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WATERSHED INVENTORY REPORT PHASE 1 OF THE WATERSHED IMPROVEMENT PLAN

BOROUGH OF ENGLEWOOD CLIFFS
BERGEN COUNTY
JANUARY 6th, 2026
Permit # NJG0150975

Stormwater Program Coordinator:
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Contents

I. LIST OF FIGURES

The below figures are located within Appendix A of the report.

II. LIST OF TABLES

The below tables can be found within the pages of the report.

III. ACKNOWLEDGEMENTS

The Borough of Englewood Cliffs' Watershed Inventory Report has been prepared by Neglia Group.

Neglia Group would like to thank the Mayor and Council of the Borough of Englewood Cliffs for their continued work on making the Borough of Englewood Cliffs a safe, happy, and healthy place for all of its residence.

Neglia Group also wishes to acknowledge the following resources which were compiled by the New Jersey Department of Environmental Protection (NJDEP) to help with the preparation of this report:

- New Jersey Watershed Evaluation Tool (NJ-WET)
- NJDEP Open Data
- MS4 WIP Guidance Webpage
- TMDL Lookup Tool
- New Jersey's Integrated Water Quality Assessment Reports – 303 (d) List
- New Jersey Environmental Justice Mapping, Assessment, and Protection Tool (EJMAP)
- New Jersey Hydrologic Modeling Database (H&H Database)

IV. INTRODUCTION

The Borough of Englewood Cliffs is located in Bergen County, covering 2.08 square miles directly to the West of Hudson River and bordered by Tenafly to the North, Fort Lee to the South, Englewood to the West, and the Hudson River New Jersey/New York state border to the East. The Borough has a population of 5,342 (2020 United States Census) with the highest land use being Residential with 40.3% as Single Unit, Medium Density, 4.21% as High Density/Multiple Dwelling, 3.14% as Single Unit, Low Density, and 0.95% as Single Unit, Rural. Table 1 below depicts land use breakdown of the Borough (Land Cover 2020).

The Borough of Englewood Cliffs is located within the Overpeck Creek subwatershed, Hudson River (lower) subwatershed, and Hudson River (upper) subwatershed of the Watershed Management Area 5 (Hackensack, Hudson, and Pascack), as shown in Figure 1. Small portions of the Borough are in Zone AE flood zone and Zone X 0.2% Annual Chance flood zones as shown in Figure 2.

This watershed improvement report provides a comprehensive understanding of the key defining features of how water flows throughout and into the Borough of Englewood Cliffs. This report presents information of the existing conditions and infrastructure within the Borough of Englewood Cliffs and aims to serve as a tool for informed decision-making, planning, and implementation of sustainable watershed management strategies to improve the community, watershed, the Hudson River, and the associated ecosystems.

The figures and tables provided in this report were prepared by geographic information systems (GIS) to provide a full graphical understanding of the stormwater infrastructure owned and operated by the Borough of Englewood Cliffs. The Borough's infrastructure was mapped by Neglia Group staff between 2023 – 2025 using survey-grade GPS collection methods and professional GIS drafting methods.

Table 1: Land Use Acreage & Percentage Breakdown		
Type	Acreage	Percentage
Residential	645.60	48.46
Commercial/Industrial	194.54	14.60
Urban Land	36.46	2.74
Transportation/Communication/Utilities	68.72	5.16
Recreational Land	45.56	3.42
Forest	322.25	24.19
Barren Land	6.71	.50
Water	6.51	0.49
Wetlands	6.05	0.45
Total	1,332.37	100
Source: Anderson Classification Land Use / Land Cover 2020		

V. ACRONYMS & DEFINITIONS

ACRONYMS

- "BMP" – Best Management Practice
- "DO" – Dissolved Oxygen
- "EPA" – U.S. Environmental Protection Agency
- "GIS" – Geographic Information System
- "HUC 14" – Hydrologic Unit Code 14
- "LIDAR" – Light Detection and Ranging
- "MS4" – Municipal Separate Storm Sewer System
- "MTD" – Manufactured Treatment Device
- "NJPDES" – New Jersey Pollutant Discharge Elimination System
- "NJDEP" – New Jersey Department of Environmental Protection
- "NJDOT" – New Jersey Department of Transportation
- "NJ-WET" – New Jersey Watershed Evaluation Tool
- "TDS" – Total Dissolved Solids
- "TMDL" – Total Maximum Daily Load
- "TSS" – Total Suspended Solids
- "WIP" – Watershed Improvement Plan

DEFINITIONS

- "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)
- "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.
- "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.
- "Overburdened community" means a block group with at least 35 percent low-income households; or at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or at least 40 percent of the households have limited English proficiency.
- "Storm drain inlet" means the point of entry into the storm sewer system.
- "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.
- "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.
- "Stormwater interconnections" means the location in which water flows from one MS4 system into another MS4 system that is owned by another entity.
- "Stormwater management basin" means a stormwater management basin as defined in N.J.A.C. 7:8.
- "Stormwater management measure" means a stormwater management measure as defined in N.J.A.C. 7:8.
- "Stormwater runoff" means water flow on the surface of the ground or in storm sewers, resulting from precipitation.
- "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.

- "Waters of the State" means the ocean 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).

- "Water quality impairments" means that the water body is contaminated by pollutants which prevents the water body from meeting its designated use.

VI. STORMWATER OUTFALLS

The Borough of Englewood Cliffs contains twenty-two (22) outfalls within the Borough limits, as shown in Figure 3. The Borough owns and operates all twenty-two (22) of these outfalls. All storm water within the Borough is ultimately drained into the Hudson River.

All outfalls owned and operated by the Borough of Englewood Cliffs are required to be inspected once every five years per the NJDEP MS4 permit. The Borough continuously maintains and inspects these outfalls in accordance with the NJDEP requirements.

