Township of Saddlebrook

Stormwater Pollution Prevention Plan

New Jersey Pollution Discharge Elimination System

Tier A Municipal Stormwater

General Permit No. NJG0121521

PI ID No. 12897

3/13/19

Robert Hicswa

Township of Saddlebrook, DPW Supervisor, Stormwater Coordinator **Date**

Township of Saddlebrook

Stormwater Pollution Prevention Plan (SPPP)

Table of Contents

SPPP Form 1 – Stormwater Pollution Prevention Team Members

Facility Information

Facility Name: Township of Saddlebrook County: Bergen
NJPDES # : NJG NJG0151521 PI ID #: 127897
Team Member/Title: Robert Hicswa/ Superintendent Department of Public Works
Effective Date of Permit Authorization (EDPA): 4/01/2004
Date of Completion: 2/28/2005 Date of most recent update: 9/7/2018

Number of team members may vary.

Facility Contact: Mr. Robert Hicswa
Title: Superintendent Department of Public Works
Office Phone #:
Emergency Phone #:
Responsibilities: Public Works Coordinator, Stormwater Manager, Stormwater Program Coordinator, Facility Contact, SPPP Plan Employee Training Coordinator, Storm Drain Inlet Retrofitting Coordinator

Member: Mr. Peter Lo Dico, R.M.C., C.M.C., C.M.R.
Title: Business Administrator Township of Saddlebrook,35 Market Street Saddle Brook, New Jersey 07663
Office Phone #: 201-587-2908
Emergency Phone #: 201-587-2908
Responsibilities: Coordinator of storm water issues with Town Board, Public Notice Coordinator, Ordinance Coordinator, Local Public Education Coordinator

Member: Brian D. Gillen, PE, LSRP
Title: Licensed Site Remediation Professional, Saddle Brook LSRP,
Office Phone #: 201-624-2137
Emergency Phone #: 973-896-6732
Responsibilities: Consultant, SPPP rules advisor, SPPP Plan mapping, regulatory compliance

Member:
Title:
Office Phone #:
Emergency Phone #:
Responsibilities:

Member:
Title:
Office Phone #:
Emergency Phone #:
Responsibilities:

SPPP Form 2 – Inventory Requirements

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/1/2004

Date of Completion: 5/28/2005 Date of most recent update: 3/13/2019

Inventory of all industrial activities, source materials and non-stormwater discharges. Attach additional pages as necessary.

Please provide a detailed description of all industrial activities conducted at the facility:

Sand stockpiling (indoors), outdoor storage of plastic carboys, 40 CY dumpster, 100 CY stockpile of Quarry Process (QP) 100 CY stockpile of 3/4-inch stone, 100 CY of mulch, and 2-100 pound burlap bags behind salt shed and tarps. Road salting, minor vehicle maintenance, gas addition to lawn equipment takes place at facility. vehicle fueling and washing at an off-site location by a private vendor, services shared with Rochelle Park.

Describe all source materials used, stored, or otherwise located at the facility:

Material (include quantity)	Use	Storage	Handling
Heavy Equipment	Road resurfacing	gravel DPW yard	inlet 100ft. away
3/4 inch stone	road resurfacing	concrete yard bins	18CY Dump Trk
mulch	vegetate eroded area	concrete yard bins	18CY Dump Trk
salt	de-icing roads	concrete yard bins	18CY Dump Trk
refuse	solid waste collection	40CY dumpster	vendor pick-up
Tires/waste oil	Vehicles/equipment	30CYdmp/250 AS	vendor pick-up

List all non-stormwater discharges generated at the facility and any appropriate permit authorizing such discharges.

Type of Discharge	NJPDES # or other permit # (if applicable)	Discharge Location
sanitary sewage		sanitary sewer 251 2nd St

List all other permit approvals issued by the NJDEP for the facility.

Type of Permit	NJDEP Permit #
Physical Connection Permit	1584-WPC 100001

SPPP Form 3 – Developing a Site Map

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG NJG0151521 PI ID #: 127897

Team Member/Title: Brian D. Gillen, PE, LSRP/RVE Licensed Site Remediation Professional

Effective Date of Permit Authorization (EDPA): 4/01/2004

Date of Completion: 5/28/2005 Date of most recent update: 9/17/2018

Attach a map (preferably drawn to scale) of your site. Existing engineered drawings should be used if available. Hand drawn maps are acceptable if all features are clearly indicated and labeled.

Colored Map Provided in rear pocket indicating 538 storm water inlets, eight (8) storm water outfalls, watershed boundaries, sub watershed boundaries, municipal boundaries, surface water bodies and direction of storm water flow through storm drains and block and Lot numbers of all parcels served by the storm water drainage system.

SPPP Form 4 – Best Management Practices

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/01/2004

Date of Completion: 5/28/2005 Date of most recent update: 3/13/2019

Describe the BMPs that will be implemented at your facility to eliminate exposure of source material/industrial activity to stormwater and to ensure that the facility does not discharge any unpermitted wastewaters. Include a schedule for full implementation of the BMPs identified. Attach additional pages as necessary.

Source Material / Industrial Activity	Corrective Action / BMP	Scheduled Completion Date(s)
Fueling Operations	Fueling operations ceased in the DPW Yard over 14 years ago.* The only fueling activity involves mobile equipment utilizing a truck-mounted diesel fuel tank & portable containers protected by either 18-in. x 18-in. pillows or 4-in. x 12-in. sorbent socks.**	4/01/2005* 9/17/2018*
Vehicle Maintenance	Periodic inspection of vehicles for leaks and equipment with upkeep in accordance with DPW Standard Operating Procedures. An inventory of storm water BMPs (type, function and locations) are kept in a format provided by NJDEP on-site and available for inspection.	4/01/2005
Vehicle Washing	Vehicles are washed at an off-site location by a private vendor, a service the Township shares with Rochelle Park. A record of where and when equipment washing occurs and location of wastewater discharges is provided in the SPPP Appendix B (Vehicle Washing Logs).	12/01/2008
Housekeeping	The DPW Yard is inspected on a monthly basis for signs of spillage, debris, erosion, borrow piles or other issues potentially having an adverse effect on storm water BMPs, including the type, function, and locations in a NJDEP required format on-site & ready for inspection.	4/01/2004
Road Erosion Control Mainetenace	DPW inspects roads during monthly street sweeping events and keeps logs of repairs and repair dates and inspections for erosion problems. Erosion problems are reported to Bob Hicswa, with areas of concern identified, prioritized and repaired in accordance with SESC standards.	10/01/2005
Street Sweeping	During monthly street sweeping events, local streets are evaluated to determine which roads require priority. Inspections are logged on computer. Inspections include municipality owned and operated curbed streets w. storm drains, having a 35 mph limit (no ramps).	10/01/2005
Catch Basin Cleaning/ Yard Waste Collection	DPW has implemented an annual catch basin cleaning program, to be triggered in the event of observations during annual inspections. indicate basin clogging. Basin debris collection/cleaning events are recorded annually and logged on computer. Records are available.	4/01/2015
Storm Drain Inlet Retrofitting	Storm drain inlets are retrofitted to conform with NJPDES Permit NJG0151521 Attachment C, which requires inlet upgrades after inlets are in direct contact with road repaving, repairs or alterations (excluding pothole repairs). Repairs are logged & available for review.	4/01/2005

SPPP Form 5 – Maintenance Plan

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/10/2004

Date of Completion: 2/28/2018 Date of most recent update: 3/13//2019

Narrative description of structural BMP maintenance, repairs and/or replacement, the updating of non-structural BMPs, and any problematic areas needing special attention. Attach additional pages as necessary.

Describe how your facility will ensure regular, preventative maintenance and appropriate repairs, including replacement, of all structural BMPs and how your facility will update all non-structural BMPs. DPW will ensure regular, preventative maintenance of all structural BMPs and update non-structural BMPs in accordance with Township Ordinance and NJDEP requirements by adopting the following practices:

1. Require storm drain inlets to be installed and repaired pursuant to NJPDES Permit NJG0152521 Attachment C.
2. Confirm that the Township of Saddlebrook Storm water Ordinance is enforced by ensuring that the operation and maintenance of any new development or redevelopment project comply with the ordinance implementation through Township of Saddlebrook Planning and Zoning Board resolution compliance requirements in matters relating to storm water upgrades, under supervision of the Town Engineer.
3. For any BMP that is installed in order to comply with a Township post-construction program, the Township of Saddlebrook will ensure adequate long-term operation, as well as, preventative maintenance (including replacement) of BMPs.
4. Continued implementation of scheduled maintenance of basin tops.
5. Continued implementation of scheduled street sweeping programs.
6. Continued implementation of Snow Removal and Disposal Plan BMPs, SPPP Appendix 14

Identify any problematic areas that may require special attention. For BMPs on private property, that the Township of Saddlebrook does not own or operate, the Township is prepared to enforce the Municipal Storm Water Control Ordinance that requires the private entity to perform operation and maintenance, with penalties, if the private entity does not perform the required maintenance to control passage of solid and floatable materials through storm drain inlets. It is expected that such compliance would be achieved either by conveying flows through a trash rack, or by installation of a bicycle safe grate, or equivalent. If needed, the Township is also prepared to install a curb opening with a clear space no bigger than two (2) across the smallest dimension.

SPPP Form 6 – Inspection Schedule

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/10/2004

Date of Completion: 5/28/2005 Date of most recent update: 03/13/2019

Conduct monthly inspections of your entire facility and review your SPPP to ensure that all BMPs are properly implemented and/or maintained. Identify any problems and the corrective action(s) taken. Attach additional pages as necessary.

Date	BMP Properly Implemented/ Maintained?	Problem(s) Found	Steps Taken to Correct the Problem and Date Completed
Monthly	DPW Yard		*
Weekly	Street Sweeping Events		*
Yearly	Spill Control Kits		*
Weekly	Road Erosion Control Maintenance		*
During and Prior to Significant Rain Events	Storm Drain Inlets		Typically a one to two -inch rain event
Yearly	Catch Basins		*
Yearly	Storm Drain Inlet Labelling		*
			* See 2018 Storm Water Permit NJG0151521

SPPP Form 7 – Coordination of SPPP with Other Existing Environmental Management Plans

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/10/2004

Date of Completion: 2/28/2018 Date of most recent update: 3/13/2019

Evaluate any existing environmental management plans (if applicable) for consistency, and determine if any provisions can be incorporated into the SPPP. Attach additional pages as necessary.

Include, or cite, the location(s) of any Toxic Chemical Release Inventory Form(s) prepared under section 313 in Title III of the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601 et seq.

Include, or cite, the location(s) of any Spill Prevention Control and Countermeasure Plan (SPCC Plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C. 1321.

Include, or cite, the location(s) of any discharge prevention, containment and countermeasure plan (DPCC plan) and discharge cleanup and removal plan (DCR plan) prepared under N.J.A.C. 7:1E.

Include, or cite, the location (s) of any other environmental management plans (e.g., the Preparedness, Prevention and Contingency Plan and the Occupational Health and Safety Administration (OSHA) Emergency Action Plan).

Snow Removal & Disposal, Best Management Practices, Storm Water Pollution & Prevention Plan, Appendix 14

SPPP Form 8 – Employee Training

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Robert Hicswa/Superintendent Department of Public Works

Effective Date of Permit Authorization (EDPA): 4/10/2004

Date of Completion: 2/28/2018 Date of most recent update: 3/13/2019

Conduct an annual Stormwater Pollution Prevention training program for appropriate employees on appropriate topics. Record all training sessions below. Attach additional pages as necessary.

Date	Training Topic	Employees Receiving Training
January 1 2017 thru December 31, 2017	Educational Activity totaling a minimum of 10 points*	Peter Lo Dico Robert Hicswa
January 1, 2017 thru December 31, 2017	Town Ordinances (Pet Waste 9/9/2005), Litter (9/8/2005), Yard Waste Collection (9/8/2005), Illicit Connections (9/8/2005), Wild Life feeding (9/8/2005)*	Peter Lo Dico Robert Hicswa
January 1, 2017 thru December 31 ,2017	Refuse Container/Dumpster Ordinance (10/14/2010), Storm Drain Inlet Retrofitting (10/14/10), Private Strom Drain Retrofitting (6/9/2011)*	Peter Lo Dico Robert Hicswa
June 2009	Recycling Regulations and Changes to the Municipal Storm Water Permit, presenters PMK Group*	Robert Hicswa Peter Lo Dico
12/28/2017	E-JIF Municipal Storm Water Regulation Video	DPW Staff
May 21 and 22, 2019	Two-Day Storm Water Management Design Review Course (Spring), NJSP Forensics Auditorium, 1200 Negron Drive, Hamilton, New Jersey, Presenters, New Jersey Department of Environmental Protection	Robert Hicswa Brian D. Gillen, PE, LSRP
	*Documentation Provided in DPW Files **Certificates provided in SPPP Appendix 13	

SPPP Form 9 – Annual Inspection Schedule

Facility Information

Facility Name: Township of Saddlebrook County: Bergen

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member/Title: Brian D. Gillen, PE, LSRP

Effective Date of Permit Authorization (EDPA): 04/10/2004

Date of Completion: 5/28/2005 Date of most recent update: 3/13/2019

Conduct annual inspections to ensure that the SPPP is current and up-to-date, properly implemented and effectively eliminating exposure of source materials and industrial activity to stormwater.

Inspection Date	In Compliance	Out of Compliance
9/17/2018	x	
3-13-2019	x	

Illicit Connection Inspection Report Form

Municipality Information

Municipality: Saddlebrook County Bergen

NJPDES # : NJG0151621 PI ID #: 127897

Team Member: R. Hicswa

Date 03/13/2019 Effective Date of Permit Authorization (EDPA): 04/01/2004

Outfall #: _____ Location: _____

Receiving Waterbody: _____

1. Is there a dry weather flow? Y (●) N (○)
2. If "YES", what is the outfall flow estimate? _____ gpm
   (flow sample should be kept for further testing, and this form will need to be submitted with the Annual Report and Certification)
3. Are there any indications of an intermittent flow? Y (○) N (●)
4. If you answered "**NO**" to BOTH questions #1 and #3, there is probably not an illicit connection and you can skip to question #7.
   (NOTE: This form **does not** need to be submitted to the Department, but should be kept with your SPPP.)

   If you answered "**YES**" to either question, please continue on to question #5.
   (NOTE: This form will need to be submitted to the Department with the Annual Report and Certification.)

5. **PHYSICAL OBSERVATIONS**:

(a) **ODOR**: Oil

(b) **COLOR**: Yellow

(c) **TURBIDITY**: Cloudy

(d) **FLOATABLES**: Petroleum

(e) **DEPOSITS/STAINS**: Sediment

(f) **VEGETATION CONDITIONS**: Excessive Gr

(g) **DAMAGE TO OUTFALL STRUCTURES**:

IDENTIFY STRUCTURE: _____

DAMAGE: Metal Corrosion

Bergen County is respsonsible for inspecting outfalls (See attached)

6. **ANALYSES OF OUTFALL FLOW SAMPLE:**
   * field calibrate instruments in accordance with manufacturer's instructions prior to testing.

(a) **DETERGENTS**: _____mg/L

(if sample is greater than 0.06 mg/L, the sample is contaminated with detergents [which may be from sanitary wastewater or other sources]. Further testing is required and this outfall should be given the highest priority.)

(if the sample is not greater than 0.06 mg/L and it does not show physical characteristics of sanitary wastewater [e.g., odor, floatables, and/or color] it is unlikely that it is from sanitary wastewater sources, yet there may still be an illicit connection of industrial wastewater, rinse water, backwash or cooling water. Skip to question #6c.)

(b) **AMMONIA (as N) TO POTASSIUM RATIO:** 112

(if the Ammonia to Potassium Ratio is greater than 0.6:1, then it is likely that the pollutant is sanitary sewage)

(if the Ammonia to Potassium Ratio is less than or equal to 0.6:1, then the pollutant is from another washwater source.)

(c) **FLUORIDE:** 123 mg/L

(if the fluoride levels are between 1.0 and 2.5 mg/L, then the flow is most likely from fluoride treated potable water.)

