



SCHOOR DEPALMA
Engineers and Consultants

STORMWATER MANAGEMENT PLAN

FOR THE

BOROUGH OF RUTHERFORD BERGEN COUNTY, NEW JERSEY

February, 2005

Last Revised October 2006

040333901

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1.0 INTRODUCTION

The Municipal Stormwater Management Plan (MSWMP) documents the strategy for the Borough of Rutherford ("the Borough") to address stormwater-related impacts. The creation of this plan is required by N.J.A.C. 7:14A-25 Municipal Stormwater Regulations. This plan addresses groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating stormwater design and performance standards for new major development, defined as projects that disturb one or more acre of land. These standards are intended to minimize the adverse impact of stormwater runoff on water quality and water quantity and the loss of groundwater recharge that provides base flow in receiving water ways. The plan also describes long-term operation and maintenance measures for existing and future stormwater facilities.

Overall, this Plan relies on the existing regulatory framework as the basis for the management of stormwater. These regulatory requirements and the technical guidance documents on which they are based have been incorporated into this Plan. The Borough of Rutherford Stormwater Ordinance further strengthens the reliance on these technical specifications and provides the means for insuring implementation and ongoing evaluation.

The Plan also addresses the review and update of existing ordinances, the Borough Master Plan, and other planning documents to allow for project designs that include low impact development techniques. The final component of this Plan is a mitigation strategy for when a variance or exemption of the design and performance standards is sought. As part of the mitigation section of the Stormwater Plan, specific stormwater management measures are identified to lessen the impact of existing development.

The Plan is not applicable to the area under the land use and zoning jurisdiction of the New Jersey Meadowlands Commission (NJMC). This area includes Berry's Creek and Anderson Creek as outlined on Figures C-2 & C-8. The area covered by this plan is roughly 1.93 square miles of the total 2.92 municipal square mileage.

2.0 GOALS

The goals of this MSWMP are to:

- reduce flood damage, including damage to life and property;
- minimize, to the extent practical, any increase in stormwater runoff from any new development;
- reduce soil erosion from any development, redevelopment or construction projects;
- assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
- maintain groundwater recharge and base flow of streams during periods of drought;
- prevent, to the greatest extent feasible, an increase in nonpoint pollution;
- maintain the integrity of stream channels for their biological functions, as well as for drainage;
- minimize pollutants in stormwater runoff from new and existing development to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, and other uses of water and
- protect public safety through the proper design and operation of stormwater basins and the use of Best Management Practices.

To achieve these goals, the Borough has in place specific stormwater design and performance standards and ordinances for new development. Additionally, the Plan proposes stormwater management controls to address impacts from existing development. Preventative and corrective maintenance strategies are included in the Plan to ensure long-term effectiveness of stormwater management facilities. The Plan also outlines safety standards for stormwater infrastructure to be implemented to protect public safety.

As a part of the Plan, the Borough requires that all developments adhere to Army Corps of Engineers, New Jersey Department of Environmental Protection (NJDEP) and Residential Site Improvement Standards (RSIS) requirements, including drainage and stormwater management.

To further achieve these goals, Chapters 37 & 107 of the Code of the Borough of Rutherford prohibit increase in stormwater runoff, prohibit impacts to streams or flood planes, require detention and subsurface recharge and prohibit/restrict uses which are dangerous to health, safety

or property due to water or erosion or flood heights or velocities. These ordinances have been adopted in order to meet these goals and other purposes.

Chapter 37 of the aforementioned Code, titled "Flood Damage Prevention", outlines the steps required to protect developments in the town from the possibility of flood damages. Chapter 107 of the aforementioned Code, titled "Stormwater Management", outlines the stormwater management practices instituted for all developments.

3.0 STORMWATER DISCUSSION

Land development can dramatically alter the hydrologic cycle of a site and, ultimately, an entire watershed. Prior to development, native vegetation can either directly intercept precipitation or draw that portion that has infiltrated into the ground and return it to the atmosphere through evapotranspiration. Development can remove this beneficial vegetation and replace it with lawn or impervious cover, reducing the site's evapotranspiration and infiltration rates. Clearing and grading a site can remove depressions that store rainfall. Construction activities may also compact the soil and diminish its infiltration ability, resulting in increased volumes and rates of stormwater runoff from the site. Impervious areas that are connected to each other through gutters, channels, and storm sewers can transport runoff more quickly than natural areas. This shortening of the transport or travel time quickens the rainfall-runoff response of the drainage area, causing flow in downstream waterways to peak faster and higher than natural conditions. These increases can create new and aggravate existing downstream flooding and erosion problems and increase the quantity of sediment in the channel. Filtration of runoff and removal of pollutants by surface and channel vegetation is eliminated by storm sewers that discharge runoff directly into a stream. Increases in impervious area can also decrease opportunities for infiltration, which, in turn, reduces stream base flow and groundwater recharge. Reduced base flows and increased peak flows produce greater fluctuations between normal and storm flow rates, which can increase channel erosion. Reduced base flows can also negatively impact the hydrology of adjacent wetlands and the health of biological communities that depend on base flows. Finally, erosion and sedimentation can destroy habitats creating conditions to which some species cannot adapt.