RECEIVING SURFACE WATERS

Nineteen (20) of the twenty-two (22) Englewood Cliffs owned outfalls, or ninety-one percent (91%), located within the Borough of Englewood Cliffs discharge directly into Flat Rock Brook Tributary. One (1) or five percent (5%) of outfalls discharge into the Hudson River Tributary, and one (1) or five percent (5%) of outfalls discharge into a Wooded Area. as shown on Figure 4.

WATER QUALITY CLASSIFICATIONS

The Borough of Englewood Cliffs contains three classified waterways, which are all ultimately tributaries to the Hudson River. The Hudson River, Flat Rock Brook Tributary, and Hudson River Tributary are classified as non-trout freshwater (FW2-NT) with the abilities to support shellfish, as shown on Figure 5.

VII. STORMWATER INTERCONNECTIONS

The Borough of Englewood Cliffs contains MS4 systems owned by Bergen County. Additionally, Englewood Cliffs' stormwater infrastructure is connected to the adjacent Borough of Fort Lee, the City of Englewood, and the Borough of Tenafly. These interconnections point locations were found using the municipality boundary and right-of-way for county and state roadways utilizing information from the NJ Office of GIS, NJDEP.

The Borough or Englewood Cliffs' MS4 infrastructure interconnects into the NJDOT MS4 System at four (4) locations along Route 9W. The Borough of Englewood Cliffs' MS4 infrastructure interconnects into the Bergen County MS4 system at eleven (11) locations. The Borough of Englewood Cliffs' MS4 infrastructure interconnects into the Fort Lee System at two (2) locations, Englewood System at four (4) locations, and Tenafly System at three (3) locations. The Borough of Englewood Cliffs' MS4 infrastructure interconnects into private systems at three (3) locations. The Borough of Englewood Cliffs' MS4 infrastructure interconnections into the varying systems detailed above are illustrated on Figure 6.

The NJDOT MS4 infrastructure discharges into the Borough of Englewood Cliffs' MS4 System at five (5) locations along Route 9W. The Borough of Fort Lee discharges into the Borough of Englewood Cliffs MS4 infrastructure at two (2) locations. The Borough of Tenafly discharges into the Borough of Englewood Cliffs MS4 infrastructure at one (1) location. The State of New Jersey's MS4 infrastructure discharges into the Borough of Englewood Cliffs' MS4 infrastructure at one (1) location. The interconnections of water flowing into the Borough of Englewood Cliffs' MS4 system are shown in Figure 7.

VIII. DRAINAGE AREA(S) FOR STORMWATER OUTFALLS AND STORMWATER INTERCONNECTIONS

The report delineates the drainage areas that are flowing to outfalls and upstream connections to other MS4 systems. These delineations can identify the amount of water flowing into the Borough's system and aid in identifying issues in the stormwater piping network.

STORM DRAIN INLETS AND MANHOLES

The Borough of Englewood Cliffs owns and operates one thousand one hundred thirty-two (1,132) stormwater inlets and catch basins and one hundred sixty-eight (168) manholes that discharge stormwater runoff into the waterways referenced above located within the Borough. Englewood Cliffs uses ArcGIS to manage and visualize the MS4 infrastructure. Figure 8 illustrates the stormwater structures owned and operated by the Borough of Englewood Cliffs and all stormwater interconnections that convey stormwater runoff into the Borough's MS4 system.

The stormwater inlets and catch basins owned and operated by the Borough of Englewood Cliffs are required to be inspected once every five years per the NJDEP MS4 permit. The Borough maintains a list of inlets that require cleaning and repair. The Borough cleans and implements repairs on stormwater infrastructure on a regular basis, in accordance with the MS4 permit.

OUTFALL AND UPSTREAM CONNECTIONS DRAINAGE AREA METHODOLOGY

The procedure used to delineate the drainage area for the outfalls and upstream interconnection points use the outfall, manhole, and inlet points with the pipe network linework inserted into AUTOCAD Civil 3D. The MS4 information was then used in conjunction with one-foot contours provided from LIDAR information and detailed using standard overland and pipe flow analysis. Figure 9 illustrates the delineated drainage areas for the outfalls.

This delineation procedure is not entirely accurate due to insufficient data due to the lack of manholes and inlets owned by other entities within the Borough that would otherwise, create a full picture of the stormwater infrastructure from the county and state. Future procedures can be refined to improve the delineation process by incorporating the county and state data, upon the completion from both entities.

IX. WATER QUALITY IMPAIRMENTS AND TMDLS

The New Jersey Integrated Water Quality Monitoring and Assessment Report (305(b) and 303 (d)) (Integrated List) is required by the federal Clean Water Act to be prepared biennially and is a valuable source of water quality information. This combined report presents the extent to which New Jersey water is attaining water quality standards and identifies waters that are impaired.

Water bodies are classified through the use of Sublists. Sublist 1 and 2 waterbodies are unimpaired. Sublist 3 waterbodies have limited assessment or data availability. Sublist 4 waterbodies are impaired due to pollution rather than pollutants or have had a Total Maximum Daily Load (TMDL) or other enforceable management measure approved by the EPA expected to achieve Water Quality Standards. Sublist 5 of the Integrated List constitutes the list of waters impaired or threatened by pollutants, for which one or more TMDLs are needed.

A TMDL is the amount of a pollutant that can be accepted by a water body without causing an exceedance of water quality standards or interfering with the ability to use a water body for one or more of its designated uses. The allowable load is allocated to the various sources of the pollutant, such as stormwater and wastewater discharges, which require an NJPDES permit to discharge, and nonpoint source, which includes stormwater runoff from agricultural areas and residential areas, along with a margin of safety. Provisions may also be made for future sources in the form of reserve capacity. Based on an inquiry to the NJDEP's TMDL Look-Up Tool, provided by the Bureau of Nonpoint Pollution, Nickel are present in the Borough of Englewood Cliffs, as shown in Figure 10.