(if the sample tests below a detection limit of 0.1 mg/L for fluoride, it is likely to be from groundwater infiltration, springs or streams. In some cases, however, it is possible that the discharge could originate from an onsite well used for industrial cooling water, which will test non-detect for both detergents and fluoride. To differentiate between these cooling water discharges and groundwater infiltration, you will have to rely on temperature.)

(d) **TEMPERATURE:** _____ °F

(if the temperature of the sample is over 70°F, it is most likely cooling water)

(if the temperature of the sample is under 70°F, it is most likely from ground water infiltration)

7. Is there a suspected illicit connection? Y (◉) N (◯)

   If "**YES**", what is the suspected source? 12

   If "**NO**", skip to signature block on the bottom of this form.

8. Has the investigation of the suspected illicit connection been completed? Y (◯) N (◯)

   If "**YES**", proceed to question #9.
   If "**NO**", skip to signature block on the bottom of this form.

9. Was the source of the illicit connection found? Y (◉) N (◯)

   If "**YES**", identify the source. asdfasdfasdf

   What plan of action will follow to eliminate the illicit connection?

   Resolution:

   If "**NO**", complete the Closeout Investigation Form and attach it to this Illicit Connection Inspection Report Form.

Inspector's Name: _____

Title: _____

Signature: _____

Date: _____

If there is a dry weather flow or evidence of an intermittent flow, be sure to include this form with your Annual Report and Certification.

If there is not a dry weather flow or evidence of an intermittent flow, this form should be retained with your SPPP.

Illicit Connection Inspection Report Form

Municipality Information

Municipality: Saddlebrook County Bergen

NJPDES # : NJG0151521 PI ID #: 127897

Team Member: R. Hicswa

Date 03/13/2019 Effective Date of Permit Authorization (EDPA): 04/01/2004

Outfall #: _____ Location: _____

Receiving Waterbody: _____

1. Is there a dry weather flow? Y (●) N (○)
2. If "YES", what is the outfall flow estimate? _____ gpm
   (flow sample should be kept for further testing, and this form will need to be submitted with the Annual Report and Certification)
3. Are there any indications of an intermittent flow? Y (○) N (●)
4. If you answered "**NO**" to BOTH questions #1 and #3, there is probably not an illicit connection and you can skip to question #7.
   (NOTE: This form **does not** need to be submitted to the Department, but should be kept with your SPPP.)

   If you answered "**YES**" to either question, please continue on to question #5.
   (NOTE: This form will need to be submitted to the Department with the Annual Report and Certification.)

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(a) **ODOR:** Oil

(b) **COLOR:** Yellow

(c) **TURBIDITY:** Cloudy

(d) **FLOATABLES:** Petroleum

(e) **DEPOSITS/STAINS:** Sediment

(f) **VEGETATION CONDITIONS:** Excessive Gr

(g) **DAMAGE TO OUTFALL STRUCTURES:**

IDENTIFY STRUCTURE: _____

DAMAGE: Metal Corrosion

Bergen County is respsonsible for inspecting outfalls (See attached)

6. **ANALYSES OF OUTFALL FLOW SAMPLE:**
   * field calibrate instruments in accordance with manufacturer's instructions prior to testing.

(a) **DETERGENTS:** _____mg/L

(if sample is greater than 0.06 mg/L, the sample is contaminated with detergents [which may be from sanitary wastewater or other sources]. Further testing is required and this outfall should be given the highest priority.)

(if the sample is not greater than 0.06 mg/L and it does not show physical characteristics of sanitary wastewater [e.g., odor, floatables, and/or color] it is unlikely that it is from sanitary wastewater sources, yet there may still be an illicit connection of industrial wastewater, rinse water, backwash or cooling water. Skip to question #6c.)

(b) **AMMONIA (as N) TO POTASSIUM RATIO:** 112

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(if the fluoride levels are between 1.0 and 2.5 mg/L, then the flow is most likely from fluoride treated potable water.)

(if the sample tests below a detection limit of 0.1 mg/L for fluoride, it is likely to be from groundwater infiltration, springs or streams. In some cases, however, it is possible that the discharge could originate from an onsite well used for industrial cooling water, which will test non-detect for both detergents and fluoride. To differentiate between these cooling water discharges and groundwater infiltration, you will have to rely on temperature.)

(d) **TEMPERATURE:** _____ °F

(if the temperature of the sample is over 70°F, it is most likely cooling water)

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   If "**YES**", what is the suspected source? 12

   If "**NO**", skip to signature block on the bottom of this form.

8. Has the investigation of the suspected illicit connection been completed? Y (◯) N (◯)

   If "**YES**", proceed to question #9.
   If "**NO**", skip to signature block on the bottom of this form.

9. Was the source of the illicit connection found? Y (◉) N (◯)

   If "**YES**", identify the source. asdfasdfasdf

   What plan of action will follow to eliminate the illicit connection?

   Resolution:

   If "**NO**", complete the Closeout Investigation Form and attach it to this Illicit Connection Inspection Report Form.

Inspector's Name: R. Hidewa

Title: DPW Super.

Signature: _____

Date: 03/13/2019

If there is a dry weather flow or evidence of an intermittent flow, be sure to include this form with your Annual Report and Certification.

If there is not a dry weather flow or evidence of an intermittent flow, this form should be retained with your SPPP.

Closeout Investigation Form

Municipality Information

Municipality: TOWNSHIP OF SADDLEBROOK County BERGEN

NJPDES # : NJG 0151521 PI ID #: 127897

Team Member / Title: ROBERT HICSWA / SUPERINTENDENT DPW

Outfall #: _____ Location: _____

Receiving Waterbody: _____

Basis for Submittal:

( ) A non-stormwater discharge was found, but no source was located within six months.

( ) An intermittent non-stormwater discharge was observed, and three unsuccessful investigations were conducted to investigate the discharge while it was flowing.

Describe each phase of your investigation, including dates. Attach additional pages as necessary:

BERGEN COUNTY RESPONSIBLE FOR INSPECTING OUTFALLS

(SEE ATTACHED EMAIL)

Inspector's Name: ROBERT HICSWA

Title: SUPERINTENDENT DEPARTMENT OF PUBLIC WORKS

Signature: _____

Date: 3.17.2019

(COUNTY)
STORMWATER OUTFLOW PIPES

Joan Ramsey

From: Kavvadas, Christos [CKavvadas@co.bergen.nj.us]
Sent: Thursday, April 23, 2015 11:21 AM
To: Joan Ramsey
Cc: 'hardtop99@msn.com'
Subject: FW: Saddle River Park Storm Outfalls
Attachments: SB Tax Map w Outfalls to River.pdf

Mike,

Here it is again.

Thanks

Christos

From: Kavvadas, Christos
Sent: Monday, April 20, 2015 10:43 AM
To: 'jramsey@saddlebrooknj.gov'
Cc: 'hardtop99@msn.com'; Femia, Joseph; Connolly, Tom; Pluchino, Peter; Koenig, Alan
Subject: Saddle River Park Storm Outfalls

Gentlemen,

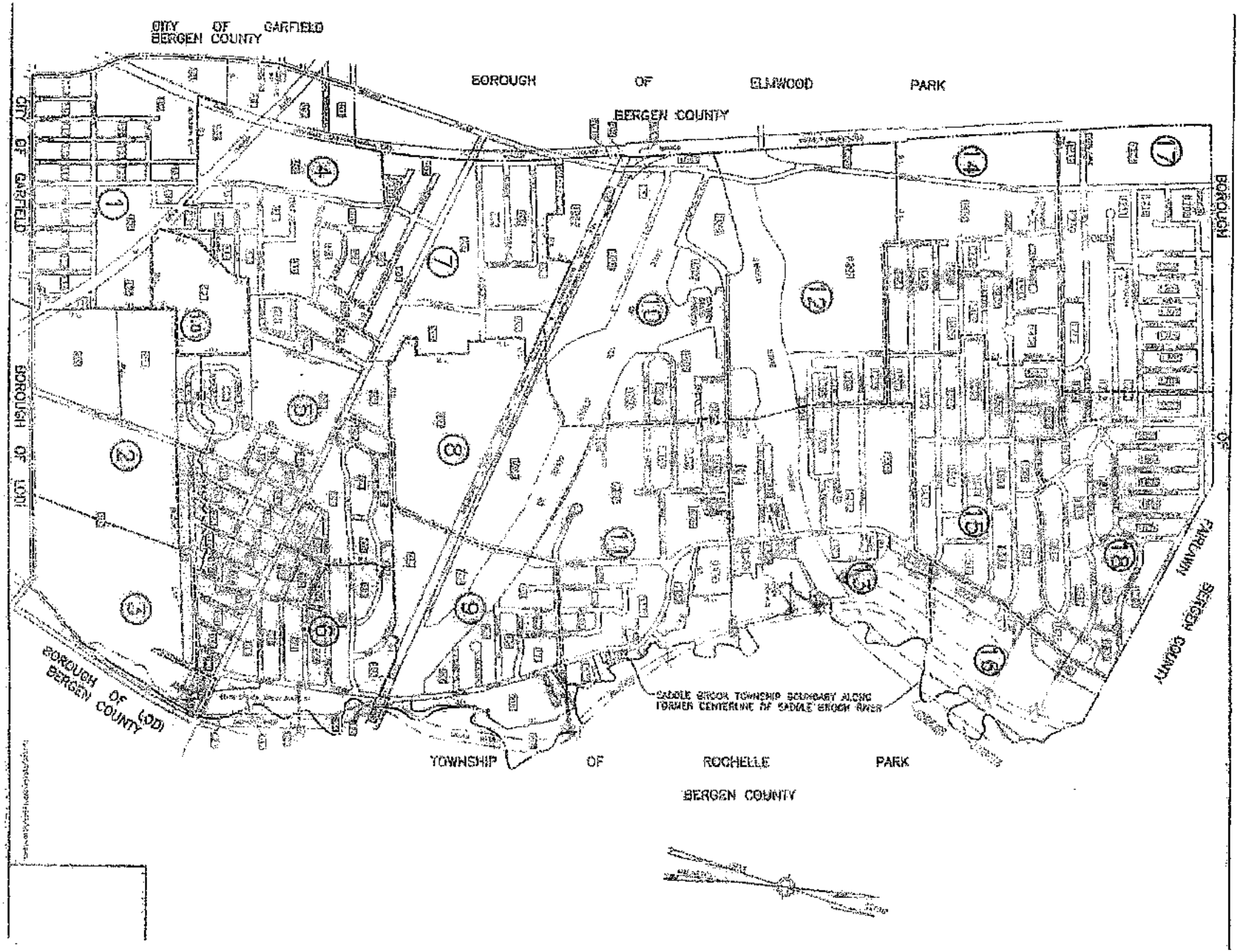
This is to inform you that the outfalls marked on the attached tax map are under the jurisdiction of the County of Bergen Department of Parks.

Please feel free to contact me should you have any questions or need additional information.

Christos Kavvadas

****

Christos D. Kavvadas, P.E.
Principal Engineer - Hydraulics
County of Bergen - Department of Public Works
One Bergen County Plaza - Room 416
Hackensack, NJ 07601-7076
Tel: (201) 336-6774, Cell: (201) 364-2414, Fax: (201) 336-6845
Email: ckavvadas@co.bergen.nj.us
www.co.bergen.nj.us


CITY OF GARFIELD
BERGEN COUNTY
BOROUGH OF ELMWOOD PARK
BERGEN COUNTY
CITY OF GARFIELD
BOROUGH OF LODI
BOROUGH OF
CARLSTADT
BERGEN COUNTY
BOROUGH OF LODI
BERGEN COUNTY
SADDLE BROOK TOWNSHIP BOUNDARY ALONG FORMER CENTERLINE OF SADDLE BROOK RIVER
TOWNSHIP OF ROCHELLE PARK
BERGEN COUNTY

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 1

ANNUAL REPORT

You have completed the Annual Report submittal process. You may print or save a copy of this submittal report for your records.

Service ID:	808036
Facility Name:	SADDLE BROOK TWP
Reporting Period:	January 1, 2017 through December 31, 2017
NJPDES Permit #:	NJG0151521
Activity ID:	DST170001

Name:	Peter LoDico
Title:	Township Clerk
Contact Type:	Stormwater Coordinator
Organization Name:	SADDLE BROOK TWP
Organization Type:	Municipal
E-Mail:	plodico@saddlebrooknj.gov
Phone:	(201) 587-2909 (Work Phone Number) (201) 587-2908 (Fax Number)
Contact Address:	93 MARKET ST Saddle Brook Twp, New Jersey 07662

Attachment Name	Attachment Description	File Name
MS4 Tier A	2017	Tier_A_MS4_Annual_Supplemental_Questionnaire.pdf

Team member responsible for completing the report:	Peter Lo Dico
Team member email address:	plodico@saddlebrooknj.gov

1. Has the municipality revised its Stormwater Pollution Prevention Plan during the last calendar year?	Yes
2. Date of the last revised SPPP:	03/22/2005

1. Is the municipality complying with applicable State and local public notice requirements when providing for public participation in the ongoing development and implementation of the stormwater program?	Yes

1. Is the municipality reviewing and approving major development residential projects in accordance with the Residential Site Improvement Standards (RSIS)?	Yes
2. Did the municipality adopt a municipal stormwater management plan?	Yes
3. Most recent date of adopted municipal stormwater management plan:	03/29/2010
4. Status of this plan (if not adopted):	
5. Did the municipality adopt the municipal stormwater control ordinance provided by NJDEP without change?	Yes
6. Most recent date the municipality adopted a municipal stormwater control ordinance:	05/11/2006
7. What is the current status of the ordinance?	
8. Did the municipality submit the adopted municipal stormwater management plan to the appropriate county review agency for approval?	Yes
9. Most recent date the adopted Municipal Stormwater Management Plan was submitted to the appropriate county review agency for approval:	03/16/2005
10. If yes, did the municipality send the adopted municipal stormwater control ordinance to the appropriate county review agency for approval?	Yes
11. Most recent date the adopted Municipal Stormwater Control Ordinance was submitted to the appropriate county review agency for approval:	03/16/2005
12. Status of county review:	Approved
13. Did the municipality adopt the review agency's required amendments and resubmit to the county review agency?	
14. Is the Stormwater Control Ordinance in effect?	Yes
15. Most recent effective date of Stormwater Control Ordinance:	05/07/2009
16. Ordinance Number(s):	09-04

17. What is the current status of the adopted plan and ordinance?	
18. Are you reviewing projects as part of your site plan and sub-division approval process to ensure that they comply with your municipality's effective municipal stormwater control ordinance(s)?	Yes
19. How many projects that were subject to either the municipal stormwater control ordinance or the stormwater provisions of RSIS did the municipality review?	0
20. Does the municipal stormwater management plan contain a mitigation plan?	Yes
21. Has the municipality granted any variances or exemptions from the design and performance standards for stormwater management measures set forth in the approved municipal stormwater management plan and stormwater control ordinance(s)?	No
22. If yes, how many variances or exemptions from the design and performance standards has the municipality granted?	
23. If granted any variances or exemptions, did you submit a written report to the county review agency describing the variance or exemption and the required mitigation?	
24. Does the municipality's plan review evaluate storm drain inlet protection for solids and floatables in accordance with Attachment C of the permit?	Yes
25. Does the municipality require plans for long-term operation and maintenance for stormwater BMPs?	Yes
26. Are you ensuring that adequate long-term operation and maintenance of stormwater BMPs is being performed on property that you do not own or operate? **Please keep an inventory of stormwater BMPs indicating type, function and location in a format provided by the Department onsite and available for inspection or upon request.**	Yes
27. Briefly indicate how this is being accomplished (e.g., ordinance requiring operation and maintenance by private entity; operation and maintenance by you or other governmental entity):	Periodic inspections by municipal staff
28. Is the municipality's stormwater management plan re-examined at each re-examination of the master plan in accordance with N.J.A.C. 7:8-4?	Yes
29. Date re-examination report was last adopted:	03/29/2011

Report Details - Part C

Local Public Education Program

1. Have you developed a Local Public Education Program?	Yes
2. Have you conducted educational activities that total a minimum of 10 points (between January 1, 2017 and December 31, 2017)?	Yes