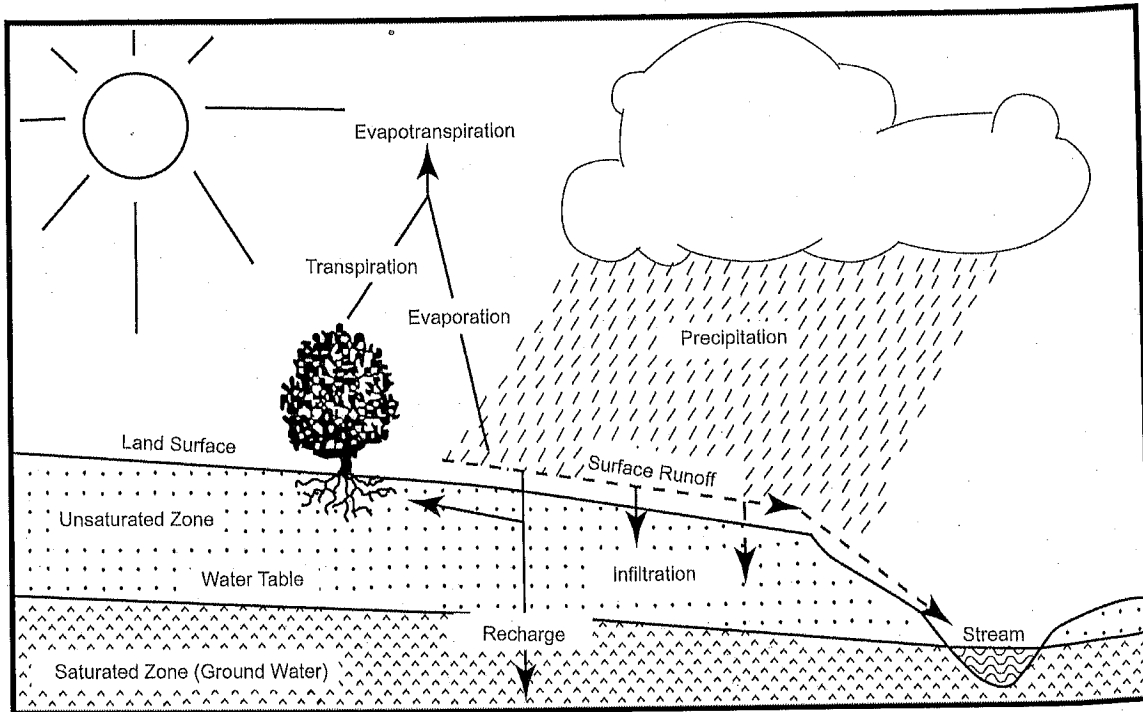


Figure C-1: Groundwater Recharge in the Hydrologic Cycle

Source: New Jersey Geological Survey Report GSR-32.

In addition to increases in runoff peaks, volumes, and loss of groundwater recharge, land development often results in the accumulation of pollutants on the land surface that runoff can mobilize and transport to streams. New impervious surfaces and cleared areas created by development can accumulate a variety of pollutants from the atmosphere, fertilizers, animal wastes, and leakage and wear from vehicles. Pollutants can include metals, suspended solids, hydrocarbons, pathogens, and nutrients.

In addition to increased pollutant loading, land development can adversely affect water quality and stream biota in more subtle ways. For example, stormwater falling on impervious surfaces or stored in detention or retention basins can become heated and raise the temperature of the downstream waterway, adversely affecting cold water fish species such as trout. Development can remove trees along stream banks that normally provide shading, stabilization, and leaf litter that falls into streams and becomes food for the aquatic community.

4.0 BACKGROUND

The Borough of Rutherford encompasses a 2.92 square mile area or 1,815 acres situated in southwestern Bergen County, New Jersey. The Borough's total tax parcel acreage, excluding streets and water ways, is 1,332 acres. The Borough is bound by the Hackensack River on its southern boundary. Rutherford is bordered by the communities of East Rutherford and Lyndhurst. The southern portion of the Borough also contains areas that are included in the New Jersey Meadowlands Commission (NJMC).

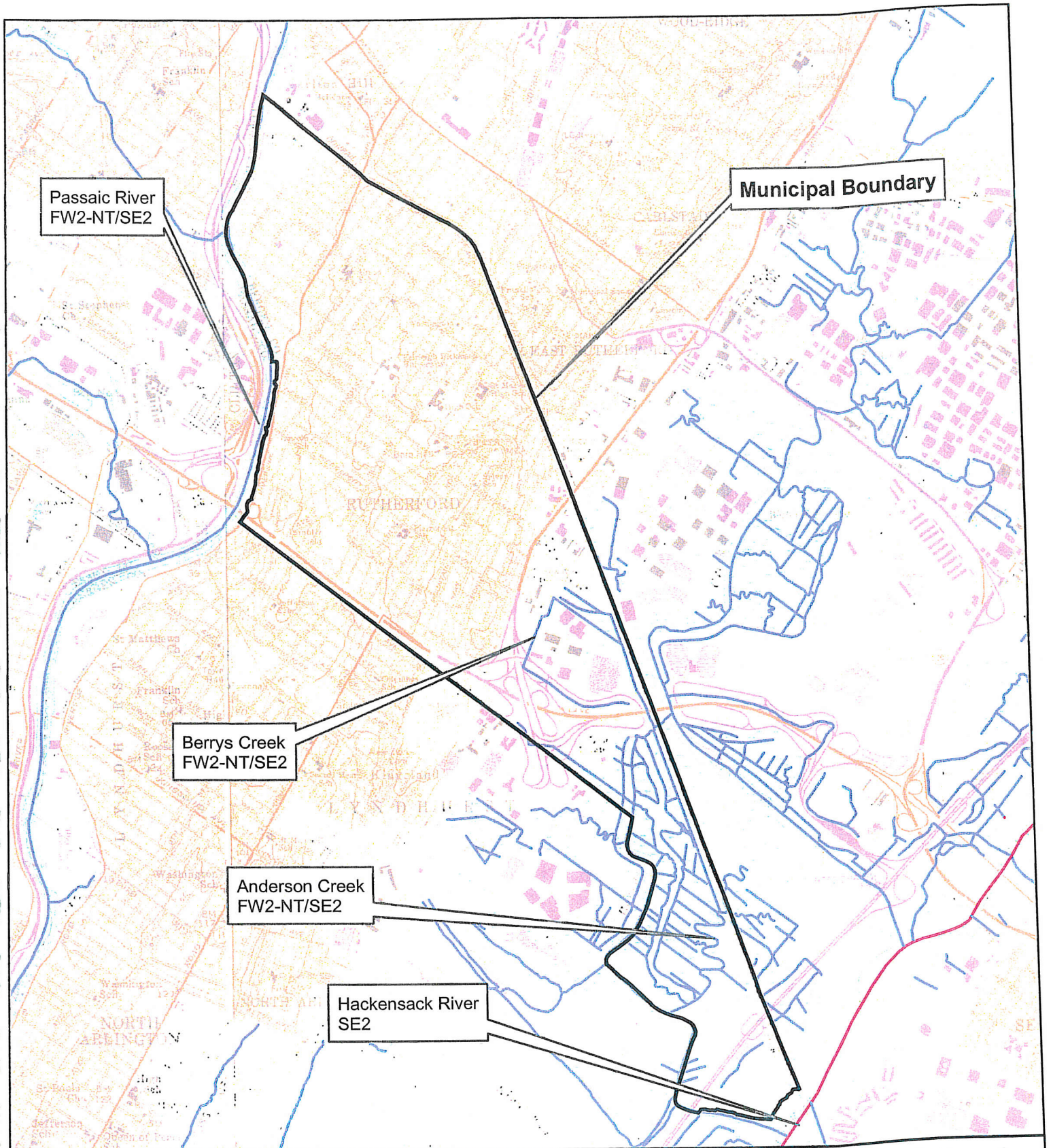
According to the Rutherford Vision Statement: 2025, the Borough has zoning jurisdiction over 66% of the total tax parcel land area and the NJMC has zoning jurisdiction over the remaining 34%. Excluding the NJMC land area, 72% of the Borough is zoned single-family residential, with municipal parkland and preserved open space combined account for a total of 55 acres.

According to the 2003 Master Plan Reexamination Report, the 1997 Master Plan outlines the following Vacant Land Use Analysis and its location by zoning district. Less than 15 acres of the Borough is considered "vacant" in the area under the planning jurisdiction of the Borough, which represents less than 1% of the total area of the Borough. The largest amount of vacant land (319.52 acres) in the Borough lies within the jurisdiction of the NJMC, with about one-third of the acreage publicly-owned.

