

NJDEP Surface Water Classifications

The following summarizes those aspects of NJDEP's system of surface water classification that have current or potential relevance to water bodies in the Great Swamp watershed.

The highest quality waters in NJ are designated "Outstanding National Resource Waters" (ONRW). These include some waters in National and State Parks, Wildlife Refuges (though not the Great Swamp National Wildlife Refuge, probably because the streams' sources are all outside the Refuge), and "waters of exceptional recreational or ecological significance". Waters designated as ONRW include two general surface water classifications: Fresh Water One (FW1) and Pinelands waters (PL). The FW1 waters are intended to be set aside for posterity in their natural state and not to be subjected to any wastewater discharges or increases in runoff from human activities.

All remaining waters are designated as FW2, the general classification that applies to all non-ONRW fresh waters. All the surface waters in the Great Swamp watershed are classified FW2. There are three sub-classifications of FW2:

- FW2-TP - Trout production waters, designated for use by trout for spawning or nursery purposes during their first summer.
- FW2-TM - Trout maintenance waters, designated for the support of trout throughout the year.
- FW2-NT - Non-trout waters, not considered suitable for trout, but may be suitable for many other fish species.

There are several other classifications for saline coastal and estuarine waters but these are not relevant to the Great Swamp watershed.

Associated with the applicable classifications, there are three Anti-degradation Levels of Protection.

- The ONRW (i.e. FW1 & PL) non-degradation waters by definition are to be "maintained in their natural state (set aside for posterity), and shall not be subject to any manmade wastewater discharges". NJDEP "shall not approve any activity which, alone or in combination with any other activities, might cause changes, other than toward natural water quality, in the existing water quality characteristics".
- Category One (C1) waters are protected from any measurable changes to the existing water quality. C1 can be applied to any of the surface water classifications except FW1 and PL, and is frequently applied to waters flowing through parks, wildlife refuges and to FW2-TP streams. "Water quality characteristics that are generally worse than the water quality criteria, except as due to natural conditions, shall be improved to maintain or provide for the designated uses where this can be accomplished without adverse impacts on organisms, communities or ecosystems of concern".
- Category Two (C2) waters are all fresh surface waters not designated FW1, PL or Category One. "Water quality characteristics that are generally better than, or equal to, the water quality standards shall be maintained within a range of quality that shall protect the

existing/designated uses". "Water quality characteristics that are generally worse than the water quality criteria shall be improved to meet the water quality criteria".

A list of NJ streams and their classifications is available in NJ Administrative Code 7, Chapter 9B, Subchapter 1, "Surface Water Quality Standards". This document is periodically updated; the most recent version carries an amendment date of April 4, 2011. In the classification list a stream might be designated as, for example, FW2-TP (C1). Another one might be shown as FW2-NT. In the latter case, C2 protection, while not stated, is of course assumed. The stream segments for the Great Swamp watershed appear in this list as follows:

BLACK BROOK

(Meyersville) - Entire length, except segment described below

FW2-NT

(Great Swamp) - Segment and tributaries within the Great Swamp National Wildlife Refuge

FW2-NT(C1)

GREAT BROOK

(Chatham) - Entire length, except segment described below

FW2-NT

(Great Swamp) - Segment within the boundaries of the Great Swamp National Wildlife Refuge

FW2-NT(C1)

LOANTAKA BROOK

(Green Village) - Entire length, except segment described below

FW2-NT

(Great Swamp) - Brook and all tributaries within the boundaries of Great Swamp National Wildlife Refuge

FW2-NT(C1)

PASSAIC RIVER

(Mendham) - Source downstream to, but not including, Osborn Pond or tributaries described separately below

FW2-TP (C1)

(Paterson) - Outlet of Osborn Pond to Dundee Lake dam

FW2-NT

PRIMROSE BROOK

(Harding) - Source to Lee's Hill Road bridge

FW2-TP (C1)

(Harding) - Lees Hill Road bridge to Great Swamp National Wildlife Refuge boundary

FW2-NT

(Great Swamp) - Wildlife Refuge boundary to Great Brook

FW2-NT(C1)

*Note that C1 does not apply to Passaic River where it borders the refuge.

The N.J.A.C. 7:9B document also includes an extensive list of surface water quality standards pertaining to the FW2 and other classifications. The document may be accessed at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf

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