The Hudson River (lower), Hudson River (upper), and Overpeck Creek of the Watershed Management Area 5 (Hackensack, Hudson, and Pascack), has four (4) water quality impairments, as shown in Figure 11. The impairments are Benzo[a]pyrene (PAHS), Phosphorus Total, Escherichia Coli (E.Coli), and PCBS in Fish Tissue.

X. NON-MUNICIPALLY OWNED OR OPERATED STORMWATER FACILITIES

The non-municipally owned or operated stormwater facilities were identified utilizing the New Jersey Hydrologic Modeling Database (H&H Database). The Borough has nine (9) detention basins that were included in the H & H Database, as shown in Table 2 below.

Table 2: Englewood Cliffs Privately Owned Detention Basins		
Project Name	Project Adress	Project Block & Lot
Office Building and Parking	980 Sylvan Avenue	B: 1202 L: 2
Building & Parking Improvements	818-900 Sylvan Avenue	B: 1201 L: 8, 9.01
Unilever Project Unify – Parking Garage	700 Sylvan Avenue	B: 806/808 L: 7/9
Bank of New Jersey Renovations	745 East Palisade Avenue	B: 512 L:4-6
Sara Hill Lane – Subdivision	Sara Hill Lane	B: 303 L: 40.02-40.05, 43
Parkway Toyota	100 Sylvan Avenue	B: 130 L:22
Daycare Bldg. & Parking	21 Sylvan Avenue	B: 127 L: 20.01
Subdivision	Van Nostrand Avenue	B: 206 L: 25
Office Building	Sylvan Avenue	B: 201 L: 3
Source: Jersey Hydrologic Modeling Database (H&H Database)		

XI. OVERBURDENED COMMUNITIES

The Borough of Englewood Cliffs contains 59.98% overburdened communities (NJ-WET), as shown in Figure 12. Municipalities with large numbers of overburdened communities often struggle with limited financial resources to maintain and expand the stormwater infrastructure in that area. Furthermore, these communities are susceptible to disproportionately high environmental and public health stressors, therefore, these areas are more susceptible to health disparities during national disasters such as flooding.

Englewood Cliffs works tirelessly to ensure that the disparities caused by the high percentage of overburdened communities are mitigated to the highest extent possible. The Borough regularly does activities to promote the wellness of the residents by hosting community wellness days and wellness programs for adults and seniors. Englewood Cliffs further has an annual town wide clean-up and facilities school / youth education activities on the importance of stormwater.

Table 3: Overburdened Communities Percentage

Type	Acreage	Percentage
Minority	799.15	59.98%
Non-Overburdened Community	533.22	40.02%
Total	1,332.37	100.00%
Source: NJDEP Open Data		

XII. IMPERVIOUS COVER

The impervious area occupies approximately forty-eight (48%) of the Borough's footprint. Figure 13 shows the impervious coverage of the Borough of Englewood Cliffs.

Table 4: Impervious Coverage Breakdown		
Class	Acreage	Percentage
Building	167.79	12.59%
Other	270.10	20.27%
Road	197.26	14.81%
Total Impervious	635.15	47.67%
Non-Impervious	697.22	52.33%
Total	1,332.37	100.00%
Source: NJDEP Open Data		

A link has been discovered by researchers between the impervious cover within a watershed and the stream ecosystem impairments (Schueler et al., 2009). Schueler first proposed a model in 2004 using the impervious coverage to diagnose the severity of future streams problems within the urban watersheds. The impervious cover model designates urban streams into four (4) categories; sensitive, impacted, non-supporting, and urban drainage.

A sensitive stream is when the watershed has an impervious cover of less than ten percent (10%) and are able to generally retain the hydrologic function and support good to excellent aquatic diversity. Impacted streams have an impervious coverage of ten percent (10%) to twenty-five (25%) and while showing signs of stream health decline have fair aquatic diversity. Non-supporting streams have an impervious coverage between twenty-five percent (25%) and sixty percent (60%) and no longer support their hydraulic function, channel stability, habitat, water quality of biological diversity. Non-supporting streams often are so degraded that it is difficult for the stream to make a full recovery. Urban drainage streams have an impervious coverage of sixty percent (60%) or higher and have become so degraded that they generally only function as a conduit for flood waters. Urban drainage streams consistently have poor water quality, highly unstable channels and poor habitat and biodiversity scores. Many of these streams are so beyond repair that they disappear altogether by earthworks and / or storm drain enclosures.

The high percentage of impervious cover within the Borough of Englewood Cliffs would suggest that the waterways within its border are impaired as urban drainage streams.

XIII. CONCLUSION

The Watershed Inventory Report serves as a record for the stormwater infrastructure, water quality data, stream classifications, and additional relevant information for a full understanding of the MS4 information within the Borough of Englewood Cliffs. All the data compiled for this report has been compiled by GIS experts as a digital map that can be utilized as a continued reference with a closer look at the information provided in this report. As phase one of the watershed improvement plan, this report will be used in the creation of a Watershed Assessment Report which will identify areas of potential concern and where water quality improvement projects could potentially be implemented.

XIV. REFERENCES

DATA SOURCES

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

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ADDITIONAL REFRENCES

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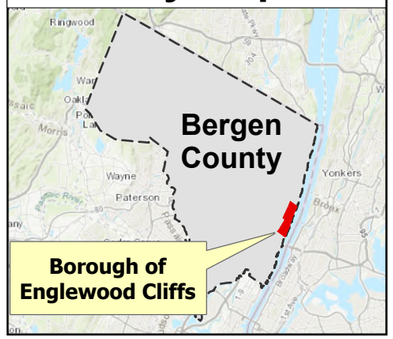
What are Overburdened Communities (OBC)? Retrieved on December 2025 from New Jersey Department of Environmental Protection Environmental Justice website: https://dep.nj.gov/ej/communities/

What is Environmental Justice? Retrieved on December 2025 from New Jersey Department of Environmental Protection Environmental Justice website: https://dep.nj.gov/ej/

