

# 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 and/or maintain 5,000 acres of critical plant and wildlife habitat by June 30, 2022.
- 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Number of deer hunting participants	62,000	70,471	60,000	70,400	70,500	72,000	72,000
Number of bear hunting participants	1,730	1,708	1,683	2,059	2,375	2,375	2,500
Number of deer harvested	84,000	85,193	86,542	77,382	79,457	81,000	81,000
Number of bear harvested	95	167	131	135	145	160	160
Cumulative number of acres of habitat restored since 2004	1,905	2,805	3,796	4,196	4,446	4,796	5,046
Cumulative acres of early successional habitat created	676	1,101	1,503	2,549	3,632	5,094	6,594
Number of Park Service acres restored to preserve biodiversity	180	210	160	606	131	200	200
Number of conservation inspections conducted	161,585	163,499	144,507	146,210	170,789	148,232	163,219
Number of conservation inspections per officer	878	856	983	949	959	837	837
Acres of RFBs established	258	118	167	145	213	250	270
Miles of RFBs restored in Maryland	16	8	14	7	17	20	22
Cumulative miles restored in Bay Watershed since 1996	1,402	1,410	1,424	1,431	1,448	1,468	1,490
Number of acres covered by Forest Stewardship Plans	32,203	28,123	28,226	24,781	23,449	20,000	20,000
Total acres of management practices implemented	28,948	25,835	29,389	29,175	28,220	26,000	26,000
Number of wildfires suppressed	131	126	97	47	158	150	150
Acres of wildfires suppressed	185	2,255	398	1,223	1,678	1,500	1,500

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## 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Cumulative pounds of coastal non-point sources of nitrogen reduced through annual and structural land use change Best Management Plans (BMPs)	1,678,254	1,937,574	1,614,316	3,509,111	4,349,994	4,650,734	4,696,486
Cumulative pounds of coastal non-point sources of phosphorus reduced through annual and structural land use change BMPs	168,531	198,202	218,525	193,764	206,615	215,655	214,383
Cumulative pounds of coastal non-point sources of sediment reduced through annual and structural land use change BMPs (millions)	373.057	373.061	373.071	376.006	376.018	376.024	376.023
<sup>1</sup> Number of tributaries with Harmful Algal Blooms	7	10	8	8	18	8	8
<sup>1</sup> Number of fish or human health advisories events reported/responses	6	2	0	3	4	3	3
<sup>1</sup> Acres of Submerged Aquatic Vegetation (goal=114,034)	29,277	62,356	56,994	39,151	45,000	52,500	59,750
<sup>1</sup> Number of sites where Maryland Biological Stream Survey (MBSS) benthic, fish, herpetofauna, and habitat samples are collected	220	232	230	152	162	215	215
<sup>1</sup> Number of volunteer benthic samples collected and processed	99	61	49	64	0	80	80
<sup>1</sup> Number of freshwater watersheds with data available	60	63	55	46	41	84	84

- 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 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	8%	0%	6%	3%	3%	20%	6%
<sup>1</sup> Number of monitoring stations reporting water quality trends	196	221	222	226	222	223	226
Number of oyster habitat and oyster location surveys completed	147	190	196	285	104	100	100
Number of waterway violation cases supported	65	134	179	103	71	66	66

