REMINGTON & VERNICK ENGINEERS

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Watershed Inventory Report

Phase 1 of the Watershed Improvement Plan – INITIAL DRAFT= Pre January 1, 2026 filing deadline

WATCHUNG BOROUGH
SOMERSET COUNTY

Date Approved: *Pending (Dec 2025)*

Permit Number: NJG0149993

Stormwater Program Coordinator: Terence Vogt, PE

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DISCLAIMER - STORMWATER MAPPING IS BEING COMPLETED FOR WATCHUNG BOROUGH PRIOR TO THE JANUARY 1 2026 FILING DEADLINE. MAPPING WILL BE FILED WITH NJDEP AND MADE AVAILABLE THROUGH WATCHUNG BOROUGHS STORMWATER WEBLINK (BELOW).

HTTPS://WATCHUNGNJ.GOV/STORMWATER

THE FINAL PHASE 1 WIP REPORT WILL BE REVISED TO INCLUDE DATA FROM THIS MAPPING WORK AFTER IT IS COMPLETED (BY OR BEFORE SPRING, 2026)

Acronyms & Definitions

1. Acronyms
   - i. "BMP" – Best Management Practice
   - ii. "DO" – Dissolved Oxygen
   - iii. "EPA" – U.S. Environmental Protection Agency
   - iv. "GIS" – Geographic Information System
   - v. "HUC 14" – Hydrologic Unit Code 14
   - vi. "MS4" – Municipal Separate Storm Sewer System
   - vii. "MTD" – Manufactured Treatment Device
   - viii. "NJPDES" – New Jersey Pollutant Discharge Elimination System
   - ix. "NJ-WET" – New Jersey Watershed Evaluation Tool
   - x. "TDS" – Total Dissolved Solids
   - xi. "TMDL" – Total Maximum Daily Load
   - xii. "TSS" – Total Suspended Solids
   - xiii. "WIP" – Watershed Improvement Plan
2. Definitions
   - i. "HUC 14" or "hydrologic unit code 14" means an area within which water drains to a particular receiving surface water body, also known as a subwatershed, which is identified by a 14-digit hydrologic unit boundary designation, delineated within New Jersey by the United States Geological Survey. (N.J.A.C. 7:9B)
   - ii. "Municipal separate storm sewer" (or MS4 conveyance) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) as defined in more detail at N.J.A.C. 7:14A-1.2.
   - iii. "Outfall" means any point source which discharges directly to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.
   - iv. "Storm drain inlet" means the point of entry into the storm sewer system.
   - v. "Stormwater" means water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities or is conveyed by snow removal equipment.
   - vi. "Stormwater facility" means stormwater infrastructure including, but not limited to, catch basins, infiltration basins, detention basins, green infrastructure (GI), filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses, Manufactured Treatment Devices (MTDs), and stormwater conveyances.
   - vii. "Stormwater management basin" means a stormwater management basin as defined in N.J.A.C. 7:8.
   - viii. "Stormwater management measure" means a stormwater management measure as defined in N.J.A.C. 7:8.
   - ix. "Stormwater runoff" means water flow on the surface of the ground or in storm sewers,

resulting from precipitation.

x. "Total maximum daily load" or "TMDL" means a total maximum daily load formally established pursuant to Section 7 of the Water Quality Planning Act (N.J.S.A. 58:11A-7) and Section 303(d) of the Clean Water Act, 33 U.S.C. §§12512 et seq. A TMDL is the sum of individual wasteload allocations for point sources, load allocations for nonpoint sources of pollution, other sources such as tributaries or adjacent segments, and allocations to a reserve or margin of safety for an individual pollutant.

xi. "Waters of the State" means the Somerset and its estuaries, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction" (see N.J.A.C. 7:9B-1.4)

Acknowledgements

Watchung Borough's Phase 1 Watershed Inventory Plan (WIP) report was prepared by Remington & Vernick, Engineers. Funding for preparation of the plan was provided by Watchung Borough.

This WIP Inventory Report was prepared using NJDEP-GIS stormwater infrastructure mapping data obtained by RVE; which was funded in-part by a $25,000 NJDEP stormwater mapping grant provided to Watchung Borough.

Regional Collaboration

Watchung Borough has not collaborated regionally in the preparation of this Phase 1 Inventory Report. At Watchung's discretion it may choose to collaborate for preparation of Phase 2 and Phase 3 reports due January 1, 2027 and December 31, 2027, respectively.

Introduction

The purpose of this watershed inventory report is to provide a comprehensive understanding of key, defining features within the watersheds throughout Watchung Borough. This involves gathering, organizing, and presenting information about existing conditions and infrastructure within each watershed. It aims to serve as a tool for informed decision-making, planning, and implementation of sustainable watershed management strategies aimed to protect and enhance the health of the watershed, its associated ecosystems, and the surrounding communities.

In the 2020 census, Watchung borough had a population of 6,449, a 11.2% increase from 2010. The median age was 45.5 years, with 2,218 households and an average of 2.8 people per household. The racial makeup was 74% White, 14% Asian, and 4% other, with a per capita income of $73,470.

- **Population:** 6,449
- **Population Change:** +11.2% from the 2010 census
- **Median Age:** 45.5 years
- **Number of Households:** 2,218
- **Average Household Size:** 2.8 people
- **Race and Ethnicity:** 74% White, 14% Asian, 4% Other
- **Per Capita Income:** $73,470
- **Poverty Rate:** 1.8%

Watchung Borough is a developed suburban municipality with little vacant land remaining. The majority of its land is dedicated to single-family dwellings, with a smaller percentage allocated to multi-family dwellings and utility structures. The borough's land use is governed by its zoning districts, which include Rural Single-Family Residential (R-R) and specific overlays for highway development, quarries, and cemeteries.