3. School Presentations (1 point per visit / maximum of 5 points per year):	0
4. Website (1 point):	1
5. Stormwater Display (2 points):	2
6. Giveaway (2 points):	2
7. Citizen Stormwater Advisory Committee (2 points):	0
8. Utilize Department Materials (2 points each / maximum of 4 points per year):	0
9. Poster Contest (2 points):	0
10. Stormwater Training for Elected Municipal Officials (3 points):	0
11. Mural (3 points):	0
12. Mailing (3 points):	3
13. Partnership Agreement / Local Event (3 points):	0
14. Ordinance Education (5 points):	5

1. Have you established a storm drain inlet labeling program?	Yes
2. Indicate the percentage or number of sectors labeled to date:	100%
3. Other Amount:	
4. Is your municipality maintaining the labels (i.e. replacing and/or repainting)?	Yes

Have you adopted and are you enforcing a regulatory mechanism for:

1. Pet Waste Ordinance:	Yes
2. Date adopted:	09/08/2005
3. Litter Ordinance/State Litter Statute:	Litter Ordinance
4. Date adopted:	09/08/2005
5. Improper Disposal of Waste Ordinance:	Yes
6. Date adopted:	09/08/2005
7. Wildlife Feeding Ordinance:	Yes
8. Date adopted:	09/08/2005
9. Containerized Yard Waste Ordinance / Yard Waste Collection Program Ordinance:	Yard Waste Collection Program Ordinance
10. Date adopted:	09/08/2005
11. Illicit Connection Ordinance:	Yes

12. Date adopted:	09/08/2005
13. Refuse Container/Dumpster Ordinance:	Yes
14. Date adopted:	10/14/2010
15. Private Storm Drain Inlet Retrofitting Ordinance:	Yes
16. Date adopted:	06/09/2011
17. Status of these ordinances (if not adopted):	
18. Method(s) of enforcement (e.g., summons, warnings, additional signs, etc.):	Warnings
19. Are you distributing the Pet Waste Information Sheets with pet licenses?	Yes

1. Has the municipality completed the mapping of the MS4 outfall pipes?	Yes
2. Date completed:	07/17/2009
3. Number of outfall pipes that you operate in the municipality:	6
4. How many MS4 outfall pipes are mapped?	6

1. Does the municipality have an ongoing program to detect and eliminate illicit connections to municipally owned or operated outfall pipes?	Yes
2. How many outfall pipes were inspected during the past calendar year?	6
3. Number of illicit connections detected during the past calendar year:	0
4. Number of illicit connections eliminated during the past calendar year: **Please attach, in a format provided by the Department, a list of all outfalls found to have an illicit connection since the inception of the program. The list must include the outfall location, receiving water body, source of illicit connection and the date the illicit connection was eliminated.**	0

1. In the past calendar year, were all required streets swept?	Yes
2. What was the total number of miles swept?	70

List the total amount of materials collected for each month since January 1, 2017, in tons.

3. Units:	Tons
4. January:	7.07
5. February:	12.05
6. March:	5.5
7. April:	41.85
8. May:	26.13
9. June:	20.78
10. July:	9
11. August:	8.39
12. September:	16.77
13. October:	16.95
14. November:	28.63
15. December:	5.96
16. Total (Note: 1.053 cubic yards = 1 ton):	199.08
17. Explain the reason if reporting zero (0) for a month above:	

1. Has the municipality completed repaving, repairing, reconstruction, or alterations on any road surfaces in direct contact with municipally owned or operated storm drain inlets?	Yes
2. Approximately what percentage of storm drains within the municipality currently meet the standard?	60

Stormwater facilities include, but are not limited to, catch basins, extended detention basins, low flow bypasses, underground detention, dry wells, manufactured treatment devices, pervious paving buffers, infiltration basins/trenches, sand filters, constructed wetlands, wet ponds, bioretention, rooftop vegetated cover, vegetative filters, and stormwater conveyance systems. Stormwater facility inventories that indicate the type, function, and location of the facility must be kept onsite and available for inspection or upon request in a format provided by the Department. The format is available as SPPP Form 13 at: http://www.nj.gov/dep/dwq/pdf/Tier_A/A%20-%20pdf%206.pdf.

1. Have you developed a Stormwater Facility Maintenance Program?	Yes

1. Were all stormwater facilities that you operate inspected?	Yes
2. Were any found to be in need of cleaning or repair in order to function properly?	Yes
3. During the past calendar year, were any stormwater facilities (excluding catch basins) cleaned?	Yes
4. Were repairs made?	N/A - no repairs needed
5. Describe repair(s) or if repairs have not yet been made, provide a schedule for the repair(s):	

1. Total number of catch basins that the municipality operates:	538
2. Total number of catch basins inspected:	538
3. Total number of catch basins cleaned:	76
4. Amount of materials removed from catch basins, in tons, during the past calendar year:	5
5. Units:	Tons

For all outfall pipes undergoing remediation through a scour remediation program, attach additional page(s) as necessary indicating the location of the outfall pipe (including the alphanumeric identifier), the repair start date, and the repair completion date.

1. Has the municipality developed a prioritized list of outfall pipes requiring outfall pipe stream scouring remediation?	Yes

1. Does the municipality have a permanent structure for all de-icing material storage?	Yes
2. If sand is being stored outside, is it set back 50 feet from storm sewer inlets, ditches or other stormwater conveyance channels, and surface water bodies?	N/A - no sand stored outdoors

1. Is the municipality implementing Standard Operating Procedures for vehicle fueling and receiving of bulk fuel deliveries at maintenance yard operations?	N/A - no fueling

1. Is the municipality implementing Standard Operating Procedures for vehicle maintenance and repair activities at maintenance yard operations?	N/A - no maintenance or repairs

1. Is the municipality implementing Good Housekeeping Practices for all materials or machinery listed in the Inventory Requirements for Municipal Maintenance Yard Operations (including maintenance activities and ancillary operations)?	Yes

1. Has the municipality implemented measures to properly handle the discharge of equipment and vehicle wash wastewater from municipal maintenance yard operations?	Yes
2. Please indicate which option you implemented to eliminate the unpermitted discharge:	Ceased the discharge (no longer wash onsite)
3. Date the management measure was implemented:	12/01/2008
4. What is the NJPDES permit number that authorizes the discharge of vehicle and equipment wash wastewater?	
5. Is the municipality maintaining records of vehicle and equipment washing?	N/A - we do not wash our vehicles

1. Did the municipality conduct training for employees on stormwater related topics as required under the MS4 permit (e.g., police officers trained on ordinances)?	Yes
2. List date(s) of employee training:	12/28/2017

Does the municipality share services with another entity to satisfy a permit requirement?	Yes

For each of the following, indicate if you are relying on another entity to satisfy all or part of any permit requirements. Please provide additional information for any "Yes" answers in the provided Comments field.

1. Public notice:	No
2. Comments:	We provide our own public notice.
3. Ensure compliance with RSIS for stormwater management:	No
4. Comments:	
5. Municipal stormwater management plan:	No
6. Comments:	
7. Municipal stormwater control ordinance:	No
8. Comments:	
9. Long term operation and maintenance of BMPs (post-construction):	No
10. Comments:	
11. Storm drain inlet design standard (post-construction):	No
12. Comments:	
13. Local public education program:	No
14. Comments:	
15. Storm Drain Inlet Labeling Program:	No
16. Comments:	
17. Illicit connection elimination program:	No
18. Comments:	
19. Street sweeping:	No
20. Comments:	
21. Storm drain inlet retrofitting:	No
22. Comments:	
23. Maintenance of municipally operated stormwater facilities:	No
24. Comments:	
25. Outfall pipe stream scouring:	No

26. Comments:	
27. De-icing and sand storage:	No
28. Comments:	
29. Fueling operations:	Yes
30. Comments:	We share with Rochelle Park, NJ
31. Vehicle maintenance:	No
32. Comments:	
33. Good Housekeeping:	No
34. Comments:	
35. Vehicle and Equipment Washing:	Yes
36. Comments:	We share with Rochelle Park, NJ
37. Employee Training:	No
38. Comments:	

1. Did your Public Complex have any incidents of non-compliance?	No
2. Identify the steps being taken to remedy the noncompliance and to prevent such incidents from recurring. **(If the text box is not large enough to complete this section, please provide your report as an attachment and upload it on the next screen. Please reference the attachment in the textbox.)**	

Certifier: Peter LoDico
Certifier ID: PETELODICO
Challenge/Response Question: What is your favorite car?
Challenge/Response Answer: ******
Certification PIN: ******
Date/Time of Certification: 04/17/2018 10:21

"I certify under penalty of law that this Annual Report and Certification and all attached documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate this information. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering this information, the information in this Annual Report and Certification and all attached documents is, to the best of my knowledge and belief, true, accurate and complete.

"I certify that the municipality is in compliance with its stormwater program, Stormwater Pollution Prevention Plan (SPPP) and the NJPDES Tier A Municipal Stormwater General Permit No. NJG0151521 except for any incidents of non-compliance which are identified herein. For any incidents of non-compliance, the Annual Report identifies the steps being taken to remedy the non-compliance and to prevent such incidents from recurring.

"I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information."

Please note, no changes will be allowed to be made to this report upon its certification. If you need to correct or modify the report after certification, please contact your case manager at (609) 633-7021 so they may enable that function.

Peter LoDico	04/17/2018
General	**Date**

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 2

VEHICLE WASHING LOG

(ADDITIONAL LOGS IN FILES AND LOGGED ON COMPUTER)

SADDLE BROOK DEPARTMENT OF PUBLIC WORKS

VEHICLE INVENTORY

FEBRUARY 2018

VEH.#	VEH. YR.	VEH. MAKE:	COLOR:	VIN.#	PLATE #:
5410	2017	Ford F250 p/u	White	1FTBF2B65HEF26076	26124MG
5411	2014	Ford Truck	Red	1FDUF5HT3EEA26576	MG98437
5412	2000	Ford F 350	Red	1FTRF3867EEA27246	MG98422
5413	2013	Ford Truck/low Boy	White	1FDUF4HY8DEA57262	MG98436
5414	2017	Ford F250 P/U	White	1FTBF2B67HEF26077	26125MG
5415	2014	International 12 yd	Red	1HTWPAZT2EH014521	10931MG
5416	2014	International 12 yd	Red	1HTWPAZT0EH014520	10932MG
5417	2000	International Garb.	Red/w	1HTGHADTXYH279345	MG62573
5418	2002	International Truck	Red	1HTWDAAR82J045804	MG51388
5419	2005	International Truck	Red/w	1HTWGAZT15J133699	MG62580
5420	2007	Ford P/U Truck	Red	1FTWF31P97EA47028	MG71063
5421	2007	Ford P/U Truck	Red	1FTWF31P07EA47029	MG71061
5422	2014	Ford Low Boy Dump	Red	1FDUF4HY6EEA43233	MG98432
5423	2012	Volvo Garbage Truck	White	4V5KC9EG9CN558625	MG96602
5424	2014	Ford Truck	Red	1FTRF3B69EEA27247	MG98421
550	2014	Ford Pick up	Red	1FTRF3B65EEA27245	MG98420
551	2007	Ford F350 Pick up	Red	1FTWF31507EA47031	MG71062
580 M	2002	Case Backhoe	Orange	JJG0309610	MG44813
580 N	2013	Case Backhoe	Yellow	JJGN58SNCDC586062	MG98419
621C	1999	Case frontend loader	Orange	JEE0122840	MG39433
Sewer Jet	1994	International	Red	1HTSCACR9RH599949	MG19455
Sweeper	2005	Elgin	White	P4393S	MG62569
Camera Truck	2004	Ford Van	White	1FTSS34P544B52908	MG65144

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 3

EROSION CONTROL MAINTENANCE LOGS,

DPW INSPECTS ROADS DURING STREET SWEEPING EVENTS WITH LOCAL STREETS EVALUATED WHICH ROADS REQUIRE PRIORITY. EROSION PROBLEMS ARE REPORTED TO ROBERT HICSWA, WITH ANY AREAS ON CONCERN IDENTIFIED, PRIORITIZED AND REPAIR IN ACCORDANCE WITH NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARDS.

(ADDITIONAL RECORDS IN FILES AND LOGGED ON COMPUTER)

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 4

STREET SWEEPING LOGS,

STREETS ARE SWEEPING OCCURS ON A DAILY BASIS WITH EACH STREET CLEANED AT LEAST ONCE PER MONTH. STREETS ARE ALSO EVALUATED TO DETERMINE WHICH ROADS REQUIRE PRIORITY.

(ADDITIONAL RECORDS IN FILES AND LOGGED ON COMPUTER)

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 5

YARD WASTE COLLECTION LOGS,

YARD WASTE IS COLLECTED PERIODICALLY IN ACCORDANCE WITH THE ATTACHED SCHEDULES. YARD WASTE CONFORMS TO

YARD WASTE COLLECTION ORDINANCE 9/8/2005.

(ADDITIONAL RECORDS IN FILES AND LOGGED ON COMPUTER)

Emergencies after hours please contact the Saddle Brook Police Department at (201) 843-7000

Acceptable Yard Waste Includes

Plant trimmings, ivy, tree limbs and branches. Trimmings must be in a container or biodegradable bag. Branches must be cut to 4ft or shorter and be less than 3" in diameter. Branches must be bundled and tied. All containers and bundles must weigh no more than 30 lbs. **Wood boards, decking, fencing, construction material, propane tanks, windows, doors, wood, stumps, toilets, tubs sinks, car batteries, pools, liners, concrete, dirt, stone brick, block, tires, etc. are NOT acceptable.

Grass Clippings

Homeowners must place grass clippings in a covered trash container or biodegradable paper bag, not to exceed 30 pounds per container. Grass should be placed at curbside for pick up on your scheduled Section Yard Waste Pick-up day. Do not place grass clippings at curbside earlier than 7:00 p.m. the evening prior to pick up. Homeowners are encouraged to compost their yard waste by leaving grass clippings to mulch gardens.

Leaf Collection

November 1st until December 10th, **leaves must be placed at the curb in biodegradable bags or containers not to exceed 30 lbs.** Containers and bags should not be placed at curb before 7:00 p.m. the night before collection. (Leaf pick-up same day as Yard Waste Collection Schedule*)

Solid Waste Collection

Garbage including bulk items: large household items such as a couch, chair, mattress, box spring, dresser, table or any non-appliance type item is picked up by Gaeta Recycling every Wednesday and Saturday excluding Holidays. Missed collections call 201-843-3064

NOTE : White Goods, Scrap Metal, Electronics & Computers are picked up by appointment only. To schedule a pick-up, please contact the Department of Public Works at 201-843-3064 Mon-Fri 8:30 a.m.-3:30 p.m.

Yard Waste Collection Schedule

The Township is divided by four sections. *Please remove all cars from roadways between 7:00 a.m. to 3:00 p.m. for Street Sweeper.

Section 1 - Every Monday :

All streets from Wilson Street south to Colonial Avenue; from Fairlawn Parkway west to North Midland Avenue.