Key Map



Englewood City
Bergen County

Tenafly Borough
Bergen County

Fort Lee
Borough
Bergen
County

HUC14: 02030103180040
Subwatershed Name: Overpeck Creek

HUC14: 02030101170030
Subwatershed Name: Hudson River (lower)

HUC14: 02030101170010
Subwatershed Name: Hudson River (upper)

Flat Rock Brook tributary
Overpeck Creek tributary
Hudson River Tributary
Hudson River

Roberts Rd
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Stephan Dr
Lynn Dr
Johnson Ave
Laurie Dr
Carol Dr
Connor Dr
S Virginia Ct
N Virginia Ct
Samford Dr
Willow Dr
Geraldine Rd
Ellington Pl
Churchill Rd
Lyncrest Rd
Fairview Ave
Maple St
Beverly Rd
Stratford Rd
Dorchester Rd
Kim Hunter Rd
Karens Ln
Demarest Ave
Summit St
Chestnut St
Berkshire Pl
Hollywood Ave
Floyd St
Allison Dr
Sage Rd
Roslyn Ct
Marjorie Ter
Roslyn Ave
Pershing Rd
Reiner Pl
Egan Pl
Clifton Ter
Floyd Ct
Elisa Dr
Casper Rd
Oakwood Ln
Mauro Rd
Rock Rd
Wood Rd
Skyline Dr
Ridge Rd
Castle Dr
Summit Ave
Snyder Rd
Elm St
Alfred Ave
Marietta St
Anderson Ave
Botz St
Ash St
Center St
Arthur Ave
Mercer Ave
Irving Ave
1st St
Henry St
3rd St
6th St
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Charlotte Pl
Sherwood Ave
New St
John St
Anon St
Kahn Ter
Dillingham Pl
E Palisade Ave
Hudson Ter
Henry Hudson Dr

4
505
9W

Legend

Subwatersheds

- Hudson River (lower)
- Hudson River (upper)
- Overpeck Creek

Figure: 01
HUC14 / Subwatersheds
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

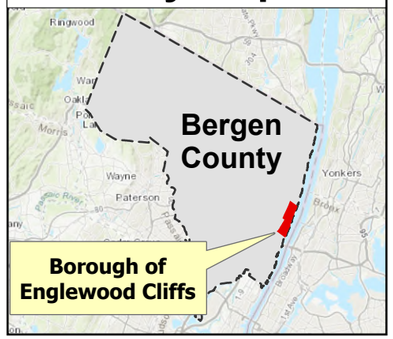
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By: R.K.C.

Data Source: NJ Office of GIS, NJDEP, NJ-WET

NEGLIA

Key Map



Englewood City
Bergen County

Tenafly Borough
Bergen County

Fort Lee
Borough
Bergen
County

Flat Rock Brook tributary

Overpeck Creek tributary

Hudson River Tributary

Hudson River

Beverly Rd
Stratford Rd
Dorchester Rd
Kim Hunter Rd
Karens Ln
Demarest Ave
Summit St
Maple St
Fairview Ave
Chestnut St
Ellington Pl
Churchill Rd
Berkshire Pl
Lyncrest Rd
S Virginia Ct
N Virginia Ct
Hollywood Ave
Connor Dr
Floyd St
Allison Dr
Johnson Ave
Lynn Dr
Stephan Dr
Sanford Dr
Willow Dr
Laurie Dr
Carol Dr
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Roberts Rd
Geraldine Rd
Sage Rd
Roslyn Ct
Roslyn Ave
Marjorie Ter
Pershing Rd
Reiner Pl
Egan Pl
Skyline Dr
Ridge Rd
Castle Dr
Casper Rd
Elisa Dr
Floyd Ct
Clifton Ter
Oakwood Ln
Mauro Rd
Rock Rd
Sherwood Ave
John St
New St
Anon St
Kahn Ter
Dillingham Pl
E Palisade Ave
Summit Ave
Snyder Rd
Wood Rd
Elm St
Alfred Ave
Marietta St
Anderson Ave
Bolz St
Ash St
Center St
Arthur Ave
Mercer Ave
Irving Ave
1st St
Henry St
3rd St
6th St
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Charlotte Pl
Hudson Ter
Henry Hudson Dr

4
505
9W

Legend

- Zone AE Special Flood Hazard Area
- Zone X 0.2% Annual Chance Flood Hazard

Figure: 02
FEMA Flood Hazard Areas Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

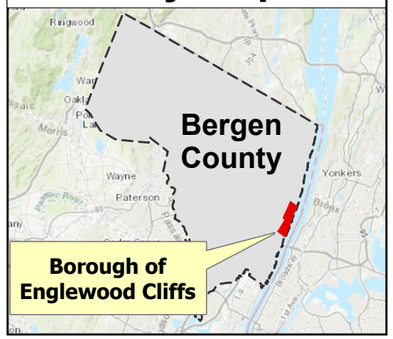
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By: R.K.C.

Data Source: NJ Office of GIS, NJDEP, Effective FEMA NFHL Bergen County 2019

NEGLIA

Key Map



Sara Hill Lane - Subdivision Stormwater Management Basin

Englewood City Bergen County

Tenafly Borough Bergen County

Fort Lee Borough Bergen County

Office Building and Parking Stormwater Management Basin

Building & Parking Improvements Stormwater Management Basin

Unilever Project Unify - Parking Garage Stormwater Management Basin

Bank of New Jersey Renovations Stormwater Management Basin

Parkway Toyota Stormwater Management Basin

Subdivision Stormwater Management Basin

Daycare Bldg. & Parking Stormwater Management Basin

Office Building Stormwater Management Basin

All outfalls are considered to be owned and maintained by the Borough of Englewood Cliffs.

