

## APPENDIX E: Landscape ranking factors

Table E-1. Factors used to rank unprotected land for natural resource conservation importance, and their relative weighting.

Level 2	Level 3	Level 4	Level 5	Combined weight	Classification	Numeric Value	Reclassified Value (0-100)	Reclass function
Mandatory criteria	Not developed			(Mandatory)	Impervious surfaces	1	0	step
	Not open water			(Mandatory)	Open water	1	0	step
	Not already protected (with fee simple or easement restrictions)			(Mandatory)	Protected land (with fee simple or easement restrictions on land conversion)	1	0	step
Statewide Green Infrastructure	State Designated Ecological Significance	Statewide Green Infrastructure Hubs		0.0125	Statewide hubs	1	100	step
		Statewide Green Infrastructure Corridors		0.0125	Statewide corridors	1	100	
		Targeted Ecological Areas		0.0250	All TEA sites	1	100	step
		BioNet Significance	Tier 1 – Critically Significant for Biodiversity Conservation		0.1000	1	100	step
			Tier 2 – Extremely Significant for Biodiversity Conservation			2	80	
			Tier 3 – Highly Significant for Biodiversity Conservation			3	60	
	Tier 4 – Moderately Significant for Biodiversity Conservation			4		40		
	Tier 5 – Significant for Biodiversity Conservation		5	20				
	Wetlands of Special State Concern + 100 ft buffer		0.0500	All WSSC + 100 foot buffers	1	100	step	
	Watershed Characteristics (USGS HUC-12 level)	Forest Cover by Watershed		0.0500	% forest cover in watershed (see "Maryland's Forests for Healthy Watersheds")	0-78%	0-100	val/max * 100
Impervious Surface by Watershed			0.0500	Able to support sensitive species and stable stream banks (source: MD DNR)	0-5%	100	step	

Level 2	Level 3	Level 4	Level 5	Combined weight	Classification	Numeric Value	Reclassified Value (0-100)	Reclass function	
					Most sensitive species absent, some erosion and pollution	5-10%	50		
					Only tolerant species, obvious erosion	10-20%	25		
					Severely impaired	>20%	0		
			Watersheds with surface drinking water intakes	0.0500	Within a HUC-12 watershed containing a drinking water intake	1	100	step	
		Forests of Recognized Importance		0.1000	100 foot buffers of Stronghold Watershed streams, trout bearing streams, streams feeding municipal drinking water reservoirs, and Tier II High Quality Waters	1	100	step	
County Scale Resource Features	Natural resource features	Wetlands and floodplains	Wetlands + buffers	0.0500	Wetlands + 100 foot buffer	1	100	step	
			Streams + buffers and 1% (100 year) floodplains	0.0500	Streams + 100 foot buffer + 1% (100 year) floodplain	1	100	step	
		Forest	Forest patches with at least 1 acre of interior	0.0500	Forest patches with at least 1 acre of interior	1	100	step	
		Highly erodible soils	Highly erodible soils	0.0500	Soils on slopes >15%, or soils with K > 0.35 on slopes > 5%	1	100	step	
	County green infrastructure network	Core areas			0.1000	Core areas	1	100	step
		Hubs			0.0333	Hubs	1	100	step
		Forest movement importance			0.0333	Movement potential for forest organisms (area linked + linkage suitability)	0-1	0-100	equal area slice
		Wetland movement importance			0.0333	Movement potential for wetland organisms (area linked + linkage suitability)	0-1	0-100	equal area slice
Other Considerations	Existing conservation priorities	Rural Legacy Areas		0.0250	Inside a Rural Legacy Area	1	100	step	
		Priority Preservation Areas		0.0250	Inside a Priority Preservation Area	1	100	step	
	Park equity	Distance to nearest existing park		0.1000	Distance in meters to nearest park	0-9555	0-100	equal area slice	

Table E-2. Factors used to rank areas for siting new stormwater treatment BMPs, and their relative weighting.

