
ACRONYMS AND GLOSSARY

RARITAN BASIN WATERSHED MANAGEMENT PLAN

**New Jersey Water Supply Authority
December 2002**

Common Acronyms Used

319 Grant – A grant for nonpoint pollution control under Section 319 of the Clean Water Act
604b Grant – A grant for water quality planning under Section 604b of the Clean Water Act
106 Grant – A grant for ground water quality planning under Section 106 of the Clean Water Act
%EIA – Percent Effective Impervious Area
%TIA – Percent Total Impervious Area
AMNET – Ambient Biomonitoring Network
ANJEC - Association of New Jersey Environmental Commissions
ANJEE – Association of New Jersey Environmental Educators
AWWA – American Water Works Association
BMP – Best Management Practices
BOD – biochemical oxygen demand
BPU – Board of Public Utilities
C&A – Raritan Basin Characterization & Assessment
CBT – Corporate Business Tax (especially that portion constitutionally dedicated to watershed management purposes)
cfs – cubic feet per second
CWP – Center for Watershed Protection
CSO – Combined Sewer Overflow
D&R Canal – Delaware and Raritan Canal
DO – dissolved oxygen
ENSP – Endangered and Nongame Species Program of the NJDEP, Division of Fish & Wildlife
ESRI – Environmental Systems Research Institute
FDA – Food and Drug Administration
FEMA – Federal Emergency Management Agency
FW2-NT – fresh water non-trout stream
FW2-TM – fresh water trout maintenance stream
FW2-TP – fresh water trout production stream
GIS – Geographic Information System
gpcd – gallons per capita (person) per day
gpd – gallons per day
HUC – Hydrologic Unit Code
HUC-11 – 11-digit Hydrologic Unit (i.e., watersheds)
HUC-14 – 14-digit Hydrologic Unit (i.e., subwatersheds)
IPM – Integrated Pest Management
IS – Impervious Surface
KCSNJ - Known Contaminated Sites in NJ
LBWP - Lawrence Brook Watershed Partnership
LREO – Lower Raritan Education & Outreach Subcommittee
LRLI – Lower Raritan Legal, Institutional & Implementation Subcommittee
LRLM – Lower Raritan Land Management & Open Space Subcommittee
LRLU – Lower Raritan Land Use, Wastewater & Water Supply Subcommittee
LRMC-WRA – Lower Raritan-Middlesex County Water Resources Association
LRSC – Lower Raritan Steering Committee
LRSW – Lower Raritan Stormwater & Flooding Subcommittee
LRWVG – Lower Raritan Watershed Management Group
LRWR – Lower Raritan Watershed Restoration Subcommittee
LRWQ – Lower Raritan Water Quality Monitoring & Modeling Subcommittee
LU/LC – Land Use/Land Cover
MCL – maximum contaminant level
MCPB – Middlesex County Planning Board
MCUA – Middlesex County Utilities Authority
MGD – million gallons per day

msl – Mean Sea Level
NHP – Natural Heritage Program
NJAC – New Jersey Administrative Code
NJCF - New Jersey Conservation Foundation
NJCWA - New Jersey Council of Watershed Associations
NJDA-SSCC - New Jersey Department of Agriculture, State Soil Conservation Committee
NJDCA – New Jersey Department of Community Affairs
NJDEP – New Jersey Department of Environmental Protection
NJDF&W – NJDEP Division of Fish & Wildlife
NJDOT – New Jersey Department of Transportation
NGO - Non-Governmental Organization
NJGS – New Jersey Geological Survey of the NJDEP
NJOSP – New Jersey Office of State Planning (aka Office of Smart Growth)
NJPDES – NJ Pollutant Discharge Elimination System
NJPO - New Jersey Planning Officials
NJRC&D - North Jersey Resource Conservation & Development Council
NJSWSP – 1996 NJ Statewide Water Supply Plan
NJWAP - New Jersey Watershed Ambassador Program
NJWSA – New Jersey Water Supply Authority
NPS – Nonpoint Source Pollution
NRCS – Natural Resources Conservation Service
NY-NJ HEP – New York–New Jersey Harbor Estuary Program
PSA - Public Service Announcement
RBC - Raritan Basin Council
ROW – Rights of Way
RCE - Rutgers Cooperative Extension
RRA – Rahway River Association
RU - Rutgers University
RUCEC – Rutgers University Center for Environmental Communication
SBMWA– Stony Brook-Millstone Watershed Association
SBWA – South Branch Watershed Association
SCD – Soil Conservation District
SDRP – State Development Redevelopment Plan
SPC - State Planning Commission
SSA – Sewer Service Area
TAC - Technical Advisory Committee (Raritan Project)
T & E – Threatened and Endangered
TDS – total dissolved solids
TMDL – total maximum daily load
TNC - The Nature Conservancy
TOC – total organic carbon
TOT – Time of Travel
TPL - Trust for Public Land
TSS – total suspended solids
URWA – Upper Raritan Watershed Association
USACE – United States Army Corps of Engineers
USDA – United States Department of Agriculture
USEPA – United States Environmental Protection Agency
USFWS - United States Fish & Wildlife Service
USGS – United States Geological Survey
VOC – volatile organic compound
WEF - Water Environment Federation
WHPA - Wellhead protection area
WMA – Watershed Management Area
WMUA – Western Monmouth Utilities Authority

