitrification Septic Provaling Practices Dirk&Gravel Road E&S Non-Tiidal Agal Flow-way Tidal Agal Flow-way Tidal Agal Flow-way	cumulative cumulative AL cumulative cumulati	Animal Units Acres Treated Acr	- 32.35 163.77 62.25 - - - - - - - - - - - - - - - - - - -	252.28 91.51 	38.20 20.28 - 2.30 12.52 0.01 0.18 0.01 0.03 0.00 - - - - - - - - - - - - - - - - -	73,431,71 43,789,08

MD-0206000502 - Upper Choptank River					LBS Reduced	
Permit Approval 2010/Talbot, Caroline, & Queen An	ne's Duration	Unit	Measure	Nitrogen	Phosphorus	Sediment
Agriculture Practices						
Nutrient Management	,		24.001.00	01.006.06	110.56	
Core Nitrogen Rate Nitrogen	annual annual	Acres Acres	34,881.09 14,390.12	91,886.86 11,731.39	119.56	
Placement Nitrogen	annual	Acres	4,444.32	9,130.64		
Timing Nitrogen	annual	Acres	8,403.69	14,575.70	-	
Core Phosphorus	annual	Acres	34,881.09	-	8,705.31	
Rate Phosphorus	annual	Acres	1,814.49		233.87	-
Placement Phosphorus	annual	Acres	2,536.16	-	158.93	
Fiming Phosphorus	annual	Acres	-	-	-	-
	TAL			127,324.59	9,217.66	-
Fillage Management						
Conservation	annual	Acres	7,918.21	8,908.38	2,043.26	1,187,215.48
Continuous High Residue	annual	Acres	20,190.30	68,145.09	7,552.07	5,832,956.36
Low Residue	annual	Acres	-	-	-	7 020 171 04
	TAL			77,053.47	9,595.34	7,020,171.84
Cover Crop Traditional	annual	Acres	14,352.27	89,579.53	166.40	24,424.79
Commodity	annual	Acres	14,332.27	89,379.33	100.40	24,424.79
	TAL	10.05		89,579.53	166.40	24,424.79
Pasture Management						
Alternative Watering	cumulative	Acres	96.29	50.14	14.27	189.65
Prescribed Grazing	cumulative	Acres	55.75	51.74	23.59	335.13
Horse Pasture Management	cumulative		11.28	-	4.03	90.34
Forest Buffers on Fenced Pasture Corridor		Acres in Buffers	3.00	153.35	48.99	23,448.09
Grass Buffers on Fenced Pasture Corridor	Cumulative TAL	Acres in Buffers	0.04	1.95	0.62 91.50	272.95
Forest Buffers		Acres in Buffers	134.21	257.18 11,339.45	286.87	24,336.17 102,212.69
Wetland Restoration	cumulative		522.34	28,203.13	1,103.40	308,275.65
Wetland Creation	cumulative		6.08	202.68	9.41	2,358.62
Wetland Enhancement and Rehabilitation	cumulative		2.43	10.07	0.87	80.17
Land Retirement to Open Space	cumulative		158.04	4,096.42	51.25	54,825.31
Land Retirement to Pasture	cumulative		79.42	2,058.58	25.75	38,804.77
Grass Buffers		Acres in Buffers	1,348.69	88,467.26	1,804.25	1,018,524.99
Tree Planting	cumulative		133.25	3,825.15	159.47	47,176.89
Alternative Crops Soil and Water Conservation Plan	cumulative		0.35 27,019.04	9.61 52,994.68	0.12 3,966.37	124.70 2,123,092.86
Crop Irrigation Management	cumulative		27,019.04	52,994.08	5,900.57	2,123,092.80
Manure Incorporation	annual	Acres	4,154.90	11,379.04	730.65	-
Capture & Reuse	annual	Acres	-		-	-
Non Urban Stream Restoration	cumulative		1,092.17	67.45	57.86	62,462.86
Non Urban Shoreline Management	cumulative	Feet	0.01	0.00	0.00	1.64
	TAL			202,653.52	8,196.28	3,757,941.14
