

CHESAPEAKE BAY RESTORATION SPENDING CROSSCUT

Report to Congress

Office of Management and Budget

November 2020

The Chesapeake Bay Watershed



Chesapeake Bay Restoration Spending Crosscut

This report represents an accounting of Federal and, to the extent available, State funding for Chesapeake Bay restoration activities. This report is provided to Congress in response to Section 3 of the Chesapeake Bay Accountability and Recovery Act (CBARA) of 2014.

The Fiscal Year (FY) 2021 Budget recognized the importance of Chesapeake Bay restoration activities and included a request of nearly \$352 million for high priority programs and projects in the Chesapeake Bay Watershed.

This crosscut presents information on Federal funding from FY 2018 enacted through the FY 2021 Budget for Chesapeake Bay restoration work in the following formats for those Federal agencies on the Federal Leadership Committee for the Chesapeake Bay:

- Total Federal funding by agency;
- Agency funding details

As directed in CBARA, the Office of Management and Budget (OMB) also requested Chesapeake Bay restoration funding data from the Chesapeake Bay Watershed States—Maryland, Virginia, Pennsylvania, Delaware, West Virginia, New York, and the District of Columbia. OMB received tabular data from all of the states and this report includes the submitted state data. OMB greatly appreciates but cannot verify the completeness or accuracy of the state data. Further, because the state data includes funding received from Federal sources, there may be double-counting between the state and Federal tables.

It is important to note that in many instances the funding numbers shown are extrapolated from past funding provided to the region or estimated based on the portion of the program focused directly on Chesapeake Bay restoration activities. The funding ultimately provided to Chesapeake Bay watershed efforts may differ from these estimates.

A few other funding notes are necessary. All Federal and State dollars are reported in thousands, and rounding errors may occur. The data request for both Federal agencies and States excluded programs and projects that received less than \$100,000 in funding, though all data received is included in the tables below. In addition, the current year (FY 2020) funding only reflects data through the second quarter of the fiscal year. Depending on the program, fiscal outlays may be weighted toward the third or fourth quarters. As a result, second quarter numbers reflect only a partial snapshot of program execution.

Federal Data

Table 1--Federal Agency Totals^{1 2}

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
Department of Agriculture	152,679	236,087	196,631	173,922	220,912	220,550	158,786	77,218	99,651	207,053
Department of Defense (non-Army Corps)	94,452	129,514	116,687	50,759	65,600	80,815	53,990	99,267	45,079	37,897
Department of Commerce	16,020	17,900	15,837	16,829	15,909	16,597	17,613	10,945	8,741	6,372
Department of Homeland Security	0	115	493	0	0	385	400	2,000	492	2,055
Department of the Interior	34,738	33,297	29,877	34,553	30,548	26,563	36,821	14,686	13,539	24,464
Department of Transportation	0	3,811	7,804	0	19,460	17,825	0	26,105	10,770	0
Environmental Protection Agency	217,868	212,494	176,230	193,420	216,399	201,231	228,664	48,701	106,577	71,312
Army Corps of Engineers	13,358	4,674	4,420	17,831	3,571	3,847	9,122	1,042	1,037	2,803
Total, All Agencies	529,115	637,892	547,979	487,314	572,399	567,813	505,396	279,964	285,886	351,956

¹ In all tables, funding amounts are rounded to the nearest thousand. Rounding errors may result.

² Prior year reported funding levels may have changed from previous reports due to availability of better data, error corrections, or classification changes for projects.

Table 2—Department of Agriculture¹

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
Agricultural Research Service^{2,3}										
Water Availability and Water Management	5,084	5,084	5,084	5,418	5,418	5,418	5,690	5,690	5,690	5,675
Soil and Air	5,873	5,873	5,873	5,973	5,973	5,973	6,123	6,123	6,123	3,974
Grass, Forage, and Rangeland Agroecosystems	413	413	413	413	413	413	413	413	413	413
Sustainable Agricultural Systems Research	1,304	1,304	1,304	1,304	1,304	1,304	1,304	1,304	1,304	1,304
Natural Resource Conservation Service										
Conservation Operations	14,620	15,037	14,134	15,000	15,135	12,411	15,000	6,735	7,776	15,000
Agricultural Conservation Easement Program (ACEP)	8,086	4,746	4,556	4,700	5,875	4,171	4,700	870	523	4,700
Agricultural Management Assistance (AMA)	336	959	1,748	500	631	1,667	500	46	221	500
Chesapeake Bay Watershed Program (CBWP)	9,639	1,830	2,692	9,475	561	1,317	0	0	0	0
Conservation Reserve Program (CRP)	3,696	3,771	3,658	3,800	3,517	3,306	3,800	446	1,008	3,800
Conservation Stewardship Program (CStP) ⁴	10,117	9,852	17,985	9,900	21,985	26,982	9,900	2,600	8,400	9,900
Environmental Quality Incentives Program (EQIP)	49,312	63,937	97,446	63,900	71,848	107,357	63,900	554	32,000	63,900
Farm and Ranch Lands Protection Program (FRPP)	0	424	594	0	0	0	0	0	0	0
Regional Conservation Partnership Program (RCP)	1,788	3,181	1,845	3,200	1,707	1,946	3,200	121	4,000	3,200
Wetlands Reserve Program (WRP)	0	846	440	0	354	730	0	67	0	0
Wildlife Habitat Incentives Program (WHIP)	0	196	304	0	0	109	0	0	0	0
Economic Research Service										
Economic Research Service	7	7	7	0	0	0	0	0	0	0

Animal and Plant Health Inspection Service⁵										
Wildlife Services, Virginia-Federal Cooperative Funding ⁶	26	26	26	16	5	5	47	26	26	0
Wildlife Services, Maryland-Federal Cooperative Funding ⁷	1,007	1,007	1,007	1,545	718	718	1,500	724	747	1,500
National Institute of Food and Agriculture										
Hatch Act	867	867	867	921	921	921	921	0	0	865
Evan-Allen	695	695	695	744	744	744	859	0	0	690
Agriculture and Food Research Initiative	2,349	2,349	2,349	2,437	2,437	2,437	2,496	0	0	3,523
Other Grants	1,560	1,560	1,560	1,560	1,560	1,560	1,560	0	0	1,560
Farm Service Agency										
Conservation Reserve Program	33,700	30,709	29,844	33,700	31,645	31,645	33,700	28,247	28,247	33,700
Rural Development										
Rural Utilities Service Water and Environmental Programs ⁸	0	79,214	0	0	38,745	0	0	20,079	0	52,849
Forest Service⁹										
NFS ¹⁰	485	485	485	415	415	415	417	417	417	0
LWCF-NFS	181	181	181	5,000	5,000	5,000	455	455	455	0
SPF Cooperative Lands ¹¹	534	534	534	946	946	946	1,101	1,101	1,101	0
LWCF- Forest Legacy ¹²	0	0	0	1,555	1,555	1,555	0	0	0	0
R&D ¹³	1,000	1,000	1,000	1,500	1,500	1,500	1,200	1,200	1,200	0
Total, USDA	152,679	236,087	196,631	173,922	220,912	220,550	158,786	77,218	99,651	207,053

¹ Each agency has a different timing for obligations and outlays. Carryover funds from the prior years are also reflected in operating levels from year to year.

² ARS tracks obligations by project but an individual project can cover different types of research. Therefore we cannot provide obligations for specific initiatives.

³ In FY 2019 the National Programs were renamed to the following: Climate Change, Soils and Emissions was renamed to Soil and Air; Pasture, Forage and Rangeland Systems was renamed to Grass, Forage, and Rangeland Agroecosystems and Agricultural System Competitiveness & Sustainability was renamed Sustainable Agricultural Systems Research.