The population of the Borough has increased from 17,790 in 1990 to 18,110 in 2000, which represents a growth of approximately 1.8%. This small population increase has most likely not changed the landscape and has not increased stormwater runoff volumes and pollutant loads to the waterways of the municipality. However, it remains a goal of the Master Plan to maintain low lot coverage standards, to minimize stormwater runoff, erosion and siltation as well as to increase groundwater recharge and infiltration.

There are several waterways located within and bordering the Borough as shown on the Bergen County Soil Survey. The Hackensack River and the Passaic River border the Borough's southern and northwestern boundaries, respectively. Anderson Creek flows through the southern portion and Berry's Creek flows through the midsection of the Borough.

Since the Borough of Rutherford is bounded on two sides by waterways it is important to manage stormwater. Figure C-2 illustrates the waterways in the Borough. Figure C-3 depicts the Borough boundary on the USGS Quadrangle maps.



Data Type	Source	Relevant Time Period
USGS Quad	UGSG	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
C1 Waters	NJDEP	2003



Figure C-2
Borough and its Waterways

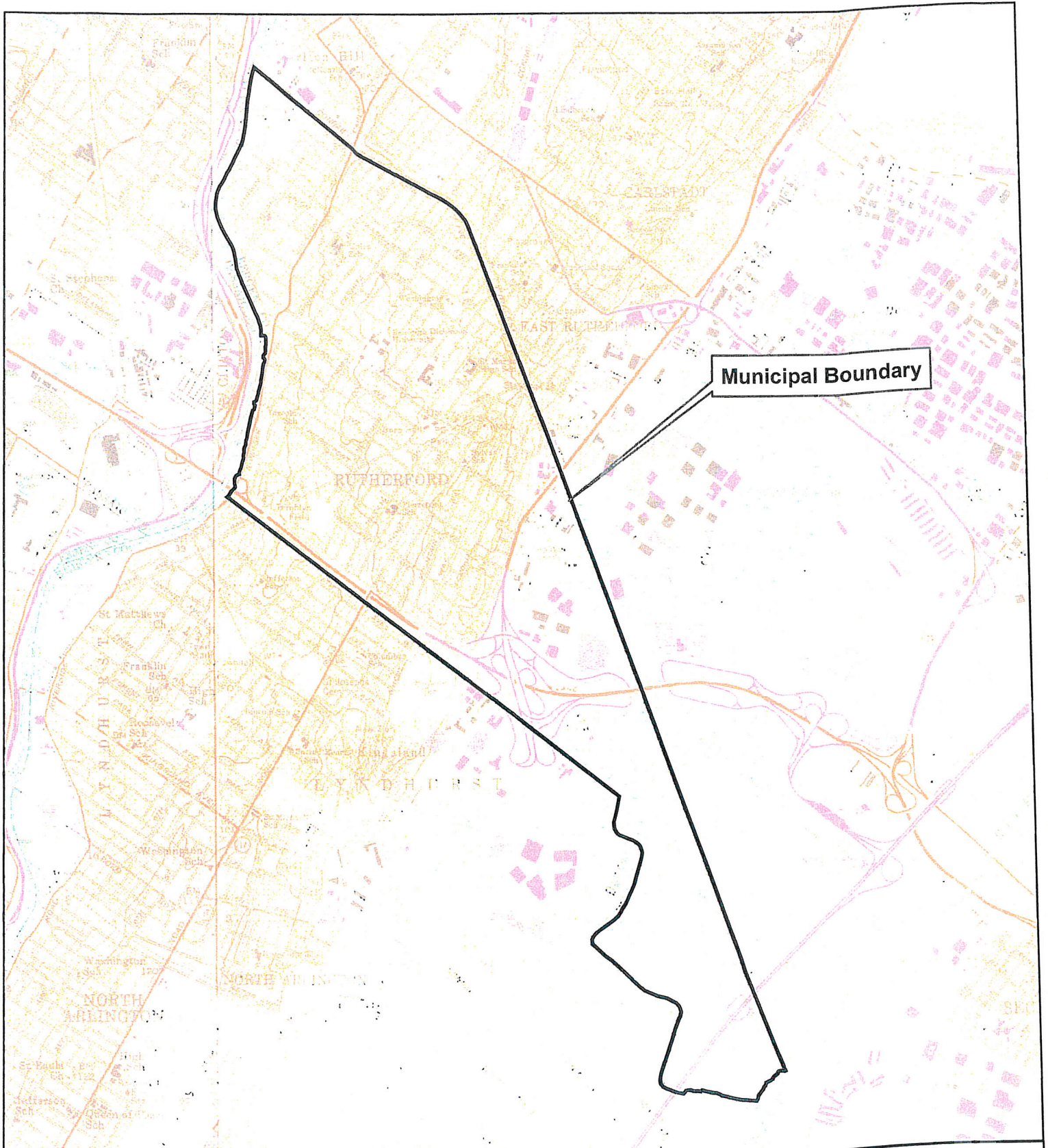
Borough of Rutherford
Bergen County, New Jersey

Symbol Legend

- Municipal Boundary
- C1 Waters**
- FW2-NT/SE2
- SE2



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Data Type	Source	Relevant Time Period
USGS Quadrangles		Feb-Apr 2002
Municipal Boundary	NJDEP	1989