Overall land use: Watchung is a developed suburban area with 85.68% of its land allocated to single-family dwellings and 2.36% to multi-family dwellings.

- **Zoning:** The primary zoning category is R-R (Rural Single-Family Residential), with various districts and overlays including Highway Development (H-D), Quarry District (QU), Cemetery (CE), and an Affordable Housing Overlay District (S-W).

- **Vacant land:** There is little vacant land remaining for new development, as the entire borough is designated as a PA2 Suburban Planning Area by the State Development and Redevelopment Plan.
- **Recreation and conservation:** The borough owns 9 properties for active municipal recreation use, totaling 24.88 acres, and has 31.56 acres of undeveloped land held for conservation purposes.
- **Slope regulations:** Land use regulations are impacted by slope, with permitted lot coverage decreasing as the slope percentage increases. For example, slopes over 20% and up to 30% allow only 63% of the lot coverage permitted in the zone.

Public Participation (Watchung Borough Phase 1 WIP Inventory Report)

- **List of stakeholders**

  The Phase 1 Watershed Inventory Report (WIP) was prepared for Watchung Borough by Remington & Vernick, Engineers (RVE).

  Stakeholders for this plan include Watchung Borough, Watchung Borough Committee, Watchung Borough Planning Board, Watchung Borough Zoning Board and the Watchung Borough Department of Public Works (DPW).

- **List of Previously Held Meetings (Watchung January 2026 Committee meeting)**

  Watchung Borough shall solicit input from stakeholders, including residents, business owners, owners of private stormwater facilities (as per b.xiii below), and other municipalities and/or dischargers to the subwatershed(s) to be involved in the Plan development process

  Watchung Borough shall conduct semi-annual public information sessions (in-person or virtual) beginning on or before January 1 2026, throughout the development of the Plan. These sessions could be included on the agenda for Borough Committee (or equivalent) meetings.

- **Summary of Feedback**
  - *Summarize any feedback received from informational or stakeholder sessions. Include notes and meeting minutes from any public meetings for the WIP*

- **Future Scheduled Meetings**

  A second (and final) semi-annual public information session shall be held by or before June, 2026. The final draft of the Phase 1 Watershed Inventory Report will be available on Watchung Borough's Stormwater Webpage at the link below:

  https://watchungnj.gov/stormwater

  The second meeting date and time will be advertised on Watchung's municipal website:

  https://www.Watchungnj.gov/

Stormwater Outfall(s)

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Receiving Surface Water Bodies & Water Quality Classifications

Watchung Borough is situated within NJ **Watershed Management Area 9 (Lower Raritan, South River, and Lawrence).**

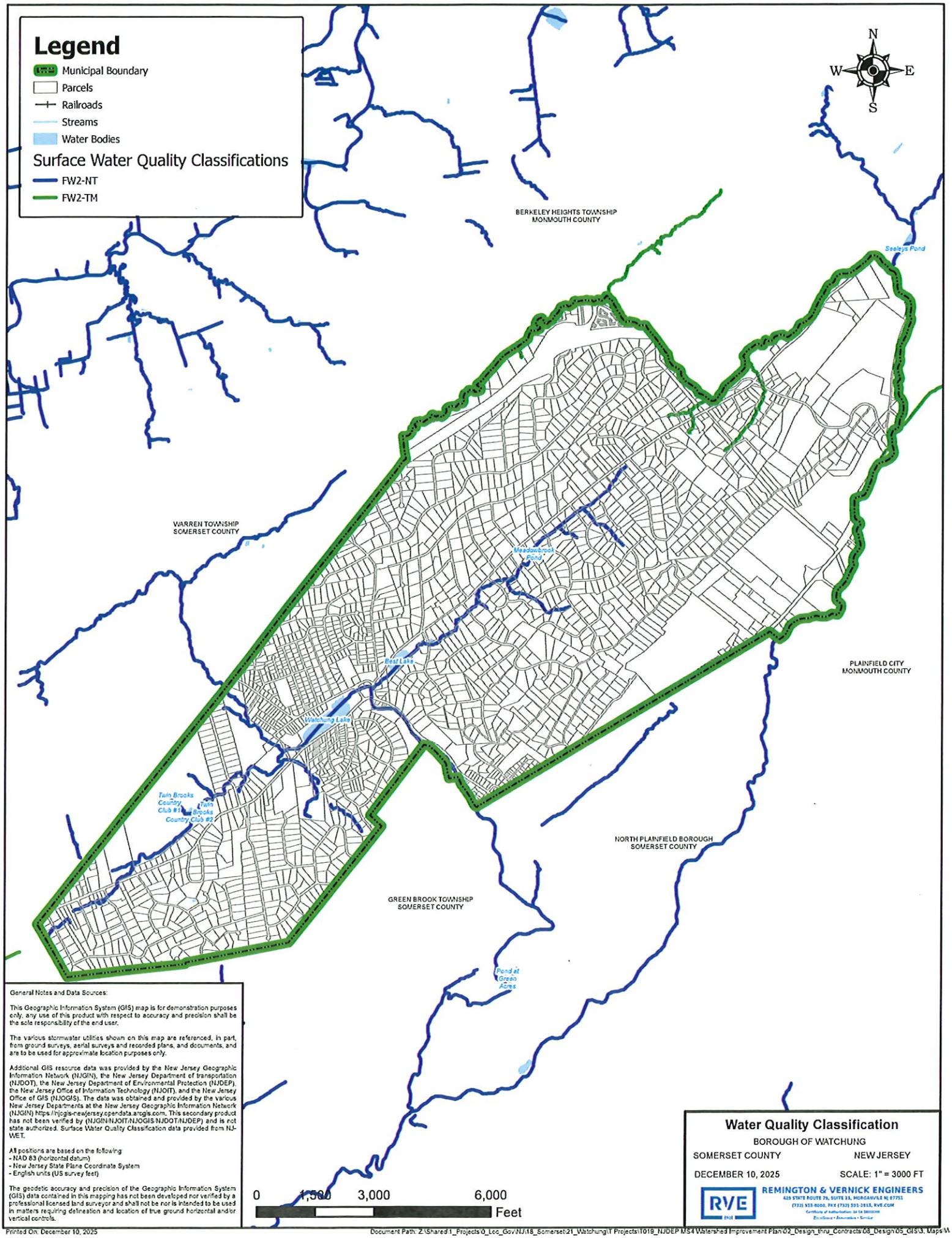
The main water bodies in Watchung are Watchung Lake and Best Lake, both of which are part of the Watchung Lake Park area. There is also the Stony Brook, which has monitoring locations in the area and connects to Best Lake.