⁴ CStP obligations and outlays for FY 2020 2nd quarter includes CSP-GCI.

⁵ The funding is in the form of cooperative agreements. For FY 2021 APHIS' Wildlife Services Virginia program has not received confirmation of the agreement.

⁶ Migratory Bird Protection, Stormwater Management (APHIS) -- This reflects 2019 full year obligations for cooperative agreements to the states which have not outlaid their full allocations

⁷ Nutria Eradication in the Chesapeake Bay (APHIS) -- This reflects 2019 full year obligations for cooperative agreements to the states which have not outlaid their full allocations

⁸ The Rural Utilities Service's Water and Environmental Programs (WEP) does not receive an appropriation, earmark, set aside, or any other form of funding specific to the Chesapeake Bay Watershed (Watershed). From time-to-time WEP may make loans and/or grants that benefit borrowers who are located within the Watershed, but the Agency does not have policies or procedures that identify or direct the use of monies for the benefit of the Watershed. As such, WEP is reporting loans and grants that were made in the Watershed whether or not they had a direct impact on assisting the cleanup. Absent guidance, WEP estimated what areas/counties might be considered part of the Watershed. WEP's Data Team ran obligation reports and pulled out all projects that appear to be in said counties. FYs 18 includes loan BA and Grant. FY 18 figures are considered high due to Supplemental Funding. In FY19, the program carried a negative subsidy rate, so figures only reflect grant monies. The subsidy rate is positive for FY20, so loan BA and grant are counted; however, the majority of obligations occur in August and September. Therefore, the FY20 is not reflective of the total obligations anticipated (\$57,837). FY21 is a three-year average of adjusted FY17-19 data. WEP has no mechanism to track the outlays (disbursements) for projects within said areas, so the respective columns are reported as \$0.

⁹ The Forest Service generally obligates the funding in same year it is received so for the purposes of this report, the obligations and outlays stay the same.

¹⁰ NFS amounts include all Watershed, Wildlife and Fish restoration activities, Non-native Invasive Species treatments and Prescribed burning to improve habitat as it supports Chesapeake Bay Agreements. Reported amounts may include: Salary for permanent employees, fleet vehicles, or travel

¹¹ State and Private Forestry Cooperative Lands includes programs and projects directly associated with Chesapeake restoration . Includes pertinent LSR grants and \$100k of subgrants through NFWF each year.

¹² LWCF-Forest Legacy projects are not chosen until January each year. The list is confirmed when the budget is passed by Congress. Zeros indicate that there were no approved projects those years within CB watershed.

¹³ Research and Development funding is an estimate of annual expenditures on Chesapeake Bay activities directly and indirectly associated with Chesapeake restoration.

Table 3- Department of Defense

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays ¹	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2 ²	Outlays Through Q2	President's Budget ³
Services ⁴	94,452	129,514	116,687	50,759	65,600	80,815	53,990	99,267	45,079	37,897
Total, DOD	94,452	129,514	116,687	50,759	65,600	80,815	53,990	99,267	45,079	37,897

¹ DoD (Services) FY2018 - FY2020 Outlays are based on current DoD O&M Defense Wide Outlay Rates over a typical 5-year outlay period.

² DoD (Services) FY2020 Obligation is an average based on FY2015 - FY2019 obligations.

³ DoD (Services) funding amount for the FY2021 President's Budget is the based on projections for that fiscal year for the reasons identified in Footnote 4.

⁴ DoD (Services) does not have a direct line item for Chesapeake Bay funding for restoration/protection. Reported budget amounts are based on compliance with environmental protection requirements in the Chesapeake Bay watershed and are part of the larger DoD Operations and Maintenance budget. Reported amounts are based on annual data collected from each DoD Component. Example environmental protection projects include stormwater pollution prevention, stormwater project design and management, water quality monitoring, wastewater treatment plant upgrades, integrated natural resources planning and management, environmental outreach and stewardship activities, and land conservation.

Table 4- Department of Commerce

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
National Oceanic and Atmospheric Administration										
Habitat Conservation and Restoration	6,439	5,921	6,526	6,239	5,540	6,291	6,326	1,736	2,321	5,594
Coastal Science, Assessment, Response and Restoration and Competitive Research	2,140	2,255	2,255	3,363	3,142	3,142	3,363	2,230	2,230	778
Office of Education: Bay Watershed Education and Training (BWET)	2,748	2,748	2,504	2,767	2,767	2,588	2,840	2,840	2,055	0
National Sea Grant College Program	4,693	4,693	4,552	4,460	4,460	4,576	5,084	4,139	2,135	0
Economic Development Administration										
Economic Development Assistance Programs, Public Works	0	2,283	0	0	0	0	0	0	0	0
Total, Commerce	16,020	17,900	15,837	16,829	15,909	16,597	17,613	10,945	8,741	6,372

Table 5- Department of Homeland Security

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget ¹
Department of Homeland Security^{2,3}										
TRACEN Yorktown & Base Portsmouth- Sanitary Sewer System I&I Survey/Study ⁴	0	0	0	0	0	0	0	0	492	0
TRACEN Yorktown- Installation of Bioretention Systems in Parking Lot 4 ⁵	0	0	235	0	0	0	0	0	0	0
TRACEN Yorktown- Parking Lot Upgrades with Stormwater BMPs ^{6,7}	0	115	0	0	0	0	400	0	0	0
Base Portsmouth- Special Requirements Total Maximum Daily Load Water Program ⁸	0	0	0	0	0	385	0	0	0	1,300
Base Portsmouth- Tree Box Installation	0	0	258	0	0	0	0	0	0	0
Coast Guard Yard- TMDL Stormwater Program	0	0	0	0	0	0	0	0	0	755
Coast Guard Yard- ShipLift Treatment System	0	0	0	0	0	0	0	2,000	0	0
Total, DHS	0	115	493	0	0	385	400	2,000	492	2,055

¹ Projects planned for execution in FY 2021.

² Projects are limited to only those which are over \$100K, as per the Office of Management and Budget's "2020 Chesapeake Bay Restoration Budget Crosscut Report" memorandum.

³ Per the Office of Management and Budget's "2020 Chesapeake Bay Restoration Budget Crosscut Report" memorandum, the scope of this BDR is limited to "Federal restoration activities include programs and projects with the express intent to directly protect, conserve, or restore living resources, habitat, water resources, or water quality in the Chesapeake Bay watershed."

⁴ \$1.087M obligated in FY 2017, outlays of \$492K as of Q2 FY2020.

⁵ \$235K obligated in FY 2017, outlayed in FY 2018.

⁶ FY 2018 obligation corrected to \$115K (from \$101K in 2019 BDR).

⁷ Next phase of project delayed from FY 2019 to FY 2020; obligation still expected in FY 2020.

⁸ \$1.3M planned in FY 2021 for next phase of project.