Figure C-3

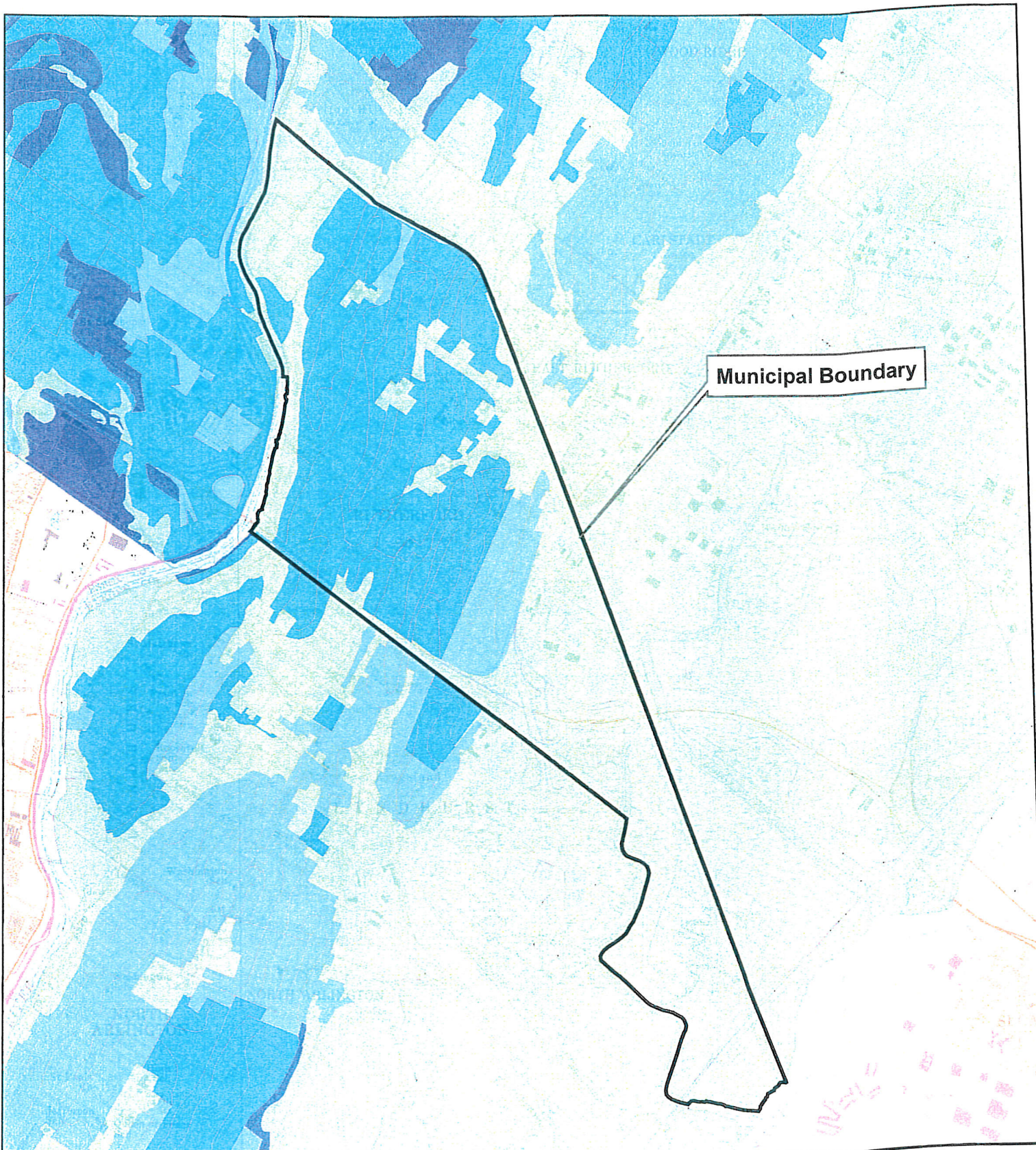
Municipal Boundary on USGS Quadrangles

**Borough of Rutherford
Bergen County, New Jersey**



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Data Type	Source	Relevant Time Period
USGS Quad	USGS	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
Groundwater Recharge Areas	NJDEP	Various



Figure C-4

Groundwater Recharge Areas in the Borough

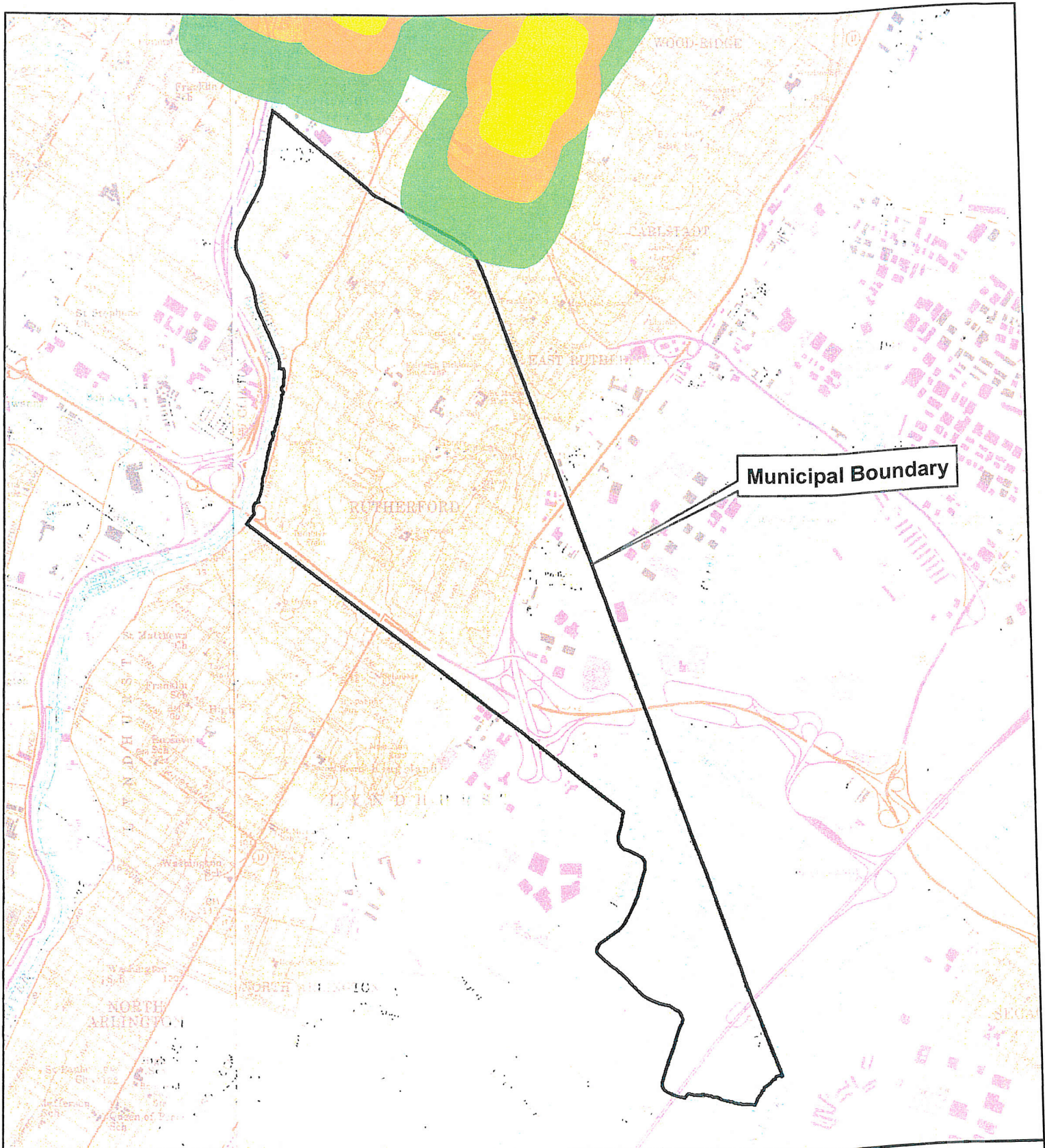
Borough of Rutherford
Bergen County, New Jersey

Symbol Legend

- Municipal Boundary
- Ground Water Recharge Areas**
- 0.00 in/yr
- 0.01 - 9.00 in/yr
- 9.01 - 12.00 in/yr
- 12.01 - 16.00 in/yr
- 16.01 - 22.74 in/yr