Major water bodies

- Watchung Lake: A central body of water in Watchung, located within Watchung Lake Park. It is a reservoir and has specific regulations regarding activities like swimming, boating, and fishing.
- Best Lake: Another lake in Watchung, surrounded by greenery and trails. Like Watchung Lake, it has restrictions on swimming and wading.
- Stony Brook: A waterway that is monitored in the Watchung area and is connected to Best Lake.

As illustrated on the enclosed ***"Surface Water Quality Classification" Map***, classifications of Borough Waters are as follows:

- **FW2-NT (Freshwater 2, Non-Trout)** – most of the Borough's waters are classified as such. The "FW2" stands for the general classification for most freshwaters, while the "-NT" specifies it is a non-trout water. These waters are still designated for uses like supporting aquatic life and recreation.



General Notes and Data Sources:

This Geographic Information System (GIS) map is for demonstration purposes only, any use of this product with respect to accuracy and precision shall be the sole responsibility of the end user.

The various stormwater utilities shown on this map are referenced, in part, from ground surveys, aerial surveys and recorded plans, and documents, and are to be used for approximate location purposes only.

Additional GIS resource data was provided by the New Jersey Geographic Information Network (NJGIN), the New Jersey Department of transportation (NJDOT), the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Office of Information Technology (NJOIT), and the New Jersey Office of GIS (NJOGIS). The data was obtained and provided by the various New Jersey Departments at the New Jersey Geographic Information Network (NJGIN) https://njogis-newjersey.opendata.arcgis.com. This secondary product has not been verified by (NJGIN/NJOIT/NJOGIS/NJDOT/NJDEP) and is not state authorized. Surface Water Quality Classification data provided from NJ-WET.

All positions are based on the following:
- NAD 83 (horizontal datum)
- New Jersey State Plane Coordinate System
- English units (US survey feet)

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Water Quality Classification

BOROUGH OF WATCHUNG

SOMERSET COUNTY NEW JERSEY

DECEMBER 10, 2025 SCALE: 1" = 3000 FT

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- **FW2-TM (Freshwater 2, Trout Maintenance Waters) -FW2-TM** – several streams in the northern portion of the Borough are assigned as FW2-TM. Which is a classification for surface waters that are designated as **Trout Maintenance waters**. This classification means the water is suitable for supporting trout populations throughout the entire year and is a sub-classification of the general FW2 designation, which applies to most non-estuarine freshwater in the state.
    - **FW2:** The general classification for all non-tidal freshwater in New Jersey, excluding certain special-purpose waters.
    - **TM:** Specifically indicates that the water's quality is sufficient to support trout throughout the year, making it a designated trout maintenance water.

Specific water quality issues in Watchung include the following:

- **Fecal contamination:** Well water testing from June 2024 found that over 10% of tested wells showed fecal coliform bacteria, which can indicate contamination from human or animal waste.
- **Nonpoint source pollution:** This includes pollution from diffuse sources like runoff, such as trash that degrades habitats and chemicals from road salt that can wash into waterways, especially during drought conditions.
- **Trash and debris:** Improper disposal of trash contaminates waterways and harms habitats.
- **Potential for other pollutants:** While not confirmed as a widespread problem for surface water, a 2024 well water study in Watchung did show concerning results for certain chemicals, including PFOA and PFOS, which are types of PFAS chemicals.

Stormwater Interconnection(s)

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Drainage Area(s) for Stormwater Outfalls and Stormwater Interconnections

This section should detail the following information for outfalls owned/operated by the permittee and interconnection(s) from the permittee's MS4 into another entity's system:

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Storm Drain Inlets

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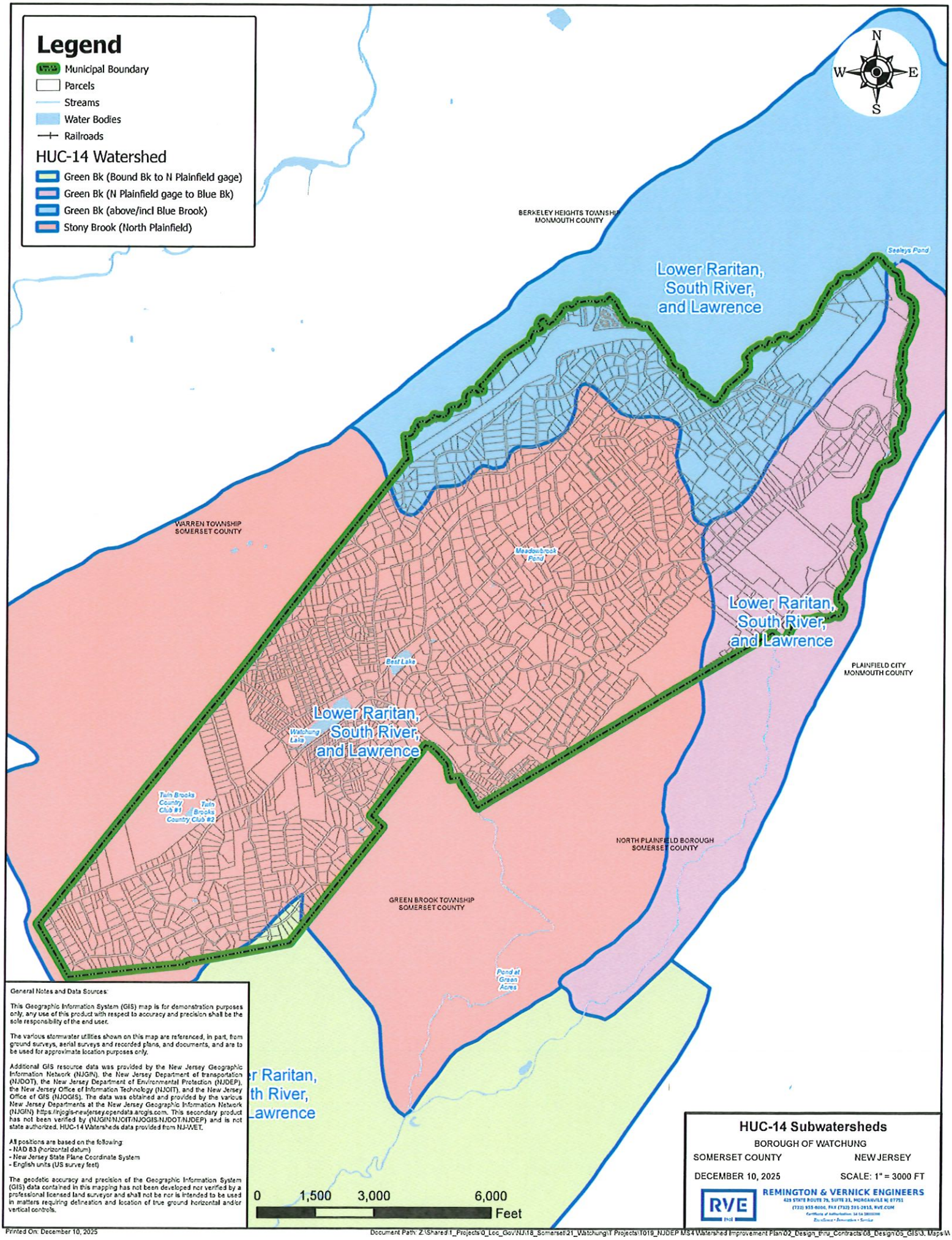
TMDLs and Water Quality Impairments

In accordance with Section 305(b) and 303(d) of the Federal Clean Water Act, New Jersey is required to assess the overall water quality of the state's waters and identify those waterbodies with a water quality impairment for which total maximum daily loads (TMDLs) may be necessary. NJDEP fulfills its assessment obligation under the Clean Water Act through the Integrated Water Quality Monitoring and Assessment Report (i.e., Integrated Report), which includes the Integrated List of Waterbodies, issued biennially. A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of pollutants of concern, the natural background, and surface water withdrawals. A TMDL can be thought of as a "budget" for the total amount of a pollutant that can enter a waterbody while still maintaining surface water quality standards. TMDLs have been developed for various pollutants in various waterbodies throughout the state. Tier A MS4 discharges are considered point sources under the Clean Water Act;

Watchung Borough contains portions of three (3) HUC-14 watersheds, summarized below and illustrated on the enclosed HUC-14 Watershed Map:

- **Stony Brook (North Plainfield)** – HUC-14 02030105120030.
- **Green Bk (Bound Bk to N Plainfield gage)**– HUC-14 02030105120020.
- **Green Bk (above/including Blue Brook)** – HUC-14 02030105120010.

TMDL's and impairments for the respective subwatersheds are summarized in the Table (below):