Table 6- Department of the Interior

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
U.S. Fish and Wildlife Service										
Resource Management	13,439	13,439	13,439	13,439	10,601	8,744	13,439	3,360	3,360	13,885
<i>Ecological Services</i>	3,180	3,180	3,180	3,180	2,415	1,697	3,180	795	795	3,083
<i>National Wildlife Refuge System</i>	4,968	4,968	4,968	4,968	3,774	3,651	4,968	1,242	1,242	5,345
<i>Habitat Conservation</i>	3,554	3,554	3,554	3,554	2,699	1,896	3,554	889	889	3,835
<i>Fisheries & Aquatic Resource Conservation</i>	1,737	1,737	1,737	1,737	1,713	1,500	1,737	434	434	1,622
Land Acquisition	1,000	510	435	1,000	403	403	0	0	0	0
Natural Resource Damage Assessment and Restoration	739	739	739	739	738	620	739	185	185	739
Wildlife Fire	563	563	563	563	422	300	563	141	141	563
Reimbursable Services	480	480	480	480	320	188	480	120	120	480
National Park Service										
Operation of the National Park System-National Trails	969	876	1,081	1,365	1,278	798	1,380	453	399	1,293
Operation of the NPS Field Offices & Associated Areas	495	503	504	488	415	449	496	161	205	466
Operation of the National Park System- Projects	67	67	137	28	28	78	192	0	0	117
Nat'l Recreation & Preservation-Ches. Gateways & Water Trails	2,020	1,941	1,664	2,020	2,020	1,619	3,000	2,767	595	0
Construction - Management Planning	275	501	399	275	206	252	376	168	202	695
Land Acquisition & State Assistance-Stateside Grants	2,118	1,859	0	939	939	885	939	300	917	0
U.S. Geological Survey										
Ecosystems	4,909	4,614	4,074	5,184	5,168	4,794	7,184	3,256	3,412	919
Land Resources	905	851	751	487	512	495	487	229	258	0

Energy and Minerals, and Environmental Health	936	880	777	961	960	891	961	452	480	0
Natural Hazards	150	141	125	450	432	389	450	212	215	450
Water Resources	5,173	4,863	4,294	5,662	5,633	5,217	5,662	2,661	2,814	4,206
Core Science Systems	500	470	415	473	475	443	473	222	237	651
Total, DOI	34,738	33,297	29,877	34,553	30,548	26,563	36,821	14,686	13,539	24,464

Table 7- Department of Transportation

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
FHWA Apportioned STBG-eligible Funding Obligated in support of MD's Watershed Implementation Plan ¹	0	3,811	804	0	19,460	17,825	0	26,105	10,770	0
Total, Transportation	0	3,811	804	0	19,460	17,825	0	26,105	10,770	0

¹ Since each State determines how STBG-eligible apportioned funding will be utilized, neither specific operating levels nor specific President's Budget projects are identified for Chesapeake Bay Restoration activities.

Table 8- Environmental Protection Agency

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlay	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
Environmental Protection Agency¹										
Program Operations & Support	4,801	4,689	4,812	5,113	4,356	4,387	5,169	3,140	3,063	0
Partnership & Data Management Support	8,878	10,065	9,904	9,118	13,429	11,446	13,000	4,793	4,623	0
WQ Monitoring Grants	4,818	4,463	6,391	4,270	4,956	4,355	5,240	681	1,999	5,200
TMDL Implementation & Analysis	3,000	1,551	1,285	3,000	1,766	1,650	2,017	1,351	947	1,600
Reporting & Accountability	2,601	2,248	2,691	2,754	3,014	2,186	2,612	284	1,442	500
Permit Review and Rule Development, Guidance & Implementation	4,595	2,486	3,526	4,445	4,418	3,075	916	1,499	1,760	0
Enforcement	1,364	1,378	1,057	1,357	1,849	2,213	1,672	319	461	0
Small Watershed Grant Program	6,000	6,000	5,478	6,000	6,000	6,256	9,000	9,000	2,759	0
Innovative Nutrient Sediment Reduction Grants	6,000	6,000	5,209	6,000	6,000	4,216	9,000	9,000	3,085	0
State Implementation Grants	30,943	28,662	26,253	30,943	26,987	30,631	36,374	8,631	13,812	0
Non-Point Source Grants: Improve Water Quality-Watershed (CWA Sec 319) ^{2,3}	8,465	8,441	6,330	8,371	8,420	7,332	8,700	-6	4,390	0
Pollution Control Grants (CWA Sec 106) ^{3,4,5}	11,284	11,388	10,782	11,172	11,295	11,471	11,141	9,937	2,890	5,979
Pollution Control Monitoring (CWA Sec 106) ^{3,4,5,6}	823	826	778	861	866	756	762	0	721	0
Infrastructure Assistance Grants: Clean Water SRF ³	124,296	124,296	91,733	100,016	123,045	111,257	123,062	73	64,625	58,033
Total, EPA	217,868	212,494	176,230	193,420	216,399	201,231	228,664	48,701	106,577	71,312

¹ Fiscal year outlays can be greater than the Operating Level (OPP) and Obligations (OBLIG) as expenditures occur from carryover funds and prior obligations.

² FY 2020 Obligations for Sec. 319 grants is negative due to a deobligation of prior year funds from GO C900350015.

³ These funding programs are statewide. In order to determine the Chesapeake Bay funding levels, the statewide program funding was multiplied by percentage of the land area within the Chesapeake Bay watershed. FY2018, FY2019 and FY2020 funding were calculated using a pro rata for the percent of the state within the Chesapeake Bay watershed to determine program funding levels, then the state level estimates were aggregated for a watershed total. The FY2021 President's Budget estimate was calculated by multiplying the regional funding by the percentage of land area within the Chesapeake Bay watershed at a regional level for Region 3 (48.67%) since state-by-state allocations are unavailable.

⁴ The Section 106 Pollution Control Grants include Susquehanna River Basin Commission (SRBC) and Interstate Commission for the Potomac River Basin (ICPRB) because these commissions operate entirely in the Chesapeake Bay Watershed. For the FY2021 President Budget, Delaware River Basin Commission (DRBC) estimates could not be removed, since allocation proposals are made at the regional level. However, FY2018-FY2020 DRBC allocations were approximately \$600K per year. NY allocations could not be estimated for the FY2021 President Budget, however, FY2018-FY2020 NY estimates were approximately \$965K per year.

⁵ 2019 and 2020 Obligations and Outlays as of 3-31-2020, however, in order to include SRBC and ICPRB numbers and exclude DRBC numbers, grant tracking numbers as of 7-27-2020 were used.

⁶ Operating plans are not provided for Section106 monitoring funds. Section 106 monitoring funds are reprogrammed after operating plans are loaded into Budget Formulation System (BFS).

Table 9- Army Corps of Engineers

(Budget authority in thousands)	FY 2018			FY 2019			FY 2020			FY 2021
	Operating Level	Obligations	Outlays	Operating Level	Obligations	Outlays	Operating Level	Obligations Through Q2	Outlays Through Q2	President's Budget
Army Corps of Engineers										
Investigations (Studies/Design)										
Anacostia Watershed Restoration, Montgomery County	0	3	3	0	0	0	0	0	0	0
Anacostia Watershed Restoration, Prince George's County	0	49	49	0	9	12	1,935	0	0	0
Chesapeake Bay Comprehensive Plan, MD, PA & VA	0	1,038	935	133	128	208	0	12	16	0
Lynnhaven River Basin, VA	0	160	160	0	197	197	0	0	0	0
Construction										
Chesapeake Bay Oyster Recovery, MD & VA	0	641	1,031	0	577	363	5,000	85	85	0
Lynnhaven River Basin, VA	10,000	0	0	14,920	210	176	0	209	221	0
Paint Branch Fish Passage	0	54	68	0	286	25	0	0	31	0
Other										
Environmental Stewardship- multiple projects	3,358	2,729	2,174	2,778	2,164	2,866	2,187	736	684	2,803
Coordination with Other Water Resources Agencies	54	103	103	97	98	98	250	26	26	N/A ¹
Total, USACE	13,358	4,674	4,420	17,831	3,571	3,847	9,122	1,042	1,037	2,803

¹ The FY 2021 Budget includes \$350,000 for multiple programs. The specific allocation of funds to support Chesapeake Bay Restoration has not yet been determined.

