

Accounting for Growth Acronyms and Glossary of Terms

Important: These are not legal or regulatory definitions.

These definitions are intended to ensure clear communication in the Accounting for Growth workgroup; that is, we all mean the same thing when we use a word or acronym. These terms may be defined differently in specific laws and regulations. Different State agencies may define the same term differently.

Acronyms and Abbreviations

BAT	Best Available Technology Economically achievable
BCT	Best Conventional Pollutant Control Strategy
BMP	Best Management Practice
BNR	Biological Nutrient Removal
BPT	Best Practicable Control Technology Currently Available
CWA	Clean Water Act
DNR	The Maryland Department of Natural Resources
ENR	Enhanced Nutrient Removal
EOS	Edge of Segment or Edge of Stream
EPA	The federal Environmental Protection Agency
LA	Load Allocation
LA	Load Allocation
m/l	Milligrams per Liter (in dilute solutions, equivalent to parts per million)
MDA	Maryland Department of Agriculture
MDE	The Maryland Department of the Environment
MDP	The Maryland Department of Planning
MGD	Million(s) of Gallons per Day
N	Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
OSDS	Onsite Sewage Disposal System
P	Phosphorus
POTW	Publicly Owned Treatment Works
ppm	Parts per million
S	Sediment
TBELS	Technology Based Effluent Limitations
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TP	Total Phosphorus
WLA	Waste Load Allocation
WWTP	Wastewater Treatment Plant

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Term	Definition
Aggregator	An individual or entity that can collect and compile credits from individual agricultural non-point sources.
Agricultural land	Land used to produce food, feed, fiber, sod, animals, plants, trees, or plants in containers, or for out-of-ground production.
Allocation	A weight or load of a pollutant (both nonpoint and point sources) entering a water body.
Antidegradation	Policies that ensure protection of existing uses and of water quality for a particular waterbody where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water.
Baseline	The pollutant control requirements that apply to buyers and sellers in the absence of trading. Sellers must first achieve their applicable baselines before they can enter the trading market and sell credits. Buyers can purchase credits to achieve their applicable baselines once they have met their minimum control levels.
Bay Segment	Subunits of the Chesapeake Bay estuary that were derived on the basis of specific selection criteria related to factors such as jurisdictional boundaries and other water quality, physical, geographic, and habitat related characteristics. The Chesapeake Bay and its tidal tributaries and embayments are divided into 92 segments.
Best Available Technology Economically Achievable	Technology-based standard established by the Clean Water Act as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.
Best Conventional Pollutant Control Technology	Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand, total suspended solids, fecal coliform, pH, oil and grease. The BCT is established in light of a two-part cost reasonableness test, which compares the cost for an industry to reduce its pollutant discharge with the cost to a POTW for similar levels of reduction of a pollutant loading. The second test examines the cost-effectiveness of additional industrial treatment beyond BPT. EPA must find limits that are reasonable under both tests before establishing them as BCT.
Best Management Practices	Methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources.
Best Practicable Control Technology Currently Available	The first level of technology-based standards established by the Clean Water Act to control pollutants discharged to waters of the United States. BPT effluent limitations guidelines are generally based on the average of the best existing performance by plants within an industrial category or subcategory.
Biological Nutrient Removal	A biological wastewater treatment technology capable of reducing the nitrogen in wastewater effluent to no more than 8 milligrams per liter, as calculated on an annually averaged basis.
Cap	A legally enforceable aggregate mass load limit contained in a discharger's permit.
Certifier	An individual or entity that could certify and verify that either the estimated nutrient reductions are creditable and/or the nutrient reductions are being generated.