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HUC-14 Subwatersheds

BOROUGH OF WATCHUNG

SOMERSET COUNTY NEW JERSEY

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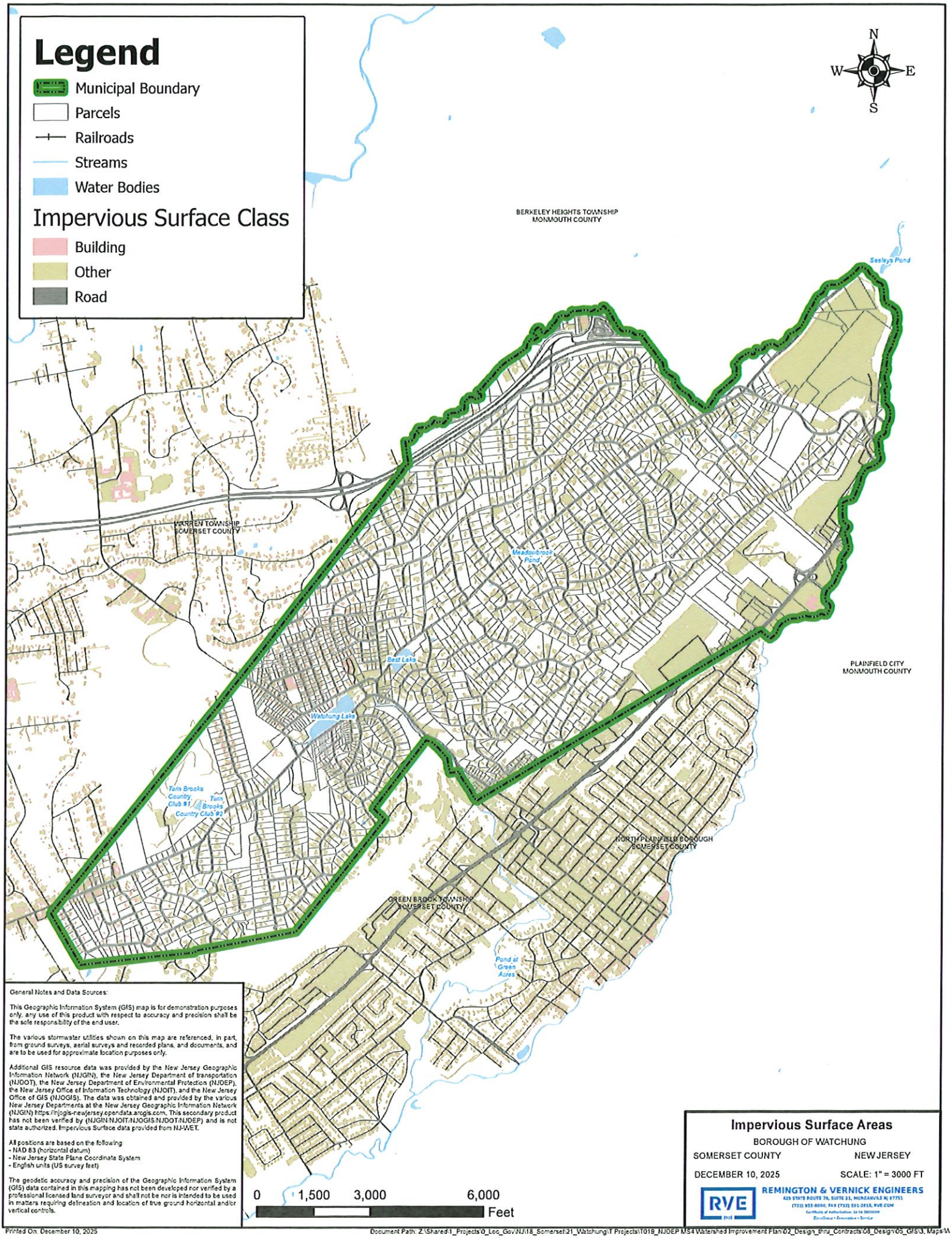
Printed On: December 10, 2025

Document Path: Z:\Shared\1_Projects\0_Loc_Gov\NJ\18_Somerset\21_Watchung\Projects\1019_NJDEP MS4 Watershed Improvement Plan\02_Design_thru_Contracts\08_Design\05_GIS\3. Maps\M



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Impervious Surface Areas

BOROUGH OF WATCHUNG

SOMERSET COUNTY NEW JERSEY

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TMDLs and Impairments for Subwatersheds within or bordering Watchung Borough

HUC 14	Subwatershed Name	TMDL(s)	Impairment(s)
02030105120030	*Stony Brook (North Plainfield)*	*Stream sheds Total Suspended Solids (2013)*	*None*
02030105120010	*Green Bk (Bound Bk to N Plainfield gage)*	*Stream sheds Suspended Solids (2016)*	*PH, Temperature, Total Dissolved Solids*
02030105120010	*Green Bk (above/including Blue Brook)*	*Stream sheds Suspended Solids (2016),*	*PH, Temperature, Total Dissolved Solids*

Impairments summary

pH (scientifically referred to as the Potential of Hydrogen) measures the concentration of hydrogen ions in a solution and is the indicator of the acidity or alkalinity of a substance, representing its ability to donate or accept hydrogen ions. pH values can range from 0 to 14, with 0 representing the most acidic and 14 representing the most basic. Fluctuations in pH and pH levels outside of the typical levels for a waterbody can negatively impact aquatic life, including reduced biodiversity if those values exceed critical thresholds. These impacts happen when the receiving waters experience even slight changes in pH levels that negatively impact reproduction, growth, and the ability to sustain life for species that live within them.

Pure water has a neutral pH equal to 7 but when chemicals or pollutants are mixed with stormwater runoff, the mixture can become either acidic or basic. Such is the case when stormwater comes into contact with ammonia, sulfur, battery acids, lime, cement, wet or fresh concrete, fertilizers, compost, and other pollutants. This mixing can happen on the ground with runoff, or can happen in the atmosphere with air pollutants causing "acid rain." When acid rain or pH impacted storm water runoff collect in streams and ponds, the pH of that water body is changed.

Temperature: The concentration of dissolved oxygen in the receiving waters is also affected by the temperature of the water. Cold water holds more dissolved oxygen than warm water, so in New Jersey during winter and early spring, the dissolved oxygen concentration in the surface waters is relatively high. However, in summer and fall, the dissolved oxygen concentration is often lower and therefore can pose a risk to designated uses associated with aquatic life. Deeper water also tends to be colder and hold more dissolved oxygen than shallower waters. Yet, turbid waters will absorb more heat. The elevated temperatures are especially harmful to cold water fish, such as trout.

Temperature impairments in the receiving waters can be due to heating of stormwater runoff as it runs across hot paved areas, such as roadways and parking lots, overflow of heated stormwater ponded in basins, stream bank erosion that widens the stream and creates more shallow stream beds, and increased solar incidence in areas where shading vegetation is lacking in the riparian buffer. In addition to the other Tier A permit conditions noted below, the increased temperature impacts associated with stormwater runoff can also be mitigated by implementing green infrastructure measures to manage stormwater runoff at the source rather than direct it into the MS4 and receiving waterbodies, providing proper stormwater management practices, and conducting streambank restoration projects where needed.

