

Department of Natural Resources

MISSION

The Department of Natural Resources leads Maryland in securing a sustainable future for our environment, society, and economy by preserving, protecting, restoring, and enhancing the State's natural resources.

VISION

In a sustainable Maryland, we recognize that the health of our society and our economy are dependent on the health of our environment. Therefore, we choose to act both collectively and individually to preserve, protect, restore, and enhance our environment for this and future generations.

KEY GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Goal 1. Healthy Terrestrial Ecosystems.

- Obj. 1.1** Establish scientifically supported sustainable harvest strategies for game species populations through a variety of survey methods.
- Obj. 1.2** Restore 3,000 acres of critical plant and wildlife habitat by June 30, 2021.
- Obj. 1.3** Preserve and protect Maryland's aquatic and wildlife habitats and populations by increasing the number of conservation inspections conducted to 170,000 by 2021.
- Obj. 1.4** Restore 2,000 miles of riparian forest buffers (RFBs) in Maryland by 2025.
- Obj. 1.5** Provide multiple ecosystem benefits by annually achieving integrated resource management covering 25,000 acres of non-industrial private forest lands and guiding 700 forest landowners in natural resources management that meets their needs.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Number of deer hunting participants	66,000	62,000	70,471	60,000	70,400	70,500	70,500
Number of bear hunting participants	1,060	1,730	1,708	1,683	2,059	2,100	2,100
Number of deer harvested	86,900	84,000	85,193	86,542	77,382	80,000	80,000
Number of bear harvested	69	95	167	131	135	140	150
Cumulative number of acres of habitat restored since 2004	1,855	1,905	2,805	3,796	4,196	4,596	4,996
Cumulative acres of early successional habitat created	N/A	676	1,101	1,503	2,549	3,600	3,750
Number of Park Service acres restored to preserve biodiversity	120	180	210	160	606	350	400
Number of conservation inspections conducted	154,854	161,585	163,499	144,507	146,210	143,318	150,029
Number of conservation inspections per officer	927	878	856	983	949	838	838
Acres of RFBs established	251	258	118	167	145	150	180
Miles of RFBs restored in Maryland	17	16	8	14	7	12	15
Cumulative miles restored in Bay Watershed since 1996	1,386	1,402	1,410	1,424	1,431	1,443	1,458
Number of acres covered by Forest Stewardship Plans	19,112	32,203	28,123	28,226	24,781	24,000	24,000
Total acres of management practices implemented	23,349	28,948	25,835	29,389	29,175	29,000	29,000
Number of wildfires suppressed	135	131	126	97	47	100	100
Acres of wildfires suppressed	1,061	185	2,255	398	1,223	1,500	1,500

Department of Natural Resources

Goal 2. Healthy Aquatic Ecosystems.

- Obj. 2.1** Utilizing the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund, annually reduce coastal non-point source pollution from entering Chesapeake, coastal, and ocean waters. Report on the status of key Chesapeake Bay resources as government, commercial, and citizen efforts to restore water and habitat quality of the Bay and its watershed continue through 2025.
- Obj. 2.2** Annually produce technical assessments on Harmful Algal Bloom (HAB) distribution and prevalence for Maryland’s waters, develop new management strategies, and provide timely information to the public and agencies charged with protecting public health.
- Obj. 2.3** Assess ecosystem components within non-tidal waters to evaluate critical fisheries and habitat elements for protection and/or restoration.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Cumulative pounds of coastal non-point sources of nitrogen reduced through annual and structural land use change Best Management Plans (BMPs)	2,104,961	1,678,254	1,937,574	1,614,316	3,531,111	3,755,455	4,785,957
Cumulative pounds of coastal non-point sources of phosphorus reduced through annual and structural land use change BMPs	165,179	168,531	198,202	218,525	193,764	205,104	214,213
Cumulative pounds of coastal non-point sources of sediment reduced through annual and structural land use change BMPs (millions)	370.729	373.057	373.061	373.071	376.006	380.208	384.074
¹ Number of tributaries with Harmful Algal Blooms	11	7	10	8	7	10	10
¹ Number of fish or human health advisories events reported/responses	4	6	2	-	3	5	5
¹ Acres of Submerged Aquatic Vegetation (goal=114,034)	53,783	59,131	62,356	65,263	65,283	68,170	71,077
¹ Number of sites where Maryland Biological Stream Survey (MBSS) benthic, fish, herpetofauna, and habitat samples are collected	219	220	232	230	152	160	160
¹ Number of volunteer benthic samples collected and processed	240	99	61	49	64	80	80
¹ Number of freshwater watersheds with data available	65	60	63	55	46	50	50