Table 10—Army Corps of Engineers—Project Detail

(Budget authority in thousands)	FY 2021 Budget	Description	Status	Authorized Funding Level ¹
Army Corps of Engineers				
Environmental Stewardship	2,803	The USACE is the steward of the lands and waters at Corps water resources projects and has a mission for Environmental Stewardship. The financial data shown in this table is a roll-up of data for the Environmental Stewardship business line within the Operations and Maintenance account, and represents multiple projects that are budgeted and receive budget authority at the project level within the Chesapeake Bay watershed.	This program is in the Operations and Maintenance phase.	N/A
Lynnhaven River Basin, VA	0	The Lynnhaven River Basin, VA project was authorized by Section 7002 (5)(10) of the Water Resources Reform and Development Act of 2014 (PL 113-121). This project is in the construction phase, and its purpose is aquatic ecosystem restoration and includes restoration of wetlands, submerged aquatic vegetation (SAV), and restoration of hard reef habitat. The Recommended Plan, as described in the Final Feasibility Report, consists of 94 acres of SAV restoration, 38 acres of wetlands restoration, and 31 acres of reef habitat placement using hard reef structures. These plans would support restoration of the watershed and promote the strategies and objectives of Executive Order 13508 for Chesapeake Bay Protection and Restoration. This project was first funded in FY 2018 as a new start and was funded to completion in FY 2019. This project is cost-shared 65 percent Federal and 35 percent non-Federal (City of Virginia Beach, VA).	This project is in the construction phase.	35,110

¹ The authorized funding level amounts shown in this table is the maximum project cost limit for Lynnhaven River Basin, VA and the program cost limit for the Chesapeake Bay Oyster Recovery, MD & VA. Environmental Stewardship investments do not have authority cost limits.

State Data

Table 11--Delaware, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Natural Resources and Environmental Control				
Conservation Cost Share	750	750	750	750
Department of Agriculture				
Cover Crop	0	0	1,450	425
Total, Delaware, State Programs	750	750	2,200	1,175

Table 12--Delaware, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020
Department of Natural Resources and Environmental Control					
Chesapeake Bay Implementation Grant	EPA	CWA Section 117	1,741	1,616	1,981
Chesapeake Bay Regulatory And Accountability Grant Program	EPA	CWA Section 117	820	812	790
Total, Delaware, Federal Funds Received			2,561	2,428	2,770

Table 13—District of Columbia, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Energy and the Environment (DOEE)				
SRF Clean Water Construction (EVCA, EVSD, SRF)	2,144	3,416	414	308
Nonpoint Source Program (EVNI)	594	518	360	1,240
Chesapeake Bay Program (EVCB, EVRA)	2,590	3,732	2,604	3,210
Water Pollution Control Program (EVWP, EVWQ)	464	483	285	1,473
Floodplain Management Program (EVFC, EVFE, CAPSSE, CTPFEM, CTPX, CAPX)	732	31	15	95
Fisheries Management and Aquatic Education (EVFS, MB, WS, AE, FM,SP, AR, TS, WT, CV, AD, AC)	631	760	462	1,578
Fishing License Program (603) not match	-	-	-	11
MS4 Program Operating (654) not match	7,756	14,533	6,268	11,430
Stormwater and Erosion/Sediment Control (634, 646) not match	2,988	3,394	2,509	2,733
Anacostia Fund Operating (670) not match	2,066	2,539	596	1,900
MS4 Program - Capital (SWM05C) not match	840	432	433	-
Anacostia Fund - Capital (BAG04C) not match	25	364	144	-
Anacostia Sediment Study (HMRHMC)	6,179	6,453	4,888	-
Fort Dupont Restoration - (EVFD)	465	-	-	-
Source Reduction (EVSR, EVPO)	6	6	-	75
District Department of Transportation (DDOT)				
Infrastructure Project Management Division	2,765	3,111	1,428	2,000
Urban Forestry Division	1,964	2,470	4,028	4,000
DCWater				
Blue Plains Operations and Maintenance excluding facilities, engineering, administration	101,917	101,870	103,820	107,022
Total, DC, State Programs	134,126	144,122	128,254	137,075

Table 14—District of Columbia, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020
Department of Energy and the Environment (DOEE)					
SRF Clean Water Construction (SRF)	EPA	Clean Water State Revolving Fund	3,209	4,541	4,628
NPS Program (EVNI - 350, 8201)	EPA	Section 319 Program	1,024	982	1,024
Chesapeake Bay Program (EVCB, EVRA)	EPA	Section 117 Program	2,376	1,878	2,398
Environmental Information Exchange Network Grant Program and Related Assistance (EVEX)	EPA	Consolidated Appropriations Act of 2019 (PL116-6)	-	-	200
Water Pollution Control Program (EVWP, EVWQ)	EPA	Section 106 and 604(b) Programs	1,448	1,160	350
Stream Restoration and Demonstration (EVLI, EVLI, EVSW, EVDP, EVMR, EVOR)	EPA	NFWF	-	200	200
Floodplain Management Program (EVFC, EVFE, CTP, FEM)	FEMA	Cooperative Technical Partners and Community Assistance programs	60	122	109
Fisheries Management and Aquatic Education (FM, AE,MB,FS, FH, SPOT, HOBE, WS)	DOI	Wildlife and Sport Fish Restoration Program	1,960	1,841	1,002
Source Reduction Auto Pollution (17EVSR, 19EVPO)	EPA	Source Reduction Assistance Grant Program	5	76	-
Boating Access (17EVAC, BOATAC, BOATKI)	DOI	Wildlife and Sport Fish Restoration Program (US Fish and Wildlife Service)	228	228	362
DC Floating Dock on Anacostia River (17EVAD)	DOI	Wildlife and Sport Fish Restoration Program (US Fish and Wildlife Service)	94	57	-
District Department of Transportation (DDOT)					
Infrastructure Project Management Division	FHWA	State Transportation Fund	8,318	7,717	3,680
DCWater					
Clean Water Act	EPA	Construction Grants for WW Treatment Works	3,312	2,865	1,803
Safe Drinking Water Act	EPA	Safe Drinking Water State Revolving Funds	11,107	11,004	10,481
Total, DC, Federal Funds Received			33,141	32,671	26,237

Notes on Tables 13 and 14

DOEE's fiscal year is October to September. The expenditures for FY 20 are reported through 7-27-2020 and do not include encumbered funds or intradistrict advances. Final FY20 expenditures will be higher.

DOEE information was obtained from DOEE AFO and letters in () refers to the DC funding codes that generated the expenditures

FY21 operating funds taken from Mayor's budget. FY21 estimated capital funds based on budgets for planned projects

District dollars for stream restoration and demonstration projects are captured under MS4, Nonpoint Source, SRF and Chesapeake Bay program as match to grant funds.

Unless specified as "not match", District funds are used as match to federal grant programs.

District dollars include personnel

DDOT dollars provided by DDOT Resource Allocation Division. Data for FY 2018 - FY 2020 as of Jul. 24, 2020 (FY 2020 data is not complete since the fiscal year ends on Sep. 30, 2020).

Estimated data for FY21 based on an extrapolation of prior-year expenditures by DDOT's Infrastructure Project Management Division and Urban Forestry Division.

Projects captured are (a) those that fully support stormwater management infrastructure and (b) those that include stormwater management infrastructure. Based on a discussion with DDOT's Infrastructure Project Management Division, DDOT applied a proxy rate of 5% to all major roadway and bridge projects to estimate the share of each project's budget dedicated for stormwater management infrastructure.

Unless otherwise noted, data based on federal awards received within the fiscal year (October 1 - September 30).

FY20 Clean Water State Revolving Fund based on anticipated FY20 award

Section 117 Program based on anticipated amounts provided by U.S. EPA Chesapeake Bay Program Office

FY20 319 Program funding is based on projected award. DOEE has yet to receive the award.

DDOT dollars provided by DDOT Resource Allocation Division. Expenditure data for FY18-20 as of July 24, 2020 (FY20 data is not complete since the fiscal year ends September 30, 2020)

DDOT projects captured are (a) those that fully support stormwater management infrastructure and (b) those that include stormwater management infrastructure. Based on a discussion with DDOT's Infrastructure Project Management Division, DDOT applied a proxy rate of 5% to all major roadway and bridge projects to estimate the share of each project's budget dedicated for stormwater management infrastructure.