Pathogens, including fecal coliform, and total coliform, enter the receiving waters when stormwater comes into contact with sources of these pathogens, such as pet waste, animal waste from geese and other wildlife, some farming activities, illicit discharges, failing sewage conveyance systems and septic systems, combined sewage overflows, and sanitary sewer overflows (SSOs).

While sewage treatment plants contribute a steady input of treated sewage to their receiving waters, stormwater runoff is the primary contributor to pathogen loads in the surface waters of the state. Many of these pathogens affect the designated uses of the receiving waters and are harmful to human or animal health when ingested causing intestinal disease. Pathogens can attack the immune system and cause infections that may result in abdominal issues, respiratory problems, fever, headache, skin rashes, etc. (Water Quality Topics: Pathogens | US EPA).

When receiving surface waters include shellfish harvesting as a designated use, pathogens also pose additional concerns. Proximity to potential sources such as marinas, development served by septic systems and concentrated stormwater outfall locations warrant precautionary closures of shellfish waters on a seasonal or full-time basis. The National Shellfish Sanitation Program has established criteria for pathogens that are used to determine support of the shell fishing use.

Total Dissolved Solids (TDS) is the measure of the concentration of dissolved inorganic substances, such as calcium, chlorides nitrate, phosphorus, iron, sulfur, and other ion particles, in water that can pass through a filter with pores of approximately 0.002 cm. TDS differs from TSS in that TSS particles will not pass through the same filter. TDS affects aquatic and human health by altering the water balance in the cells of organisms. For instance, when an aquatic organism is placed in water with very low TDS, such as distilled water, it will swell up because water will tend to move into its cells, which have a higher concentration of solids. Conversely, an organism placed in water with high TDS will shrink somewhat because the water in its cells will tend to move out. This will in turn affect the organism's ability to maintain the proper cell density, making it difficult to keep its position in the water column by causing it to float up or sink down to depths to which it is not adapted, and it might not survive. High concentrations of TDS may also cause adverse health effects due to the chemicals making up the TDS, make drinking water unpalatable and cause additional adverse health effects on people who are not used to drinking such water. Levels of TDS that are too high or too low can also adversely affect industrial processes that use raw water.

TDS is discharged into the receiving waters via stormwater as the runoff picks up various substances on the ground surface, such as salts and brine solutions used for de-icing of motor vehicle surfaces and walkways, fertilizers, motor vehicle parts and fluids, illicit connections, and soil particles through erosion.

Finally, **Watchung's flooding problems** stem from heavy rainfall events, like the July 2025 storms that caused extensive flash flooding, damaging roads and properties and leading to a "shelter in place" order. The borough is also at high risk from long-term flooding, with a significant portion of properties facing risk in the next 30 years, and is actively working on mitigation with the help of grants and state and federal agencies, including the Green Brook Flood Control Commission and the U.S. Army Corps of Engineers.

Long-term and systemic issues

- **High risk:** First Street reports that 12.8% of properties in Watchung are at risk of flooding in the next 30 years.

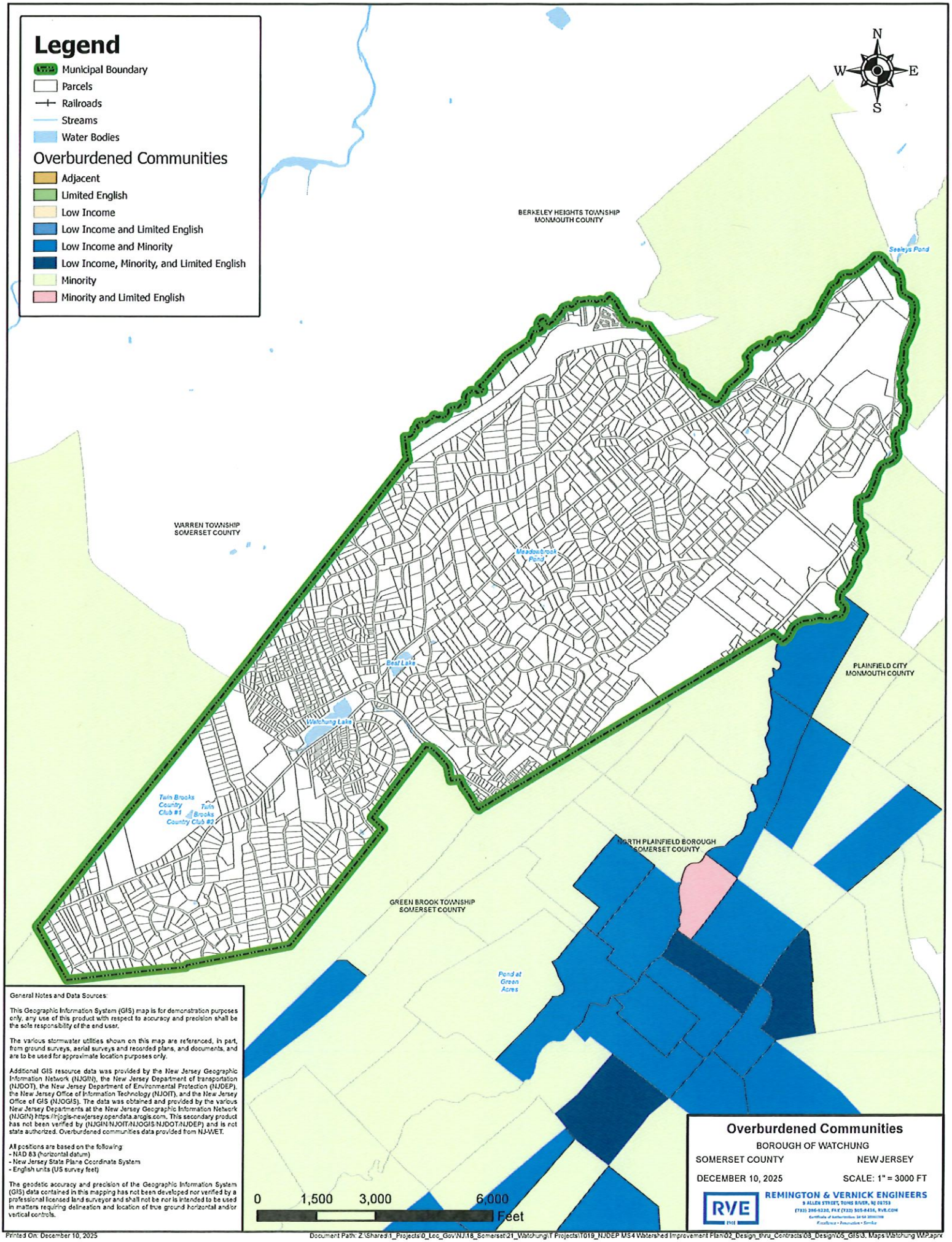
- **Contributing factors:** Slow-moving storms and a tropical air mass have increased the risk of prolonged downpours and significant flooding in the region.