Agricultural Drainage Management Denitrifying Ditch Bioreactors	cumulative	A	555.14	3,132.18		
Saturated Buffer	cumulative		555.14	45,947.75	214.72	202,411.37
Sorbing Materials in Ag Ditches	cumulative		555.14	43,947.75	238.33	202,411.37
Water Control Structures	cumulative		555.14	4,599.52		-
TO	ΓAL			53,679.45	453.05	202,411.37
Animal Waste Management Systems						
Broiler Mortality Freezers	annual	Dry Tons (Carcasses)	6035.54	11,364.36	394.16	-
Barnyard Runoff Control & Loafing Lot Management	cumulative		11.44	2,659.45	135.85	643.21
Ag Stormwater Management		Acres Treated	86.19	34,910.12	2,857.07	8,405.55
Manure Transport	annual	Dry Tons	141.83 2.99	173.48	64.33	- 132.23
Dairy Precision Feeding Ammonia Emission Reductions (Litter Amendments)	annual	Animal Units Animal Units	5.22	7.07 2.45	0.65	132.23
Ammonia Emission Reductions (Enter Amendments)		Animal Units	-	2.45	-	
Ammonia Emission Reductions (Lagoon Covers)		Animal Units	-	-	-	-
TO	TAL			49,116.92	3,452.05	9,180.99
Urban/Suburban Practices						
Stormwater Management						
Runoff Reduction Performance Standard		Acres Treated	-			
Storm Water Treatment Performance Standard Wet Ponds & Wetlands		Acres Treated Acres Treated	-	-	-	-
	cumulative	. area i redicu				
Floating Treatment Wetlands	cumulative	Acres Treated (Wet Pond)				
Dry Ponds		Acres Treated	-			-
Extended Dry Ponds	cumulative	Acres Treated	-	-	-	-
Infiltration Practices		Acres Treated				
Filtering Practices		Acres Treated	-	-	-	-
BioRetention BioSwale		Acres Treated Acres Treated				
Permeable Pavement		Acres Treated				
Vegetated Open Channel		Acres Treated	-		-	-
Urban Filter Strips		Acres Treated	-			-
Grey Infrastructure (IDDE)	annual	Acres Treated	-	-	-	-
Impervious Disconnection		Acres Treated	-		-	-
Conservation Landscaping Practices		Acres Treated	-	-	-	-
TO			0.05	-	-	
Erosion and Sediment Control Impervious Surface Reduction	annual	Acres	0.00	-	-	-
Impervious Surface Reduction Urban Forest Buffers	cumulative	Acres Acres in Buffers	- 5.17	54.22	6.12	- 1,103.01
Urban Tree Planting	cumulative		0.12	0.13	0.02	1,103.01
Urban Forest Planting	cumulative		6.92	55.26	5.68	576.37
Urban Nutrient Management	annual	Acres	8,415.85	7,077.04	358.86	290,462.09
Urban Stream Restoration	cumulative				-	
Storm Drain Cleanout	annual	Lbs of Sediment	-	-	-	
Street Sweeping	annual	Acres				
Urban Shoreline Management	cumulative		3.29	- 32.22		- 124.10
Septic Connections Septic Denitrification		Number of Systems Number of Systems	204.43	1,294.57	-	124.10
Septic Pumping	annual	Number of Systems	- 204.43	1,294.37	-	-
Resource Practices						
Forest Harvesting Practices	annual	Acres	29.60	134.27	4.06	563.32
Dirt&Gravel Road E&S	cumulative	Feet	-		-	
Non-Tidal Algal Flow-way	annual	Acres	-	-	-	-
Tidal Algal Flow-way	annual	Acres			-	
TO	FAL			8,647.70	374.73	292,841.14
GRAND TOTAL				608,312.37	31,547.01	11,331,307.43
GRAND IOTAL					01,017.01	11,551,507.45

