

Glossary

Anoxic – the absence of oxygen. In some cases, management may functionally define water below a certain threshold (e.g., 1mg/l) as anoxic, since it supports very little life, but to be truly anoxic, the concentration must drop to zero.

Anthropogenic – Caused by, or resulting from, human activities.

Antidegradation Requirements – provides a framework for maintaining and protecting water quality that has already been achieved.

Aquaculture – The farming of aquatic organisms such as fish, shellfish and even plants. The term aquaculture refers to the cultivation of both marine and freshwater species and can range from land-based to open-ocean production.

Benthic – Pertaining to, or living on, the seafloor or river bottom.

Blueway – A water trail or path that is developed with launch points, camping locations and other points of interest for canoeists, paddle boarders and kayakers.

Best Management Practice (BMP) – Methods or techniques found to be the most effective and practical means of achieving an objective. Often used to refer to the control of nonpoint source runoff.

CAC, Citizens Advisory Committee (LISS) – communicates citizen concerns about the Sound and the Study to the management committee, provides advice on public education activities, and builds a constituency to support the implementation of the Management Plan. MBPC is a member.¹

CFA – Consolidated Funding Application is a Governor initiative to have all State grants and funding handled through the same application process.

Clean Water Act/CWA – the 1972 (as amended in 1997 and 1987) US Federal law and its sections that regulates the discharge of pollutants into the nation’s surface waters. It is administered by the US EPA, which sets water quality standards, handles enforcement, and helps states develop their own pollution control plans.

One of the principal objectives of the CWA is to “maintain the chemical, physical, and biological integrity of the Nation’s Waters.”

Climate Adaptation and Resiliency – Preparing for the impacts of climate change by understanding the risks from predicted changes and taking steps to reduce vulnerabilities to those risks.

CWA – the Federal Clean Water Act and its sections

Coastal Consistency – the “consistency” of a proposed activity with the NYS Coastal Management Program is determined through a set of coastal policies and procedures designed to enable appropriate economic development while advancing the protection and preservation of ecological, cultural, historic, recreational, and esthetic values.²

¹ <http://longislandsoundstudy.net/about/committees/citizens-advisory-committee/>

² <https://www.dos.ny.gov/opd/programs/consistency/consistencyfaq.html>

Glossary

Coastal Zone Management (CZM) Act – In 1982, the [New York State Coastal Management Program](#) was created to establish the boundaries of the Coastal Area, describe the organizational structure to implement the Coastal Management Plan, and provide a set of statewide policies enforceable on all State and Federal agencies which manage resources and coordinate actions along the State's coastline. Local governments are encouraged to prepare and adopt [local waterfront revitalization programs \(LWRP\)](#) which would provide more detailed implementation of the State's Program.³

DEC – Department of Environmental Conservation; New York State's environmental protection and regulatory agency.

Designated Uses – required by the water quality standards regulation (EPA), these are state-specified goals and expectations for how each water body is used

Diadromous – A species, which spends part of its life cycle in fresh water, and part in salt water. Diadromous species can be **anadromous**, living in the ocean and migrating to fresh water to breed (e.g., salmon, alewife, herring) or, less commonly, **catadromous**, living in fresh water but migrating to the ocean to breed (e.g., American eel).

DOS – Department of State (NY); it is the agency responsible for administering the NYS Coastal Management Program

DUAR – Data Usability Assessment Report; analysis of how useful past data is for the purposes of comparing it with other and future data. This is a funding requirement of NYSDEC.

Ecosystem service – The processes by which the environment produces resources that humans use such as clean water, timber, and habitat for fisheries, and pollination of native and agricultural plants.

Eelgrass (*Zostera marina*) – A marine flowering plant rooted in the sediment. It is the most abundant seagrass in Long Island Sound, and is an important habitat for many species of fish and invertebrates.

Environmental Indicator – Documented measurement, statistic, or value of a substance or effect in an environment. Used as a barometer to identify the presence or level of the factor/ characteristic impacting the environment. The overall condition or quality of the environment is detailed by the set of such indicators and their periodic trend points.