Legend

- Borough Owned and Operated Outfalls
- Stormwater Management Basins

Figure: 03
Overall Outfalls Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

0 500 1,000 2,000 Feet

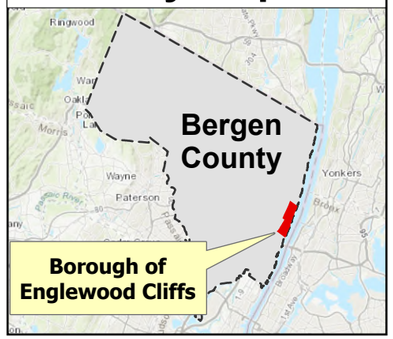
Date: December 2025
Revised:

Drawn By: E.W.C.
Checked By: R.K.C.

Data Source: NJ Office of GIS, NJDEP

NEGLIA

Key Map



Outfalls flowing to Flat Rock Brook tributary

Outfalls flowing to Flat Rock Brook tributary

Outfalls flowing to Flat Rock Brook tributary

Outfall flowing to Wooded Area

Outfall flowing to Hudson River tributary

Englewood City Bergen County

Tenafly Borough Bergen County

Fort Lee Borough Bergen County

Flat Rock Brook tributary

Overpeck Creek tributary

Hudson River Tributary

Hudson River

Beverly Rd
Stratford Rd
Dorchester Rd
Kim Hunter Rd
Karens Ln
Demarest Ave
Summit St
Maple St
Chestnut St
Fairview Ave
Pershing Rd
Roslyn Ct
Roslyn Ave
Marjorie Ter
Reiner Pl
Egan Pl
Ellington Pl
Churchill Rd
Berkshire Pl
Lyncrest Rd
S Virginia Ct
N Virginia Ct
Connor Dr
Hollywood Ave
Floyd St
Allison Dr
Johnson Ave
Lynn Dr
Stephan Dr
Samford Dr
Willow Dr
Laurie Dr
Carol Dr
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Roberts Rd
Geraldine Rd
Sage Rd
Skyline Dr
Ridge Rd
Castle Dr
Casper Rd
Elisa Dr
Floyd Ct
Clifton Ter
Oakwood Ln
Mauro Rd
Rock Rd
Wood Rd
Snyder Rd
Alfred Ave
Marietta St
Anderson Ave
Elm St
Summit Ave
Boiz St
Ash St
Center St
Arthur Ave
Mercer Ave
Irving Ave
1st St
Henry St
3rd St
6th St
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Charlotte Pl
Sherwood Ave
New St
John St
Anon St
Kahn Ter
Dillingham Pl
E Palisade Ave
Hudson Ter
Henry Hudson Dr
4
505
9W

Legend

- Borough Owned and Operated Outfalls
- Waterways

Figure: 04
Receiving Waterbodies of Outfalls Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

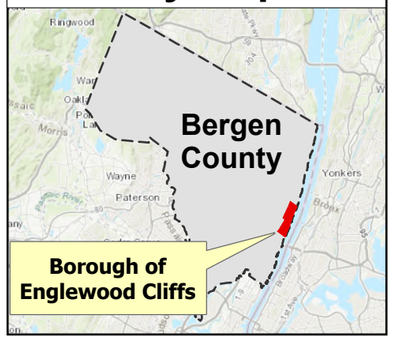
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP

NEGLIA

Key Map



Tenafly Borough
Bergen County

Englewood City
Bergen County

Fort Lee
Borough
Bergen
County

Overpeck Creek tributary
Flat Rock Brook tributary
FW2-NT/SE2
Hudson River Tributary
FW2-NT/SE1
Hudson River
FW2-NT/SE1

Roberts Rd
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Stephan Dr
Lynn Dr
Johnson Ave
Laurie Dr
Carol Dr
Samford Dr
Willow Dr
Geraldine Rd
Sage Rd
Ellington Pl
S Virginia Ct
N Virginia Ct
Connor Dr
Allison Dr
Floyd St
Hollywood Ave
Churchill Rd
Lyncrest Rd
Berkshire Pl
Fairview Ave
Maple St
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Stratford Rd
Dorchester Rd
Kim Hunter Rd
Karens Ln
Demarest Ave
Summit St
Chestnut St
Roslyn Ct
Roslyn Ave
Marjorie Ter
Pershing Rd
Reiner Pl
Egan Pl
Skyline Dr
Ridge Rd
Castle Dr
Casper Rd
Elisa Dr
Floyd Ct
Clifton Ter
Oakwood Ln
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Charlotte Pl
Summit Ave
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Alfred Ave
Marietta St
Anderson Ave
Bolz St
Ash St
Center St
Arthur Ave
Mercer Ave
Irving Ave
1st St
Henry St
3rd St
6th St
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Hudson Ter
Henry Hudson Dr
Henry Hudson Dr
9W
505
4

- FW2 describing freshwater waterways classified as having the ability to support trout.
- SE2 describing the ability of a saline waterway to support recreation, shell fish harvesting and warm water fish species.
- SE1 describing salty waters that are high quality and support shellfish.
- NT describing these particular waterways as "Non-Trout".

Legend

- Borough Owned and Operated Outfalls
- Waterways

Figure: 05
Water Quality Classification Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

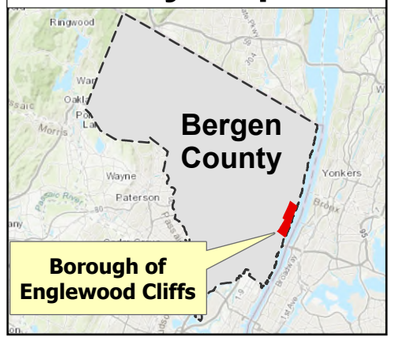
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By: R.K.C.