Appendix B | Milestones and BMP Goals

The following annual milestones coincide with Maryland's NPS Management Program objectives presented in Chapter 2 of Maryland's 2021-2025 Nonpoint Source Management Plan (Plan). The Management Plan is intended to achieve and maintain water quality standards and to maximize water quality benefits among other broad strategic goals presented in Chapter 1 of the Plan. These milestones, in concert with the Plan's goals and objectives, address Key Component #1 of EPA's Nonpoint Source Program and Grants Guidelines entitled, "Key Components of an Effective State Nonpoint Source Management Program" (November 2012).

Each year, the following tables are included in Maryland's NPS Annual Report with updates to reflect annual progress. These results show what was accomplished in SFY2024 (unless otherwise noted).

Objective 3: Pollutants & Stressors	Lead	2024	Cumulative Progress
Annual Nitrogen Nonpoint Source Loads to Bay: (lbs/yr)	MDE	42,885,954 (SFY2023)	_
Nitrogen: For all watersheds with EPA-accepted plans, overall total annual reduction by NPS implementation completed during the past year: (Cumulative lbs/yr from plan start)	MDE	1,666,601 (SFY2023)	_
Annual Phosphorus Nonpoint Source Loads to Bay: (lbs/yr)	MDE	2,688,815 (SFY2023)	-
Phosphorus: For all watersheds with EPA-accepted plans, overall total annual reduction by NPS implementation completed during the past year: (Cumulative lbs/yr from plan start)	MDE	96,130 (SFY2023)	_

Sediment: 319-funded projects Estimated annual reductions in pounds of sediment to local water bodies (lbs/yr)	MDE	22,214,000 (SFY2023)	_
Sediment: For all watersheds with EPA-accepted plans, overall total annual reduction by NPS implementation completed during the past year: (Cumulative lbs/yr from plan start)	MDE	33,779,141 (SFY2023)	_
Bacteria: Annual Report on Monitoring Results for Maryland Beaches	MDE		rater/Beaches/Documents/2023 MD Be rt final.pdf
Bacteria: Conduct Annual Meetings of County Beach Management Programs	MDE	Annual meetings conducted.	
Bacteria: Conduct annual Shoreline Field Surveys near Shellfish Waters to identify pollutant sources of concern (part of a 7-year cycle).	MDE	21 Routine Surveys; 24 Separate Aquaculture Surveys	96 Surveys
Bacteria: Conduct annual Sanitary Surveys of relevant data for all shellfish growing areas. These are reviews of all potential pollution sources in a shellfish growing area, which are informed by Shoreline Field Surveys.	MDE	49 Surv	eys/year
Chloride: Development of a Statewide Implementation	MDE	Agreement with EPA Region 3 could not be reached on a 4b approach;	-

Strategy in the form of a 5S plan to address chloride impairments in a consistent manner across the State. This path was discussed with Region 3 staff, and MDE's ultimate goal is a 4b plan.		therefore, these chloride impairments remain in Category 5s. Maryland's salt/chloride reduction strategies are documented here and are available on MDE's winter salts web page.	
Chloride: Certify 150 individuals over the life of this 5-year NPS State Management Program Plan through the Annual Parking lots and Sidewalks Salt Application Management Training by MDE designee.	MDE	The Smart Salting pilot was a success. Twenty-one participants completed the entire training and were certified. Plans are underway to offer training again with UMD EFC in October-December 2024.	
Chloride: Track and report the # of personnel trained through the Annual Road Salt Application Management Training by State Highway Administration.	MDE	143 People	409 People
Chloride: Update Maryland's 319 Program webpage to summarize Maryland's existing chloride mitigation activities, information about chloride pollution, and partnerships established within and outside of the State.	MDE	https://mde.maryland.gov/programs/v	ongoing; water/319NonPointSource/Pages/411- it.aspx
PCBs: Develop one new PCB TMDL over the life of this 5-year NPS State Management Program Plan.	MDE	Draft PCB TMDL for the Conowingo Pool and Lower Susquehanna River is currently undergoing review. MDE anticipates submitting the TMDL to EPA by Fall 2025.	TBD