Term	Definition
Contract	Written agreement between the trading parties, separate from any applicable NPDES permit, in which the parties memorialize their agreement on any of a variety of financial or legal considerations and contingencies, including what happens in the case of default by any party.
Credit	For purposes of the Chesapeake Bay TMDL, means a measured or estimated unit of nitrogen, phosphorus, or sediment pollutant reduction per unit of time at a location designated and standardized by the jurisdiction that can be generated, sold, or traded as part of an offset.
Cross-Pollutant Trading	Trading across two different pollutant parameters when equivalent mass loads of the different parameters can be calculated and the water quality effects of those equivalent mass loads are similar (<i>e.g.</i> , meeting an effluent limitation for biochemical oxygen demand by purchasing credits generated for reduction of a phosphorus load).
De minimis	This is part of the Latin phrase “De minimis non curat lex” which means "the law does not concern itself with trifles." A <i>de minimis</i> matter is unlikely to have substantial impact, is immaterial, or is insignificant; or the burden of addressing the impact is disproportionately large in comparison to the benefit of including it in a program. In the context of Accounting for Growth, a <i>de minimis</i> project would not be required to offset its post-development load.
Delivered Load	The amount of a pollutant delivered to the tidal waters of the Chesapeake Bay or its tidal tributaries from an upstream point of discharge/runoff after accounting for permanent reductions in pollutant loads due to natural in-stream processes in nontidal rivers.
Delivery Ratio	Factor applied to pollutant reduction credits that accounts for the distance and unique watershed features (<i>e.g.</i> , hydrologic conditions) that will affect pollutant fate and transport between trading partners.
Development	Conversion of land from an agricultural, forest, recreational or other natural land use/land cover type to an industrial, commercial, institutional or residential use; or activity that increases the density, intensity of use, or wastewater demand associated with a property.
Edge-of-Stream Load	The amount of a pollutant reaching a simulated stream segment from a point in that stream’s watershed.
Edge of Stream Ratio	A factor that is unique to each watershed model segment that has been determined by the Chesapeake Bay Watershed Model in order to estimate the EOS load for individual non-point sources within a watershed segment.
Enhanced Nutrient Removal	A wastewater treatment technology that is capable of reducing the nitrogen and phosphorus concentrations in wastewater effluent to achieve permit limits equivalent to concentrations of no more than 4 milligrams per liter total nitrogen and 0.3 milligrams per liter total phosphorus, as calculated on an annually averaged basis.
Facility Design Flow	The maximum flow volume for which a facility is designed and at which it is permitted to operate.
Impaired Waters	Waters with chronic or recurring monitored violations of the applicable numeric or narrative water quality standards.
In-Stream Delivery Factor	The In-Stream Delivery Factor represents the effective delivery of the pollutant load to the Chesapeake Bay and the related estimated diminution of the pollutant effect of the nutrient reductions between upstream and downstream points. It is a function of the distance from the edge of the watershed segment and the fall line of the Chesapeake Bay. The delivery factor is derived from the Chesapeake Bay Watershed Model. This factor is applied to nonpoint source and point source reductions.
Load Allocation	The portion of the TMDL allocated to existing or future nonpoint sources and natural background.

Term	Definition
Loading rate	The total amount of material (pollutants) entering the system from one or multiple sources; measured as a rate in weight per unit time.
Location Ratio	Similar to Delivery Ratio. Factor applied to pollutant reduction credits when sources are upstream of a waterbody of concern that accounts for the distance and unique watershed features between a pollutant source and the downstream waterbody (e.g., bay, estuary, lake, reservoir) or area of interest (e.g., a hypoxic zone in a waterbody).
Mainstem Bay	The Chesapeake Bay, from Havre de Grace, Maryland to the Virginia Capes, without the tidal tributaries and embayments included.
Margin of Safety	An accounting of uncertainty about the relationship between pollutant loads and receiving water quality. The margin of safety can be provided implicitly through analytical assumptions or explicitly by reserving a portion of loading capacity.
Minimum Control Level for trading generally	The pollutant load that a point source buyer must first meet before buying credits to meet the facility's baseline. This pollutant load is either the Technology Based Effluent Limitations (TBELs) specified in a permit or the current discharge level, depending on which is more stringent.
Minimum Control Level for Maryland WWTPs	The pollutant controls, including Technology Based Effluent Limitations (TBELs), that a point source buyer must implement before using credits or offsets to meet the facility's tributary strategy cap. For significant POTWs and other significant sewage treatment plants, the minimum control level is implementation of ENR treatment. In addition, for BRF-funded ENR facilities, the minimum control level includes the concentration-based annual loading limitation in their discharge permits (also referred to as a floating cap because it is based on each current year's discharge volume). New discharges of 0.1 mgd or more shall be required to implement ENR level treatment, and new facilities discharging less than 0.1 mgd will require secondary treatment as a minimum.
Minor (Non Significant) Point source	WWTPs with the design capacity of less than 500,000 gallons per day.
Model	A system of mathematical expressions that describe and represent the physical world or some aspect therein. In the Bay TMDL, models are used to describe both hydrologic and water quality processes as well as estimate the load of a specific pollutant to a water body and make predictions about how the load would change as remediation methods (e.g. scenarios) are implemented.
National Pollutant Discharge Elimination System	Permit program authorized by the Clean Water Act that works to control water pollution by regulating point sources that discharge pollutants into waters of the United States. Industrial, municipal, and other facilities must obtain permits for any discharge into waters of the United States. In most cases, the NPDES permit program is administered by authorized states or EPA.
National Resource Conservation Service	Originally established by Congress in 1935 as the Soil Conservation Service (SCS), NRCS has expanded to become a conservation leader for all natural resources, ensuring private lands are conserved, restored, and more resilient to environmental challenges, like climate change.