Data Source: NJ Office of GIS, NJDEP, Surface Water Quality Classification of NJ

NEGLIA

Key Map



Englewood City
Bergen County

Tenafly Borough
Bergen County

Fort Lee
Borough
Bergen
County

Overpeck Creek tributary
Flat Rock Brook tributary
Hudson River tributary
Hudson River

Roberts Rd
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Stephan Dr
Lynn Dr
Johnson Ave
Laurie Dr
Carol Dr
Geraldine Rd
Sanford Dr
Willow Dr
Connor Dr
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N Virginia Ct
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Egan Pl
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Roslyn Ave
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1st St
Henry St
3rd St
6th St
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Hudson Ter
Henry Hudson Dr
Sage Rd

9W
505
4

Legend

- Englewood Cliffs Interconnection to Bergen County System
- Englewood Cliffs Interconnection to Fort Lee System
- Englewood Cliffs Interconnection to Tenafly System
- Englewood Cliffs Interconnection to Englewood System
- Englewood Cliffs Interconnection to NJDOT System
- Englewood Cliffs Interconnection to Private System
- Borough Owned and Operated Outfalls
- MS4 Stormwater Lines and Conveyance

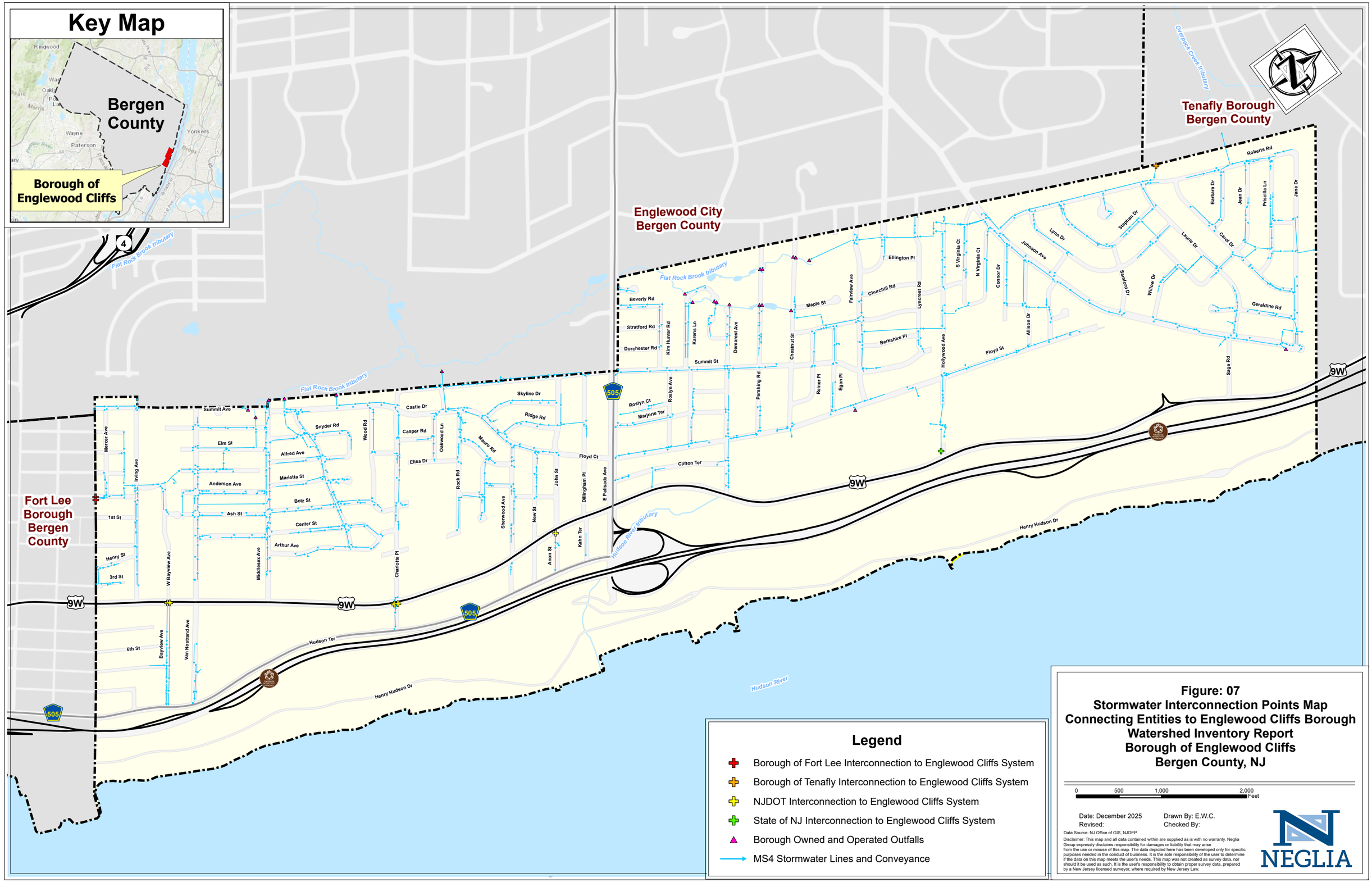
Figure: 06
Stormwater Interconnection Points Map
Englewood Cliffs Borough to Connecting Entities
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP

NEGLIA



Legend

- Borough of Fort Lee Interconnection to Englewood Cliffs System
- Borough of Tenafly Interconnection to Englewood Cliffs System
- NJDOT Interconnection to Englewood Cliffs System
- State of NJ Interconnection to Englewood Cliffs System
- Borough Owned and Operated Outfalls
- MS4 Stormwater Lines and Conveyance

Figure: 07
Stormwater Interconnection Points Map
Connecting Entities to Englewood Cliffs Borough
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

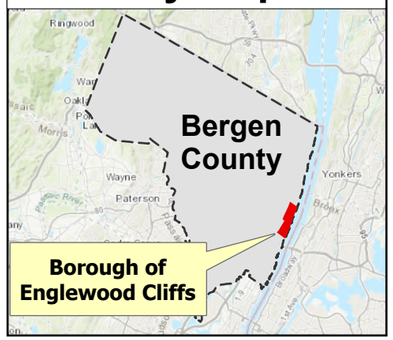
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP

NEGLIA

Key Map



Tenafly Borough
Bergen County

Englewood City
Bergen County

Fort Lee
Borough
Bergen
County

Overpeck Creek tributary
Flat Rock Brook tributary
Hudson River tributary
Hudson River

Roberts Rd
Barbara Dr
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Geraldine Rd
Sage Rd
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W Bayview Ave
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Van Nostrand Ave
Hudson Ter
Henry Hudson Dr
9W
505
4

Legend

- MS4 Stormwater Inlets
- MS4 Stormwater Manholes
- MS4 Interconnection Point
- Borough Owned and Operated Outfalls
- MS4 Stormwater Lines and Conveyance

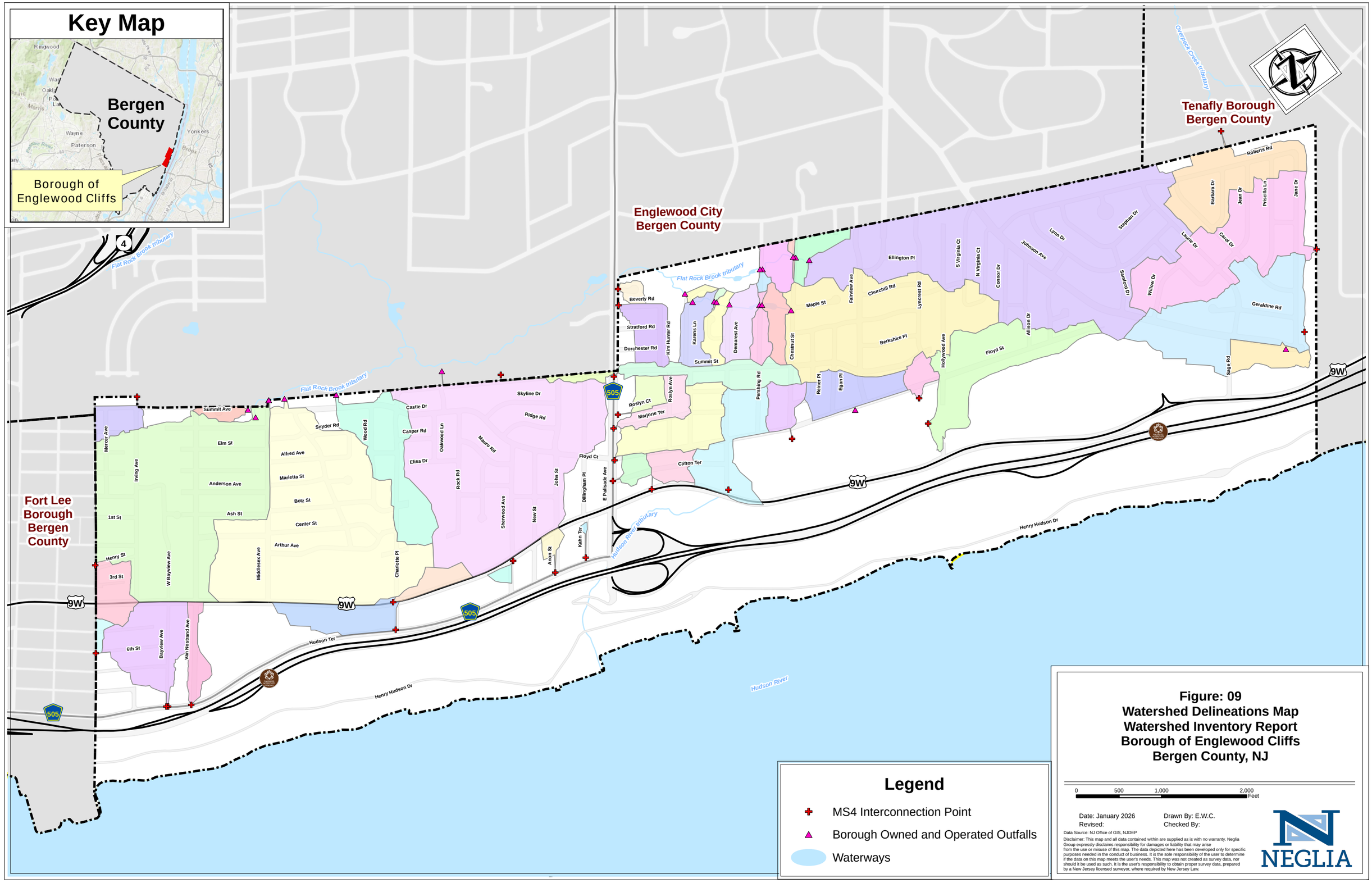
Figure: 08
Overall Storm Inlets and Manholes Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP

NEGLIA



Legend

- MS4 Interconnection Point
- Borough Owned and Operated Outfalls
- Waterways

Figure: 09
Watershed Delineations Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

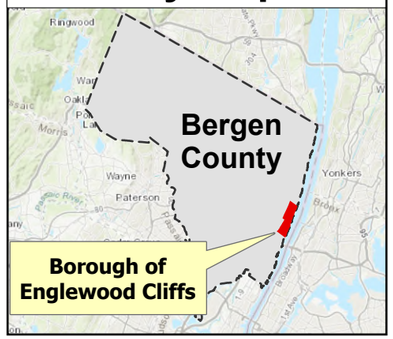
0 500 1,000 2,000 Feet

Date: January 2026 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP

NEGLIA

Key Map



Englewood City
Bergen County

Tenafly Borough
Bergen County

Fort Lee
Borough
Bergen
County

Flat Rock Brook tributary
Overpeck Creek tributary
Hudson River Tributary
Hudson River

Roberts Rd
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Laurie Dr
Carol Dr
Stephan Dr
Lynn Dr
Johnson Ave
Sanford Dr
Willow Dr
Geraldine Rd
Ellington Pl
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Kim Hunter Rd
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Irving Ave
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Charlotte Pl
Rock Rd
Sherwood Ave
New St
John St
Anon St
Kahn Ter
Dillingham Pl
E Palisade Ave
Hudson Ter
Henry Hudson Dr
4
505
9W