Table 15—Maryland, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Agriculture				
Agricultural Land Preservation (MALPF)	26,229	50,810	47,077	50,865
Ag BMP Technical Assistance (General Funds)	3,466	3,554	3,360	3,364
Animal Waste Technology (Capital Bonds)	446	129	165	120
BMP Tech Assistance to Farmers (GF)	6,632	7,337	8,053	7,868
Cost Share for BMP Capital Projects	8,000	8,500	8,500	8,000
Cover Crop- SF	4,113	11,474	11,479	14,200
Manure to Energy Projects (SF MEA)	2,006	240	2,240	0
Manure Transport- Poultry (GF)	281	281	281	281
Poultry Litter Transportation (SF)	447	526	524	581
Urban Nutrient Mgmt (SF)	27	137	121	184
Department of the Environment				
Capital Programs				
WWTP upgrades - SRF (non-federal)	97,685	123,600	88,837	119,286
ENR Upgrades (BRF Funds)	60,000	70,000	70,000	75,000
Septic System Upgrades (statewide)	15,000	15,000	15,000	15,000
Operating Programs				
Wetlands	5,798	5,739	6,213	5,873
Compliance	5,606	5,400	5,658	5,845
Wastewater Permits	3,066	3,611	3,590	3,414
Integrated Water Planning Program	1,679	2,366	1,906	2,170
Sediment, Stormwater and Dam Safety	2,807	2,899	3,002	2,556
Engineering and Capital Projects Program	2,199	1,597	1,786	1,940
Water Quality Financing (operating)	2,004	2,476	2,428	2,623
ENR O&M Grants	4,777	7,000	7,000	8,000
Septic System Grant Administration (HB12- local govtfunds)	1,425	1,500	1,500	1,500

Clean Water Commerce Act (HB417)	0	10,000	10,000	10,000
Department of Natural Resources				
Forest Service	9,726	9,612	9,722	13,253
Wildlife & Heritage Service	1,065	848	977	880
Critical Area Commission	1,980	2,076	2,101	2,175
Resource Assessment Service	5,138	5,329	6,802	7,870
Maryland Environmental Trust	565	604	604	597
Chesapeake & Coastal Service	52,461	54,106	54,703	59,053
Fisheries Service	5,758	5,318	5,066	5,498
Capital Funds (GO Bonds)				
Oyster Restoration	2,729	260	2,610	8,730
Coastal Resiliency	540	4,725	3,085	4,160
Department of Planning				
Planning Services	3,757	3,977	3,898	4,354
Department of Transportation	127,372	159,836	190,783	131,857
Total, Maryland	464,784	580,866	579,070	577,097

Notes on Table 15:

Does not include reimbursable funds.

Most transportation projects undertaken in MD require stormwater management and mitigation for impacts to wetland, forests, and the Critical Area. A significant amount of mitigation costs represent transportation dollars spend specifically to support Bay restoration through living resources, water quality and habitat improvements. Transportation dollars do NOT represent Purple Line promised funding. Funds are based on state FY (July 1- June 30) - SFY20 July1, 2019 - June 30 2020

Table 16--Maryland, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020 ¹
Maryland Department of Agriculture					
Watershed Implementation Program	USDA, NRCS	Conservation Innovation Grant	19	0	0
Program Planning and Development	USDA, NRCS	RCPP	0	0	0
Watershed Implementation Program	EPA	66.466 CBRAP	193	73	**197
Nutrient Management	EPA	66.466 CBRAP	1,232	1,222	1,250
Special Projects Research	USDA, NRCS	10.192 Environmental Quality Incentives Program	N/A	10	133
Maryland Department of the Environment					
Integrated Water Planning Program	USEPA	66.454 Water Quality Mgmt Planning	196	214	314
Water Quality RLF - Capital Funds	USEPA	66.458 Capitalization Grants for Revolving Funds	32,315	33,000	38,820
Integrated Water Planning Program	USEPA	66.460 Nonpoint Source Implementation Grant	2,114	2,008	2,160
Wetlands	USEPA	66.461 Wetlands Protection	152	527	351
Water and Science Administration	USEPA	66.466 Chesapeake Bay Program	3,593	2,981	2,058
Water and Science Administration	USEPA	66.605 Performance Partnership Grant	2,720	3,576	3,678
Sediment, Stormwater and Dam Safety	DHS/ FEMA	97.041 National Dam Safety Program	52	62	66
Wetlands	DHS/ FEMA	97.045 Cooperating Technical Partners	611	839	852
Maryland Department of Natural Resources					
		10.069 Conservation Reserve Program			
		10.664 Cooperative Forestry Assistance			
		10.675 Urban and Community Forestry Program			
		10.676 Forest Legacy Program			
		10.678 Forest Stewardship Program			
		10.680 Forest Health			
Forest Service	Department of Interior	Forestry Contracts (excludes out-of-state fire expenses)	2,015	2,075	2,459
		15.611 Wildlife Restoration			
		15.615 Cooperative Endangered Species Conservation Fund			
		15.657 Endangered Species Conservation-Recovery Fund			
Wildlife & Heritage Service	USF&WS, Dept. of the Interior	15.633 Landowner Incentive Program	999	791	773

		666.466 EPA-Chesapeake Bay Program			
		15.424 Bureau of Ocean Energy			
		15.810 USGS Statemap			
Resource Assessment Service	NOAA, USGS, EPA, BOEM	15.814 National Geological and Geophysical Data.			
		11.457 - NOAA	2,205	1,942	2,530
Chesapeake & Coastal Service	EPA, USFWS	15.614 USFWS			
		66.466 EPA-Chesapeake Bay Program	3,601	4,053	4,050
Fisheries Service	USF&WS	15.605 Sport Fish Restoration			
		11.463 Habitat Conservation	2,681	3,458	1,961
Maryland Department of Planning			97	76	53
Total, Maryland, Federal Funds Received			54,795	56,907	61,508

Numbers have been updated to reflect FY2019 Actuals

**EPA numbers reflect dollars not yet awarded. The FY21 appropriation approved by the legislature was shown on the spreadsheet to reflect dollars approved as of this date.

Table 17—New York, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Environmental Conservation (NYSDEC)				
Water Quality Improvement Projects (WQIP) grant program	1,813	3,071	2,790	2,790
Engineering Planning Grant (EPG) program	244	300	218	218
Department of Agriculture and Markets (NYSDAM)				
Agricultural Nonpoint Source Abatement & Control Grant Program (AgNPS)	2,560	3,740	3,376	3,376
Agricultural Environmental Management (AEM) Base Funding	990	1,270	1,086	1,086
Environmental Facilities Corporation (EFC)				
Green Infrastructure Program (GIGP)	409	1,330	1,582	1,582
Total, New York, State Programs	6,015	9,711	9,053	9,053

Notes on Table 17:

WQIP is a state grant program for projects that address water quality problems. FY18 and FY19 are awarded amounts. FY20 and FY21 is an estimate based on average awards made in prior WQIP rounds.

The EPG is a state grant program for municipalities for planning for wastewater infrastructure improvements. FY18 and FY19 are awarded amounts. FY20 and FY21 is an estimate based on average awards made in prior EPG rounds.

AgNPS is a state grant program that provides funding for BMP planning and implementation on farms to reduce nonpoint source pollution. FY18 and FY19 AgNPS amount reported by NYSDAM in 2018-2019 Programmatic Milestones. FY20 and FY21 is an estimate based on average awards made in prior AgNPS rounds.