Temperature: Update Maryland's 319 Program webpage to summarize state initiatives designed to reduce temperature. Project Summer 2022 for completion.	MDE	Prettyboy Reservoir Stream Temperature simulation was completed and we are currently designing management scenarios, calculating TMDL allocations, and continuing drafting the TMDL.	https://mde.maryland.gov/programs/ water/TMDL/WaterQualityStandards/P ages/Protecting-Cold-Water- Resources-in-Maryland.aspx
Trash: Update Maryland's 319 Program webpage to summarize status of TMDLs designed to reduce trash. Project Summer 2022 for completion.	MDE	The work with Morgan State is ongoing and in FFY25, the analysis will be completed and a draft revised TMDL will be completed.	https://mde.maryland.gov/programs/ water/TMDL/DataCenter/Pages/TMDL <u>MapTrash.aspx</u>

Objective 4: Pollutant Sources	Lead	2024	Cumulative Progress
Maintain Annual Cover Crop Implementation Acreage Levels	MDA	515,561 acres (SFY2023)	515,561 acres
Maintain Annual Nutrient Management Plan Acreage Levels	MDA	1,101,012 acres (SFY2023)	1,101,012 acres
Maintain Annual Soil Conservation and Water Quality Plan Acreage Levels	MDA	802,492 acres (SFY2023)	802,492 acres
Maintain Annual Manure Transported out of Chesapeake Bay watershed (tons)	MDA	Manure Transport out of the WS decreased to 16,609 tons in FY23	Manure Transport out of the WS increased to 40,900 tons
Maintain Annual Conservation Tillage (Inc. High Residue) Acreage Levels	MDA	Conservation Tillage levels were maintained in FY23 at 909,221 acres.	909,221 acres
Plant Riparian Forest Buffers (Acres/year; cumulative)	MDA	22,147 acres of buffer planted (SFY2023)	22,147 acres of buffer planted

Wetland Restoration (Acres/year)	MDA	229 acres created (SFY2023)	615 acres created	
Phosphorus Management Tool – Maintain use of PMT for operations in the high-risk group, medium-risk group, and low-risk group. (# of operations utilizing the tool by risk group)	MDA	PMT is fully implemented with 20% of MD farm fields requiring use of the PM at this time, which translates to roughly 200,000 acres of fields.		
Upgrade septic systems to nitrogen removal technology (systems/year; figures may vary from year to year due to edits to the BATMN database resulting from BAT units being replaced with sewer connection or conventional septic tanks, vacancy, catastrophe, error, etc.)	MDE	806 BAT upgrades	_	
Stormwater retrofits of land without sufficient controls (cumulative pounds of nitrogen reduced/year). (May be refined in future Chesapeake Bay 2-Yr Milestones.)	MDE	https://mde.maryland.gov/programs/w /Docume WPRP/2024%20Stormwater%20Financi 0Report%20 MSAR%20	nts/FAP- al%20Assurance%20Plan%20Annual%2	
Complete the redevelopment of the MS4 geodatabase that will aid MDE in the assessment of management programs and improve current Phase I MS4 stormwater data tracking, collection, and validation of BMPs:	MDE	Some jurisdictions have submitted in the revised format and we anticipate most jurisdictions will be submitting data in that format in CY 2025.	-	