Section 2 - Every Tuesday :

All streets from South Broadway south from Fairlawn Parkway east to Saddle River Road including Jamros Terrace, Kuhn Drive, Bell Avenue, Birk St. and Riverview Avenue

Section 3 - Every Wednesday :

All Streets from Market Street, Southside of Market Street only, south to Outwater Lane, from Hollywood Avenue west to Midland Avenue

Section 4 - Every Thursday :

All Streets from Pehle Avenue south to Market Street (north side of Market Street only), from Saddle River Road

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 6

CATCH BASIN CLEANING LOGS,

CATCH BASINS ARE CLEANED ON AN ANNUAL BASIS

BASIN INLETS ARE CHECKED PRIOR TO EACH MAJOR STORM EVENT (TYPICALLY RANGING FROM A ONE (1) TO TWO (2) INCH STORM)

(MAINTENANCE RECORDS ARE LOGGED ON COMPUTER)

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 7

OUTFALL INSPECTION LOGS,

OUTFALLS INSPECTIONS ARE THE RESPONSIBILITY OF BERGEN COUNTY

(SEE ATTACHED EMAIL COMMUNICATION)

HOWEVER, PERIODICALLY OUTFALLS ARE INSPECTED BY DPW PERSONNEL

COMPLETED

DATE:_____

OUTFLOW #1 No Flow – clear – No obstructions

#2 No Flow – clear - No obstructions

#3 Low Flow – clear – No obstructions

#4 No Flow – clear – No obstructions

#5 Low Flow – clear – No obstructions

#6 Low Flow – clear – No obstructions

#7 No Flow – clear – No obstructions

→ Illicit Connection – post 72 hr period

→ Securing

see pages 15-17 part IV of permit

Illicit Connection Inspection Report FORM

COMPLETED

DATE: 6/28/18

OUTFLOW #1 No Flow – clear – No obstructions

#2 No Flow – clear - No obstructions

#3 Low Flow – clear – No obstructions CLEAR

#4 No Flow – clear – No obstructions

#5 Low Flow – clear – No obstructions CLEAR

#6 Low Flow – clear – No obstructions CLEAR

#7 No Flow – clear – No obstructions

COMPLETED

DATE: 7/13/12

OUTFLOW #1 No Flow – clear – No obstructions

#2 No Flow – clear - No obstructions

#3 Low Flow – clear – No obstructions

#4 No Flow – clear – No obstructions

#5 Low Flow – clear – No obstructions

#6 Low Flow – clear – No obstructions

#7 No Flow – clear – No obstructions

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 8

DRAIN INLET REPAIR LOGS

DRAIN INLETS ARE INSPECTED PRIOR TO EACH MAJOR RAIN EVENT AND REPAIRED AND RETROFITTED IN ACCORDANCE TO THE REQUIREMENTS OF NJPDES PERMIT NJG0151521. ATTACHED ARE TYPICAL INSPECTION LOGS

(ADDITIONAL RECORDS IN FILES AND LOGGED ON COMPUTER)

SEC.	BASIN	TYPE	STREET LOCATION	DATE	COND	NEEDS CLEANING	DATE CLEANED/ REPAIRED
1	1	D/B	5-7 ROSARIO CT.	9/6/18	O/C		
1	2		4-6 ROSARIO CT.				
1	3	O	341 WILSON ST.				
1	4		344-352 WILSON ST.				
1	5		153-149 WILSON ST				
1	6		148 WILSON &PINE		POOR	X	
1	7		613 PINE & WILSON			X	
1	8		135 SCHEPIS AVE.	9/10/18			
1	9		136 SCHEPIS AVE.				
1	10		145 SCHEPIS AVE.				
1	11		159 SCHEPIS AVE.				
1	12		152 SCHEPIS AVE.				
1	13		189 SCHEPIS & SPRUCE	9/10/18	OK		
1	14		201 SCHEPIS & SPRUCE		BAD		
1	15		576 SPRUCE AVE.		OK		
1	16	D/BV.B	200-196 SCHEPIS AVE.				
1	17		575 MAPLE AVE.				
1	18		576 MAPLE AVE.				
1	19		229 SCHEPIS & ASH	9/10/18			
1	20		237 SCHEPIS & ASH				
1	21		234 SCHEPIS AVE.				
1	22		249 SCHEPIS & ELM				
1	23		259 SCHEPIS & ELM				
1	24		254 SCHEPIS AVE.				
1	25		269 SCHEPIS & OAK				
1	26		277 SCHEPIS & OAK				
1	27		274-278 SCHEPIS AVE.				
1	28		299 SCHEPIS AVE.				
1	29		302 SCHEPIS AVE.				
1	30	D/B	326 SCHEPIS & MIDLAND AVE.				
1	31	D/B	135 EVANS & FAIRLAWN PKWY.	9/6/18		X	
1	32	M	165-161 EVANS PL.	9/10/18			
1	33	M	164-160 EVANS PL.				
1	34	M	159-155 HERBERT TERR.				
1	35	M	160-162 HERBERT TERR.				
1	36		529 FAIRLAWN PKWY &HERBERT	9/6/18	O/C	X	
1	37	M	273-269 HAYES DR.	9/10/18			
1	38	M	272-268 HAYES DR.				
1	39	O	251 FLORAL LA				
1	40	-	227 FLORAL LA				
1	41		219-213 FLORAL LA				

Needs rebuilt use same grate

REUSE OLD

WHAT IS IN STORM WATER?

You've learned about the three ways storm water can move (soak in, run off, flow into). Let's learn more about its journey. It's possible for storm water to pick up many different pollutants as it flows over the land. This produces a **cumulative** effect and can greatly decrease water quality. The pollutants in storm water can make it unsafe for humans, plants, and animals. The pollution in storm water is considered **nonpoint source pollution**.

So where does all this storm water pollution come from? Lots of places. Travel through the maze to see some examples. You'll see why storm water management is important and it's up to all of us to do our part to keep it clean. On page 13 you'll learn ways to prevent pollution, called **Best Management Practices**, or **BMPs**. Fill one in under each type of pollutant.

Now try to unscramble the names of the pollutants you traveled through in the maze to learn how they enter storm water and why they are harmful.

1. lois/islt _____
Can enter storm water from construction sites or cleared land. Can block sunlight in streams and fill in waterways.
BMP? _____

2. ador slta _____
Used in icy conditions; it stays on the road until a storm washes it down a storm drain. Can change the **salinity**, making it hard for many plants and animals to live.
BMP? _____

3. eirttl _____
Enters storm water through careless actions by humans. It's an eyesore and it can harm animals, clog pipes, and degrade water quality.
BMP? _____

4. tep ewsat _____
Enters storm water when owners don't clean up after their animals. It can cause algae growth, which hurts lakes and can make people sick.
BMP? _____

5. ferretziil _____
Many people use too much of this on their lawns, and it can run off after a storm. It can cause breathing difficulties in people, and algae growth in water, which can lower the amount of oxygen in the water.
BMP? _____

6. lio/sga _____
Drips from cars and stays on roadways until a storm washes it down a storm drain. It can make people and animals sick.
BMP? _____

7. speesdtici _____
Used on agricultural crops, but also used in residential areas to control pests. It gets washed off of crops or lawns and can enter storm water. It can make people and animals sick.
BMP? _____

Storm Water Dictionary:
algae: simple plants without roots that grow in water and can worsen the water quality
cumulative: increasing with each addition
nonpoint source pollution: pollution that comes from many different sources, making it difficult to pinpoint one specific source
salinity: saltiness of water

One gallon of used oil can ruin 1,000,000 gallons of fresh water, enough to supply 50 people with water for a year.

What could happen if the holes in a storm drain were tiny?

HABITAT IM
STORM WAT

Choose from the following words to fill in the blanks
(some of the words may be used more than once):

flow into
habitat
sediment
water
streams
birds
fish
homes
migrating
animals
human
nonpoint
impermeable
pollution
filtering
runs off
storm water
wetlands
bays
urban
recharge
mixing
environments

So far you've learned what storm water is, how it flows and where it goes, and why _____ can be such a problem with storm water. Storm water also has a big impact on habitats, including human, plant, and animal habitats. **Habitats** are the places where plants or _____ naturally make their _____. Our human habitat may include a house, school, and all the places in between, but for a duck, _____ may include a few acres of wetland.

All living things need _____, and storm water is one way habitats acquire water. Storm water can help _____ wetlands and keep _____ flowing at a healthy level. However, as you already know, pollution can be a major problem in _____, especially storm water that _____ _____ surfaces. If storm water carries pollution with it, it can have many harmful effects on plant and animal **habitats**. Storm water can also harm habitats if it carries too much water with it. This can upset the delicate balance of nature.

Wetlands are important _____ for many reasons. They provide food and protection for _____ birds, homes for many wildlife and fish species, and protection from floods. Wetlands are also able to increase water quality by _____ out many pollutants. However, _____ have limits on how much _____ they can absorb. If human

Storm Water Dictionary:
adapted: adjusted to a particular environment
degrade: worsen
habitats: the places where plants or animals naturally make their home
turbid: cloudy because of sediment like soil

Cities as diverse as Portland, Oregon; Ottawa, Ontario; Chicago, Illinois; and Tokyo, Japan are reducing storm water runoff by an average of 54% by creating "green roofs"—roofs planted with grass and flowers.

MANAGEMENT

such as permeable asphalt and wetland storm water ponds. See pages 12 and 13 for things you can do.

Part of a storm water manager's job is looking ahead to the future. Can you think of some ways your town's storm water management needs could change in the future? What happens when towns grow and new neighborhoods are built? Remember, the amount of storm water is part of nature's cycle throughout history, but the amount of runoff changes when we change the way we use the land.

Storm Water Dictionary:
Storm water management: controlling what's in storm water and where it goes

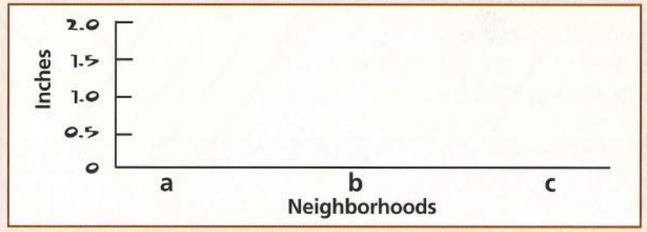
ACTIVITY

Now it's your turn to be the manager. Imagine the same rainstorm from page 2, with 1/2 inch of rain falling each hour for three hours, but this time it's falling on three different neighborhoods, each with a different management plan in place. Fill in the graph to see why storm water management is important. Graph the amount of storm water (in inches) remaining in each neighborhood two hours after the storm event. Which neighborhood would you prefer to live in?

Neighborhood A: Has no storm water management in place, and all of the rain forms a giant puddle, flooding the mall parking lot. Two hours after the storm, 85% of the storm water remains.

Neighborhood B: Has three storm drains, but none are located at the lowest part of the neighborhood. The storm drains catch a lot of the water, but two hours after the storm, 35% of the storm water remains.

Neighborhood C: Has an extensive series of storm drains in place, and all storm drains are placed in well-designed spots, like the bottom of hills. It also has more surface area left unpaved so rainwater can soak into the ground. Two hours after the storm, only 5% of the storm water remains on the streets.



What could happen if there weren't ANY grates on a storm drain? _____

STORM WATER

Pull on your rain boots and try to imagine what your town would be like without storm drains. Storm water managers have the tough job of keeping our cities from flooding and keeping storm water clean. The term **storm water management** means controlling storm water and where it goes. In our history, storm water management goes hand in hand with the development of towns and cities.

Early settlements had no system of storm water management. Dirt streets turned into mud streets after rainstorms because water couldn't drain and pooled in low places. This led to towns developing wooden walkways on main streets, so people could avoid the muddy mess caused by storm water. The city of Minneapolis was a pioneer in storm water management when it installed storm drains and built an underground network of pipes to channel storm water to streams in 1870. More and more cities developed similar systems as cities grew and streets were paved.

While early efforts were aimed at primarily removing storm water from towns and urban areas, today storm water management also means keeping the storm water free of pollutants. As our human environment changes, so do our approaches to storm water management. Today storm water managers have many tools and options available to keep cities from flooding and to help keep storm water clean. New technology and methods continue to be developed

A typical city block generates nine times more runoff than a forested area of the same size.

IMPACTS FROM WATER POLLUTION

impacts such as storm water carry too much pollution into a wetland, the entire habitat can change. This can eventually kill fish and plants, **degrade** the water quality, and destroy wildlife habitat.

Streams and rivers can also be affected by storm water. Storm water can benefit streams by keeping streamflow levels healthy. Storm water can also harm streams if too many pollutants and sediments _____ the river. If this happens, the water can become **turbid**. This can prevent _____ and other organisms from receiving the sunlight they require. _____ can cover fish spawning beds, clog fish gills, and slowly fill in our waterways.

Bays and estuaries can also be affected by _____. Bays and estuaries are known as _____ zones, because they are located where fresh-water rivers meet salty oceans. There are many plants and animals that are **adapted** to this unique environment. If there is too much freshwater in bays or estuaries, the salinity can change, and the types of animals can be altered. Silt or _____ from storm water can cover seagrass beds and disrupt important aquatic nursery areas.

And finally, our urban habitats can be affected by storm water. Most people don't think of urban areas as wildlife habitats, but many animals, especially _____, are adapted to living in populated environments. Cities are also important for people, and we can be affected by storm water pollution, just like wetlands, streams, and _____ and estuaries. Can you think of a way our _____ habitat can be damaged by storm water pollution?

Where is the creek, river, or stream closest to the storm drain you're observing? Write in the approximate distance. _____

Things You Can Do About Storm Water

You know that storm water soaks in, runs off, and flows into various places, and you know storm water can be harmful when it picks up and carries pollutants to streams, wetlands, and other areas. However, problems created by us can be solved by us.

Many steps can be taken to help minimize storm water damage. These steps are known as **Best Management Practices** or **BMPs**. Some BMPs include reducing pollution, reducing the area of impermeable surfaces, and cleaning the storm water before it enters streams or wetlands.

Water managers must decide which BMPs work best for their city. Options that work in one town may not work as well in another. Managers must also consider the typical amount of storm water, current and future land use, maintenance, cost, soil type, and city regulations.

We all have opportunities to help reduce the negative effects of storm water in our homes, yards, and communities. People often don't even know they are adding to pollution that will be carried away by storm water.

Wetlands, both natural and artificial ones, are effective tools for removing pollutants from the water. In fact, in 1981, the city of Arcata, California, built a 96-acre artificial wetland instead of a traditional sewage treatment plant to manage all of its wastewater and storm water.

Water

...on? Where Does It Go?

the **ground water**. On paved or hardened surfaces, storm water must *run off*. A small amount of storm water can also evaporate back into the air. The third way storm water can move is to *flow into* storm drains, rivers, wetlands, and estuaries.

See if you can match the places that water soaks in, runs off, or flows into on the picture. Find the raindrops labeled A, B, C, and D. Draw a path to show the journey each raindrop takes from where it lands to where it ends up, using a different colored pencil for each raindrop. Which drop travels the farthest across an impermeable surface? Which drop do you think could pick up the most pollutants? Which drop travels the least and probably has fewer pollutants?

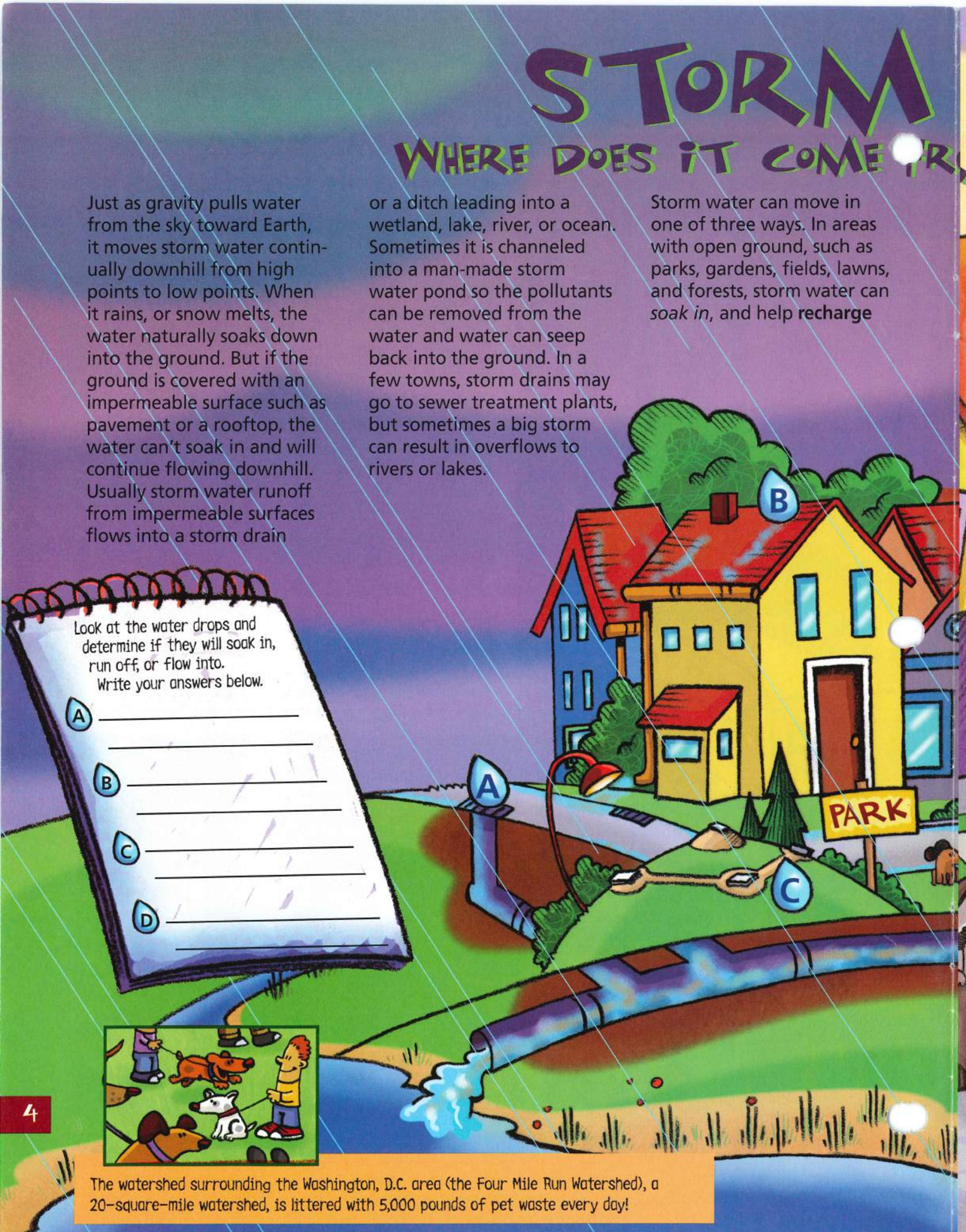
Storm Water Dictionary:
ground water: underground water that helps supply wells, springs, and wetlands
...harge: refill with water

Find the closest storm drain to your house or school and draw it here.