Level 2	Level 3	Level 4	Combined weight	Classification	Numeric Value	Reclassified Value (0-100)	Reclass function
Mandatory criteria	Suitable BMP site		(mandatory)	Identified using EPA criteria for bioretention, constructed wetland, dry pond, grassed swale, infiltration basin, infiltration trench, porous pavement, sand filter (both surface and non-surface), vegetated filter strip, and/or wet pond	1	1	step
				Existing BMP location?			
					yes	1	0.33
				no	No Data	1	
Land ownership			0.050	Publicly owned	1	100	step
				Privately owned with easement	1	25	
				Privately owned, no easements		0	
Area of impervious surface draining to site			0.350	Acres of impervious surface draining to site (maximum impervious flow accumulation)	<0.5	0	step
					0.5 - 2	20	
					2 - 5	40	
					5- 10	60	
					10 - 25	80	
					>25	100	
Watershed characteristics	Watershed Characteristics (HUC- 12 watersheds)	Forest Cover by Watershed	0.060	% forest cover in watershed (see "Maryland's Forests for Healthy Watersheds")	0-78%	0-100	equal interval slice, then subtract from 100
		Impervious Surface by Watershed	0.060	Able to support sensitive species and stable stream banks (source: MD DNR)	0-5%	0	step
				Most sensitive species absent, some erosion and pollution	5-10%	50	
				Only tolerant species, obvious erosion	10-20%	100	
				Severely impaired	>20%	25	
Watersheds with surface drinking water intakes	0.030	Within a HUC-12 watershed containing a drinking water intake	1	100	step		

Level 2	Level 3	Level 4	Combined weight	Classification	Numeric Value	Reclassified Value (0-100)	Reclass function
	Development preceding stormwater regulations (by NHD catchment)		0.100	% of NHD catchment developed in 1992 (closest available land cover to 1984, when local ordinances were implemented)	0-100%	0-100	none
	Nutrient loading (NHD catchment)	Incremental TN flux attributable to undifferentiated urban sources	0.125	TN_MEAN_LOAD_INC_URBAN (kg N/year)	0-7800	0-100	% of maximum
		Incremental TP flux attributable to undifferentiated urban sources	0.125	TP_MEAN_LOAD_INC_URBAN (kg P/year)	0-826	0-100	% of maximum
Constructability and visibility	Distance to nearest road, parking lot, or driveway		0.100	Distance to nearest road, parking lot, or driveway (m)	0-10	100	step
					10-50	75	
					50-150	50	
					150-250	25	
					>250	0	

Table E-3. Factors used to rank preservation of natural features for coastal defense, and their relative weighting.

Level 2	Level 3	Combined weight	Classification	Numeric Value	Reclassified Value (0-100)	Reclass function
Mandatory criteria	Not developed	(Mandatory)	Impervious surfaces	1	0	step
	Not already protected (with fee simple or easement restrictions)	(Mandatory)	Protected land (with fee simple or easement restrictions on land conversion)	1	0	step
	MDOT predicted 0.2% flood extent in 2100 (equivalent to 5.5 feet of SLR plus Category 3 hurricane)	(Mandatory)	Vulnerable to storm surge by 2100	1	1	step
	Existing natural features within storm surge zone (forest, wetlands, or underwater grass)	(Mandatory)	Within storm surge zone, forest >1 ac and >=120 ft wide, DNR wetlands, and 2015 SAV with at least 40% cover	1	1	step
Blue Infrastructure shoreline segments	Allocate to nearest natural features in storm surge zone	0.333	Total rank	0 - 165	0-100	Equal interval slice
Maryland Coastal Resiliency Assessment - Habitat Role in Hazard Reduction	Allocate to nearest natural features in storm surge zone	0.667	Tier I Shorelines (Shorelines with a high habitat role, OR shorelines that transition to High Hazard when habitats are removed.)		100	step
			Tier II Shorelines (Shorelines with moderate habitat role, OR shorelines that transition to Moderate Hazard when habitats are removed.)		25	
			Neither Tier I nor Tier II		0	