- Obj. 2.4** Complete comprehensive reviews of local Critical Area Programs to assure consistency with law and regulations.
- Obj. 2.5** Maximize the preservation and protection of living resources and aquatic habitat by providing annual, comprehensive surveys, charts, and accurate markings of State waterways.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Percentage of Critical Area Programs reviewed and completed during the six-year cycle as required by law, and fully consistent with the Critical Area law and regulation	4%	8%	0%	6%	3%	15%	12%
¹ Number of monitoring stations reporting water quality trends	196	196	221	222	226	222	223
Number of oyster habitat and oyster location surveys completed	109	147	190	196	285	285	285
Number of waterway violation cases supported	66	65	134	179	103	103	103

Department of Natural Resources

- Obj. 2.6** Annually achieve fishery sustainability objectives (target fishing level and/or biomass threshold) for blue crab, striped bass and oyster fisheries.
- Obj. 2.7** Restore native oyster habitat and populations in 10 tributaries (5 in Maryland) by 2025 and ensure their protection.
- Obj. 2.8** Facilitate the development of the Maryland aquaculture industry through collaboration with the Maryland Aquaculture Coordinating Council.
- Obj. 2.9** Annually achieve statewide finfish population restoration and enhancement Sportfish Restoration objectives through 2021.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
¹ Number of fisheries being tracked/reviewed annually in accordance to a management plan	22	26	26	26	26	27	28
¹ Harvest rate (exploitation fraction) of female blue crabs relative to target harvest rate (25.5 percent)	15%	16%	21%	23%	25%	25%	25%
¹ Crab winter dredge survey index of stock size (density-crabs/1000m)	50	58	47	41	62	50	50
¹ Striped bass juvenile index (abundance of young of the year fish)	24.2	2.2	11.7	11.7	11.8	11.8	11.8
¹ Number of bushels of oysters harvested	393,588	385,000	224,685	181,329	136,954	125,000	125,000
¹ Oyster biomass index (1994 base =1; goal = 10)	2.1	1.8	1.4	1.4	1.8	1.8	1.3
¹ Number of hatchery oysters planted (millions)	550	796	840	453	7	575	508
¹ Acres of oyster habitat rehabilitated through planting of shell or non-shell habitat	127	164	106	56	2	76	100
Number of new or expanded aquaculture businesses	54	68	53	46	42	52	45
¹ Stock hatchery-cultured finfish to support population restoration, population enhancement, corrective stocking, put-and-take fishing, outreach, education, and research (millions)	5.7	6.6	7.5	5.2	6.4	5.0	5.0

Obj. 2.10 Certify five additional Clean Marinas annually.

Obj. 2.11 Screen 20 applications per year to provide grants for the purchase and installation of marine sewage pumpout stations.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
¹ Clean marinas certified	3	5	2	3	0	2	2
¹ Cumulative number of clean marinas in State adopting best management practices (including those decertified over time)	155	156	154	149	148	149	150
Total number of pumpout stations operating in the State	350	340	359	360	358	360	363
New pumpout stations installed	1	1	1	2	1	1	2
Pumpout stations replaced or upgraded	9	9	5	4	4	7	6

Department of Natural Resources

Goal 3. Fiscal Responsibility: Efficient Use of Energy & Resources and Support of Long-Term Economic Prosperity.

Obj. 3.1 Protect Maryland's ecologically-valuable lands and waters through effective project review, including permit applications, and policy strategies.

Obj. 3.2 Protect high value natural resources and outdoor recreational opportunities on public and private lands by reviewing more than 2,500 proposed projects and permits, on an annual basis, to minimize environmental harm and preserve investments in public lands.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Number of requests for new critical maintenance capital projects on DNR lands	92	116	74	81	95	99	103
Number of requests for new major capital development projects on DNR land (not including critical maintenance projects)	27	43	24	52	47	49	51
Number of projects on DNR lands initiated or completed	349	258	234	240	108	113	118
Percent of major capital development projects on DNR lands initiated or completed	86%	86%	88%	74%	86%	86%	86%
Number of project proposals reviewed for impacts to threatened and endangered species and other species of concern	2,848	1,989	1,871	1,948	2,080	2,100	2,100

Obj. 3.3 Increase the number of State and local governments prepared for the impacts of future storm-events, shoreline changes, and sea level rise.