Environmental Justice (EJ) – the fair and meaningful treatment of all people, regardless of race, income, national origin or color, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.

EPA, USEPA – the United States Environmental Protection Agency is the federal agency tasked with protecting public health and the environment

Estuary – A partially closed coastal body of water where freshwater and saltwater mix.

Eutrophication – The process by which a body of water becomes enriched in dissolved nutrients that stimulate the growth of aquatic plant life, usually resulting in the depletion of dissolved oxygen.

Floatable debris – trash found floating in the water

Green Infrastructure (GI) – Describes an array of technologies, approaches, and practices that protect and use natural systems, or systems engineered to mimic natural processes, to manage rain water as a resource, to solve combined sewer overflows (CSOs), enhance environmental quality, and achieve other economic and community benefits. Also this term can be synonymous with natural infrastructure, in

³ <https://www.dos.ny.gov/opd/programs/WFRevitalization/coastmgmtprog.html>

Glossary

contrast with grey infrastructure, which uses traditional practices, such as sewers and pipes, for stormwater management and wastewater treatment.

GP – General Permit; in this context it refers to the Phase II Stormwater GP.

Hypoxic – Low dissolved oxygen. While no universal threshold exists, most organizations use an operational definition of less than approximately 3mg/l of oxygen (See Anoxic).

Impaired – waters where standards are not being met

Impervious Cover – Any surface in the landscape that cannot effectively absorb or infiltrate rainfall.

Invasive Species – Non-native species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health.

I/A – Innovative and advanced OSWTS, these systems treat bacteria and remove nutrients

Inter-Municipal Agreement (IMA) – a binding agreement between two or more municipal parties

Legacy Contaminants – Pollutants or chemicals, often produced by industry, which remain in the system long after they are discharged, such that their ecological impact continues even after discharge has been curtailed. Whitney Pond is polluted by chlordane, a legacy contaminant from now-banned pesticide use.

LID – Low Impact Development; management approach and set of practices that can reduce runoff and pollutant loadings by managing runoff as close to its source(s) as possible.

LINAP – Long Island Nitrogen Action Plan (see below)

LISFF – Long Island Sound Futures Fund; the funding mechanism of the Long Island Sound Study, it is administered by NFWF

Living Shorelines – A shoreline stabilization technique using plants, sand, and limited use of rock to provide shoreline protection and maintain valuable habitats.

Long Island Sound Study (LISS) – one of 28 National Estuary Programs, it is a partnership between the EPA and the States of New York and Connecticut

Low Impact Development – Management approach and set of practices that can reduce runoff and pollutant loadings by managing runoff as close to its source(s) as possible.

Member Municipality – one of the 15 signatories to the IMA

Minimum Control Measures (MCMs) – Compliance requirements of the Phase II Stormwater Permit; there are six (6).

Monitoring – A series of measurements of water quality made with the goal of detecting changes in the environment. This is most often referred to as Water Quality Monitoring.

MS4 – Municipal Separate Storm Sewer System; a system designed to collect and carry stormwater using municipal drainage systems, streets, catch basins, curbs, gutters, ditches, channels, and specialized storm drains. This system is not connected to wastewater treatment plants, which means the stormwater is not cleaned before it discharges into local waterways.

MS4 operator – owner of an MS4 system and therefore subject to the Phase II Stormwater Permit; all the Manhasset Bay Protection Committee member municipalities are MS4 operators.: each entity

Nitrogen – The most abundant element in Earth's atmosphere. Nitrogen is an essential nutrient for all organisms, forming a component of many proteins and amino acids, but virtually all of the nitrogen on earth is in the form of dinitrogen gas (N₂), which cannot be used by most organisms. These organisms are instead dependent on the much rarer dissolved inorganic nitrogen, which is frequently the nutrient that limits primary production in marine ecosystems. Anthropogenic activities contribute a large amount of

Glossary

nitrogen to coastal marine ecosystems, primarily through sewage discharge, agricultural fertilizer, and industrial emissions.

Nonpoint Source – A source of pollutants not restricted to a clearly identifiable discharge location like a river, pipe, or culvert (See Point Source).