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**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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
<sup>1</sup> Number of fisheries being tracked/reviewed annually in accordance to a management plan	26	26	26	26	26	26	26
<sup>1</sup> Harvest rate (exploitation fraction) of female blue crabs relative to target harvest rate (25.5 percent)	16%	21%	23%	25%	25%	25%	25%
<sup>1</sup> Female crab winter dredge survey index of stock size (density-female crabs/1000m)	20	26	17	20	14	15	15
<sup>1</sup> Striped bass juvenile index (abundance of young of the year fish)	2.2	11.7	11.7	11.8	11.6	11.6	11.6
Number of bushels of oysters harvested by the public fishery	385,000	224,685	181,329	136,954	270,000	250,000	300,000
<sup>1</sup> Oyster biomass index (1994 base =1; goal = 10)	1.8	1.4	1.4	1.8	1.7	1.7	1.9
<sup>1</sup> Number of hatchery oysters planted in large-scale restoration sanctuaries (millions)	796	840	453	7	116	621	802
<sup>1</sup> Acres of oyster habitat restored in large-scale restoration sanctuaries	164	106	56	2	12	103	159
Number of new or expanded aquaculture businesses	68	53	46	42	41	39	44
Stock hatchery-cultured finfish to support population restoration, population enhancement, corrective stocking, put-and-take fishing, outreach, education, and research (millions)	6.6	7.5	5.2	6.4	5.2	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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
<sup>1</sup> Clean marinas certified	5	2	3	0	3	2	2
<sup>1</sup> Cumulative number of clean marinas in State adopting best management practices (including those decertified over time)	156	154	149	148	152	151	152
Total number of pumpout stations operating in the State	340	359	360	358	352	355	358
New pumpout stations installed	1	1	2	1	2	2	2
Pumpout stations replaced or upgraded	9	5	4	4	8	10	6

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## 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Number of requests for new critical maintenance capital projects on DNR lands	116	74	81	95	84	88	92
Number of requests for new major capital development projects on DNR land (not including critical maintenance projects)	43	24	52	47	58	60	62
Number of projects on DNR lands initiated or completed	258	234	240	108	96	101	106
Percent of major capital development projects on DNR lands initiated or completed	86%	88%	74%	86%	90%	85%	85%
Number of project proposals reviewed for impacts to threatened and endangered species and other species of concern	1,989	1,871	1,948	2,080	2,296	2,300	2,300

**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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 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	14	6	6	7	12	11
<sup>1</sup> Number of new power plant/transmission line projects under review	41	30	26	24	8	31	31

## 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Additional number of youth participants in corps programs	383	498	519	350	387	47	250
Number of stewardship projects completed by youth corps	2,400	2,755	2,787	2,517	2,621	2,329	2,400

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- 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
MET Workshop and conference attendance	377	360	314	235	151	200	200
Number of educators trained	1,978	1,920	764	731	410	258	550
Number of students participating in classroom, field and other activities	69,102	61,729	45,812	22,252	16,259	14,030	32,000
Number of DNR social media followers	125,000	215,000	217,000	282,000	331,000	340,000	350,000
Number of State Park acres available to the public	138,270	137,716	140,761	141,020	141,180	142,000	142,500
Acres of Wildlife Management Areas (WMAs)	123,530	123,790	125,122	126,609	128,714	129,000	130,000
Number of visitors using parks (millions)	12.94	13.99	13.78	13.56	17.49	15.00	15.00
Number of trail miles available	919	1,020	957	1,088	1,134	1,150	1,165
Number of Park Service interpretive and environmental education program participants	245,547	248,901	266,382	248,600	126,000	100,000	200,000
Percent of visitors rating their park experience as excellent or above average	90%	90%	91%	92%	94%	94%	94%

- 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Number of reportable boating accidents	150	154	164	170	148	161	159
Number of hunting accidents	16	18	9	12	14	11	10

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**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.

<b>Performance Measures</b>	<b>2016 Act.</b>	<b>2017 Act.</b>	<b>2018 Act.</b>	<b>2019 Act.</b>	<b>2020 Act.</b>	<b>2021 Est.</b>	<b>2022 Est.</b>
Number of hunters checked	16,501	16,614	15,395	15,276	19,312	16,992	18,720
Number of boating inspections	43,281	38,897	14,115	17,015	34,504	30,267	33,345
Number of law enforcement officers	184	191	147	154	178	177	195
Number of law enforcement contacts	309,427	270,877	101,930	115,743	116,635	188,151	207,285
Number of law enforcement citations/warnings	31,239	29,826	21,991	27,477	27,077	28,320	31,200
Hours spent on Waterway Patrols	42,018	40,457	31,912	28,572	43,395	38,232	42,120
Hours spent on Public Land Patrols	62,544	63,272	63,405	40,222	55,554	58,587	64,545
Uniform Crime Report data – Part 1 crimes	149	163	121	137	127	97	92
Number of Homeland Security patrol checks	12,142	15,054	14,423	14,691	14,529	15,045	16,575

