

NJDEP surface water classifications

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 GSNWR, 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 categorized as FW2 - the general classification that applies to all non-ONRWs. All the surface water in the Great Swamp watershed is characterized as FW2. There are three sub-categories of FW2:

- FW2-TP - Trout production waters for trout spawning or nursery during their first summer.
- FW2-TM - Trout maintenance water for the support of trout throughout the year.
- FW2-NT – Non-trout waters – these are 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 do not concern the Great Swamp watershed.

In addition to the above categories, there are Anti-degradation Levels of Protection, of which NJ has three. The ONRW (i.e. FW1 & PL) waters by definition are to be maintained in their natural state and protected from human activities that might cause a change in water quality. (Somehow in the Pinelands this policy is considered compatible with cranberry and blueberry production)

- Category One (C1) waters are protected from "measurable or calculable changes" in 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.
- Category Two (C2) waters are all surface waters not designated FW1, PL or Category One. Water quality changes are allowed provided that they are in the range of changes permissible with existing stream uses, and that degradation is necessary to accommodate "important economic or social development".

A list of NJ streams and their classifications is available in NJ Administrative Code 7, Chapter 9B, Subchapter 1, "Surface Water Quality Standards". In this list, which was published in October 2006, 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 course assumed. The stream segments for the GS 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.

Two other points: There is a statement at the beginning of the NJAC 7:9B document referred to above (from which these listings were obtained), that Chapter 9B expires on March 19, 2008. Secondly, the same document contains a long list of water quality standards pertaining to the FW2 and other classifications. These may be objectives rather than hard requirements. If you'd like to access the NJAC 7:9B document, you can find it at:

<http://www.state.nj.us/dep/wms/bwqsa/swqshome.html>