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Data Type	Source	Relevant Time Period
USGS Quadrangles	USGS	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
Wellhead Protection Areas	NJDEP	2004 (Updated)



Figure C-5

Wellhead Protection Areas in the Borough

Borough of Rutherford
Bergen County, New Jersey

Symbol Legend

- Municipal Boundary
- Wellhead Protection Areas**
- 2 Year
- 5 Year
- 12 Year



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The New Jersey Department of Environmental Protection (NJDEP) has established an Ambient Biomonitoring Network (AMNET) to document the health of the State's waterways. There are over 800 AMNET sites throughout the state of New Jersey. The major goal of AMNET is to establish a network of stream sites that would adequately represent New Jersey's major drainage basins and NJDEP's Watershed Management Areas (WMA). Twenty (20) WMAs have recently been delineated within New Jersey's five (5) basins. Each basin constitutes a "Water Region." The results from the 1999-2000 Atlantic Region AMNET Study for Watershed Management Areas 4 and 5 indicate that bioassessment ratings for the Berry's Creek, Hackensack River and Passaic River stations in Rutherford are moderately impaired. There were no significant macroinvertebrate abnormalities during the sampling period for any of these streams.

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 waters are attaining water quality standards and identifies waters that are impaired. Sublist 5 of the Integrated List constitutes the list of waters impaired or threatened by pollutants, for which one or more Total Maximum Daily Load (TMDL) limits are required. A TMDL is the amount of a pollutant that can be accepted by a waterbody without causing an exceedance of water quality standards or interfering with the ability to use a waterbody for one or more of its designated uses. The allowable load is allocated to the various sources of the pollutant including point sources, such as stormwater and wastewater discharges, which require a New Jersey Pollutant Discharge Elimination System (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. An implementation plan is developed to identify how the various sources will be reduced to the designated allocations. Implementation strategies may include improved stormwater treatment plants, adoption of ordinances, reforestation of stream corridors, retrofitting stormwater systems, and other best management practices (BMPs).

Several portions of the Hackensack River are listed on Sublist 5 of the Integrated List for not attaining water quality standards for mercury, fish-PCB, fish-dioxin, phosphorus, fecal coliform, arsenic, benthic macroinvertebrates, chromium, copper and lead. Please note that none of these levels were for the portion of the river adjacent to the Borough of Rutherford, but for portions north of the Borough. Furthermore, this Plan will outline the necessary steps to minimize stormwater related pollutants from entering the impaired waterways in the Borough.

A map of the Borough's groundwater recharge areas are shown in Figure C-4. Recharge areas are differentiated by the number of inches per year water infiltrates below the water table as groundwater. The Wellhead protection areas are shown in Figure C-5. A Well Head Protection Area (WHPA) in New Jersey is a map area calculated around a Public Community Water Supply (PCWS) well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two-, five-, and twelve-year period of time.

5.0 DESIGN AND PERFORMANCE STANDARDS

The Borough will adopt the design and performance standards for stormwater management measures as presented in N.J.A.C. 7:8-5 through its stormwater management ordinance to minimize the adverse impact of stormwater runoff on water quality and water quantity and loss of groundwater recharge in receiving water ways. The design and performance standards include the language for maintenance of stormwater management measures consistent with the Stormwater Management Rules at N.J.A.C.7: 8-5.8 Maintenance Requirements, and language for safety standards consistent with N.J.A.C. 7: 8-6 Safety Standards for Stormwater Management Basins. The ordinances will be submitted to Bergen County for review and approval within 24 months of the effective date of the Stormwater Management Rules.

Non-structural measures to be considered first shall include site design and preventive source controls. To confirm the effectiveness of such measures, applicants must verify the control of stormwater quantity impacts as detailed in the Stormwater Management Rules. The tests of assuring control of the quantity impacts as detailed in these Rules will be incorporated into the Borough's Stormwater Ordinance.

The general standards for structural measures are specified in the Stormwater Management Rules and will be incorporated into the Rutherford Borough's Stormwater Ordinance. These measures shall be incorporated as needed to meet the soil erosion, infiltration and runoff quantity standards included in the Borough's Stormwater Ordinance. The design standards for the specific structural stormwater management measures are those included in the New Jersey Stormwater Best Management Practices Manual. Other designs or practices may be used if they are approved by the Soil Conservation District. The design and construction of such facilities must comply with the NJ Soil Erosion and Sediment Control Standards as well as any other applicable state regulations including the Freshwater Wetland Protection Act rules, the Flood Hazard Control Rules, the Surface Water Quality Standards and the Dam Safety rules. Since many stormwater facilities hold and detain stormwater for extended time, new development or redevelopment drainage facilities should be coordinated with the Bergen County Mosquito Extermination Commission so that Mosquito breeding habitat is not increased so that facilities can be properly maintained. The requirement to be consistent with all other applicable rules will be included in the Borough's Stormwater Ordinance. Stormwater runoff quality controls for

total suspended solids and nutrient load shall meet the design and performance standards as specified in the Stormwater Management Rules. The minimum design and performance standards for infiltration and groundwater recharge specified in the Stormwater Management Rules will be incorporated into the Borough's Stormwater Ordinance and will be required to be met for all applicable development. Consistent with the Stormwater Management Rules, the Ordinance will allow for an exemption from this requirement where the applicant can demonstrate that it is not practicable to meet the standards but has taken all possible steps to meet all stormwater management measures.

During construction, Borough inspectors will observe the construction of the project to ensure that the stormwater management measures are constructed and function as designed. Adequate long term operation as well as preventative & corrective maintenance of the selected stormwater management measures will be ensured by requiring the design engineer to prepare a maintenance plan for its stormwater management facilities incorporated into the design of the major development. The maintenance plan shall have specific preventative maintenance tasks, schedules and cost estimates as well as the responsible party for corrective and preventative maintenance.

Where the Borough assumes maintenance responsibility, preventative maintenance shall be performed on a regular basis and will be appropriate for the particular structural management measure being implemented. These maintenance measures shall be in accordance with N.J.A.C 7:8-5 and may include: periodic inspections, vegetation management, sediment, debris and trash removal and mosquito control. Corrective maintenance shall be performed on an as needed basis for structure repairs or replacements, removal of outlet and pipe blockages, erosion restoration, snow and ice removal etc. The person or persons responsible for maintenance shall keep a detailed log of all preventative and corrective maintenance for the structural management measures incorporated into the design of the development, including a record of all inspections and work orders.

Similarly, all new stormwater management basins will be designed and operated to protect public safety as mandated through ordinance.

6.0 PLAN CONSISTENCY

The Borough is not within a Regional Stormwater Management Planning Area and no TMDLs have been developed for water within the Borough; therefore this plan does not need to be consistent with any regional stormwater management plans (RSWMPs) nor any TMDLs. If any RSWMPs or TMDLs are developed in the future, this Municipal Stormwater Management Plan will be updated to be consistent.