**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.

<b>Performance Measures</b>	<b>2016 Act.</b>	<b>2017 Act.</b>	<b>2018 Act.</b>	<b>2019 Act.</b>	<b>2020 Act.</b>	<b>2021 Est.</b>	<b>2022 Est.</b>
<sup>1</sup> Potential public access boating sites identified	5	10	12	12	13	13	13
Number of projects provided technical assistance	25	66	108	30	114	100	100
<sup>1</sup> Number of public boating sites enhanced or created	52	61	68	48	38	31	30
Number abandoned vessels removed from State waters	23	26	27	38	67	50	50
Cumulative miles of water trails established in State	745	753	782	815	815	830	840
Number of waterway projects funded annually	59	60	49	57	58	43	53
Amount of funding awarded for waterway projects (\$)	6,000,000	10,500,000	10,500,000	12,500,000	13,500,000	13,500,000	12,150,000
Number of projects incorporating sustainable components	40	39	40	40	32	28	35
Number of dredge projects funded annually	15	14	12	17	16	5	15
Amount of funding awarded for dredge projects (\$)	2,949,847	4,279,975	4,409,475	5,722,248	6,012,000	2,232,603	6,000,000
<sup>1</sup> Number of long-term slip leases realized	325	223	250	261	250	270	290
<sup>1</sup> Number of transient slip leases realized	555	575	585	640	599	650	680

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## 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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Program Open Space (POS) acquisition acres approved by the Board of Public Works (BPW)	5,596	2,222	6,578	5,203	4,444	5,000	5,500
Rural Legacy easement/fee simple acres approved by the BPW	3,533	3,778	4,850	5,400	6,249	5,000	6,000
Conservation Reserve Enhancement Program (CREP) permanent easement acres approved by the BPW	259	1123	632	687	322	650	650
Number of acres protected annually by MET easements	808	1,465	1,246	940	1,217	1,000	1,000
Number of acres of protected lands	10,196	8,588	13,305	12,231	12,231	11,650	13,150
Percent of POS Stateside acquisition acres approved by the BPW located within a Targeted Ecological Area	97%	88%	95%	96%	67%	80%	80%
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	40	53	26	147	127	200	200
Number of MET easements monitored by local land trusts	101	124	106	338	257	300	350

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**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	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Number of local POS projects	131	107	118	152	139	145	150
Number of community parks and playgrounds projects	55	29	27	27	19	20	20
Number of negotiations conducted annually by LAP	26	24	31	43	39	35	40
Percent of approved contracts negotiated by LAP with contract price below the highest appraised value	81%	100%	96%	86%	93%	80%	80%
Acres of trees planted in developed areas	81	136	139	128	53	77	100
Acres of trees planted in rural areas (non-buffer)	292	85	100	109	229	150	200
Acres reforested for Forest Conservation Act (FCA) mitigation	759	589	569	345	580	500	500
Acres conserved through FCA long-term protection	4,503	2,729	5,155	3,462	3,747	4,000	4,000
Number of roadside tree permits issued	1,190	1,632	1,616	1,584	1,575	1,580	1,580
Acres of practices on Municipal Watersheds	127	230	292	527	201	250	250
Acres of restored forest land (afforestation and reforestation)	1,007	734	796	520	780	760	760

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

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Square feet of near shore habitat created or protected	66,000	33,615	45,000	20,000	11,000	392,800	241,430

## NOTES

<sup>1</sup> Data for 2020 is estimated because it is reported on a calendar year basis.

<sup>2</sup> Acreage declines in 2017 due to resolution of errors in State Park acreage data.