STORM
WHERE DOES IT COME FR

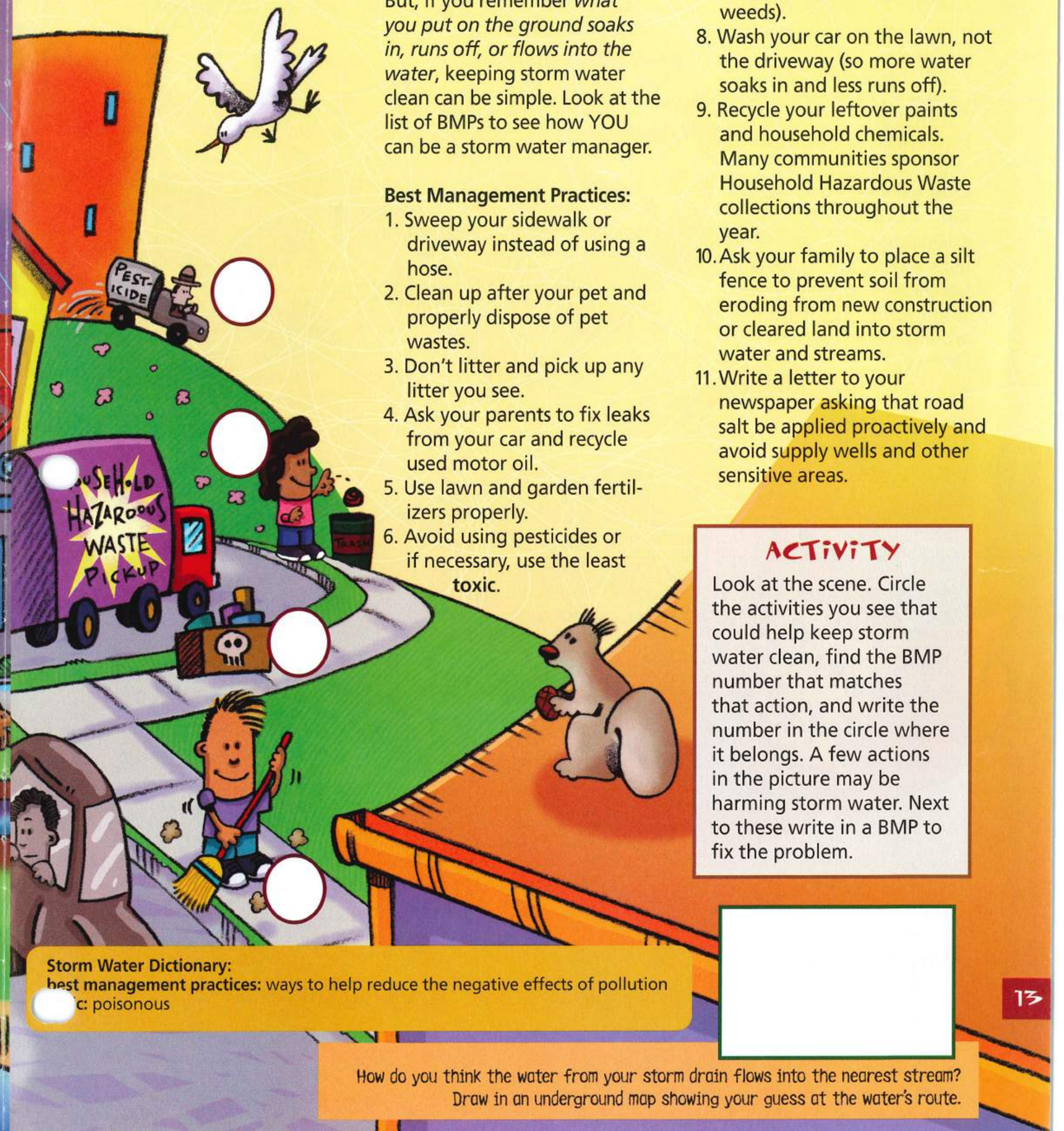
Just as gravity pulls water from the sky toward Earth, it moves storm water continually downhill from high points to low points. When it rains, or snow melts, the water naturally soaks down into the ground. But if the ground is covered with an impermeable surface such as pavement or a rooftop, the water can't soak in and will continue flowing downhill. Usually storm water runoff from impermeable surfaces flows into a storm drain or a ditch leading into a wetland, lake, river, or ocean. Sometimes it is channeled into a man-made storm water pond so the pollutants can be removed from the water and water can seep back into the ground. In a few towns, storm drains may go to sewer treatment plants, but sometimes a big storm can result in overflows to rivers or lakes.

Storm water can move in one of three ways. In areas with open ground, such as parks, gardens, fields, lawns, and forests, storm water can *soak in*, and help **recharge**



The watershed surrounding the Washington, D.C. area (the Four Mile Run Watershed), a 20-square-mile watershed, is littered with 5,000 pounds of pet waste every day!

DO TO PREVENT POLLUTION!



But, if you remember *what you put on the ground soaks in, runs off, or flows into the water*, keeping storm water clean can be simple. Look at the list of BMPs to see how YOU can be a storm water manager.

Best Management Practices:

1. Sweep your sidewalk or driveway instead of using a hose.
2. Clean up after your pet and properly dispose of pet wastes.
3. Don't litter and pick up any litter you see.
4. Ask your parents to fix leaks from your car and recycle used motor oil.
5. Use lawn and garden fertilizers properly.
6. Avoid using pesticides or if necessary, use the least **toxic**.
7. Start composting your yard waste (like grass clippings and weeds).
8. Wash your car on the lawn, not the driveway (so more water soaks in and less runs off).
9. Recycle your leftover paints and household chemicals. Many communities sponsor Household Hazardous Waste collections throughout the year.
10. Ask your family to place a silt fence to prevent soil from eroding from new construction or cleared land into storm water and streams.
11. Write a letter to your newspaper asking that road salt be applied proactively and avoid supply wells and other sensitive areas.

ACTIVITY

Look at the scene. Circle the activities you see that could help keep storm water clean, find the BMP number that matches that action, and write the number in the circle where it belongs. A few actions in the picture may be harming storm water. Next to these write in a BMP to fix the problem.

Storm Water Dictionary:
best management practices: ways to help reduce the negative effects of pollution
toxic: poisonous

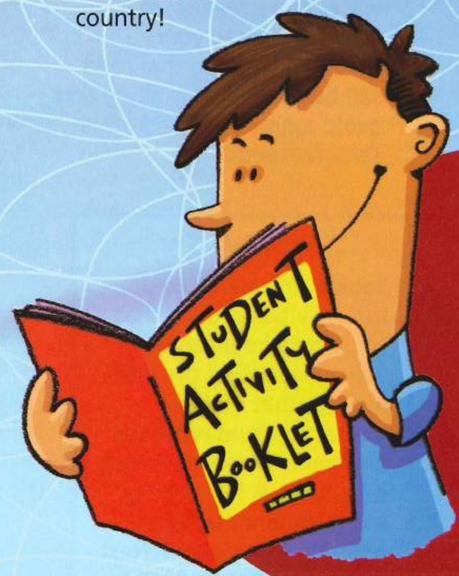
How do you think the water from your storm drain flows into the nearest stream? Draw in an underground map showing your guess at the water's route.

STORM WAM WATER?

Storm water is an issue no matter where you live, if it's in a big city, small town, near a wetland, or in the desert. All areas must manage storm water. Kids all over the country are learning how they can help prevent storm water pollution. Check out some storm water heroes from around the country!

HERO STORY #1

We're heroes in Tennessee. Students in Nashville, Tennessee, are protecting their watershed by labeling the city's thousands of storm drains. More than 50 students are working with the Cumberland River Compact and Metrowater services to protect the Cumberland River through this ongoing project. The labels help remind people to prevent pollution because storm drains flow directly to streams.



HERO STORY #2

We're heroes in Indiana. High school students in Allen County, Indiana, worked with the Allen County Partnership for Water Quality to design a student activity booklet. At the Three Rivers Festival, 1,000 elementary school students received a copy.

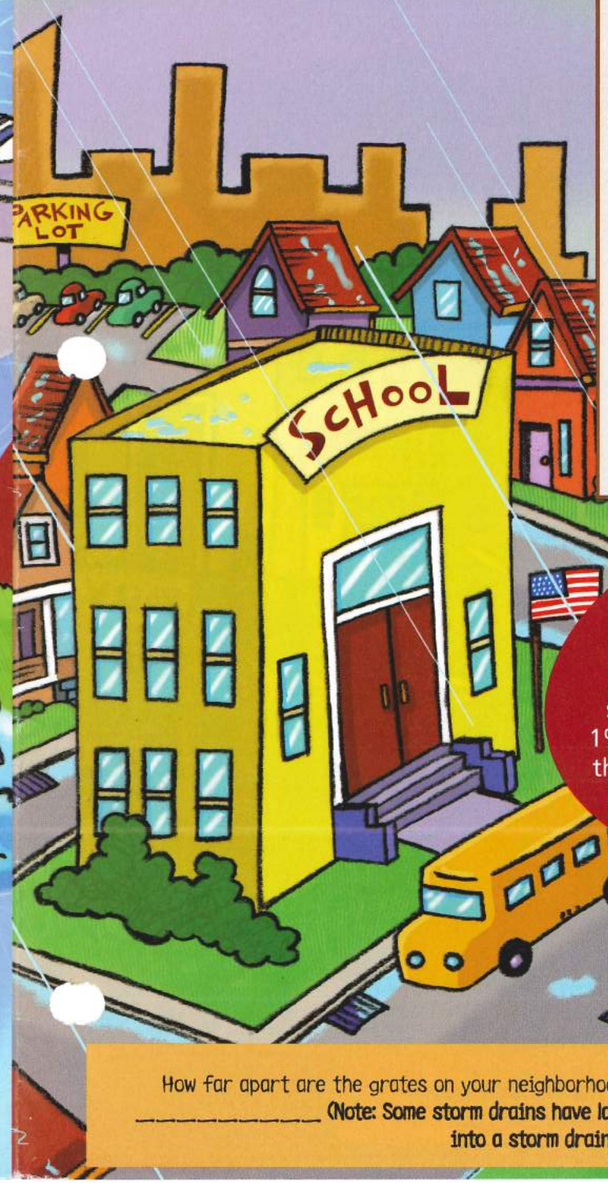
Stream monitoring can help regulate the health of local streams. Today, 1000 streams and rivers and 2,800 ponds, lakes, and wetlands are monitored by local groups.

A-MAZE-ING STORM WATER

Try this activity to see how storm water can travel. Cover a piece of cardboard with wax paper. Use clay to create a maze similar to city streets, parks, and streams. Add sponges to represent **permeable** areas, such as wetlands or soccer fields. Place a large drop of water at the start of your maze and tilt the cardboard until the water travels to the end. As it moves, you can have it travel through spots containing ingredients that represent pollution. How does the appearance of the water change? Would you want to swim in this water? How much water stayed in the sponges?

POLLUTION

powdered cocoa	=	sediment or soil
green food coloring	=	fertilizers
candy sprinkles	=	pet waste
paper clips	=	litter
grass clippings	=	grass
vegetable oil or soy sauce	=	oil & gas from cars
salt	=	road salt



TRY THIS

Here is a math problem to show how storm water runs off different surfaces. Imagine a 3-hour rainstorm. Each hour, 1/2 inch of rain falls to the earth. On a soccer field, 60% of the rain soaks into the ground. On a parking lot, only 1% of the water soaks into the concrete. At the end of three hours, how much rain (in inches) has run off from both surfaces? Check the back for the answer.

How far apart are the grates on your neighborhood storm drain? Observe carefully and write the answer in here.

_____ **(Note: Some storm drains have large openings. Always use care, and NEVER reach any body parts into a storm drain. Stay on the sidewalk, wear bright colors, and go with a buddy.)**

WHAT IS STORM WATER?

Storm water is water that falls from the sky as rain or snow. Wherever you live, whether it's a very wet or very arid climate, storm water occurs. When water falls to earth as rain or snow, most of it seeps into the ground. If the ground is **saturated**, frozen, or covered with **impermeable surfaces** like a concrete sidewalk or a paved parking lot, the water flows over the land, creating what's known as storm water **runoff**.

Maybe you've heard people say that rain washes the streets clean, but have you ever thought about where that water ends up? Storm water runoff can add needed water to streams, lakes, and wetlands, but it can also cause flooding, erosion, and pollution problems. Storm water by itself is necessary and good, but when it passes through urban areas like cities or towns it can pick up pollution, and this can become a big problem.

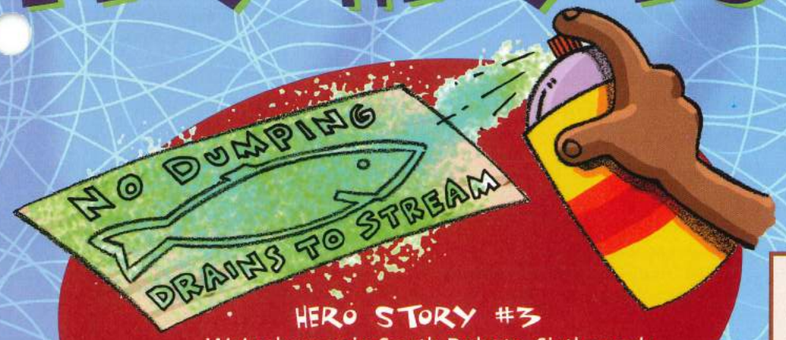
Storm water **discharges** are generated by runoff from land and impermeable areas such as paved streets, parking lots, and building rooftops during rain and snowfall. These surfaces often contain **pollutants** that are picked up by the flow of storm water and can adversely affect the water quality.

Look for these corner boxes throughout this booklet. On one side you'll find fascinating facts about storm water, and on the other side you'll find questions to help you learn more about your nearest storm drain.

Storm Water Dictionary:
discharges: releases of water into lakes, rivers, oceans, or soil
impermeable surfaces: surfaces that don't absorb water or let it pass through
permeable: allows water to soak in
pollutant: a material that harms the given use of the water
runoff: water that flows over the land after a rainstorm
saturated: to fill or soak something completely

In AD 47, the Romans brought their skill of water collection to England and helped build drains all over the country.