Obj. 3.4 Annually issue assessments and recommendations to minimize the environmental, public health, and socioeconomic impacts of electric energy facilities.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Cumulative number of Maryland's state agencies and coastal communities who have incorporated sea level and climate considerations into planning and management strategies	8	8	14	6	6	7	7
¹ Number of new power plant/transmission line projects under review	35	41	30	26	24	38	38

Goal 4. Citizen Stewardship, Outdoor Recreation, & Opportunities to Take Action.

Obj. 4.1 Annually increase the number of youth conservation program participants and projects.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Additional number of youth participants in corps programs	369	383	498	519	350	325	300
Number of stewardship projects completed by youth corps	2,388	2,400	2,755	2,787	2,517	2,400	2,000

Department of Natural Resources

- Obj. 4.2** Increase attendance of Maryland Environmental Trust (MET) sponsored workshops and trainings.
- Obj. 4.3** Contribute to achieving State education mandates and goals for environmental literacy by providing a combination of workshops, training, and educational opportunities that support schools (through professional development for educators and classroom and outdoor experiences for students), parks, and partner environmental education providers.
- Obj. 4.4** Annually provide outdoor recreational, historical, and cultural resource experiences for over 10 million visitors to State Parks.
- Obj. 4.5** Annually increase customer service satisfaction rating and improve fiscal sustainability.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
MET Workshop and conference attendance	253	377	360	314	235	200	200
Number of educators trained	2,006	1,978	1,920	764	731	820	900
Number of students participating in classroom, field and other activities	63,978	69,102	61,729	45,812	22,252	48,000	50,000
Number of DNR social media followers	90,000	125,000	215,000	217,000	282,000	310,000	340,000
² Number of State Park acres available to the public	138,015	138,270	137,716	140,761	141,020	141,500	142,000
Acres of Wildlife Management Areas (WMAs)	119,808	123,530	123,790	125,122	126,609	131,609	136,609
Number of visitors using parks (millions)	11.26	12.94	13.99	13.78	13.56	13.50	13.50
Number of trail miles available	880	919	1,020	957	1,088	1,115	1,130
Number of Park Service interpretive and environmental education program participants	100,135	245,547	248,901	266,382	248,600	248,000	248,000
Percent of visitors rating their park experience as excellent or above average	91%	90%	90%	91%	92%	92%	92%

- Obj. 4.6** Annually reduce the number of accidents and injuries through education programs, to include public relations outreach efforts targeted at the prior years boating and hunting accident stats for causal factors.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Number of reportable boating accidents	130	150	154	164	170	182	188
Number of hunting accidents	7	16	18	9	12	13	10

Department of Natural Resources

- Obj. 4.7** Ensure safe and enjoyable recreational opportunities for boaters, hunters, park visitors, and others participating in outdoor recreation activities by providing effective law enforcement services as a public safety agency.
- Obj. 4.8** Conduct and perform daily patrols and activities that support Maritime Homeland Security designed to provide a safe and secure environment for Maryland citizens and visitors alike.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Number of hunters checked	16,561	16,501	16,614	15,395	15,276	16,074	16,826
Number of boating inspections	34,405	43,281	38,897	14,115	17,015	29,583	30,967
Number of law enforcement officers	167	184	191	147	154	171	179
Number of law enforcement contacts	294,075	309,427	270,877	101,930	115,743	219,564	229,836
Number of law enforcement citations/warnings	31,489	31,239	29,826	21,991	27,477	28,557	29,893
Hours spent on Waterway Patrols	39,736	42,018	40,457	31,912	28,572	36,594	38,306
Hours spent on Public Land Patrols	59,647	62,544	63,272	63,405	40,222	58,140	60,860
Uniform Crime Report data – Part 1 crimes	227	149	163	121	137	98	74
Number of Homeland Security patrol checks	6,681	12,142	15,054	14,423	14,691	14,022	14,678