- **Long-term solutions:** Watchung is working with multiple agencies on long-term solutions, including:
    - Receiving county grants for "pocket drainage projects".
    - Collaborating with the Green Brook Flood Control Commission on flood control efforts in key areas.
    - Supporting the U.S. Army Corps of Engineers' general revaluation report on the Upper Basin, which includes Watchung.
    - Focusing on hazard mitigation efforts to break the cycle of disaster damage.

Overburdened Communities

Overburdened communities with limited financial resources have less capacity to invest in adequate stormwater management systems, increasing the vulnerability of the community to flooding. Flooding in overburdened communities can also lead to public health issues since these communities are already more susceptible to health disparities. This dataset was extracted from NJDEP's GIS Open Data source in December, 2025.

See Watchung Overburden Communities Map (enclosed)



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Overburdened Communities

BOROUGH OF WATCHUNG

SOMERSET COUNTY NEW JERSEY

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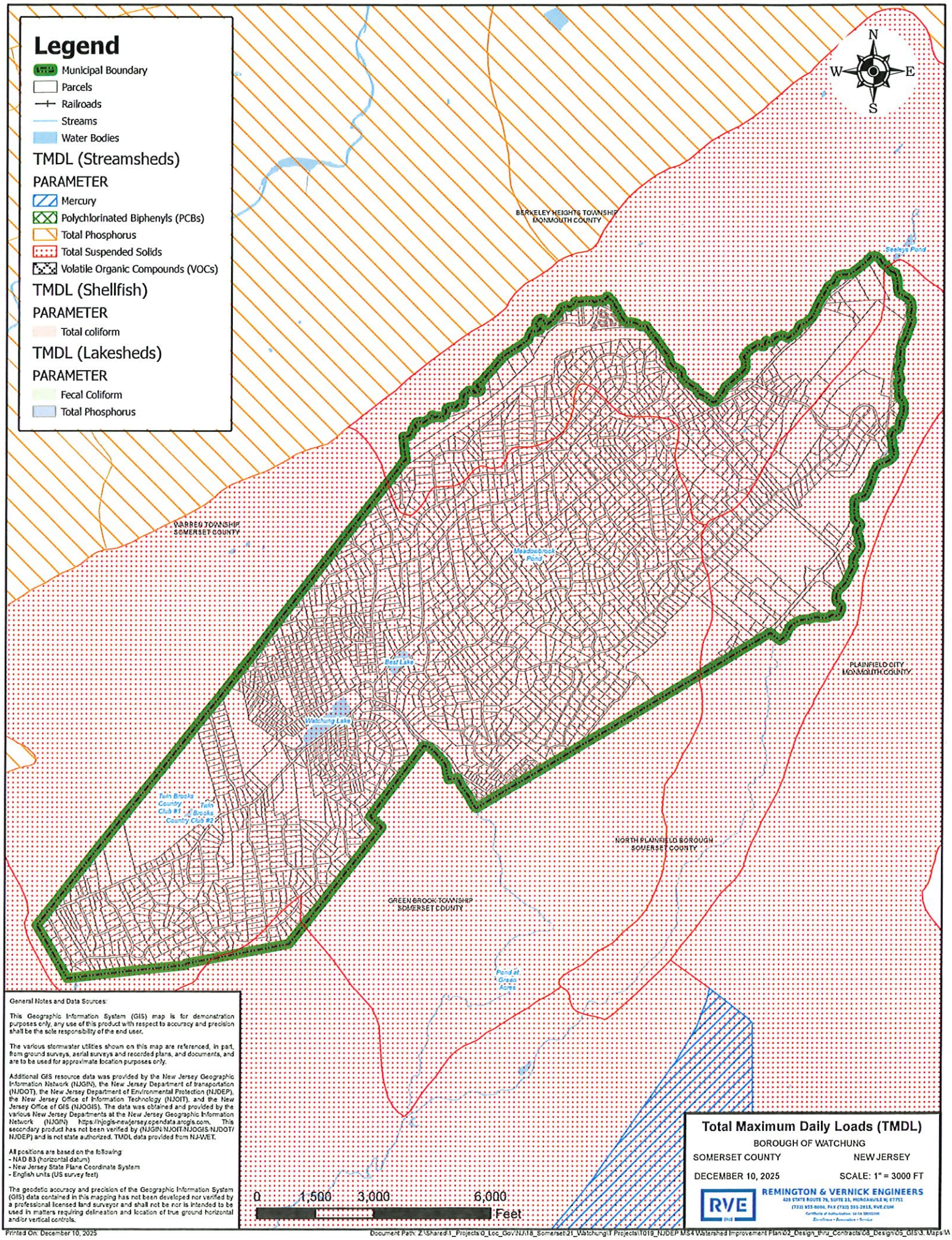
Impervious Area (*see "Impervious Cover" Map enclosed*)

NJDEP's Open Data impervious surface GIS data layer depicts surfaces throughout Watchung Borough that have been covered with materials that are highly resistant to infiltration by water, rendering them impervious. These impervious cover values were used to estimate the impervious coverage for Watchung Borough. NJWET data was used in December, 2025 to obtain data for Watchung Borough.