STORM WATER HEROES

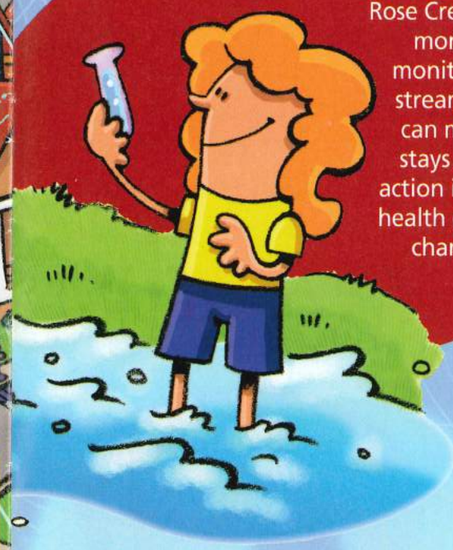


HERO STORY #3

We're heroes in South Dakota. Sixth-grade students in Sturgis, South Dakota, have labeled over 300 storm drains to help keep streams, rivers, lakes and wetlands clean and healthy.

HERO STORY #4

We're heroes in Georgia. A Girl Scout troop in Woodstock, Georgia, has adopted Rose Creek and regularly monitors its health. By monitoring, or checking, the stream regularly, the Scouts can make sure the stream stays healthy, and take action if they notice the health of the stream changing.



We can all be heroes. If you know storm water heroes, we'd like to hear about them!

ACTIVITY

Take this quiz to see what you've learned about storm water!

1. Storm water is water that falls from the sky as rain or snow. True/False
2. Storm water runoff can contain pollutants. True/False
3. Storm water can soak in, run off, and _____.
4. Pets can contribute to storm water pollution. True/False
5. BMP stands for _____.
6. Storm water pollution can harm fish, birds, and wetlands. True/False
7. One way kids can help keep storm water clean is to _____.

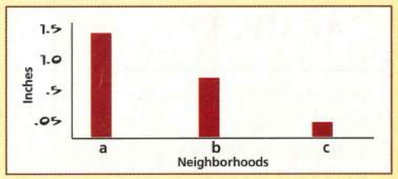
Next time it rains, watch the water on the sidewalks, streets, and parking lots. Do puddles form or does all the water flow into storm drains? How many storm drains are in your neighborhood?

ANSWER KEY

What Is Storm Water? p. 2-3
After the rainstorm, 0.6 inches have run off from the soccer field, and 1.485 inches have run off from the concrete.

Storm Water, Where Does It Come from? Where Does It Go? p. 4-5
a. flows into
b. runs off
c. soaks in
d. runs off and flows into

Storm Water Management, p. 6-7



What Is In Storm Water? p. 8-9

Answers to word scramble:
soil/silt, road salt, litter, pet waste, fertilizer, oil/gas, pesticides

Habitat Impacts from Storm Water Pollution, p. 10-11
Correct answers, in order: pollution, animals, homes, habitat, water, recharge, streams, storm water, runs off, habitats, migrating, filtering, wetlands, pollution, flow into, fish, sediment, storm water, mixing, sediment,birds, bays, human

Things You Can Do to Prevent Storm Water Pollution, p. 12-13

Storm Water Heroes, p. 14-15
Quiz answers:
1. true
2. true
3. flow into
4. true
5. best management practice
6. true
7. any answer from the list on page 13

STORM WATER IS BROUGHT TO YOU BY:

Indiana Department of Natural Resources
Mission: To protect, enhance, preserve, and wisely use natural, cultural, and recreational resources for the benefit of Indiana's citizens through professional leadership, management, and education. www.in.gov/dnr

St. Johns River Water Management District
Mission: We will ensure the sustainable use and protection of water resources for the benefit of the people of the District and the state of Florida. http://sjrwmd.com

Maryland Department of Natural Resources
Mission: The Department of Natural Resources preserves, protects, enhances and restores Maryland's natural resources for the wise use and enjoyment of all citizens. www.dnr.state.md.us/

California Department of Water Resources
Mission: To manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments. wwwdwr.water.ca.gov/

Project WET Foundation
Mission: To reach children, parents, educators and communities of the world with water education. Project WET's Kids in Discovery series (KIDs) is designed to help children discover the scientific, natural, cultural and historical wonders of their world. www.projectwet.org

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Discover Storm Water

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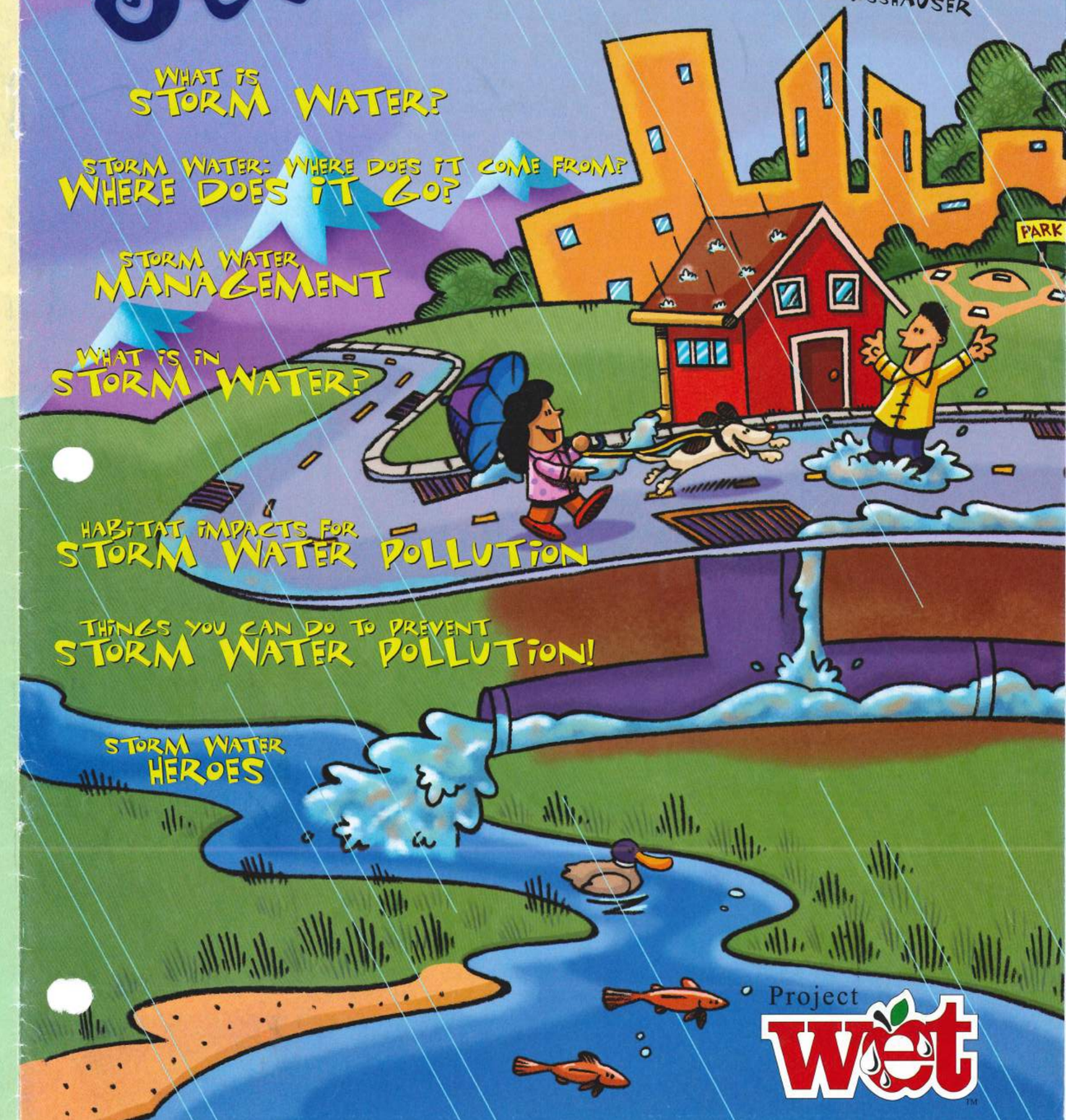

BIRDSALL ENGINEERING, INC.
CONSULTING & ENVIRONMENTAL ENGINEERS

Job No. 207521450012

MUNICIPAL STORMWATER MANAGEMENT PLAN

TOWNSHIP OF SADDLE BROOK
BERGEN COUNTY, NEW JERSEY

SADDLE BROOK PLANNING BOARD

JULY 2008

Prepared By:

Andre M. Lennertz, P.P., A.I.C.P.
New Jersey License No. 588100

A
BIRDSALL SERVICES GROUP
COMPANY

STORMWATER MANAGEMENT PLAN
TOWNSHIP OF SADDLE BROOK

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1.0 INTRODUCTION

Saddle Brook Township has consulted with Birdsall Engineering, Inc. (BEI) to revise the Township's Municipal Stormwater Management Plan (MSWMP), which was adopted in March 2005. This MSWMP outlines a strategy for Saddle Brook to alleviate the Township's stormwater management problems through the incorporation of more stringent stormwater policies within their Land Use Regulations. The creation of this MSWMP is required by N.J.A.C. 7:14A-25, the Municipal Stormwater Regulations, which were proposed in the New Jersey Register on January 6, 2003, and made effective on February 2, 2004. This plan also includes the Township's Stormwater Control Ordinance (Appendix A) which will incorporate both the goals of this plan and the new stormwater management standards into the Township's existing regulations by applying the newly adopted design standards to "Major Development"(development or redevelopment projects that either disturb one or more acres of land, or propose to add ¼ acre or more of impervious surface).

This plan will incorporate all of the required elements described in N.J.A.C. 7:8 Stormwater Management Rules as well as the nine planning goals that should be addressed when devising municipal level stormwater management plans (N.J.A.C. 7:8-2.2). Further, the plan addresses groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating the newly adopted stormwater design and performance standards for new development proposals. 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 baseflow to receiving water bodies. Also, to reduce the discharge of pollutants to the maximum extent practicable and protect water quality, the plan incorporates the six control measures outlined within the Phase II New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program Rules (N.J.A.C. 7:14A).

To accomplish these ends, Birdsall Engineering has completed a review of the Township's existing ordinances, the Saddle Brook Master Plan, and other planning documents to ensure that nonstructural stormwater management techniques have been integrated into these documents to the maximum extent practicable. In addition, a Mitigation Plan (Section 6.4) that allows Saddle Brook, in limited circumstances, to waive the strict compliance of one or more of the stormwater design and performance standards where full compliance cannot be reasonably accommodated on site has also been included in this MSWMP.

Also, as Saddle Brook can demonstrate through the Housing Element of its Master Plan that it has a combined total of less than one square mile (46.963 acres) of vacant or agricultural lands, a Build Out Analysis pursuant to N.J.A.C. 7:8 4-2 has not been included in this report.

2.0 GOALS AND OBJECTIVES

To improve water quality, reduce the risk of flooding, and in turn improve the quality of life for residents of Saddle Brook, the incorporation of more stringent stormwater management techniques have been identified as a priority by both state and local level government agencies. The new stormwater management requirements and best management practices will advance the goals and objectives of both the New Jersey Department of Environmental Protection, and Saddle Brook Township itself. As the incorporation of more stringent stormwater management regulations are designed to reduce the risk of flooding and help protect environmentally sensitive areas, the goals of this plan are consistent with those of Saddle Brook Township.

Further, the New Jersey Department of Environmental Protection (NJDEP) has established a minimum set of goals and objectives that all municipal stormwater management plans should follow, they include 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 or construction project;
- Assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
- Maintain groundwater recharge;
- 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.

To achieve these goals, this plan examines the most pressing stormwater related issues facing Saddle Brook, and in turn provides a draft Stormwater Control Ordinance that will incorporate design and performance standards that create a more ecologically sensitive and sustainable code for managing stormwater. By examining the Township's history, demographics, and current conditions concerning water quality, water quantity, and flooding issues, a clearer picture can be drawn in regards to what the stormwater management issues are at this time, and what type of policy amendments should be taken to improve them. The Township's Stormwater Control Ordinance also calls for additional stormwater management regulations to be adopted by the Township in order to assure that preventative and corrective maintenance strategies have been formulated to maintain the long-term efficacy of stormwater management facilities

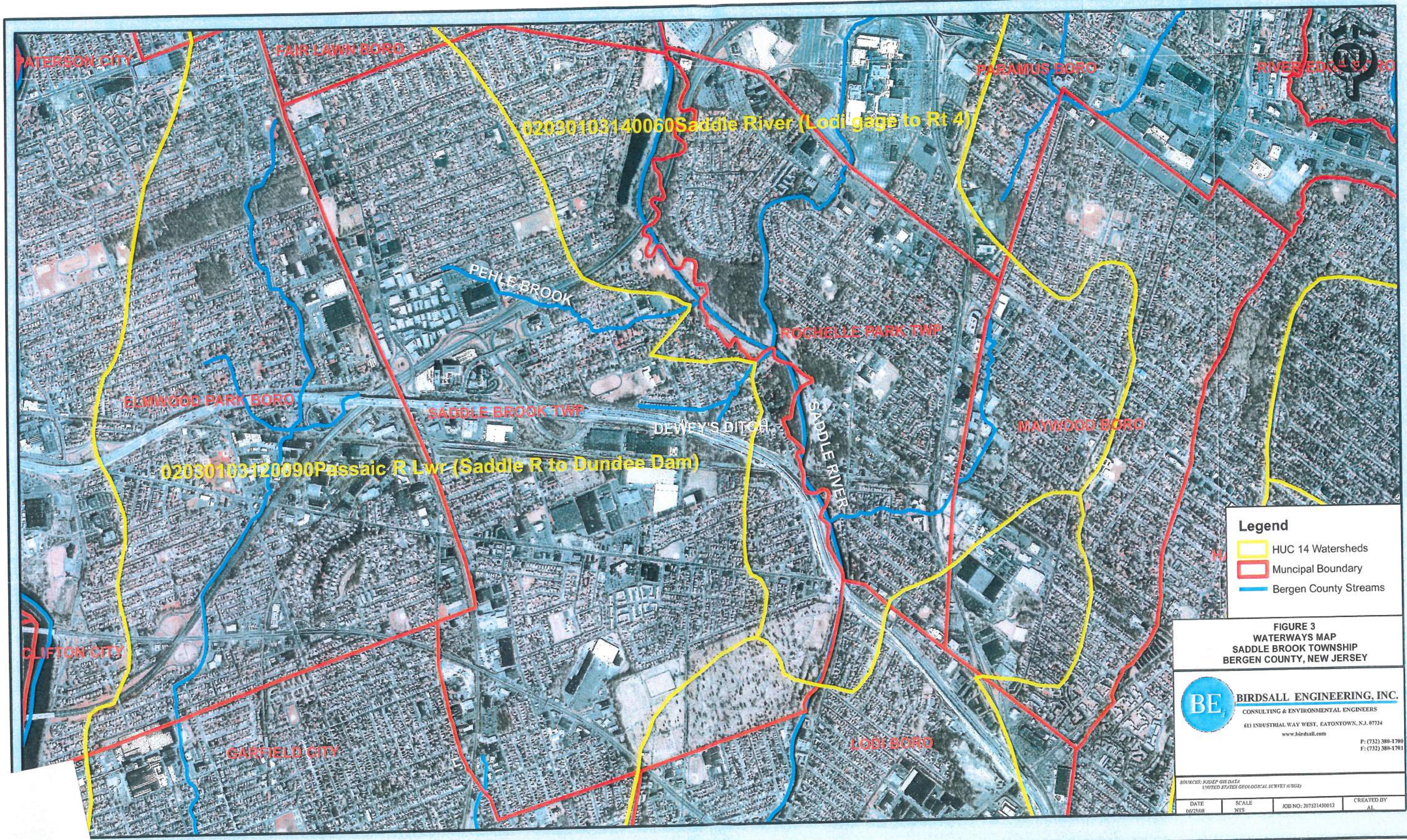

FIGURE 3
WATERWAYS MAP
SADDLE BROOK TOWNSHIP
BERGEN COUNTY, NEW JERSEY

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www.birdsall.com
P: (732) 380-1700
F: (732) 380-1701

SOURCES: NJDEP GIS DATA
UNITED STATES GEOLOGICAL SURVEY (USGS)