- Obj. 4.9** Coordinate with Departmental units and other Federal, State and local agencies to develop assessments of existing and potential boating access sites and maps for the general boating public and annually provide new or enhanced public boating access sites throughout the State.
- Obj. 4.10** Support the Maryland State Boat Act Advisory Committee in reviewing and implementing regulations affecting the equipment and operation of vessels in Maryland waters. Ensure that State-owned and State-leased marina facilities remain viable. Oversee the completion of capital projects at these facilities to maximize slip occupancy and public access.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
¹ Potential public access boating sites identified	5	5	10	12	12	13	13
Number of projects provided technical assistance	25	25	66	108	30	25	25
¹ Number of public boating sites enhanced or created	30	52	61	68	48	38	40
Number abandoned vessels removed from State waters	16	23	26	27	38	35	35
Cumulative miles of water trails established in State	737	745	753	782	815	830	850
Number of waterway projects funded annually	35	59	60	49	57	59	58
Amount of funding awarded for waterway projects (\$)	4,000,000	6,000,000	10,500,000	10,500,000	12,500,000	13,500,000	13,500,000
Number of projects incorporating sustainable components	24	40	39	40	40	39	40
Number of dredge projects funded annually	8	15	14	12	17	16	16
Amount of funding awarded for dredge projects (\$)	1,575,272	2,949,847	4,279,975	4,409,475	5,722,248	6,012,000	6,500,000
¹ Number of long-term slip leases realized	300	325	223	250	261	275	285
¹ Number of transient slip leases realized	550	555	575	585	640	650	665

Department of Natural Resources

Goal 5. Vibrant Communities & Neighborhoods.

Obj. 5.1 Annually meet Departmental land conservation goals to protect strategic natural resources while providing recreational and economic opportunities.

Obj. 5.2 Protect an additional 1,000 acres annually with MET conservation easements, and seek to visually inspect (monitor) each property once annually.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Program Open Space (POS) acquisition acres approved by the Board of Public Works (BPW)	4,425	5,596	2,222	6,578	5,203	5,400	5,400
Rural Legacy easement/fee simple acres approved by the BPW	2,862	3,533	3,778	4,850	5,400	6,000	6,500
Conservation Reserve Enhancement Program (CREP) permanent easement acres approved by the BPW	830	259	1,123	632	687	500	500
Number of acres protected annually by MET easements	763	808	1,465	1,246	940	1,000	1,000
Number of acres of protected lands	8,880	10,196	8,588	13,305	12,231	12,900	13,400
Percent of POS Stateside acquisition acres approved by the BPW located within a Targeted Ecological Area	91%	97%	88%	95%	96%	85%	85%
Percent of all easements monitored and under compliance with easement conditions	100%	100%	100%	100%	100%	100%	100%
Number of MET easements monitored by volunteers	145	40	53	26	147	200	200
Number of MET easements monitored by local land trusts	137	101	124	106	252	300	350

Department of Natural Resources

Obj. 5.3 Annually fund more than 100 projects to assist local subdivisions in the planning, acquisition, and/or development of recreation land or open space area.

Obj. 5.4 Annually, 80 percent of acquisition contracts negotiated by Land Acquisition and Planning (LAP) are below the highest appraised value for acquisitions.

Obj. 5.5 Work with communities and jurisdictions to conserve existing tree canopy and expand it by 45 acres annually.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Number of local POS projects	138	131	107	118	152	140	145
Number of community parks and playgrounds projects	32	55	29	27	27	19	25
Number of negotiations conducted annually by LAP	30	26	24	31	43	30	35
Percent of approved contracts negotiated by LAP with contract price below the highest appraised value	80%	81%	100%	96%	86%	80%	80%
Acres of trees planted in developed areas	100	81	136	139	128	125	125
Acres of trees planted in rural areas (non-buffer)	326	292	85	100	109	100	100
Acres reforested for Forest Conservation Act (FCA) mitigation	318	759	589	569	345	500	500
Acres conserved through FCA long-term protection	2,040	4,503	2,729	5,155	3,462	4,000	4,000
Number of roadside tree permits issued	1,043	1,190	1,632	1,616	1,584	1,600	1,600
Acres of practices on Municipal Watersheds	120	127	230	292	527	500	500
Acres of restored forest land (afforestation and reforestation)	1,136	1,007	734	796	520	750	800

Obj. 5.6 Preserve and restore the protective functions of near shore tidal habitats such as marshes, beaches, dunes, and wetlands.

Performance Measures	2015 Act.	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.
Square feet of near shore habitat created or protected	150,000	66,000	33,615	45,000	20,000	224,800	167,000

NOTES

¹ Data for 2019 is estimated because it is reported on a calendar year basis.

² Acreage declines in 2017 due to resolution of errors in State Park acreage data.