Online BMP Reporting Tool for Non-MS4 local governments:	MDE	Complete: a tool has been created that can be used for these jurisdictions.		
SMART Homeowner BMP Tracking Tool: Track number of BMPs	UMD	405 BMPs	1,584 BMPs	
Online BMP Reporting Tools for Phase II MS4 and Non-MS4 local governments: Make the tool available to users.	MDE	No Progress	No Progress	
Local Stormwater WLA Implementation Plans: Review Plans submitted as part of Phase I MS4 requirements. (Number of jurisdictions, which may include multiple plans for each jurisdiction) Anticipate salt plans in 2024.	MDE	2 TMDL SW-WLA Implementation Plans and 9 Countywide TMDL Implementation Plans across 10 jurisdictions.	-	
Erosion and Sediment site "inspection compliance rate" conducted by MDE (Source: Annual Enforcement & Compliance Report)	MDE	Report not yet published.	https://mde.maryland.gov/programs/ water/StormwaterManagementProgr am/Documents/Annual%20Report%2 0E%26SC%20Violations%202023%20 MDE.pdf	
Lawn-to-Woodland Program: Track and report the number of landowners assisted and acres forested through the Lawn-to- Woodland Program, which provides landowners with trees, tools and technical assistance for planting and maintaining a healthy tree canopy that will support a	DNR	The Lawn-to-Woodland program has not been funded in recent years, but by working with partners, such as Healthy Forests Healthy Waters and the Western MD Tree Planting Program, services that address tree planting opportunities have been implemented	https://dnr.maryland.gov/forests/Pag es/tree- planting.aspx#:~:text=Lawn%20to%20 Woodland%20helps%20Maryland,tree %20shelters%20by%20a%20contracto <u>r.</u>	

myriad of environmental, economic and recreational benefits.			
Maryland's 5 million trees by 2030 initiative (Report status of program and # of trees planted)	MDE	522,747 trees	992,989 trees (June 2024)
Sustainably manage forests on 38,000 acres (annually) by 2030 from baseline as part of Maryland's revised 2021 Greenhouse Gas Reduction Act (GGRA) plan goals.	DNR	41,066 acres	https://mde.maryland.gov/programs/ <u>Air/ClimateChange/Pages/Greenhous</u> <u>e-Gas-Emissions-Reduction-Act-</u> <u>(GGRA)-Plan.aspx</u>
Coal Mining site "inspection coverage rate" conducted by MDE	MDE	Report not yet published.	-
Non-Coal Mining site "inspection coverage rate" conducted by MDE	MDE	Report not yet published.	-
Non-tidal wetlands and floodplains permit site "inspection coverage rate"	MDE	Report not yet published.	-
Tidal wetlands permit site "inspection coverage rate"	MDE	Report not yet published.	-

Objective 5: Types of Waterbodies	Lead	2024
Statewide Lakes and Reservoirs		
Lakes/Reservoirs: Triadelphia and Liberty chlorides/temperature monitoring Study (Trends analysis to help determine if we can see drops in salt levels, started in 2019)	MDE	Data is being compiled up to December 2024; MDE is discussioning internally the best analyses for this data.

Patuxent Reservoirs Annual Report of the Technical Advisory Committee	WSSC	2023 Annual Report	
<u>Central Maryland – Chesapeake Bay Drainage</u>	Watersheds with EPA-accepted watershed plans that are eligible for 319(h) Grant implementation funding.		
Antietam Creek Watershed. Water quality goal is to billion E. coli MPN. (see the Washington County Soil Conservatio			
Watershed plan milestones: Report progress in the 319 Annual Report.	WCSCD	MDE's NPS program has funded 16 projects in this watershed, the most of any watershed in MD	
Assess Implementation Progress toward sediment and bacteria reduction watershed plan milestones and update plan if needed.		Review of revisions has stalled due to staff turnover. MDE will reevaluate once positions have been filled.	
Update watershed implementation plan		Review of revisions has stalled due to staff turnover. MDE will reevaluate once positions have been filled.	
Back River – Tidal Watershed. Water quality goal is phosphorus. (see Baltimore County's 2010 watershed plan Table 3-2		t loads: 6,498 lbs/yr nitrogen and 679 lbs/yr	
Watershed plan milestones: Report progress in the 319 Annual Report.	Baltimore County	No new progress	
Assess action items progress: Stormwater retrofit and Stream restoration		No action for 2024	
Back River – Upper Watershed. Water quality goal is to reduce annual nutrient loads: 48,189.6 lbs/yr nitrogen and 6,055.8 lbs/yr phosphorus. (see Baltimore County's 2008 watershed plan Table 3-2 and Appendix A Table A-2)			
Watershed plan milestones: Report progress in the 319 Annual Report.	Baltimore County	Baltimore County has started a stream restoration project of 4,790 LF of Stemmers Run, which will be partially funded by the 319(h) grant. Construction is set to begin in 2025.	