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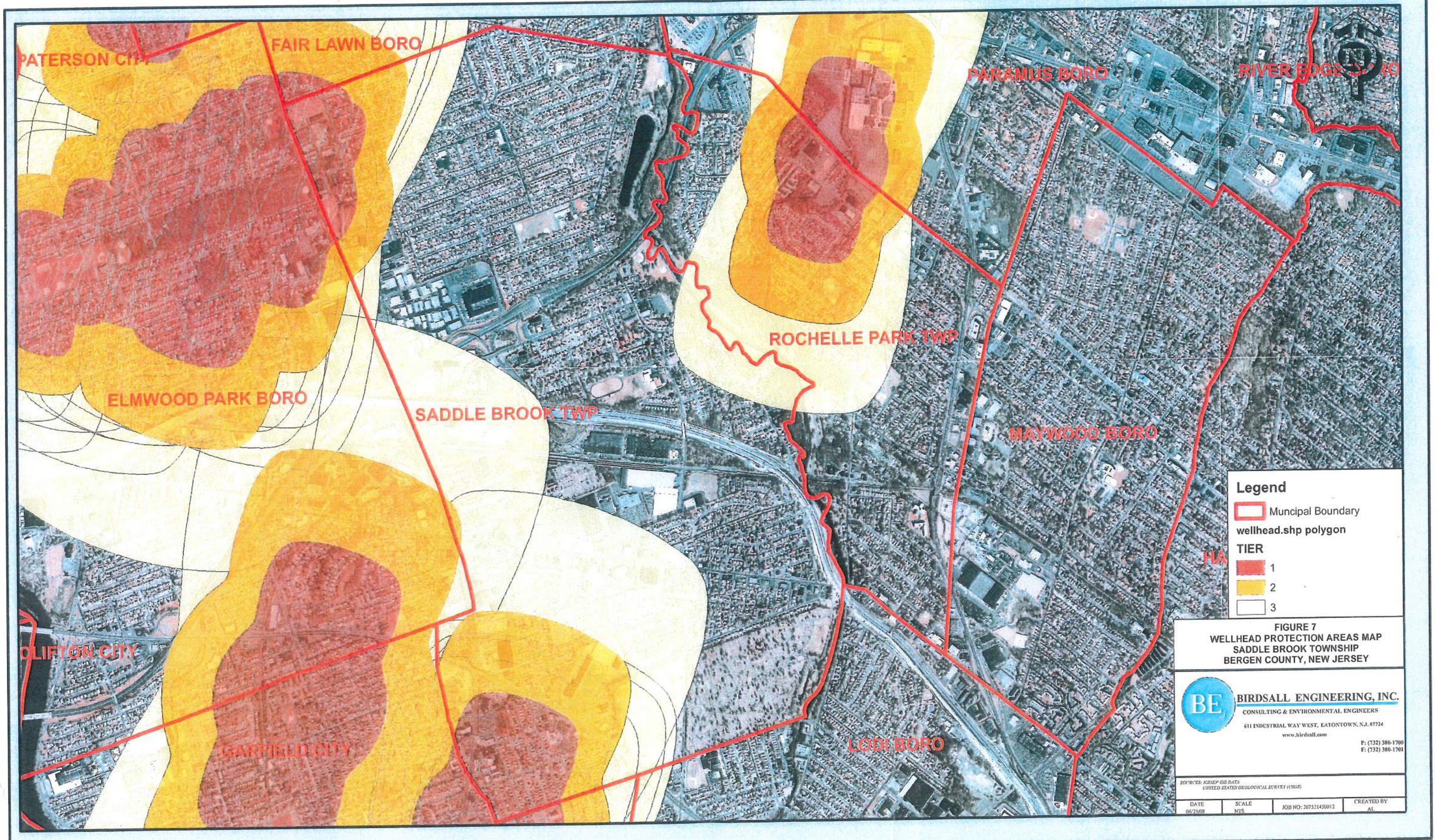

FIGURE 7
WELLHEAD PROTECTION AREAS MAP
SADDLE BROOK TOWNSHIP
BERGEN COUNTY, NEW JERSEY

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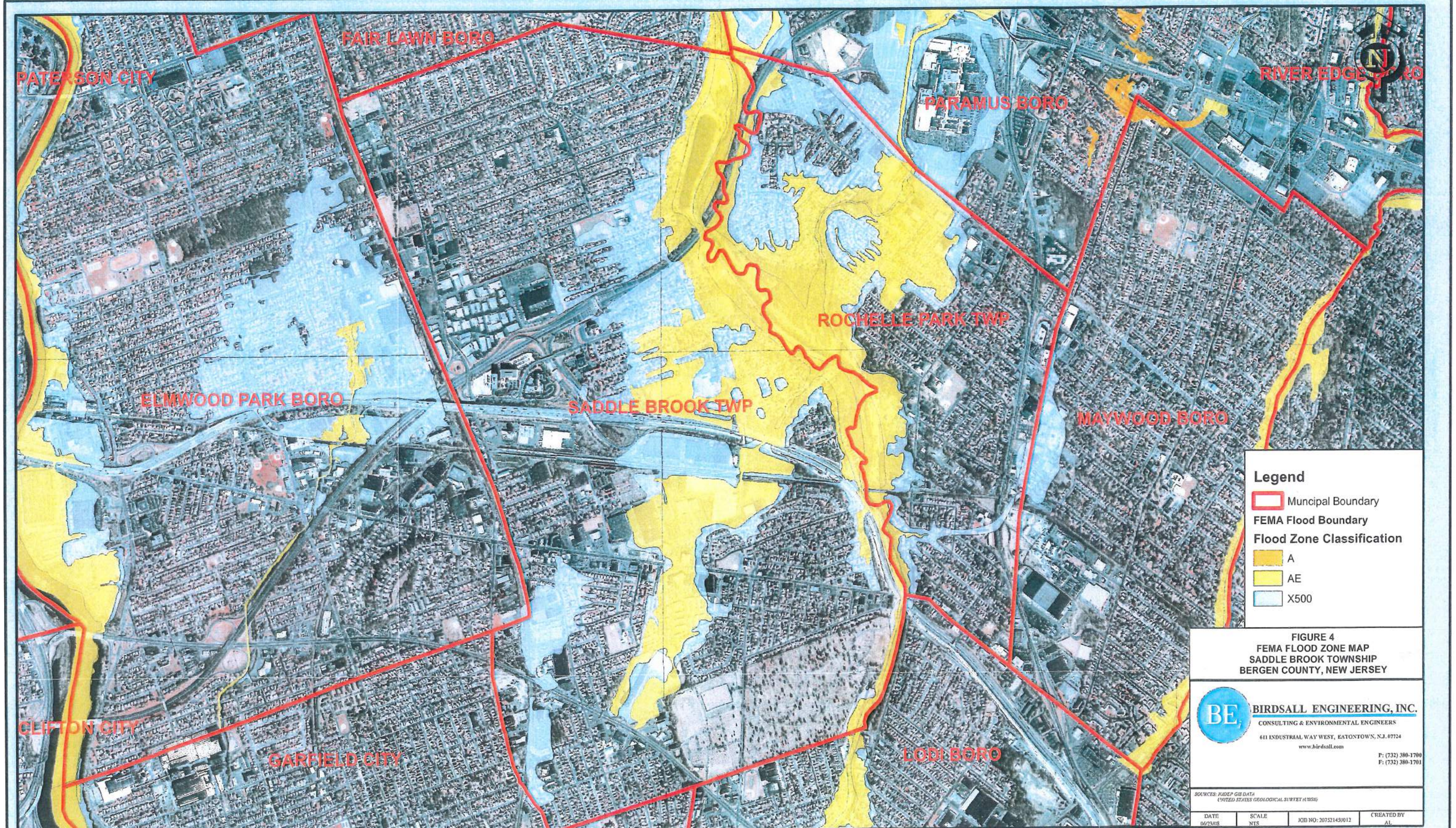

FIGURE 4
FEMA FLOOD ZONE MAP
SADDLE BROOK TOWNSHIP
BERGEN COUNTY, NEW JERSEY

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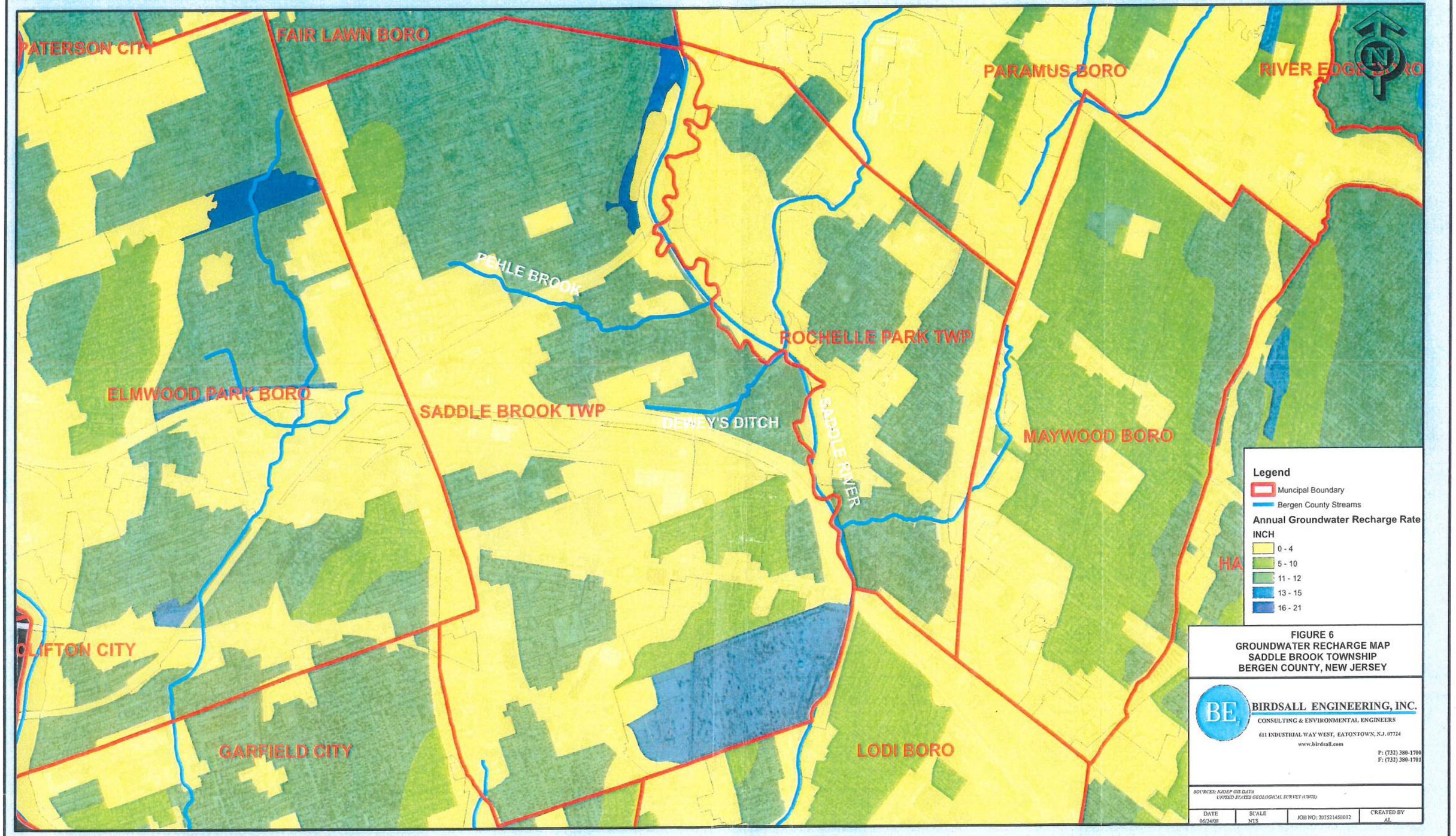

FIGURE 6
GROUNDWATER RECHARGE MAP
SADDLE BROOK TOWNSHIP
BERGEN COUNTY, NEW JERSEY

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SOURCES: NJDEP GIS DATA
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DATE	SCALE	JOB NO: 207521450012	CREATED BY
06/24/08	NTS		AL

Township of Saddlebrook

SPPP

Attachment 11

Township Ordinances related to Stormwater

Pet Waste (9/9/2005)

Litter (9/8/2005)

Yard Waste Collection (9/8/2005

Illicit Connections (9/8/2005)

Wild Life feeding (9/8/2005)

Refuse Container/Dumpster Ordinance (10/14/2010)

Storm Drain Inlet Retrofitting (10/14/10)

Private Storm Drain Retrofitting (6/9/2011)

On file at Township offices

Township of Saddlebrook

SPPP

Attachment 12

NJDEP Contacts

Acting Bureau Chief: James Murphy

Mail Code: 401-02B
Division of Water Quality
Bureau of Nonpoint Pollution Control
PO Box 420
401 E. State St., 3rd Floor
Trenton, NJ 08625-0420
Tel. (609) 292-0407

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 13

TRAINING DOCUMENTATION

Gillen & Hickwq

eventbrite

Order #883684618

Two-Day Stormwater Management Design Review Course (Spring 2019)

MS4 Reviewers

New Jersey DEPARTMENT of ENVIRONMENTAL PROTECTION
Connect with us:

NJSP Forensics Auditorium, 1200 Negron Drive, Hamilton, NJ 08691

Tuesday, May 21, 2019 at 8:30 AM - Thursday, May 23, 2019 at 5:00 PM (EDT)

Free Order

Order Information	Name
Order #883684618. Ordered by Brian Gillen on January 15, 2019 1:18 PM	Brian Gillen

883684618110168354300 1

Event Information:

You are successfully enrolled in the two-day Stormwater Management Design Review course May 21st & 22nd, 2019, at the NJSP Forensics Auditorium in Hamilton, NJ.

For directions to the facility, paste this link in your browser: http://www.nj.gov/agriculture/divisions/fn/about/NJForensicScienceCtr.pdf

To cancel your order, contact lisa.schaefer@dep.nj.gov.

You must bring your ticket for the event in order to complete the check-in process.

Registration Information:

Please provide the name of any municipality, and the county in which the municipality is located, for which you review and identify for which office you provide services (e.g., Municipal Engineer's Office, Planning Board, etc.)
Planning Board, Zoning Board, Department of Public Works

E-JIF MUNICIPAL STORMWATER REGULATION VIDEO SIGN-IN SHEET

DATE: 12/28/17

1. MIKE CALDERONE
2. ADAM CALDERONE
3. CHARLIE CERONE, JR.
4. MATT ESSER
5. PERRY FESTA
6. CHARLIE GALBO
7. ROBERT GOLDSTEIN
8. BOB HICSWA
9. GREG JACOB
10. VIN LIBERTY
11. JASON MANCUSO
12. RICH SANZARI
13. MIKE STANKIEWICZ
14. MANUEL BRENYA

Attachment E
Local Public Education Approved Activities and Point Totals

A. Tier A Municipalities shall conduct educational activities that total a minimum of 10 points annually. Each approved activity is listed below with an assigned point value.

1. **School Presentations** - Present educational classes/assemblies to local elementary, middle, and/or high school classes. (1 point per visit / maximum of 5 points per year)

2. **Website** – Maintain a stormwater related page on the municipal website and include a link to www.cleanwaternj.org. (1 point)

3. **Stormwater Display** – Present a stormwater related display and materials at any municipal event (e.g., Earth Day, town picnic) or maintain a display at the municipal building (2 points)

4. **Giveaway** – Distribute an item with a stormwater related message (e.g., refrigerator magnets, temporary tattoos, bookmarks, coloring books, and pens or pencils). Municipality must purchase a minimum number of the item equal to 10% of the municipal population. (2 points)

5. **Citizen Stormwater Advisory Committee** – Establish a subcommittee to the Environmental Commission to identify, coordinate and implement stormwater related programs. (2 points)

6. **Utilize Department Materials** - Use Department created stormwater education materials, which can be found on www.cleanwaternj.org to publish an ad in a newspaper that serves the municipality; broadcast a radio or television commercial on a local radio or municipal public service channel; produce a billboard or sign which can be displayed on a bus, bus stop shelter, or at a recreation field (outfield sign). (2 points each / maximum of 4 points per year)

7. **Poster Contest** – Organize a poster contest with a local school district. Poster themes shall have an appropriate stormwater message. Posters are to be displayed at buildings within the municipality such as at the town hall, library, or school. (2 points)

8. **Stormwater Training for Elected Municipal Officials** – Conduct a program for all elected municipal officials which educates them on the Stormwater Management Rules (N.J.A.C. 7:8), Tier A Permit and what steps the municipality has already taken to minimize stormwater pollution. (3 points)

9. **Mural** – Facilitate the planning and painting of a stormwater pollution themed mural at a local downtown/commercial area. (3 points)

10. **Mailing** – Distribute any of the Department's educational brochures, tip cards, or a municipally produced equivalent (e.g, calendar, recycling schedule), to every resident and business in the municipality. (3 points)

11. **Partnership Agreement / Local Event** - Identify and enter into a partnership

agreement with a local group such as a watershed organization, Riverkeeper, school, youth/faith based group and/or other nonprofit to carry out a minimum of two (2) watershed stewardship/education activities (e.g., litter march, stream/beach cleanup). (3 points)

12. **Ordinance Education** – Distribute a letter from the mayor to every resident and business in the municipality highlighting the requirements and environmental benefits of the Pet Waste, Litter, Improper Disposal of Waste, Wildlife Feeding, Yard Waste, Illicit Connection, Refuse Container, and Private Storm Drain Inlet Retrofitting Ordinances. This letter/article must also reference a page on the municipal website (if applicable) to which residents can go to read these ordinances. (5 points)
* Posting these ordinances does not constitute the development of a website referenced above.