Legend

Total Maximum Daily Load: Nickel

Figure: 10
TMDL Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

0 500 1,000 2,000 Feet

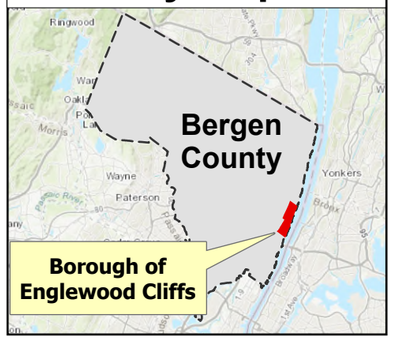
Date: December 2025
Revised:

Drawn By: E.W.C.
Checked By:

Data Source: NJ Office of GIS, NJDEP, NJ-WET

NEGLIA

Key Map



Englewood City
Bergen County

Tenafly Borough
Bergen County

Fort Lee
Borough
Bergen
County

Flat Rock Brook tributary

Overpeck Creek tributary

Hudson River tributary

Hudson River

Roberts Rd
Barbara Dr
Jean Dr
Priscilla Ln
Jane Dr
Stephan Dr
Lynn Dr
Johnson Ave
Laurie Dr
Carol Dr
Geraldine Rd
Sanford Dr
Willow Dr
Connor Dr
S Virginia Ct
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Churchill Rd
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Kim Hunter Rd
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Mercer Ave
Irving Ave
W Bayview Ave
Bayview Ave
Van Nostrand Ave
Middlesex Ave
Charlotte Pl
Sherwood Ave
New St
John St
Anon St
Kahn Ter
Dillingham Pl
E Palisade Ave
Hudson Ter
Henry Hudson Dr

4
505
9W

Borough of Englewood Cliffs is within the subwatersheds of Hudson River (lower), Hudson River (upper) and Overpeck Creek. Borough of Englewood Cliffs holds impairments of Benzo[A]pyrene (PAHS), Phosphorus Total, Escherichia Coli (E.coli) and PCBs in Fish Tissue.

Legend

Watershed Impairment Locations

- Hudson River (lower)
- Hudson River (upper)
- Overpeck Creek

Figure: 11
Water Quality Impairments Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

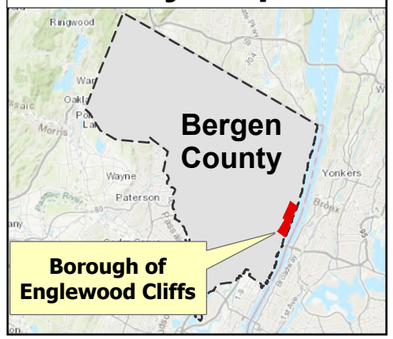
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP, 2020 NJDEP 303d List Impairments for New Jersey HUC14s

NEGLIA

Key Map



Tenafly Borough
Bergen County

Englewood City
Bergen County

Fort Lee
Borough
Bergen
County

Overpeck Creek tributary
Flat Rock Brook tributary
Hudson River Tributary
Hudson River

Roberts Rd
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Stephan Dr
Laurie Dr
Carol Dr
Lynn Dr
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Willow Dr
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Roslyn Ct
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Irving Ave
1st St
Henry St
3rd St
W Bayview Ave
6th St
Bayview Ave
Van Nostrand Ave
Hudson Ter
Henry Hudson Dr
9W
505
4

All other areas not considered to be Overburdened per dataset.

Legend

Overburdened Community Criteria

Minority

-Minority - At least 40% of the residents identify as a minority or members of a state recognized tribal community.

Figure: 12
Overburdened Communities Location Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

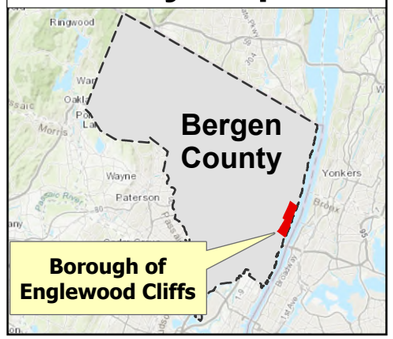
0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP, Municipalities with Overburdened Communities under the New Jersey Environmental Justice Law 2022.
Disclaimer: This map and all data contained within are supplied as is with no warranty. Neglia Group expressly disclaims responsibility for damages or liability that may arise from the use or misuse of this map. The data depicted here has been developed only for specific purposes needed in the conduct of business. It is the sole responsibility of the user to determine if the data on this map meets the user's needs. This map was not created as survey data, nor should it be used as such. It is the user's responsibility to obtain proper survey data, prepared by a New Jersey licensed surveyor, where required by New Jersey Law.

NEGLIA

Key Map



Tenafly Borough
Bergen County

Englewood City
Bergen County

Fort Lee
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County

Overpeck Creek tributary
Flat Rock Brook tributary
Hudson River tributary
Hudson River
Roberts Rd
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Priscilla Ln
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Johnson Ave
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Böiz St
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Arthur Ave
Henry St
3rd St
W Bayview Ave
Middlesex Ave
Charlotte Pl
6th St
Bayview Ave
Van Nostrand Ave
Hudson Ter
Henry Hudson Dr
9W
505
4

All other areas are not considered Impervious per dataset

Legend

Impervious Surfaces

- Building
- Road
- Other

Figure: 13
Impervious Areas Map
Watershed Inventory Report
Borough of Englewood Cliffs
Bergen County, NJ

0 500 1,000 2,000 Feet

Date: December 2025 Drawn By: E.W.C.
Revised: Checked By:

Data Source: NJ Office of GIS, NJDEP, Bergen County Impervious Surface 2015

NEGLIA