

## **Appendix 1. Glossary of Terms**

**Alternative Systems** - Systems designed to provide or enhance on-site sewage disposal which either do not contain all of the components of an on-site disposal system constructed in accordance with 310 CMR 15.100 through 15.255 or which contain components in addition to those specified in 310 CMR 15.100 through 15.255 and which are proposed to the local Approving Authority and/or the Department for remedial, pilot, provisional, or general use approval pursuant to 310 CMR 15.280 through 15.289.

Build out

**CWMP** – Stands for Comprehensive Wastewater Management Plan, which is a technical document that details a community’s wastewater management needs and specifies a program of facilities and strategies to manage wastewater and achieve TMDLs.

**Design flow** – Design flow is defined in 310 CMR 15 as the amount of sanitary sewage expressed in gallons per day for which a system must be designed in accordance with CMR 15.203. *Design flow criteria* are the amounts of sanitary sewage which are assumed to be generated by a specific land use. For example, under Title 5 one bedroom is assigned a design flow of 110 gallons per day.

**Effluent** - Sanitary sewage discharged into the environment, whether or not treated.

**FAR** – Stands for Floor Area Ratio, which is a measure of building density calculated by dividing building square feet by lot area.

**GPD** – Stands for gallons per day, and is a standard measure of wastewater flow.

**I/A System** – Stands for Innovative/Alternative system, which is any septic system or part of one that is not designed or constructed in a way consistent with a conventional Title 5 system. A conventional system has a septic tank, a distribution box or dosing mechanism, a soil absorption system (SAS) and a reserve area. Some examples of alternative systems are recirculating sand filters, aerobic treatment units, peat filters, humus/composting toilets, and intermittent sand filters.

**LID** – Stands for Low Impact Development, which is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product (US EPA).

**MACC** – Stands for Massachusetts Association of Conservation Commissions. More on MACC is available on their website, [www.maccweb.org](http://www.maccweb.org).

**MassDEP** – Stands for Massachusetts Department of Environmental Protection, a department within the Executive Office of Energy and the Environment.

**MEP** – Stands for Massachusetts Estuaries Project is project of MassDEP and the School for Marine Science and Technology at UMASS Dartmouth that provides water quality, nutrient

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loading, and hydrodynamic information for estuaries in Southeastern Massachusetts. MEP Technical Reports provide the scientific basis for establishing TMDLs.

**MESA** – Stands for Massachusetts Endangered Species Act, 321 CMR 10.00

**NHESP** – Stands for Natural Heritage and Endangered Species Program, a part of the Massachusetts Division of Fisheries and Wildlife.

**Mg/l** – Stands for milligrams per liter, which is standard measure of nitrogen concentration in wastewater.

**Mixed use** – In this report, mixed use is a term used to refer to development projects in which a single building includes both residential and commercial uses.

**Nitrogen** – is a naturally occurring chemical. In excessive amounts, nitrogen leads to excessive algal growth in estuaries, which leads to reduced oxygen conditions which is harmful to aquatic plants and animals. Wastewater from septic systems is the single largest watershed source of nitrogen reaching estuaries on Cape Cod.

**Non-conforming use or structure** – A use or structure that no longer conforms to current zoning, but did conform when first built or established.

**NSA** – Nitrogen Sensitive Area is a regulatory designation of an area that meets specified criteria under 310 CMR 15.215.

**Nutrient Loading** - The introduction of nutrients such as nitrogen or phosphorus from wastewater or fertilizers which ultimately reach ponds or estuaries.

**RPP** – Stands for Regional Policy Plan generated by the Cape Cod Commission. The RPP sets forth the regulatory standards for the review of development projects and planning projects which require Cape Cod Commission review, and also provides regional growth management strategies.

**Setbacks** – A zoning term used to refer to the distance between a building and property lines.

**Septage** – Material physically removed from any part of an on-site system, including, but not limited to, the solids, semi-solids, scum, sludge and liquid contents of a septic tank, privy, chemical toilet, cesspool, holding tank, or other sewage waste receptacle. It does not include any material, which is hazardous waste.

**Septic Tank** - A watertight receptacle to receive sewage from a building sewer which is designed and constructed to allow for the separation of scum and sludge and the partial digestion of organic matter before discharge of the liquid portion to a soil absorption system or other intermediate structure in the treatment sequence.

**Sewer** - In this report, the term sewer refers to any public or private wastewater collection system serving multiple properties that has the potential of bypassing the flow design criteria of Title 5 (310 CMR 15.203), and to which a property owner could reasonably expect to be connected.

**Sewershed** – Properties within the area of service of a sewerage system.

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**Smart Growth** - a broad term used to describe a form of development that encompasses the attributes of resource protection, vibrant town centers, improved access with less reliance on automobiles, a mix of housing opportunities and improved livability. The compact form of development associated with smart growth is consistent with efficient installation and use of infrastructure such as sewers, utilities and roadways, which tends to lower costs.

**Stormwater Runoff** - Stormwater runoff results from rainfall and snow melt and poses a major threat to water quality in ponds and estuaries. Most stormwater runoff on Cape Cod comes from diffuse (non-point) sources such as roofs, roadways, driveways and other impervious surfaces.

**SRF** – Stands for State Revolving Loan Fund, a state fund from which Massachusetts municipalities borrow funds for capital projects.

**TDR** – Stands for Transfer of Development Rights, a land use regulation that allows development rights to be transferred from an area where additional development is not desired to another area where development is desired.

**Title 5** – State regulations governing the siting, construction, inspection, upgrade and expansion of on-site sewage treatment and disposal systems and for the transport and disposal of septage. The regulation citation is 310 CMR 15.00.

**TMDL** – Stands for Total Maximum Daily Load, which is a regulatory measure of the amount of a given pollutant a water body can receive and remain healthy. The TMDLs referred to in this report are for Total Nitrogen.

**Wastewater flow** – Wastewater from septic systems that leaches into groundwater and flows through groundwater to receiving waters such as a pond or estuary.

**Watershed** - Any region or area measured in a horizontal topographic divide which directs water runoff from precipitation, normally by gravity, into a stream, a body of impounded surface water, or a coastal embayment, or any region or area measured by a groundwater divide which directs groundwater into a stream, a body of impounded surface water, or a coastal embayment.

**Vernal Pool** – A surface water body that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool in accordance with the “Vernal Pool Certification Guidelines” pursuant to the Massachusetts Natural Heritage and Endangered Species Program administered by the Massachusetts Department of Fish and Game at the time a permit application is submitted to the Approving Authority.

**WPA** – Stands for Wetlands Protection Act, MGL Chapter 131 Section 40.

**Zone II or Zone of Contribution** -That area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can realistically be anticipated, as defined in Massachusetts Drinking Water Regulations, 310 CMR 22.02.