WPNJ - Watershed Partnership for New Jersey
WQMP – Water Quality Management Plan
WSCA – Water Supply Critical Area
WSMA – Water Supply Management Act

Glossary

“Allocation permit” means the document issued by the NJDEP to a person, granting that person the privilege, so long as the person complies with the conditions of the permit, to divert water for any purpose other than agricultural or horticultural use.

“Alluvium” means material, such as sand, silt, or clay, deposited on land by streams.

“Anadromous fish” means fish which travel from salt water to fresh water or up waterways to spawn.

“Anthropogenic” means caused by humans.

“Aquatic macroinvertebrate” is an aquatic insect, worm, or crustacean.

“Aquatic macrophyte” is an aquatic plant.

“Aquifer” means any water-saturated zone in sedimentary or rock stratum which is significantly permeable so that it may yield sufficient quantities of water from wells or springs in order to serve as a practical source of water supply.

“Bank” means the inclined sides of the stream channel.

“Bed” means the floor of the stream channel.

“Bioaccumulation” is the net uptake of a material by an organism from food, water, and (or) respiration that results in elevated internal concentrations.

“Biodiversity” means the variety of living organisms, habitats and ecosystems as well as the processes occurring therein.

“Carrying capacity” means a measure of how much activity a particular resource can withstand before it is affected beyond a set amount.

“Channel” means the well-defined bed and banks of a watercourse that confine and conduct flowing water continuously or intermittently.

“Confined aquifer” is an aquifer that is overlain by a relatively impermeable or significantly less permeable material so that its water is under pressure. If a well were installed, the water would rise above the top of the aquifer.

“Confining Unit” means a body of relatively impermeable material that is above or below one or more aquifers, restricting the flow of water to or from the aquifer(s)

“Consolidated deposits” means deposits of sand, gravel, silt or clay that have been compressed to form solid material or rock.

“Consumptive water use” means the use of water in such a way that a portion of the water used is lost to evaporation, transpiration, incorporation in product, etc., and not discharged to any location.

“Critical habitat” means the ecosystems upon which endangered and threatened species depend.

“Critical water supply area” or “critical area” means a water supply area in which it is officially determined by the New Jersey Department of Environmental Protection, after public notice and a public meeting, that adverse conditions exist, related to the ground or surface water, which require special measures in order to achieve the objectives of the Water Supply Management Act.

“Crown closure” means the amount of shading provided by the tree canopy over land or water surfaces.

“Deforestation” means long-term or permanent removal of forest cover and conversion to a non-forested land use.

“Dependable yield of combined surface/ground water sources” means the yield of water by a water system that is available continuously throughout a repetition of the most severe drought of record, without causing undesirable effects.

“Depletive water use” means the withdrawal of water from a water supply resource (ground or surface water) where the water, once used, is not discharged to the same water supply resource in such a manner as to be useable within the same watershed.

“Designated use” is the use specified in water quality standards for each water body or segment, whether or not they are being attained.

“Detention basin” means an impoundment area made by constructing an embankment, or excavating a pit, or both, for the purpose of temporarily storing water.

“Drought” means a condition of dryness due to lower than normal precipitation, resulting in reduced stream flows, reduced soil moisture and/or lowering of the potentiometric surface in wells.

“Ecological indicators” are plant or animal species, communities, or special habitats with a narrow range of ecological tolerance.

“Ecosystem” means an ecological community together with its environment, functioning as a unit.

“Endangered species” means a species in imminent danger of extinction throughout all or a significant portion of its range.

“Erosion” means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

“Eutrophication” means a process affecting waters that are rich in mineral and organic nutrients, whereby plant life (especially algae) proliferates, eventually reducing the dissolved oxygen content and often killing off other organisms.

“Evapotranspiration” means the combined loss of water to the atmosphere by evaporation and from growing plants.