Term	Definition
New or Increased Loading of nitrogen, phosphorus or sediment	For purposes of the Chesapeake Bay TMDL means, for a point or nonpoint sources meeting its Chesapeake Bay TMDL WLA or LA as of the date of establishment or modification of the Chesapeake Bay TMDL, any nitrogen, phosphorus, or sediment loading from the point or nonpoint source in an amount greater than reflected by WLAs or LAs in the Chesapeake Bay TMDL; for a point or nonpoint sources not meeting its Chesapeake Bay TMDL WLA or LA as of the date of establishment or modification of the Chesapeake Bay TMDL, any nitrogen, phosphorus, or sediment loading from the point or nonpoint source in an amount greater than reflected by WLAs or LAs in the Chesapeake Bay TMDL, after the point in time the source begins meeting its WLA or LA.
Nonpoint Source	Any source of water pollution that does not meet the legal definition of “point source.” Nonpoint source pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification.
Nutrient Reduction	The difference in nutrient EOS Load to surface or ground waters achieved by implementation of best management practices, compared to the applicable baseline after meeting eligibility requirements.
Nutrient Trading	A market-based approach to achieving water quality standards in which a point source, nonpoint source, or third party purchases pollutant reduction credits from another point source or a nonpoint source in the applicable trading region that are then used to meet the source’s pollutant discharge obligations. To be creditable to the point source purchaser, the credits must reflect an actual, pollutant load differential below the credit seller’s baseline.
Offset	For purposes of the Chesapeake Bay TMDL, means (n.) a reduction in the loading of a pollutant of concern from a source or sources that is used to compensate for the loading of the pollutant of concern from a different point or nonpoint source in a manner consistent with meeting WQS; or (v.) compensating for the loading of a pollutant of concern from a point or nonpoint source with a reduction in the loading from a different source or sources, in a manner consistent with meeting WQS.
Offset Baseline	Similar to “baseline.” For purposes of the Chesapeake Bay TMDL, means the amount of pollutant loading allowed by wasteload allocation (WLA) or load allocation (LA) that applies to individual credit generators in the absence of offsets. Sources generating credits are expected to first achieve their applicable offset baselines before credits may be generated.
Onsite Sewage Disposal System	Any system that disposes of sewage effluent beneath the soil surface.
Permanent	With respect to offsets, lasting as long as the load being offset.
Point Source	Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged.
Pollutant Source Sector	Category of related sources of nutrient and sediment loads identified for purposes of quantifying load allocations. Examples include agriculture, wastewater, forest, urban runoff.
Reconciliation Period	The period of time during which a seller generates water quality credits and a buyer purchases and uses those credits to compensate for a pollutant load that it discharges during that same time period.
Registry	A system utilized to track and record the generation and exchange of credits.

Term	Definition
Retirement Ratio	Factor applied to pollutant reduction credits to accelerate water quality improvement. The ratio indicates the proportion of credits that must be purchased in addition to the credits needed to meet regulatory obligations. These excess credits are taken out of circulation (retired) to accelerate water quality improvement. The retirement ratio for point source credits is 5% and the retirement ratio for nonpoint source credits is 10%.
Runoff	That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface-water. It can carry pollutants from the air and land into receiving waters.
Sediment	Soil, sand, and minerals washed from the land into water, usually after rain or snow melt.
Segment Watershed	Watershed area draining into one of the 92 Chesapeake Bay segments
Significant Point Source	A publicly-owned treatment works (POTW) or a federal or privately owned sewage treatment plant with a design capacity of 500,000 gallons per day or greater, or an industrial point source with daily discharge loadings of nitrogen or phosphorus equivalent to a significant POTW.
Single-Pollutant Trading	Trading a single pollutant parameter or different forms of the same pollutant parameter when equivalent mass loads of the different forms can be calculated and the water quality effects of those equivalent mass loads are similar (<i>i.e.</i> , meeting an effluent limitation for total nitrogen by purchasing credits generated for reduction of another source's total nitrogen load or by purchasing credits generated for reduction of another source's nitrate load).
Structural Control	Practices with multi-year life spans engineering and installed to meet or exceed NRCS Standards, to reduce or eliminate the introduction of pollutants into surface and/or ground waters.
Third Party	Any entity that is not a buyer or seller in the trade. A third party can be a state agency, conservation district, private entity, or other organization or person. Third parties could assist in facilitating credit exchanges and verifying BMPs.
Total Maximum Daily Load	Specifies the maximum amount of a pollutant that a waterbody can receive and still meet applicable water quality standards. It is the sum of the allocations for point sources (called wasteloads) and allocations for nonpoint sources (called loads) and natural background with a margin of safety (CWA section 303(d)(1)(c)).
Trading	A market-based approach to achieving water quality standards in which a point source purchases pollutant reduction credits from another point source or a nonpoint source in the same watershed that are then used to meet the point source's pollutant discharge obligations. To be creditable to the point source purchaser, the credits must reflect actual, achieved pollutant reductions in excess of the credit seller's baseline. Under certain circumstances, a point source buyer may have to purchase more than one pound of upstream pollutant reduction to equal a pound discharged at its outfall.
Trading Ratios	Discount factors applied to pollutant reductions to account for uncertainty, water quality, delivery or special need concerns. See also Uncertainty Ratio
Uncertainty Ratio	Factor applied to pollutant reduction credits generated by nonpoint sources that accounts for lack of information and risk associated with best management practice measurement, implementation and performance.
Verification	Confirmation by examination that specified requirements have been fulfilled.
Wasteload Allocation	The portion of the TMDL allocated to existing, potential or future point sources
Watershed	An area of land from which all water drains to a common point.