

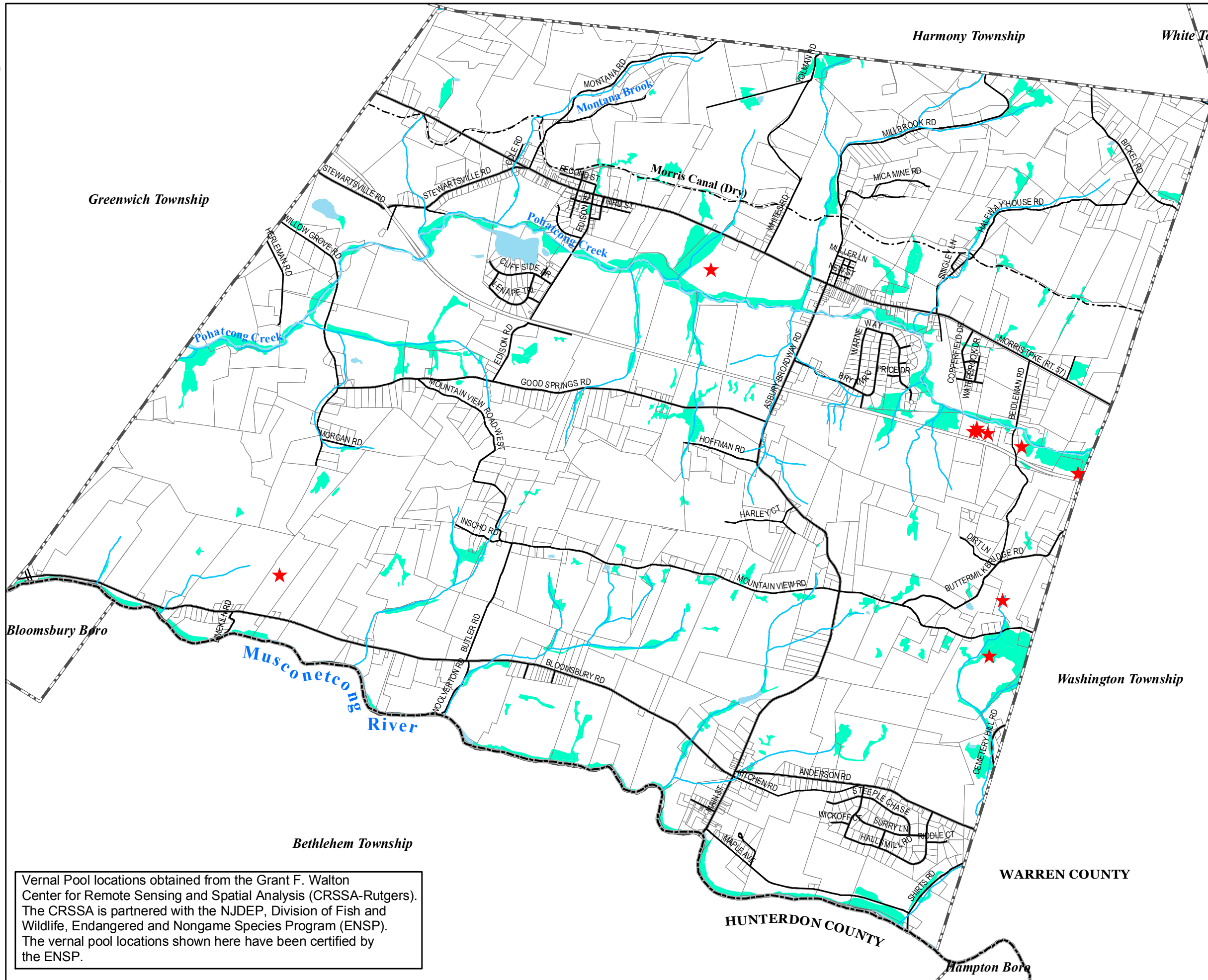
24: VERNAL POOLS

Vernal pools are narrowly defined ephemeral wetlands that are characterized by hydrologic features and ecological function. These pools are confined basins or depressions lacking means by which the standing water in the pool can drain. To be classified as a vernal pool, standing water must be present in the pool for at least two continuous months between March and September in a year of normal rainfall. Ecologically, vernal pools must harbor documented obligate or facultative vernal habitat species (as listed by NJDEP) and be free of fish populations or dry up for some period during the year. Obligate species may be defined as those species that are dependent on vernal pool habitats at some stage of the life cycle, while facultative species are those species that frequently utilize vernal pools but are capable of reproducing outside of vernal pools.