TOWNSHIP OF SADDLEBROOK

SPPP

ATTACHMENT 14

SNOW REMOVAL & DISPOSAL PLAN (BEST MANAGEMENT PRACTICES)

Township of Saddle Brook
Department of Public Works
Snow Removal and Disposal
Stormwater Pollution and Prevention Plan
Best Management Practices

PURPOSE:
To establish consistent policy on available snow disposal options consistent with the New Jersey Department of Environmental Protection (NJDEP) Guidance[1] on snow removal and disposal, the Saddle Brook Department of Public Works (DPW) has adopted these Best Management Practices (BMPs) as part of the Saddle Brook, Stormwater Pollution and Prevention Plan (SPPP).

These BMPs provide guidelines to the DPW regarding site selection, site preparation and maintenance, and emergency snow disposal. **The Key element of the BMPs require that reasonable measures should be taken to prevent disposal of snow directly into a waterway, specifically into the following water ways and streets contiguous to these waterways:**

- **Unnamed tributary to Saddle Brook, Saddle River Road east shoulder (originating 100 feet from south west corner of 640 Saddle Brook Road),**
- **Saddle River [Saddle River Road culvert, Saddle River Park pathway east shoulder, east boundaries of George Wharcol Community and Jet Age Parks]**
- **Pehle Lake (Pehle Lake Loop lakeside shoulders)**
- **Pehle Brook [Pehle Brook Road end of street, Lincoln Ave/Pehle Ave culverts, Rugby Road (west shoulder)], and**
- **Coalberg Creek [Mayhill, Washington, Albany Congress Street culverts]**

APPLICABILITY:
These guidelines apply to the Saddle Brook DPW, and private contractor entities providing snow removal services disposing of snow on Saddle Brook Township properties.

INTRODUCTION:
Finding a place to dispose of collected snow poses a challenge to municipalities such as the Township of Saddle Brook as they clear roads, sidewalks and parking lots. While Saddle brook DPW and its employees are all aware of the threats to public safety caused by snow, collected snow the SPPP plan and these BMPs have indicated that snow is contaminated with road salt, sand, litter, and automotive pollutants, such as oil, contaminants of concern that could also threaten public health and the environment.

As snow melts, road salt, sand, litter, and other pollutants are transported into surface water or through the soil where they may eventually reach the groundwater. Road salt and other pollutants can contaminate water supplies and are toxic to aquatic life at certain levels. Sand washed into waterbodies can create sand bars or fill in wetlands, ponds, and Township water ways, impacting aquatic life, causing flooding, and affecting our use of these resources.

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[1] *New Jersey Department of Environmental Protection, Division of Water Quality, "Snow Removal and Disposal Policy, November 19, 2015*

RECOMMENDED GUIDELINES

These BMP follow NJDEP Guidelines for snow removal and disposal guidelines and address:

- Site Selection
- Site Preparation and Maintenance
- Mechanical Snow Melter Discharge
- Emergency Snow Disposal Procedures

Of note, these BMPs only apply to the Township DPW and entities that provide essential services under subcontract to the Township. Authorizations issued to public agencies that lease to private facilities operations do not extend to their lessees. Under no circumstances are private facilities authorized to dispose of snow directly into a water way.

A. SITE SELECTION – UPLAND LOCATIONS

The key to selecting effective snow disposal sites is to locate them adjacent to or on pervious surfaces in upland areas away from water resources. At these locations, the snow melt water can filter into the soil, leaving behind sand and debris which can be removed in the springtime.

The following areas must be avoided:

- Any waterbody, including rivers, ponds, or wetlands. In addition to water quality impacts and flooding, snow disposed in open water can cause navigational hazards when it freezes into ice blocks. In the event of a declared emergency, limited approval may be granted to utilize water bodies (see Emergency Snow Disposal Procedures below). A Figure indicating areas to be avoided for stockpiling snow are shown on Figure A.

It is important that both public and private entities work together to select appropriate snow disposal sites. The following steps should be taken:

- Storm drain catch basins or stormwater drainage swales or ditches. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.
- Storm drain catch basins or stormwater drainage swales or ditches. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.
- Estimate, based on historic snowfall records and experience, the amount of snow disposal capacity needed for the season, so that an adequate number of disposal sites can be selected and prepare.(http://average_snowfall.findthebest.com/dla/new_jersey)
- Select sites located in upland locations that are not likely to impact sensitive environmental resources first, and

- Identify and mark/delineate sites that could potentially be used for snow disposal, such as municipal open space (e.g., parking lots or lawns).

B. SITE PREPARATION AND MAINTENANCE

In addition to carefully selecting disposal sites before the winter begins, it is important to prepare and maintain these sites to maximize their effectiveness. The following maintenance measures should be undertaken for all snow disposal sites:

- Securely place a silt fence or equivalent barrier on the down gradient side of the snow disposal site,
- Maintain a 50-foot vegetative buffer strip between the disposal site and adjacent waterbodies to filter pollutants out of the snow melt water,
- Clear debris from the site prior to using the site for snow disposal, and
- Clear debris from the site and properly dispose of debris at the end of the snow season and no later than May 1.

C. MECHANICAL SNOW MELTER DISCHARGE

In addition to selecting, preparing and maintaining sites prior to the winter, the Township DPW shall take measures to confirm that any planned discharge resulting from snow melting operations meets the following conditions:

1) All discharges resulting from snow melting operations must comply with the lawful requirements of federal agencies, municipalities, counties, and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction.
   a. If the discharge is to a Town storm sewer, the owner/operator of the mechanical snow melter must, prior to discharge, notify and obtain approval from the Township of Saddle Brook, the approximate time, location, and duration of the discharge(s). The NJDEP Guidance reserves the right of the Township to prohibit or place additional conditions on the discharge.
2) At a minimum, the snow melter must not be operated or be allowed to discharge during wet weather events and must be upstream of the wet weather regulator or other point of diversion.
   a. Direct discharges of melted snow into water bodies are prohibited. A filter bag or similar filtration device must be used to remove suspended solids and debris. This device should be used and maintained in accordance with the manufacturer's specifications. Solids collected in a mechanical snow melter must be disposed of in a proper manner.
   b. The discharge shall not result in flooding of neighboring property, streets, gutters or storm sewers.
   c. The discharge must be diverted from building foundations or other areas that may be damaged from ground settling or swelling.

d. The discharge must be visibly clear and not contain floating or solid materials

e. A visible sheen must not be evident in the discharge.

f. The addition of cleaning materials or chemicals (such as deicers) during snow melting activities is strictly prohibited.

D. ADDITIONAL TOWNSHIP LOCAL ORDINANCE RESIDENTIAL REQUIREMENTS PUBLISHED ON WEBSITE

1) **NO PARKING WHEN two (2)-inches or more of Snow Covers Roadway**

Local ordinance 835:196-25 states that no vehicles may be parked on Township streets when 2" or more of snow has accumulated. Vehicle must remain off of the streets until they have been plowed sufficiently and to the extent that parking will not interfere with the normal flow of traffic.

ATTENTION: The Township Council voted and approved an increase in the fines for violation of the snow emergency parking ordinance. A violation of 835:196-25 will result in a fine of $50 per violation.

2) **SIDEWALKS NEED TO BE CLEARED AFTER SNOW STORM**

Local ordinance 203:168-1 requires sidewalks to be cleared of snow and ice within 12 daylight hours of the snow ending.

3) **ILLEGAL TO SHOVEL / THROW SNOW INTO THE STREET**

Local ordinance 203:168-3 states no person shall place or deposit snow or ice, for the purpose of disposing of same, in or upon any public street, avenue, highway or roadway of any kind or in or upon any public sidewalk and walkway.

For further information, or questions regarding implementation of these BMPs the Township DPW shall contact any, or all, of the following parties, responsible for implementing the Stormwater Pollution Prevention Plan (SPPP) Team Members:

- Facility Contacts
    - Robert Hicswa, Superintendent, Department of Public Works, Saddle Brook, NJ, Office: 201-843-3064
    - Brian D. Gillen, PE, LSRP, SPPP Plan Consultant, Remington & Vernick Engineers, Secaucus, NJ, Office: 201-624-2137
    - Richard Arango, PE, CME, Township Engineer, Remington & Vernick Engineers, Secaucus, NJ, Office: 201-624-2137

For further information, or questions regarding implementation of the Guidelines (upon which these BMPs were based), contact the Municipal and General Storm Water Permitting Unit in the Bureau of Nonpoint Pollution Control, Division of Water Quality at 609-633-7021.

E. EMERGENCY SNOW DISPOSAL

This disposal option is only available to the Township DPW and entities that provide essential services. Authorizations issued to public agencies that lease to private facilities operations do not extend to their lessees. Under no circumstances are private facilities authorized to dispose of snow directly into a water way.

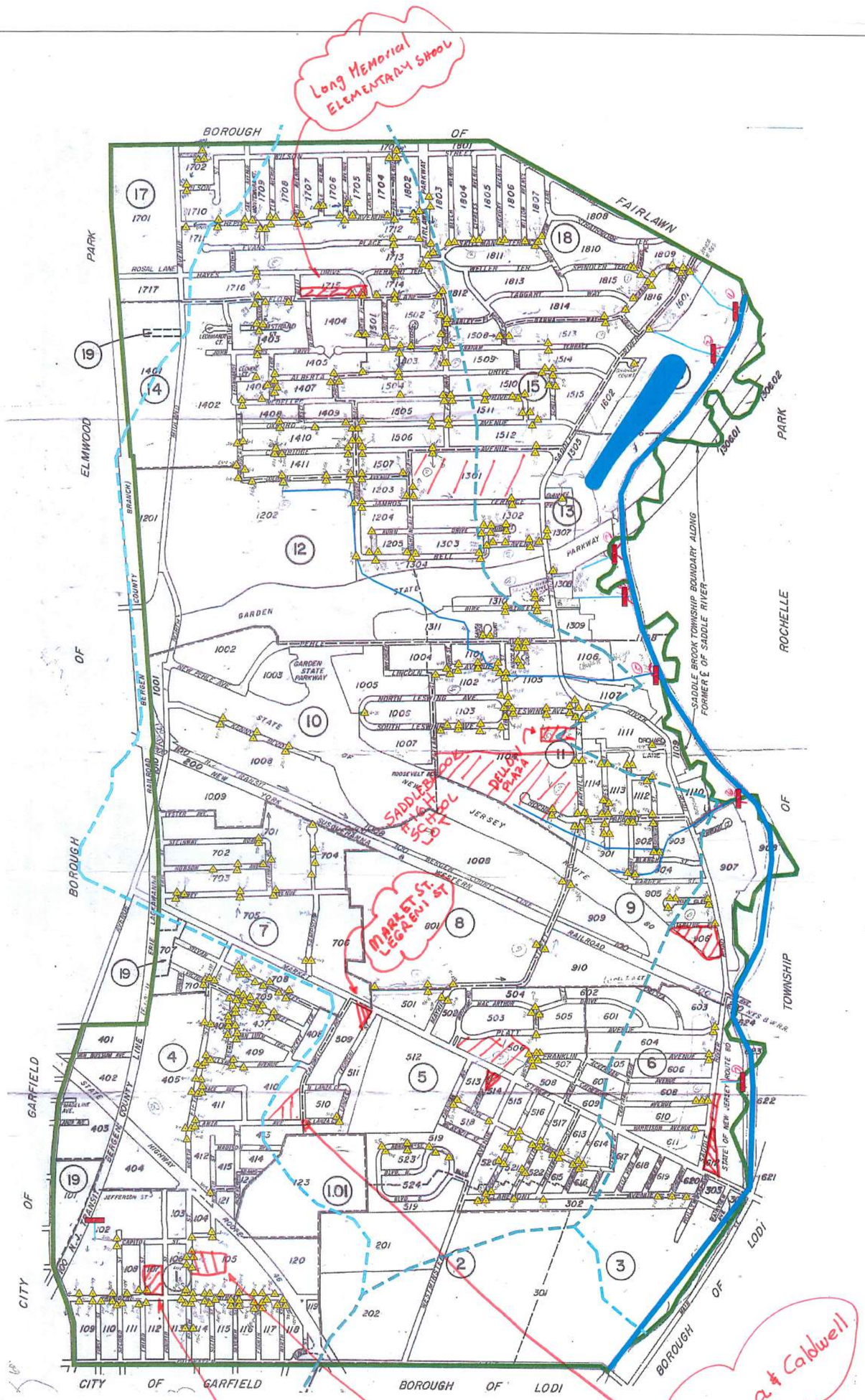
As mentioned earlier, it is important to estimate the amount of snow disposal capacity you will need so that an adequate number of upland disposal sites can be selected and prepared. Under extraordinary conditions, **after all land-based snow disposal options are exhausted**, disposal of snow from public roadways and essential facilities (i.e. hospitals, fire departments, police departments) that is not obviously contaminated with road salt, sand, and other pollutants may be allowed into certain water bodies under certain conditions. In these cases, municipalities, counties, and other public agencies are required to obtain NJDEP authorization to dispose of snow directly into a waterway. In no event does authorization extend to private entities or other entities operating at a public facility or their lease holders. Authorization should only be requested to provide disposal needs necessary to maintain roadways and other areas at essential facilities to maintain operations and safe conditions.

Authorizations can be requested by contacting the DEP Hotline at:
1-877-WARNDEP (1-877-927-6337).

An emergency authorization will only be issued when the following criteria are met:

- **All land-based snow disposal options are exhausted.**
- **Snow to be disposed is not obviously contaminated with road salt, sand, and other pollutants.**
- The proposed snow disposal location has and is expected to have open water with adequate flow and mixing to prevent ice dams from forming.
- Snow will not be disposed in wetlands or small streams.
- Snow will not be disposed where trucks may cause shoreline damage or erosion.

SPPP FIGURE A



Stormwater Mapping Plan
7-16-18

LEGEND

- STORMWATER OUTFALL*
- STORMWATER INLET*
- MUNICIPAL BOUNDARY**
- WATERBODY
- WATERSHED BOUNDARY (HUC11)***
- SUB-WATERSHED BOUNDARY (HUC14)***

* TAX MAP MARKUP PROVIDED BY DPW
** TAX MAP (KEY MAP 2-23-07)
*** NJ-GEOWEB MAPPING

MAPPING REFERENCE:
1. PROVIDED DPW INFORMATION ON TAX MAP

GRAPHIC SCALE
500 0 250 500
(IN FEET)
1 inch = 500ft.

STORMWATER MAPPING PLAN

STORMWATER POLLUTION PREVENTION PLAN
TOWNSHIP OF SADDLE BROOK
BERGEN COUNTY
NEW JERSEY

RVE
REMINGTON & VERNICK ENGINEERS
ONE HARMON PLAZA, SUITE 210 SECAUCUS, N.J. 07094
(201) 624-2137, FAX (201) 624-2136
WEB SITE ADDRESS : WWW.RVE.COM