Assess plan implementation progress, particularly: open space tree planting, impervious area removal on institutional land.		No action for 2024
Choptank River – Upper Watershed. Water quality g lbs/yr) and 28% for phosphorus (34,5000 lbs/yr). (see Carol		t loads from 2002 levels by 39% for nitrogen (704,000 rshed plan, Table 11)
Watershed plan milestones: Report progress in the 319 Annual Report.	Caroline County	BMP implementation has greatly expanded due in large part to the funding of a Technical Assistance Circuit Rider. We expect several more proposals from various locations within the Upper and Lower Choptank River watersheds, including Goldsboro, a community outside of St. Michaels, and Camp Mardela.
Assess BMP implementation progress and update plan if needed.		Another stormwater BMP project will be installed at Denton Elementary, which will heavily involve the teachers and students in the design and some of the installation. MDA's ag drainage management project will begin toward the end of 2024.
Greater Choptank Watershed Plan (Tuckahoe and Lower Choptank)		MDE submitted another draft of the WBP to EPA in 2024. Another revised draft will be submitted in 2025 to address additional comments.
Jonestown SW BMP installation		Phase I of the stormwater BMP/septic repair project was completed in summer 2024, as well as the installation of a grassed swale and some raingardens at the Jonestown Park. Phase II work will begin in 2025.
Technical Assistance Circuit Rider project		Funding for the Technical Assistance Circuit Rider will be extended through CY2027. This project has been highly successful with developing relationships with local residents, providing expertise with

		reviewing technical documents, and promoting this work amongst several different audiences.
Conococheague Creek Watershed		
Plan is being drafted and will come to MDE for review. MDE anticipates review in Spring 2022 and submission to EPA in late summer of 2022 for review. Milestones for implementation will be added upon acceptance.	Washington County	MDE continues to check in on a regular basis and is still waiting for revisions from the County.
Corsica River Watershed. Water quality goal is to co	ontinue meeting the Corsi	ca TMDL for nitrogen and phosphorus.
Watershed plan milestones: Conduct outreach to the owners of this plan to increase 319 project implantation and Report progress in the 319 Annual Report.	Centreville	No response to RFP for FFY24 funding
Assess implementation progress for BMP goals and update plan if needed.		Future projects are not expected. Frequency of monitoring was reduced this year to accommodate the growing need in other areas.
Gwynns Falls – Middle Watershed. Water quality go 5,915 lbs/yr phosphorus. (see Baltimore County's 2014 watersh		
Report implementation progress in the 319 Annual Report.	Baltimore County	No new 319 projects in this watershed.
Jones Falls – Lower Watershed. Water quality goal is to reduce annual pollutant loads: 23,146 lbs/yr nitrogen, 3,887 lbs/yr phosphorus, 204.9 tons/yr sediment. (see Baltimore County's 2008 watershed plan Table 5.4)		
Watershed plan milestones: Report progress in the 319 Annual Report.	Baltimore County	No new 319 projects in this watershed.