“Exceptional resource value wetlands” means freshwater wetlands exhibiting any of the following characteristics: those which discharge into FW-1 waters or FW-2 trout production waters or their tributaries; or those which are present habitats for threatened or endangered species, or those which are documented habitats for threatened or endangered species, and which remain suitable for breeding, resting, or feeding by these species during the normal period these species would use the habitat.

“Exotic plant species” means plant species that are foreign to an environment, having come from another part of the world.

“Facility” means a medium through which the base source is transmitted to the user. It is either man-made or manipulated in an attempt to maximize the water that may be derived from a base source. A facility for ground water is a well or well field and for surface waters is a reservoir or intake facility.

“Flood hazard areas” means the floodway and flood fringe areas determined by the NJDEP under Section 3 of the Flood Hazard Areas Control Act (P.L. 1979, c.359).

“Flood plain” means the areas adjacent to a stream or river that are subject to flooding or inundation during severe storm events. [Often referred to as a 100-year floodplain, it would include the area or flooding that occurs, on average, once every 100 years].

“Flood prone areas” means those areas that frequently flood but are not necessarily part of the regulated 100-year flood plain.

“Floodway” means the channel of a natural stream and portions of the flood hazard areas adjoining the channel, which are reasonably required to carry and discharge the flood water or flood flow of any natural stream.

“Flow, natural” means the flow of a stream as it occurs under natural conditions; that is, not subjected to any regulation or diversions.

“Flow, regulated” means the flow of a stream that has been subjected to any artificial or man-made storage, augmentation or diversions.

“Fragmentation” means the disruption of extensive habitats into isolate and small patches.

“Fresh water” means all nontidal and tidal waters generally having a salinity due to natural sources of less than or equal to 3.5 parts per thousand at or near high tide.

“Ground water” means that portion of water beneath the land surface that is within the zone of saturation (below the water table) where pore spaces are filled with water.

“Headwaters” means the beginnings or sources for watercourses. Typically the land surrounding the point in the landscape where sufficient runoff collects to form an intermittent stream.

“HUC System” means the national hydrologic unit code system used by the United States Geological Survey as a way to identify individual watershed areas.

“Hydric soils” means a soil that in its undrained condition is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.

“Hydrologic cycle” means the continuous movement of water from the Earth’s surface into the atmosphere (via evaporation, transpiration and condensation) and back to the earth’s surface again (via precipitation, runoff and infiltration).

“Impairment” is a detrimental effect of the biological integrity of a water body caused by a change in the chemical, physical, or biological quality or condition that prevents attainment of the designated use.

“Impervious surface” means an artificial surface (such as pavement, concrete, buildings or compacted earth) that prohibits or essentially prohibits the infiltration of water from the land surface into the ground.

“Impoundment” means a body of water confined by a dam, dike, floodgate or other barrier.

“Infiltration” means the soaking of water into the ground.

“Interbasin transfer” means the movement of water (as raw, treated or used water) from one watershed to another.

“Intermediate resource value wetlands” means freshwater wetlands not defined as exceptional or ordinary.

“Invasive plants” means a plant that moves in and takes over an ecosystem to the detriment of other species (often the result of environmental manipulation).

“Maximum contaminant level” is the highest level of a contaminant that is allowed in drinking water.

“Mitigation” means the policy of constructing or creating wetlands to replace those lost to development.

“Modified wetlands” means wetlands that have been altered, but still retain wetlands status and support most uses.

“Moraine” means a thick glacial deposit consisting of a heterogeneous mixture of rocks and gravel.

“Neotropical migrant bird” means birds that migrate to more favorable climates for the winter.

“Nitrate” means the most highly oxidized form of nitrogen in the nitrogen cycle. It is generally nonreactive (conservative) and moves readily in water.

“Nonpoint source pollution” is pollution that results from storm water runoff over different land uses to receiving waters.

“Normal demand” means the annual average water demand during the three preceding non-drought years, including normally occurring peaks.

“Ordinary resource value wetlands” means freshwater wetlands which are isolated wetlands which are more than 50 percent surrounded by development and less than 5,000 square feet in size.

“Physiographic provinces” means the distribution of land area in New Jersey into distinct land divisions that have been determined by New Jersey’s geologic history.

“Point source pollution” is pollution that is derived from a localized, single source and is discharged from a pipe or other distinct source.

“Potable water” means water that does not contain objectionable pollution, contamination, minerals, or infective agents and is considered satisfactory for domestic consumption using conventional water treatment processes (e.g., chemical coagulation/flocculation, clarification, filtration, disinfection).

“Public community water system” means a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

“Purveyor” means any company, authority, or person who owns or operates a public community water supply system.

“Recharge” means the process of addition of water to the saturated zone; also the water added.