Nutrient Loading – The mass of reactive nitrogen entering an aquatic system from external sources, e.g., WWTFs, OSWTSs, atmospheric deposition, fertilizer, etc.

Nutrients – Essential elements required by an organism for growth. In a marine context, this term is typically used to refer to nitrogen and phosphorus, but can also include silica (required by diatoms) and micronutrients such as iron, zinc, magnesium, etc.

OSWTS – On-Site Wastewater Treatment System, usually a cesspool or septic system, but now advanced options are available with better treatment options

Pathogen – Disease-causing bacteria, viruses, and protozoan often transmitted to people when they consume or come in contact with contaminated water.

Phase II SPDES Permit – the permit issued through NYS DEC [SPDES – State Pollution Discharge Elimination System (NY permit)] that regulates discharges from a Municipal Separate Storm Sewer System into local waterways. Also known as the MS4 Permit.

Point Source – A specific localized and stationary source of a pollutant (e.g., nutrients, sediment, toxic metals) such as a pipe, culvert, or outfall (See Nonpoint Source).

QAPP – Quality Assurance Project Plan lays out the procedures for ensuring the validity and replicability of data collection so that it can be compared with other data and repeated year after year. This is a requirement of funding received from the State or Federal government for data collection.

Representative/Member Representative – a person appointed by their municipality to represent the municipality on the Manhasset Bay Protection Committee who is designated to vote on behalf of such member and is capable of reporting back to their respective TOWN, COUNTY, or MUNICIPALITY.

Runoff – rain or snowmelt that flows into a stream, lake, or estuary, collecting debris and other pollutants.

Standards (Water Quality) – designated “best use” of a water body as assigned by NYSDEC’s Division of Water

Stewardship Area – One of 33 areas in Long Island Sound identified by the Long Island Sound Study as having significant recreational and/or ecological value to Long Island Sound. The boundaries of the Stewardship Areas are not strictly defined.

Stewardship Site – A property, with defined parcel boundaries, within a Stewardship Area that has been identified as representing the values or features for the Area that is being highlighted. The landowner of each Stewardship Site has granted permission for the land to be designated as a Stewardship Site. Manhasset Bay is a stewardship site.

Stormwater Management Plan (SWMP) – Plans developed by municipalities to reduce pollution in stormwater runoff and prohibit illicit discharges. This is a requirement of the MS4 Permit.

Stormwater runoff – rain or snowmelt that flows into a stream, lake, or estuary, collecting debris and other pollutants.

Glossary

Sustainability – Meeting the needs of the present without compromising the ability of future generations to meet their own needs: in particular using natural resources wisely to ensure their availability in the future.

TMDL (Total Maximum Daily Load) – defined by the EPA as “the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.”⁴

Tributary – A river or stream, which flows into a larger river or lake.

Turbidity – Measure of the amount of suspended particulate matter in water, which is inversely related to water clarity.

YSI – Yellow Springs Instruments (Yellow Springs, OH) is a Xylem brand that produces the water quality probe used by MBPC and has come to mean the probe itself.

Wastewater Treatment – A process designed to clean and treat raw sewage to remove pollutants. Generally a three-part process: 1) primary treatment involves screening and settlement of large particles; 2) secondary treatment involves anaerobic digestion of organic sludge; 3) water is then chlorinated and/or treated with UV sterilization to remove bacterial contaminants and discharged into the receiving waterbody. Tertiary or advanced wastewater treatment removes inorganic nutrients (nitrogen and/or phosphorus) from effluent prior to discharge.

Water Quality Criteria – numeric and/or narrative criteria to protect the designated uses of a water body.

Water Quality Standards – provisions of the state, approved by EPA, that describe the desired condition of a water body and the means by which that condition will be protected or achieved. Standards form a legal basis for controlling pollutants entering the waters of the United States. Standards consist of three core components: designated uses, criteria to protect designated uses, and antidegradation requirements to protect existing uses.⁵

Watershed – The land surface that drains into a common body of water.

⁴ <https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls>

⁵ <https://www.epa.gov/standards-water-body-health/what-are-water-quality-standards>