Vernal pools are recognized as disproportionately diverse habitats within generalized upland settings. In particular, they are associated with various obligate species across taxa that are recognized as threatened or endangered. Characteristic obligate species include amphibians such as the mole salamanders (*Ambystoma spp.*), and Wood frog (*Rana sylvatica*), but are equally important to facultative wildlife such as state threatened Wood turtle (*Glypternys insculpta*).

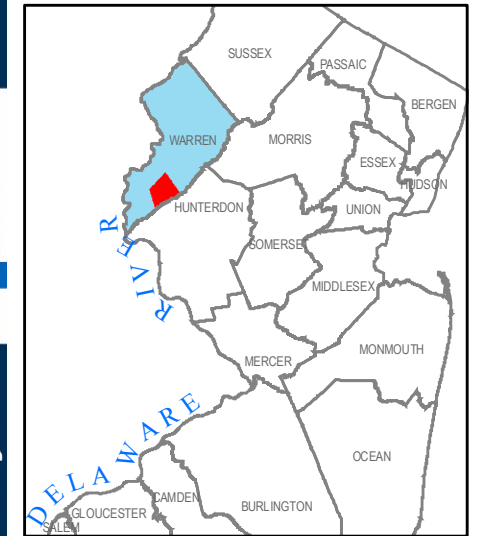
Statewide, the number of vernal pools has declined drastically because of increased development and the lack of specific regulatory protection afforded larger, more typically defined wetlands. With the approval of the Freshwater Wetlands Protection Act Rules in 2001, vernal pools became specifically protected. The NJDEP's Endangered and Nongame Species Program established the Vernal Pool Project, which is a dedicated effort to map and survey vernal pools throughout the state. Much of the NJDEP's mapping efforts have been completed through trained volunteer surveys and a partnership with Rutgers University's Center for Remote Sensing and Spatial Analysis. Additional information can be found online (<http://www.state.nj.us/dep/fgw/ensp/vernalpool.htm>) and (<http://www.dbcrssa.rutgers.edu/ims/vernal/>).

Vernal pools represent a unique natural resource. Filling, altering, draining or otherwise compromising the hydrological or ecological function of vernal pools should be avoided and any such activity is subject to NJDEP review and approval. The vernal pools located in the Township are presented in ([Figure 23](#)) with additional information appearing in Appendix 23. Zero of the possible 21 vernal pools that occur in Franklin Township have yet to be certified by the NJDEP Endangered and Nongame Species Program.

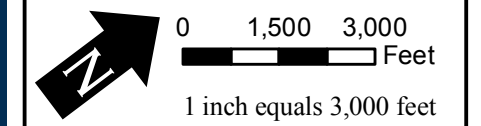


Vernal Pool locations obtained from the Grant F. Walton Center for Remote Sensing and Spatial Analysis (CRSSA-Rutgers). The CRSSA is partnered with the NJDEP, Division of Fish and Wildlife, Endangered and Nongame Species Program (ENSP). The vernal pool locations shown here have been certified by the ENSP.

NEW JERSEY COUNTY MAP



PRINCETON HYDRO, LLC.
1108 OLD YORK ROAD, SUITE 1
RINGOES, NEW JERSEY, 08551



- SOURCES:
1. Parcel, roads and the Franklin Township Boundary data obtained from Warren County Planning Dept. "This map was developed using the Warren County New Jersey, Geographic Information System digital data, but this secondary product has not been verified by Warren County and is not county-authorized."
 2. Surface water data obtained from the NJDEP, Division of GIS.
 3. Vernal Pool locations obtained from Rutgers University.

FIGURE 23
VERNAL POOLS

NATURAL RESOURCE INVENTORY
FRANKLIN TOWNSHIP
WARREN COUNTY, NEW JERSEY

- Legend**
- ★ Vernal Pools
 - County Boundary
 - Municipal Boundaries
 - Roads
 - Parcels
 - NJDEP Wetlands (726.9 Ac.)
 - Ponds/Lakes
- Streams**
- Streams
 - Morris Canal (Dry)