The Municipal Stormwater Management Plan is consistent with the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21. The municipality will utilize the most current update of the RSIS in the stormwater management review of residential projects. This Municipal Stormwater Management Plan will be updated to be consistent with any future updates to the RSIS.

The Borough's Stormwater Management Ordinance requires all new development and redevelopment plans to comply with New Jersey's Soil Erosion and Sediment Control Standards. During construction, Borough inspectors will observe on-site soil erosion and sediment control measures and report any inconsistencies to the local Soil Conservation District.

The Borough requires all development within the jurisdiction of the New Jersey Meadowlands Commission to submit to said Commission for review and approval prior to the issuance of any construction permits.

7.0 NONSTRUCTURAL STORMWATER MANAGEMENT STRATEGIES

Per NJ ADC 7:8- 4.2, if a municipality has less than one square mile of vacant or agricultural lands, it is at the option of the municipality to evaluate the extent to which the municipality's entire master plan, official map and development regulations implement the principles expressed in N.J.A.C. 7:8-5.3. If the municipality chooses not to evaluate the above-mentioned documents, documentation must be added to the SWMP including an existing land use map at an appropriate scale to display the land uses of each parcel within the municipality.

A detailed land use analysis was not conducted for the Borough since the total area of vacant lands in the Borough is less than one square mile. See figure C-8 for land use map.

The Borough has reviewed its Master Plan Reexamination Report dated November 20, 2003 subsequently adopted by the Planning Board on February 19, 2004. The Borough has also reviewed the current Zoning Ordinance (Chapter 131 of the borough's Code).

The Zoning and Design Requirements of the Borough Code were reviewed with regard to incorporating nonstructural stormwater management strategies. Several changes are recommended and described below. Non-structural measures to be considered shall include site design and preventive source controls. To confirm the effectiveness of such measures applicants must verify the control of stormwater quantity impacts as detailed in the Stormwater Management Rules. The tests of assuring control of the quantity impacts as detailed in these rules will be incorporated into the Borough Ordinance.

Buffers: Section 131-9. Buffer areas are required along lot and street lines of all nonresidential lot where the property lines or the center line of the adjacent streets abut residential uses or residential zoning district lines. It is recommended that language be added that the buffer area is required to be planted and maintained with grass or ground cover, massed evergreens and deciduous trees & shrubs of such species and size that will produce within two growing seasons a four foot screen and of such density as will obscure all of the glare of automobile headlights. The existing code adequately addresses non-structural stormwater management strategies.

Off-Street Parking: Section 131-14. This Section requires that all structures and land uses shall have sufficient amount of off-street automobile parking to meet the needs of persons residing in, employed at or making use of such structures or land uses. It is recommended that this section be amended to allow pervious paving used in areas to provide overflow parking, vertical parking structures, smaller parking stalls and shared parking.

Off-Street Loading: Section 131-14. Paving required for off-street parking and loading zones shall be as follows: Off-street parking and loading zones shall be paved with a minimum pavement consisting of a four-inch penetration macadam base with a one and one-half-inch bituminous concrete surface. It is recommended that this section be amended to allow for flush curb with curb stop, or curbing with curb cuts to encourage developers to allow for the discharge of impervious areas into landscaped areas for stormwater management.

Off Street Parking: Section 131-14A. This Section requires the landscaping for parking areas and between off street parking areas and lot lines for non residential districts. Additionally, Section 131-14A requires the landscaping between off street parking areas and lot lines or street lines for residential zones. These Sections also includes the guidance on minimum number of parking spaces. It is recommended that these sections be amended to allow pervious paving to be used in areas to provide overflow parking, vertical parking structures and shared parking.

Driveways: Section 131-14. Requires that the total width of driveways in front yards on lots in residential districts shall not exceed 12 feet per building lot for properties with garage openings of one car width. It is recommended that language be added to encourage the use of pervious paving materials to minimize stormwater runoff and promote groundwater recharge.

Sidewalks: Section 109-5. This Section describes the requirements for construction of sidewalks. It is recommended that language be added to require developers to design sidewalks to discharge stormwater to neighboring lawns where feasible to disconnect these impervious surfaces or use permeable paving materials where appropriate.

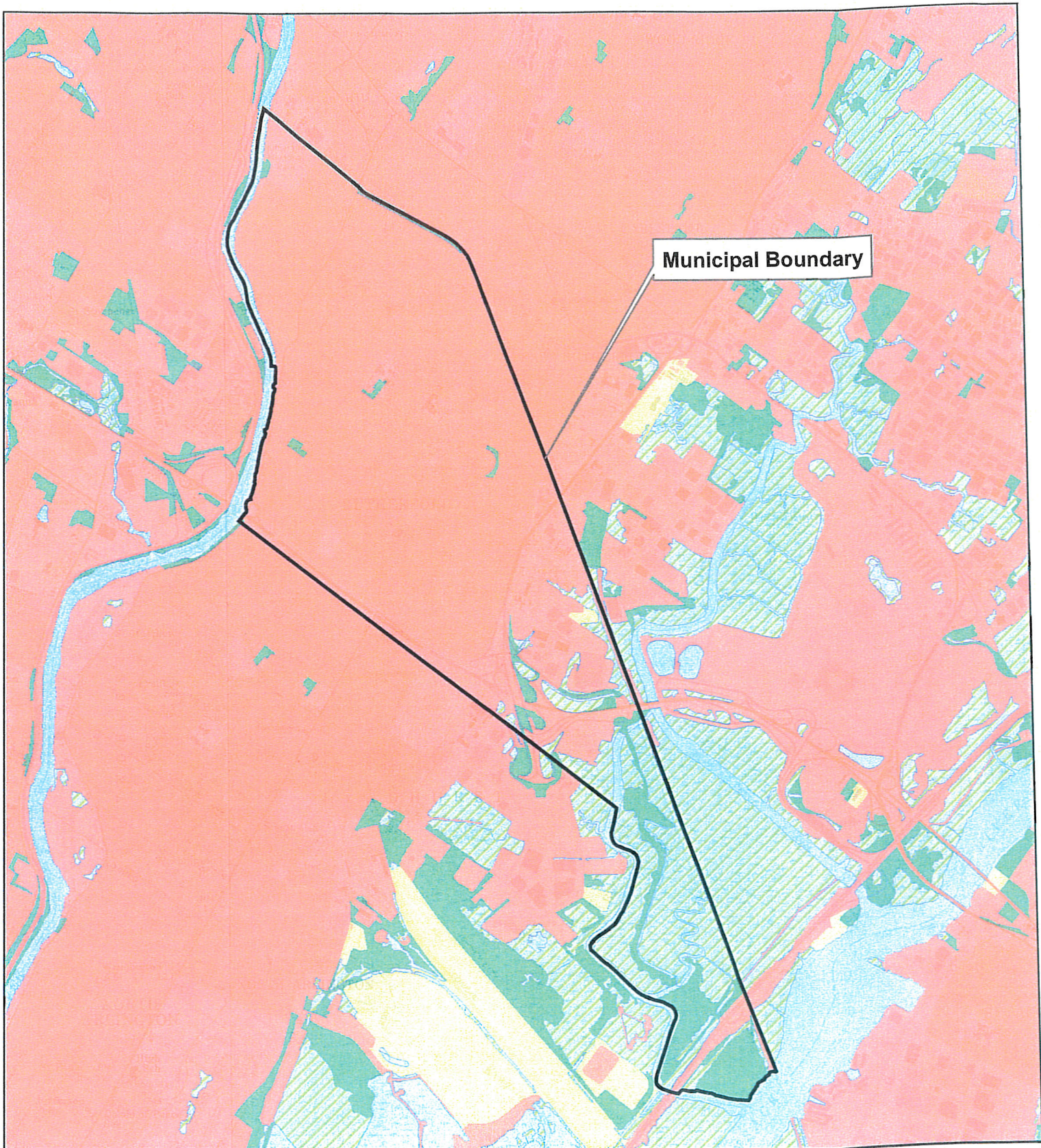
The Borough has seven (7) residential zoning district classifications. The maximum total impervious coverage is controlled by summing the building coverage requirement and the impervious surface requirement. For example, in the R-1 Zone, the maximum building coverage limit is 35% and the maximum impervious surface limit is 25% accounting for a sum total impervious coverage limitation of 60% (building and paved surfaces combined). In summary, six (6) of the seven (7) residential districts have maximum impervious coverage allocations ranging from 50% to 65% of the total lot area. One of the residential districts, the R-1B Zone located along Ridge Road, does not have a regulation for maximum impervious surface (it only limits building coverage at a maximum of 30%).