AEM Base is a state funding program for county soil and water conservation districts to provide technical assistance for conservation planning and implementation to farms. AEM Base amounts are county-wide for those counties with area in the CBay watershed and are not watershed-only. FY18-19 AEM amounts reported by NYSDAM in 2018-2019 Programmatic Milestones. FY20 and FY21 values are estimates based on funds earned in prior AEM Base program years.

GIGP is a state grant program for stormwater BMPs that provide stormwater treatment, habitat, flood attenuation and other benefits. FY18 and FY19 are awarded amounts. FY20 and FY21 is an estimate based on average awards made in prior GIGP rounds.

Table 18—New York, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020
Department of Environmental Conservation, Division of Water					
Chesapeake Bay Watershed Program	EPA	Chesapeake Bay Regulatory and Accountability Program	1,186	1,007	963
Chesapeake Bay Watershed Program	EPA	Chesapeake Bay Implementation Grant	1,700	1,691	2,002
Total, New York, Federal Funds Received			2,886	2,698	2,966

Table 19—Pennsylvania, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Environmental Protection				
Growing Greener/Environmental Stewardship Fund (ESF)	19,022	-	16,404	19,900
Water Pollution Control (Section 106; Section 106 Supplemental; Section 604(b))	9,986	9,685	7,941	-
Agriculture Plan Reimbursement Program	964	773	681	900
Chesapeake Bay Implementation- Program Management and Administration	838	-	-	-
Chesapeake Bay Regulatory and Accountability- Agricultural Nonpoint Source Abatement	1,345	2,017	-	1,487
Non-Tidal Monitoring Network	525	701	-	-
Chapter 102- Construction Stormwater (E&S, PCSM, NPDES) Program Implementation and Administration	2,922	2,296	3,789	3,700
Chapter 105- WOE and Dam Safety Program Implementation and Administration	55,056	58,194	52,398	53,000
Chesapeake Bay Commission	300	300	300	300
State Conservation Commission				
Conservation District Fund Allocation Program	2,105	2,131	2,298	2,200
Dirt, Gravel, and Low Volume Road Program	16,778	17,157	16,790	14,600
Nutrient Management Program	1,544	1,548	1,548	1,548
Resource Enhancement and Protection Program	4,466	4,914	10,900	9,500
Conservation Excellence Grant	-	-	-	2,500
Department of Agriculture				
Farmland Preservation	19,835	20,641	20,000	20,000
Pennsylvania Infrastructure Investment Authority				
Project Construction and Implementation	39,019	13,321	15,590	15,000

Department of Community and Economic Development

Watershed Restoration and Protection Program (Act 13)	608	968	-	-
---	-----	-----	---	---

Department of Conservation and Natural Resources

Land Conservation	4,723	4,866	711	1,000
Riparian Buffers (PennVest Funding)	855	683	279	150
Riparian Buffers (DCNR)	400	963	1,195	850
Tree Canopy (TreeVitalize Program)	96	59	60	10
Lawn Conservation (Conservation Landscaping and Urban Forest Planting)	-	-	72	100

Total, Pennsylvania, State Programs

181,388	141,215	150,956	146,745
----------------	----------------	----------------	----------------

Note 1: Amounts awarded are based on projects approved; an estimation can be performed based upon budgeted amounts. FY20 and FY21 are estimated.

Note 2: Expended funds calculated at 49% of the total statewide expenditures because the Chesapeake Bay Watershed makes up approximately 49% of Pennsylvania.

Note 3: Beginning FY19, match is provided in Growing Greener and Ag Plan Reimbursement Program

Note 4: FY19 Chesapeake Bay Agricultural Source Abatement funded via ESF; FY21 estimates based on the 5-month 2020-2021 state budget passed

Note 5: Chapter 102 - construction stormwater (erosion and sediment control (E&S), post-construction stormwater management (PCSM), NPDES) state expenditures do not equate to total cost to implement the program. Permit fees collected are not included in this report. These numbers are provided on a state fiscal year basis, based on the state required triennial cost and fee analysis.

Note 6: FY20 and FY21 are estimated based on potential program costs / expenditures.

Note 7: Chapter 105 - water obstruction and encroachments (WOE) and dam safety state expenditures do not equate to total cost to implement the program. Permit fees collected are not included in this report. These numbers are provided on a state fiscal year basis, based on the state required triennial cost and fee analysis.

Note 8: DCED Watershed Restoration and Protection Program is reported on a state fiscal year basis. FY20 applications are being accepted through July 31, with awards anticipated Spring 2021. Varying levels of funding is received from year to year and this program competes directly against other Act 13 funding programs, therefore an estimate of FY21 cannot be provided.

Table 20— Pennsylvania, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020
Department of Environmental Protection					
Nonpoint Source Program	EPA	319 Program	3,562	245	2,932
Water Pollution Control	EPA	106 Grant	2,856	4,405	4,711

Water Pollution Control	EPA	106 Supplemental Grant	29	173	94
Monitoring Assessment and Planning	EPA	Section 406(b)	354	598	375
Chesapeake Bay Implementation	EPA	Chesapeake Bay Implementation Grant	186	2,073	5,515
Chesapeake Bay Regulatory and Accountability	EPA	Chesapeake Bay Regulatory and Accountability Grant	1,382	2,900	2,667
Chesapeake Bay Regulatory and Accountability	EPA	WIP	175	0	0
Chesapeake Bay Regulatory and Accountability	EPA	MEB	0	0	300
Chesapeake Bay Regulatory and Accountability	EPA	Water Division	0	50	100
Non-Tidal Monitoring Network	EPA	Monitoring	471	471	471
Department of Conservation and Natural Resources- Bureau of Forestry					
Land Conservation	USDA, Forest Service	Forest Legacy Program	0	0	0
Riparian Forest Buffer Initiative	USDA, Farm Service Agency	Riparian Forest Buffer Initiative	232	0	0
Riparian Forest Buffer Initiative	EPA	Chesapeake Bay Implementation Grant	0	0	685
Pennsylvania Infrastructure Investment Authority					
Program Administration and Oversight	EPA	SRF	1,281	1,683	1,039
Construction and Implementation	EPA	SRF	112,644	40,548	64,620

Pennsylvania Department of Agriculture

Farmland Preservation- Ag BMP Implementation	USDA, NRCS	RCPP	0	0	2,400
Farmland Preservation- Conservation Easement	USDA, NRCS	ACEP	0	0	358

Pennsylvania Fish and Boat Commission

	EPA	Chesapeake Bay Implementation Grant	-	464	478
--	-----	--	---	-----	-----

Total, Pennsylvania, Federal Funds Received **114,804** **43,216** **70,451**

Note 1: FY20 is estimated.