Monocacy River – Lower Watershed. Water quality goal is to reduce annual pollutant loads: 649,998 lbs/yr nitrogen, 68,952 lbs/yr phosphorus, 10,345 tons/yr sediment. (see Frederick County's 2008 watershed plan page 16 and Table "X" p34)			
Watershed plan milestones: Conduct outreach to the owners of this plan to increase 319 project implantation and Report progress in the 319 Annual Report.	Frederick County	The design of the SPSC system was funded and MDE expects for CWP to submit another proposal for construction. However, there was no response to the RFP for FFY24 funding. MDE will check in with CWP during the FFY25 RFP period.	
Assess implementation progress and update plan if needed.		No new 319 projects in this watershed	
Sassafras River Watershed. Water quality goal is to phosphorus, 1,143	reduce annual pollutant	loads: 462,225 lbs/yr nitrogen, 12,602 lb/yr	
tons/yr sediment. (see the Sassafras River Association's 2009 watershed plan Table 5.4)		MDA plans to submit a proposal to the FFY25 RFP, which would provide funding to implement ag drainage management BMPs. This recent increase in interest in §319 grant funding may lead to additional future projects.	
Central Maryland – Chesapeake Bay Drainage	Plans not desi	gned to seek 319(h) implementation funds.	
Phase III Watershed Implementation Plan for the C	hesapeake Bay TMDL.		
Evaluate 2025 progress for pollutant load reductions to be achieved for nonpoint sources of nitrogen, phosphorus, and sediment. Report Annually.	MDE	FY23 NPS annual progress: All nonpoint sources pollutant loads continue to decrease in Maryland due to BMP implementation. https://public.tableau.com/app/profile/olivia.dever eux/viz/ProgressDataReview- 2024/IntroductionandUpdates	

<u>Western Maryland – Casselman River and</u> Youghiogheny River	Watersheds with EPA-accepted watershed plans that are eligible for 319(h) grant implementation funding.		
Casselman River Watershed Management Plan Water quality goal is to meet the pH water quality standard. (see MDE's 2011 watershed plan Chapter 3.2)			
Watershed plan milestones: Report progress in the 319 Annual Report, including, number/percentage of pH-impaired stream segments, NPS Program Success Stories and implementation progress.	MDE	No new projects are expected to be funded by the §319(h) grant in the near future due to the influx of BIL money into the Abandoned Mine Lands program.	
Percentage of impaired stream segments remediated and meet the State water quality standard for pH.[46] [47]	MDE	50%	
Report 303(d) stream segments that achieve pH criteria via Maryland's Integrated Report.	MDE	In text; complete	
Cherry Creek Watershed Protection Plan Water qua	ality goal to be determin	ned when the plan is finalized.	
Plan completion anticipated in 2022. Potential milestones TBD.	MDE	Plan will not be submitted due to influx of BIL money into our Abandoned Mine Lands program (no projects to be funded by 319 grant in near future).	
Upper Jennings Run Watershed Plan Water quality	goal to be determined	when the plan is finalized.	
Tentatively accepted pH mitigation Plan is being updated to include sediment. Report progress in the 319 Annual Report.	MDE	MDE will work with Allegany County if they want to update the WS Plan to include other sources of impairment. Sampling by MDE that is funded through the 319(h) grant will continue through 2025; however, the number of sites will be reduced to target only those sites that are tied to remediation efforts.	
Coastal Region – Coastal Bays and Atlantic Ocean			
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Coastal Bays Conservation and Management Plan Water quality goal to be determined when plans are finalized.		
Assawoman Bay is conditionally approved: Report progress in the 319 Annual Report.	МСВР	Construction of the Greys Creek project was set to begin in 2024 but was delayed. A no-cost extension was granted and construction should be done in 2025.
Next steps are to create plans for Assateague, Isle of Wight, Newport, and Sinepuxent Bays. Report progress on creation of these plans and incorporate updates to milestones for any new plans in updates to this NPS plan.	MCBP	MDE is gathering relevant data and information to formulate a draft of the Coastal Bays WBP.