There are also eight (8) non-residential and/or mixed-use zoning districts. In seven (7) of these districts, coverage is solely regulated in terms of building coverage, with no limitation on total impervious coverage. However, the bulk requirements for the Planned Commercial District includes a regulation that does not allow more than 90% of the lot to be covered by buildings, parking structures and driveways (§131-51.F.3).

The Borough should evaluate appropriate maximum impervious coverage limitations for all zoning districts that currently do not include maximum impervious coverage limitations. The Borough may also evaluate the maximum allowable impervious surface regulations for all other zones to determine whether a reduction in the impervious cover requirement is appropriate. Additionally, if a developer is given a variance to exceed the maximum allowable percent impervious cover, the developer must mitigate the impact of the additional impervious surface

allowed. The detailed descriptions of suitable mitigation areas in the Borough are discussed in Section 9 of this SWMP.

Once the ordinance texts are completed, they will be submitted to Bergen County for review and approval. A copy will be sent to the Department of Environmental Protection at the time of submission.



Data Type	Source	Relevant Time Period
USGS Quad	UGSG	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
Land Use/ Land Cover	NJDEP	1995/1997

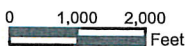


Figure C-6
Borough's Existing
Land Use
Borough of Rutherford
Bergen County, New Jersey

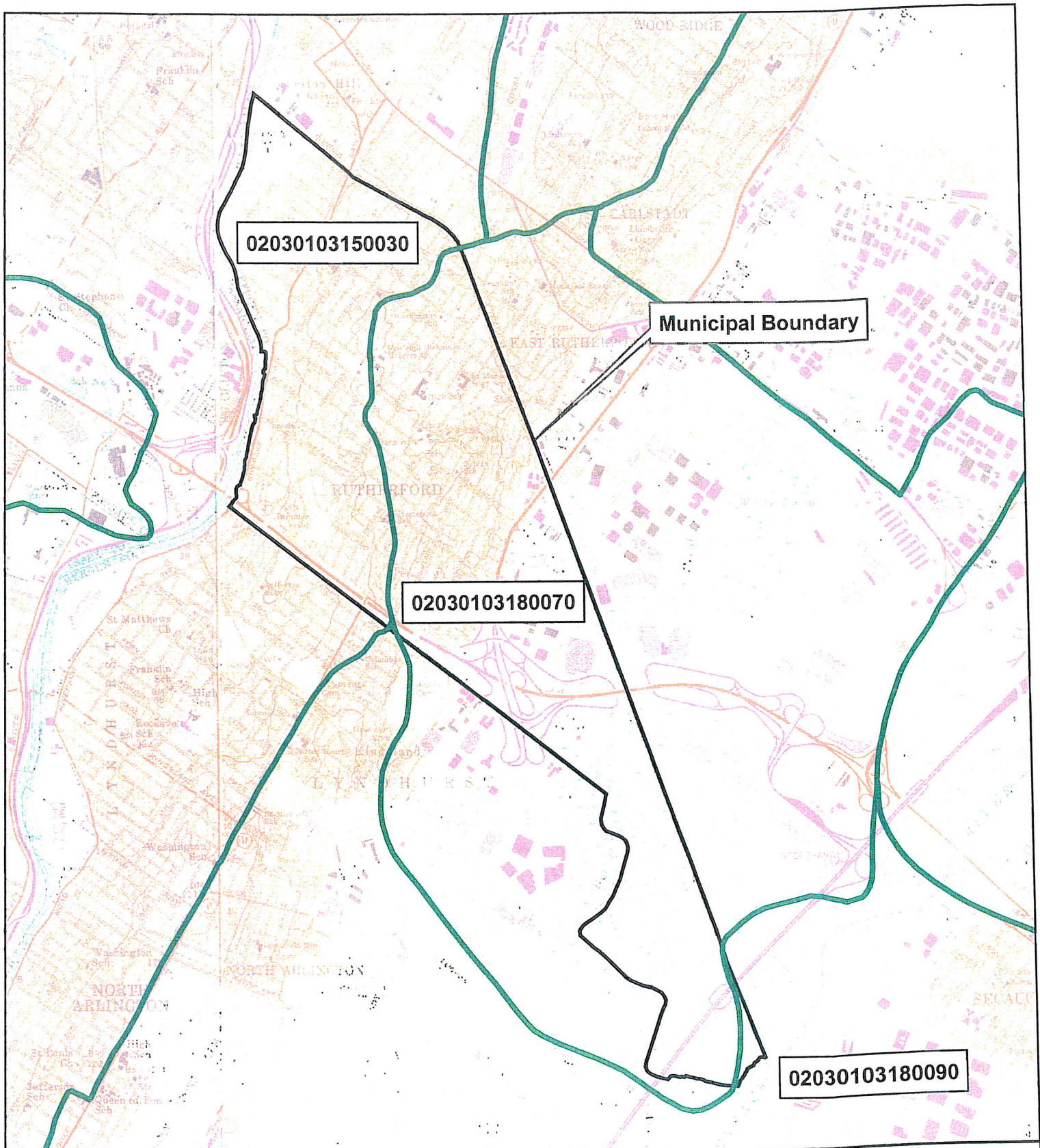


Symbol Legend

	Municipal Boundary
Land Use	
	AGRICULTURE
	BARREN LAND
	FOREST
	URBAN
	WATER
	WETLANDS