Note 2: Calculated at 49% as that is the land mass within the Chesapeake Bay Watershed

Note 3: Includes FY19 \$778,600 CBIG3 grant to DEP and subaward to DCNR and FY20 \$3,848,209 CBIG3 grant to DEP and subaward to PA State Conservation Commission

Note 4: DCNR awarded \$5,385,000 in FY17 effective 7/1/2016 - 12/31/2020 for land conservation

Note 5: DCNR awarded \$684,868 in FY20 directly from EPA

Table 21--Virginia, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Virginia Marine Resources Commission				
Oyster Replenishment/Restoration	2,000	2,750	4,000	4,000
Virginia Department of Environmental Quality¹				
Water Quality Improvement Fund point source grants	15,024	3,978	274	5,787
Water Quality Improvement Fund non point source grants	420	382	1,170	1,117
Clean Water SRF	14,849	28,539	17,221	23,022
Stormwater Local Assistance grants	9,524	7,399	8,574	9,500
Stormwater Management	4,202	6,271	6,204	6,289
Water Quality Management	16,490	15,561	15,001	16,247
Air Quality	8,183	9,022	10,318	11,068
Land Management	4,986	5,273	5,058	5,110
Superfund	1,604	1,802	1,808	1,906
Petroleum Remediation	23,892	23,541	17,015	24,227
Litter Control and Recycling	1,341	1,473	1,401	1,700
CSOs, including Lynchburg, Richmond, and Alexandria	6,563	17,801	44,929	16,553
Virginia Department of Wildlife Resources²				
Fisheries and Aquatic Habitat	2,647	2,359	3,318	3,000
Species of Conservation Need and Habitat	626	1,043	3,235	2,000
Wildlife and Terrestrial Habitat	4,633	4,861	6,034	5,500
Land Acquisition	10,553	0	0	0
Public Access*	896	182	416	400

Virginia Department of Agriculture and Consumer Services

Agricultural Stewardship Program	218	226	259	265
----------------------------------	-----	-----	-----	-----

Virginia Department of Forestry

Timber Harvest Inspection Program	997	670	657	657
-----------------------------------	-----	-----	-----	-----

Virginia Department of Conservation and Recreation³

50301- Soil and Water Conservation	2,190	1,761	3,360	40,851
------------------------------------	-------	-------	-------	--------

50320- Financial Assistance to Soil and Water Conservation Districts	4,179	4,130	5,055	5,384
--	-------	-------	-------	-------

50322- Technical Assistance to Soil and Water Conservation Districts	2,970	2,240	7,041	840
--	-------	-------	-------	-----

50323- Agricultural Best Management Practices Cost Share Assistance	12,847	14,208	35,120	6,160
---	--------	--------	--------	-------

50314- Dam Inventory, Evaluation and Classification and Flood Plain Management	1,673	1,986	6,850	12,344
--	-------	-------	-------	--------

50317- Natural Heritage Preservation and Management	2,346	2,450	3,047	2,971
---	-------	-------	-------	-------

50401- Preservation of Open Space Lands	5,289	8,429	5,348	11,655
---	-------	-------	-------	--------

50403- Design and Construction of Outdoor Recreational Facilities	462	519	621	626
---	-----	-----	-----	-----

50404- State Park Management and Operations	26,960	631	683	561
---	--------	-----	-----	-----

50406- Natural Outdoor Recreational and Open Space Resource Research, Planning, and Technical Asst.	689	701	645	1,295
---	-----	-----	-----	-------

59901- General Administration Management for Chesapeake Bay Program Activities	5,609	6,120	7,928	7,478
--	-------	-------	-------	-------

Virginia Department of Transportation⁴

MS4/Chesapeake Bay TMDL Special Condition	4,306	10,987	14,362	14,400
---	-------	--------	--------	--------

Total, Virginia, State Programs	218,521	195,743	249,955	253,813
--	----------------	----------------	----------------	----------------

¹ All costs are based on June 30, state fiscal year

Clean Water SRF: Based on actual payments for localities in the bay region

Stormwater Local Assistance grants: Based on actual payments for localities in the bay region

Stormwater Management: Total program costs allocated based on statewide bay land area 60%

Water Quality Management: Total program costs allocated based on statewide bay land area 60%

Air Quality: Total program costs allocated based on statewide bay land area 60% except for non-attainment emissions inspection expenditures at 100%

Land Management: Total program costs allocated based on statewide bay land area 60%

Superfund Based on actual payments for localities in the bay region

Petroleum Remediation: Based on actual payments for localities in the bay region

Litter Control and Recycling: Based on actual payments for localities in the bay region

CSOs, including Lynchburg, Richmond, and Alexandria: Based on actual payments for localities in the bay region

FY 2021 estimates are preliminary

² \$2.1 Million included in Species of Conservation Need and Habitat is expenses related to the Hampton-Roads Bridge-Tunnel expansion and the nesting colony on Ft. Wool.

³ Soil and Water Conservation- Includes Water Quality practices, Nutrient Mgt to prevent run off, Agricultural incentives, Resource Mgt planning, Engineering Services, Shoreline Erosion Advisory (SEAS), Adopt a Stream, Watershed and Stream Exclusion Practices, Chesapeake Bay Restoration Fund, Plant more Plants, Conservation Reserve Enhancement Program (CREP), Virginia Agricultural Best Mgt Practices. Total program costs allocated based on statewide bay land area 70%

Dam Inventory, Evaluation and Classification and Flood Plain Management - Public Safety, Erosion Control, Climate resiliency, Water Quality. Total program costs allocated based on statewide bay land area 70% Includes full \$5M for College Lake Dam. Does not include \$100K for Pittsylvania Dam.

Natural Heritage Preservation and Management - Natural Area Preserves. Conservation of Virginia's biodiversity and ecosystems of lands with native plant and animal life. Protection and outdoor recreational opportunities. Clean water through Caves and Karst. Total program costs allocated based on statewide bay land area 70%

Preservation of Open Space Lands - Land protection grants and advisory, Virginia Outdoors Fund, Virginia Land Conservation Foundation, Clean Water Revolving Loan, Land Conservation, Virginia Recreational Trails Fund, Tax Incentive Administration. Total program costs allocated based on statewide bay land area 70%

State Park Management and Operations - Accessibility, Environmental Education, Habitat Enhancement, Shoreline Erosion Control, Interpretative Signage, Canoe in Camping, Kayak Launch. Total program costs allocated based on activities in "Bay Area" Parks: False Cape, Chippokes, York River, First Landing, Leesylvania, Mason Neck, Westmorland and Kiptopeke.

Natural Outdoor Recreational and Open Space Resource Research, Planning, and Technical Assistance - Virginia Outdoors Plan, Land Water Conservation Fund, Recreational Trails Program, Virginia Land and Water Conservation Fund, Greenways and Trails, Blueways and Water Trails, Public Access, Virginia Scenic Resources (Rivers and Byways), Master Planning of Parks, Green Infrastructure- interconnected network of waterways wetlands, wildlife habitats, parks, and other open spaces that support native species. Total program costs allocated based on statewide bay land area 70%

⁴ FY2020 estimates and includes activity for August and September 2020.

Table 22--Virginia, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020
Virginia Marine Resources Commission					
Oyster Restoration-Replenishment ¹	NOAA	Fisheries Habitat Conservation Program	0	0	540
Virginia Department of Environmental Quality²					
Virginia Revolving Loan Program	EPA	EPA SRF	32,848	32,518	32,521
Chesapeake Bay Regulatory & Accountability Program (CBRAP)	EPA	EPA CBRAP	3,590	3,530	3,899
Chesapeake Bay Implementation Grant (CBIG)	EPA	EPA CBIG	2,778	2,878	3,025
PPG 106 Water	EPA	EPA 106	2,068	2,171	2,700
PPG 105 Air	EPA	EPA 105	1,708	1,841	1,708
Nonpoint Source Program	EPA	EPA 319	1,548	1,369	1,125
Coastal Zone Management Program	NOAA	NOAA CZM	2,136	1,735	1,559
Chesapeake Bay Monitoring	EPA	EPA 117e	1,360	1,360	1,392
DOD Federal Facilities	Department of Defense	Department of the Army, Corps of Engineers	480	1,341	577
PPG RCRA	EPA	EPA RCRA	1,227	1,296	1,356
Leaking Underground Storage Tank	EPA	EPA LUST	918	865	810
Leaking Underground Storage Tank Prevention	EPA	EPA LUST Prevention	464	431	403
PM 2.5 Air Monitoring Program	EPA	EPA PM 2.5	293	293	293
Water Quality Management Planning	EPA	EPA WQM 604(b)	0	229	328
DERA Project	EPA	EPA State Clean Diesel Program	153	166	196
PPG Wetlands	EPA	EPA Region 3 Wetland Program Development	225	105	105
Pre-remedial Response (Preliminary Assessment / Site Inspection - PASI)	EPA	EPA Superfund (Site Specific)	81	156	80
Superfund Core Program	EPA	EPA Superfund Core EPA Superfund (Site Specific)	74	150	385
Pre-remedial Response (Formerly Used Defense Sites - FUDS)	EPA	EPA Superfund (Site Specific)	185	68	0
106 Disaster Relief	EPA	EPA 106 Disaster Relief EPA Superfund (Site Specific)	0	0	189
Superfund: Atlantic Wood	EPA	EPA Superfund (Site Specific)	78	50	138
PPG Multipurpose	EPA	EPA Multipurpose	0	0	112
Virginia Department of Wildlife Resources³					