“Retention basin” means an impoundment area with a permanent pool made by constructing an embankment, or excavating a pit, or both for the purpose of temporarily storing stormwater.

“Riparian area” means streamside land areas that are generally transitional areas between the stream and upland areas.

“Safe yield from surface sources” means the yield maintainable by a water system continuously throughout a repetition of the most severe drought of record, after compliance with requirements of maintaining minimum passing flows, assuming no significant changes in upstream or upgradient depletive withdrawals.

“Saturated zone” means the zone in which all the subsurface voids in the rock or soil are filled with water.

“Septic tank” means an underground tank designed to hold household sewage waste and its decomposition products. It commonly is connected to a series of pipes (leachate field) to allow liquid to exit the tank to the ground. These components in total are called a “septic system” or, more formally, an “individual subsurface sewage disposal system.”

“Stipulated surface water withdrawals” these are surface water uses that are not supported by storage, have no associated safe yield, and can be rescinded during droughts.

“Storm water runoff” is the flow of water on the surface of the ground, resulting from precipitation.

“Stream order” means the number assigned to a stream based on the size and shape of the channel.

“Subwatershed” means a smaller geographic section of a larger watershed that comprises the drainage area for a tributary stream within the watershed or a section of the primary stream.

“Succession” means the process of changing plant and animal populations and developing communities over time.

“Surface water” is water at or above the land’s surface that is neither ground water nor contained within the unsaturated zone. Surface waters include, but are not limited to, the ocean and its tributaries, all springs, streams, rivers, lakes, ponds, wetlands, and artificial water bodies.

“Threatened species” means a species that is likely to become endangered in the foreseeable future.

“Time of travel” (TOT) means the average time that particles of water will take to travel in the saturated zone from a given point to a pumping well.

“Total maximum daily load” (TMDL) is the amount of constituent load that a receiving water body can receive and still meet water quality standards. Essentially, a TMDL and the process of determining the TMDL become a surface water pollution control plan, for specific constituents and stream reaches.

“Treated wastewater” means the treated spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any ground water, surface water, and storm water that may be present.

“Trend in a water quality” is defined as the statistical analysis of the concentration of a constituent at the same station over a period of time.

“Unconfined aquifer” means an aquifer close to the land surface with continuous layers of materials with high permeability, extending from the land surface to the base of the aquifer. This type of aquifer has a water table.

“Unconsolidated deposits” means recent deposits of clays, silts, sands and gravels that are not cemented together.

“Water allocation: or certification” means the authority to withdraw surface or groundwater for use, pursuant to a permit issued under N.J.A.C. 7:19-1 et seq. or 7:20A-1.1 et seq.

“Water quality criteria” is a scientifically derived ambient concentration of a contaminant that protects human health and aquatic life.

“Water quality standard” is an allowable contaminant concentration in a water supply that is enforceable by law.

“Water supply deficit” means the amount or amounts by which the available resources fall short of a given demand.

“Water supply system” means a facility for providing potable water.

“Water table aquifer” is synonymous with unconfined aquifer.

“Water table” means the upper surface of a zone of saturation except where that surface is formed by a confining unit. The upper surface of the zone of saturation at which the water pressure in the porous medium equals atmospheric pressure.

“Watershed Management Area” means one of the areas incorporating one or more contiguous watersheds as delineated in the Statewide Water Quality Management Plan. A watershed management area is used as a planning area for the watershed management process.

“Watershed” is the land area that drains into a body of water.

“Watershed” means a geographic area in which all water, sediments and dissolved material drain to a particular receiving body.

“Wellhead Protection Area” (WHPA) means an aquifer area described in plan view around a well, from within which ground water is reasonably likely to flow to the well and through which ground water pollution, if it occurs, is reasonably likely to pose a significant threat to the water quality of the well. The Wellhead Protection Area is delimited by the use of time-of-travel and hydrologic boundaries, and is further subdivided by multiple times of travel.

“Wellhead” means the well borehole and related equipment.

“Wetland transition area” means an area of land adjacent to a freshwater wetland which minimizes adverse impacts on the wetland or serves as an integral component of the wetlands ecosystem.

“WHPP” means the Wellhead Protection Program established pursuant to Section 1428 of the Federal Safe Drinking Water Act, P.L. 93-523, 42 USC 300 et. seq. and described within the New Jersey Wellhead Protection Program Plan (NJDEP, 1991) and subsequent documents.

“Yield of a water resource system” means the output of water from a system, available with monthly variations corresponding to the needs of the system.

“Zone of contribution” means the portion of an aquifer surrounding a pumping well that encompasses all areas or features that supply ground water or ground water recharge to the well over time.