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Data Type	Source	Relevant Time Period
USGS Quad	USGS	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
HUC14	NJDEP	2000





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Figure C-7

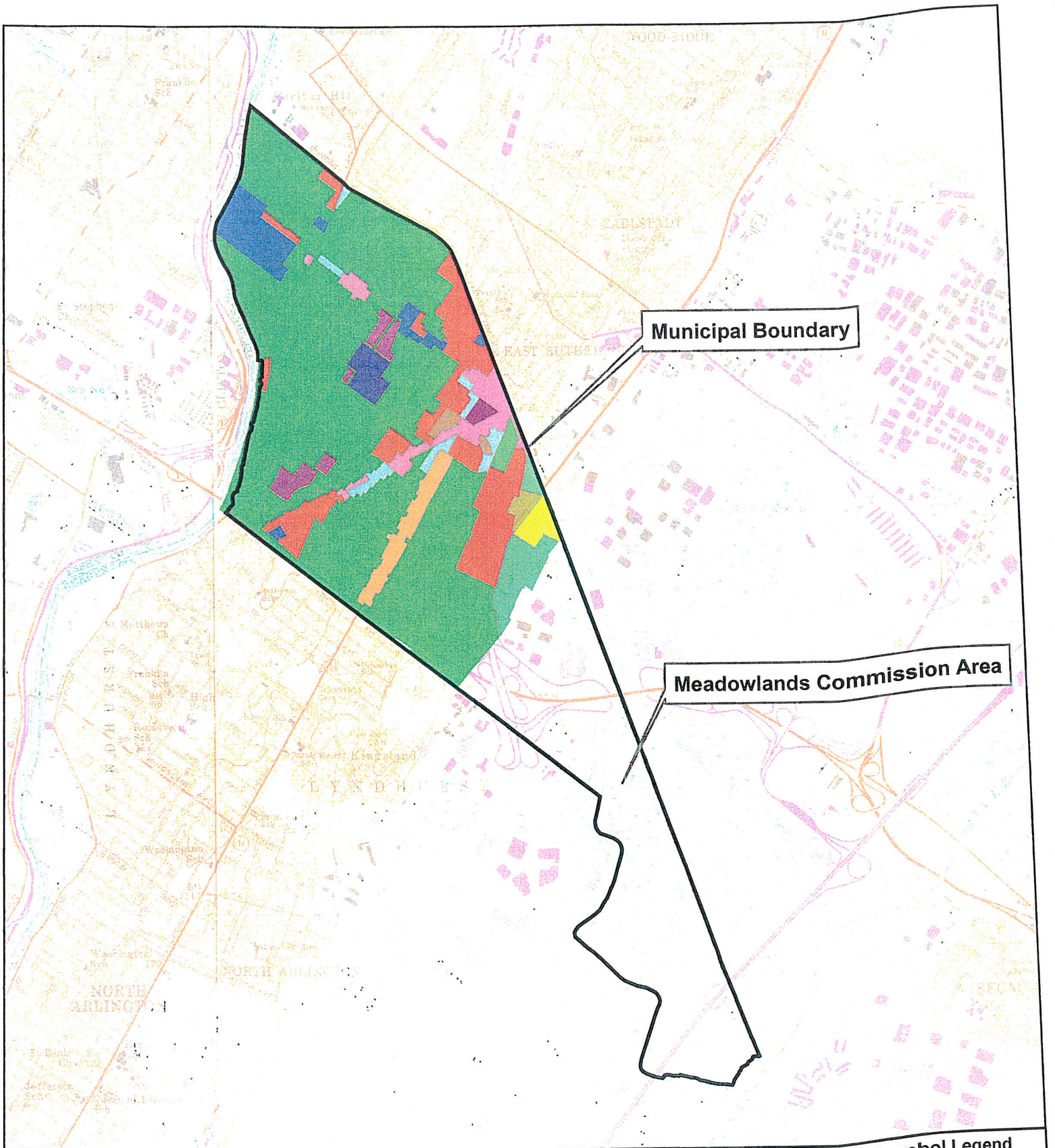
Hydrologic Units (HUC14) Within the Borough

Borough of Rutherford
Bergen County, New Jersey

Symbol Legend

-  NJDEP Huc 14
-  Municipal Boundary





Municipal Boundary

Meadowlands Commission Area

Data Type **Source** **Relevant Time Period**

USGS Quad	USGS	Feb-Apr 2002
Municipal Boundary	NJDEP	1989
Zoning	Schoor DePalma	2005



Figure C-8

Zoning Districts

Borough of Rutherford
Bergen County, New Jersey



Symbol Legend

Municipal Boundary	P.C.D.
Zoning	B-1
B-2	R-1
B-3	R-1A
B-3/SH	R-1B
B-4	R-2
H-C	R-3
O.R.D.	R-4
	U-R1A



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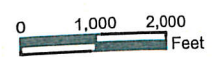


Data Type	Source	Relevant Time Period
Aerial Photograph	NJDEP	2002
Municipal Boundary	NJDEP	1989

Figure C-10

Municipal Boundary on Aerial Photograph

Borough of Rutherford
Bergen County, New Jersey



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8.0 LAND USE/BUILD-OUT ANALYSIS

A detailed land use analysis was not conducted for the Borough since the total area of vacant lands in the Borough is less than one square mile. The Borough zoning map is shown in conjunction with the HUC 14 zones in the Borough in order to show the total area of the Borough and to illustrate the extent of developed land.

9.0 MITIGATION PLANS

This mitigation plan is provided for a proposed development that is granted a variance or exemption from the stormwater management design and performance standards. Presented is a hierarchy of options.

The mitigation project must be implemented in the same drainage area as the proposed development. The project must provide additional groundwater recharge benefits, or protection from stormwater runoff quality and quantity from previously developed property that does not currently meet the design and performance standards outlined in the Municipal Stormwater Management Plan. The developer must ensure the long-term maintenance of the project, including the maintenance requirements under Chapters 8 and 9 of the NJDEP Stormwater BMP Manual.

The applicant can select one of the following projects listed to compensate for the deficit from the performance standards resulting from the proposed project. More detailed information on the projects can be obtained from the Borough Engineer. Listed below are specific projects that can be used to address the mitigation requirement when granting waivers or variances in redevelopment and infill areas of the Borough.

- Retrofit of existing outfalls
- Improving the quality of existing stormwater runoff
- Stabilize stream banks

The Borough of Rutherford may allow a developer to provide funding or partial funding to the Borough for an environmental enhancement project that has been identified in a Municipal Stormwater Management Plan, or towards the development of a Regional Stormwater Management Plan. The funding must be equal to or greater than the cost to implement the mitigation outlined above, including costs associated with purchasing the property or easement for mitigation, and the cost associated with the long-term maintenance requirements of the mitigation measure.