Fisheries and Aquatic Habitat	U.S. Fish and Wildlife Service	Sportfish Restoration Programs	1,967	1,770	2,489
Species of Conservation Need and Habitat	U.S. Fish and Wildlife Service	State Wildlife Grants	318	678	1,046
Wildlife and Terrestrial Habitat	U.S. Fish and Wildlife Service	Wildlife Restoration Programs	3,288	3,646	4,525
Land Acquisition	U.S. Fish and Wildlife Service	Wildlife Restoration Programs	10,553	4,111	2,525
Public Access	U.S. Fish and Wildlife Service	Wallup-Breaux/SFR	777	474	312
Virginia Department of Forestry					
Chesapeake Bay Program	Forest Service	10.675 Tree Canopy	10	25	0
Chesapeake Bay Program	Forest Service	10.678	227	84	56
Virginia Department of Conservation and Recreation					
Soil and Water Conservation ⁴	EPA	319, CBIG and CBRAP	2,239	1,773	2,192
Dam Inventory, Evaluation and Classification and Flood Plain Management ⁵	FEMA	CTP, CAP-SSE and Dam Safety	293	322	231
State Park Management and Operations ⁶	NPS & USFWS/ACOE	Chesapeake Bay Access	16	357	44
Natural Outdoor Recreational and Open Space Resource Research, Planning, and Technical Assistance ⁷	NPS & USFWS	Land Conservation and East Coast Greenway	3,017	5,141	2,981
Total, Virginia, Federal Funds Received			74,919	70,934	69,842

¹ Partnership with the Virginia Institute of Marine Science (VIMS), and Chesapeake Bay National Estuarine Research Reserve (CBNERR) proposes to restore 100 acres of new oyster reef habitat over a three-year period for the benefit of federally managed fish species, forage species, native oysters and ecosystem services. This is a 4-year grant with funds approved one year at a time. The total of the four-year grant is estimated at \$3,004,439)

²VADEQ Notes: * Allocation Methodology

- Based on statewide Bay land area (60%)

EPA 106 (Primarily based on 60% estimate. Funding for some 106 projects is allocated based on projects for Bay localities)

EPA 105

EPA RCRA

EPA PM 2.5

EPA State Clean Diesel Program

EPA Region 3 Wetland Program Development

106 Disaster Relief (Hybrid -- 1/3 components based on Bay land area, 2/3 components based on project locations)

PPG Multipurpose

- Based on actual projects for localities in the bay region

Department of the Army, Corps of Engineers

EPA WQM 604(b)

EPA CBRAP

EPA CBIG

EPA 319

EPA 117e
EPA Superfund (Site Specific)
EPA Superfund Core
NOAA CZM

106 Disaster Relief (Hybrid -- 1/3 components based on Bay land area, 2/3 components based on project locations)

- Based on historical payments

EPA LUST

EPA LUST Prevention

- Based on assumption that 100% of projects will impact Bay area

EPA SRF

* Generally, allocation methodology was applied to federally approved amounts.

Exceptions:

* EPA SRF allocation is based on pending 2020 request

* DOD Fed Facilities is based on cash received

* Some grants listed above have not yet been fully awarded (grant amount has been approved, but total cash has not yet been received)

³ DuPont Settlement is \$200,000 of the amount entered under Species of Conservation Need and Habitat

⁴ Includes Water Quality practices, Nutrient Mgt to prevent run off, Agricultural incentives, Resource Mgt planning, Engineering Services, Shoreline Erosion Advisory (SEAS), Adopt a Stream, Watershed and Stream Exclusion Practices, Chesapeake Bay Restoration Fund, Plant more Plants, Conservation Reserve Enhancement Program (CREP), Virginia Agricultural Best Mgt Practices. Total program costs allocated based on statewide bay land area 70%

⁵ Public Safety, Erosion Control, Climate resiliency, Water Quality. Total program costs allocated based on statewide bay land area 70%

⁶ Accessibility, Environmental Education, Habitat Enhancement, Shoreline Erosion Control, Interpretative Signage, Canoe in Camping, Kayak Launch. Total program costs allocated based on activities in "Bay Area" Parks: False Cape, Chippokes, York River, First Landing, Leesylvania, Mason Neck, Westmorland and Kiptopeke.

⁷ Virginia Outdoors Plan, Land Water Conservation Fund, Recreational Trails Program, Virginia Land and Water Conservation Fund, Greenways and Trails, Blueways and Water Trails, Public Access, Virginia Scenic Resources (Rivers and Byways), Master Planning of Parks, Green Infrastructure- interconnected network of waterways wetlands, wildlife habitats, parks, and other open spaces that support native species. Total program costs allocated based on statewide bay land area 70%

Table 23—West Virginia, State Programs

(Budget authority in thousands)	FY 2018	FY 2019	FY 2020	FY 2021
Department of Environmental Protection				
CB Implementation Subrecipient state expenditures	679	1140	1287	1035
CB Regulatory & Accountability Subrecipient state expenditures	121	229	194	181
NPDES permitting, compliance, enforcement ¹	640	689	270	533
Monitoring and TMDL (14.55% of statewide program)	296	309	449	351
SRF Wastewater Treatment Upgrades ²	2,980	196	0	0
319 Program Match	41	25	225	70
Infrastructure and Jobs Development Council (IJDC)				
Wastewater Treatment Upgrade Expenditures through Senate Bill 245 ³	2,959	0	0	0
Wastewater and CSO Projects	0	0	0	128
Total, West Virginia, State Programs	7,716	2,588	2,425	2298

¹ 14.55% of statewide program, estimated by # of counties in Potomac River Basin (8 out of 55)

² There are also personnel and operating expenses incurred by the SRF Program to administer the program; however, those expenditures could not be included because WV DEP employee time was not tracked per wastewater treatment upgrade project.

³ Legislation to provide lottery funds for upgrades to wastewater treatment plants to meet environmental standards targeting Chesapeake Bay Restoration

Table 24—West Virginia, Federal Funds Received

(Budget authority in thousands)	Federal Agency	Federal Program	FY 2018	FY 2019	FY 2020 ³
Department Environmental Protection					
CB Implementation	EPA	CB Program	1,550	1,545	1,691
CB Regulatory & Accountability	EPA	CB Program	672	672	670
Water Pollution Control ¹	EPA	CWA 106 Program	322	317	2,044
Nonpoint Source 319 Program	EPA	CWA 319	237	47	0
CB Non-Tidal	EPA	CB Program	226	226	209
WQ Management Planning ²	EPA	WQ Management Planning	37	36	250
Total, West Virginia, Federal Funds Received			3,044	2,843	4,864

¹ 14.55% of statewide program, estimated by # of counties in Potomac River Basin (8 out of 55)

² There are also personnel and operating expenses incurred by the SRF Program to administer the program; however, these expenditures could not be included because WV DEP employee time was not tracked per wastewater treatment upgrade project

³ These are awards for FY 2020. Note that FY 2018 and FY 2019 were expenditures of federal funds and are not showing awards information. In addition, FY 2020 the 106 WP and 604(b) WQMP have not yet been awarded.