Impervious cover can have considerable impacts on ecosystem and stream health. Due to an increase in stormwater runoff caused by impervious cover, the potential for pollutants to be carried to streams and rivers increases, which in turn can impact stream quality. ***Additionally***, stormwater runoff discharging into streams increases the volume of water traveling within those streams. Increases in stream volume can lead to changes in stream conditions as it reaches equilibrium, such as increases in erosion, sediment load, and other stream attributes.



General Notes and Data Sources:

This Geographic Information System (GIS) map is for demonstration purposes only, any use of this product with respect to accuracy and precision shall be the sole responsibility of the end user.

The various stormwater utilities shown on this map are referenced, in part, from ground surveys, aerial surveys and recorded plans, and documents, and are to be used for approximate location purposes only.

Additional GIS resource data was provided by the New Jersey Geographic Information Network (NJGIN), the New Jersey Department of transportation (NJDOT), the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Office of Information Technology (NJOIT), and the New Jersey Office of GIS (NJOGIS). The data was obtained and provided by the various New Jersey Departments at the New Jersey Geographic Information Network (NJGIN) https://njogis-newjersey.opendata.arcgis.com. This secondary product has not been verified by (NJGIN NJOIT-NJOGIS-NJDOT/ NJDEP) and is not state authorized. TMDL data provided from NJ-WET.

All positions are based on the following
- NAD 83 (horizontal datum)
- New Jersey State Plane Coordinate System
- English units (US survey feet)

The geodetic accuracy and precision of the Geographic Information System (GIS) data contained in this mapping has not been developed nor verified by a professional licensed land surveyor and shall not be nor is intended to be used in matters requiring delineation and location of true ground horizontal and/or vertical controls.

Total Maximum Daily Loads (TMDL)

BOROUGH OF WATCHUNG

SOMERSET COUNTY NEW JERSEY

DECEMBER 10, 2025 SCALE: 1" = 3000 FT

REMINGTON & VERNICK ENGINEERS
425 STATE ROUTE 79, SUITE 31, MORGANVILLE NJ 07751
(732) 955-0006, FAX (732) 591-2813, RVE.COM

Non-Municipally Owned or Operated Stormwater Facilities

STORMWATER MAPPING IS BEING COMPLETED FOR WATCHUNG BOROUGH PRIOR TO THE JANUARY 1 2026 FILING DEADLINE. MAPPING WILL BE FILED WITH NJDEP AND MADE AVAILABLE THROUGH WATCHUNG BOROUGHS STORMWATER WEBLINK (BELOW).

HTTPS://WATCHUNGNJ.GOV/STORMWATER

THE FINAL PHASE 1 WIP REPORT WILL BE REVISED TO INCLUDE DATA FROM THIS WORK ONCE IT IS COMPLETED

Conclusion

This Watershed Inventory Report shall serve as a record of the known stormwater infrastructure, water quality data, and additional relevant information within Watchung Borough. All the datasets contained in this report have been compiled into a GIS digital map that can be utilized to look at the data in far more detail than the static maps included will provide. This report will be followed by a Watershed Assessment Report, which will provide an assessment of potential water quality improvement projects that can be done to address water quality issues that have been identified in this report.

References

Data Sources

2020 Census of Population and Housing. Retrieved on December 22, 2025 from U.S. Department of Commerce, U.S. Census Bureau website: https://data.census.gov/.

New Jersey 2022 Integrated Water Quality Report, including the 303(d) Impaired Waters List. Retrieved on December 22, 2025 from New Jersey Department of Environmental Protection, Bureau of Bureau of Environmental Analysis, Restoration and Standards website: https://dep.nj.gov/wms/bears/integrated-wq-assessment- report-2022/.

New Jersey Watershed Evaluation Tool (NJ-WET). Retrieved on December 22, 2025 from Division of Watershed and Land Management, Bureau of NJPDES Stormwater Permitting & Water Quality Management website: https://dep.nj.gov/njpdes-stormwater/municipal-stormwater-regulation-program/watershed-improvement- plan-guidance/.

NJDEP Open Data. Retrieved on December 22, 2025 from Division of Information Technology, NJDEP Bureau of GIS website: https://gisdata-njdep.opendata.arcgis.com/.

Total Maximum Daily Load (TMDL) Look-Up Tool. Retrieved on December 22, 2025 from New Jersey Department of Environmental Protection, Bureau of NJPDES Stormwater Permitting and Water Quality Management website: https://dep.nj.gov/njpdes-stormwater/municipal-stormwater-regulation-program/tmdl/.

Master Plan Re-Examination Report of the Borough of Watchung Somerset County, December, 2020, prepared by Mark Healey, PP.

Report entitled "Hamilton Borough (Mercer County) Watershed Inventory Report", developed by the Rutgers Cooperative Extension Water Resources Program, dated January 31, 2024.

NJDEP ***Pollutants of Concern*** document, not dated.

Watchung Flooding Risk report by *First Street*, not dated.