City of Northlake

Illicit Discharge Detection and Elimination (IDDE) Program

Prepared for:

City of Northlake

55 East North Ave

Northlake, IL 60164

TABLE OF CONTENTS

1. INTRODUCTION 1

1.1 Overview 1
1.2 Objectives 1
1.3 Background 3
1.4 Definition of Illicit Discharge 3
1.5 Examples of Illicit Discharges 4

2. IDDE Program Description 7

2.1 Ordinances 7
2.2 IDDE Personnel 7
2.3 Detection and Elimination 7
2.4 Reporting Procedures 7
2.5 Inspection and Tracing 8
2.6 Sampling and Testing 8
2.7 Contributing Facilities 9
2.8 Training 9
2.9 Documentation and Recordkeeping 9

3. Program Assessment and Evaluation 9

3.1 IDDE Program Assessment 9
3.2 Audits 9

LIST OF FIGURES

1. Example of Illicit Discharge – Commercial Carwash Draining to the MS4 4

2. Example of Illicit Discharge – Surcharging Sanitary Sewer Manhole 5

3. Example of Illicit Discharge – Spilling or Dumping of Paint down Stormwater Inlet 5

4. Example of Illicit Discharge – Leaking Commercial Dumpster 6

5. Example of Illicit Discharge – Spilling or Dumping of Motor Oil..... 6

LIST OF EXHIBITS

City of Northlake Street Map .....Exhibit 1

City of Northlake Zoning District Map .....Exhibit 2

City of Northlake Outfall Maps ..... Exhibits 3, 4, 5, 6, 7

LIST OF APPENDICES

1. City of Northlake Notice of Intent (NOI) and IEPA General NPDES Permit No. ILR40
2. City of Northlake Annual Facility Inspection Report
3. City of Northlake Municipal Code: Water and Sewers Chapter
4. Physical Indicators of Outfall Visual Inspections
5. Outfall Inspection Checklist
6. Completed Outfall Inspection Checklists and Photographs
7. Outfall Action Items
8. Contributing Facilities List
9. IDDE Example Training Presentation

1. INTRODUCTION

1.1 Overview

The City of Northlake (City) is an operator of a Municipal Separate Storm Sewer System (MS4), as defined by the Illinois Environmental Protection Agency's (IEPA) National Pollution Discharge Elimination System (NPDES) Phase II program. The City has applied for and obtained coverage under the IEPA's General NPDES Permit for Discharges from Small Municipal Separate Storm Sewer Systems. A copy of the City's Notice of Intent (NOI) and General NPDES Permit ILR40 are provided in Appendix 1.

A central requirement of the NPDES Phase II Permit is the development, implementation, and enforcement of a program to detect and eliminate illicit discharges to the MS4. To meet these requirements and maintain compliance with the permit conditions, the City has developed the following comprehensive Illicit Discharge Detection and Elimination (IDDE) program.

1.2 Objectives

The purpose of the IDDE program is to identify, implement, and evaluate Best Management Practices (BMP) and other procedures that will prevent or reduce the release of pollutants from illicit discharges to the MS4. As required by the NPDES permit conditions, the IDDE program will:

- *Develop, implement and enforce a program to detect and eliminate illicit connections or discharges into the permittee's small MS4;*

- *Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters that receive discharges from those outfalls. Existing permittees renewing coverage under this permit shall update their storm sewer system map to include any modifications to the sewer system;*

- *To the extent allowable under state or local law, prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions, including enforceable requirements for the prompt reporting to the MS4 of all releases, spills and other unpermitted discharges to the separate storm sewer system, and a program to respond to such reports in a timely manner;*

- *Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system;*

- *Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and the requirements and mechanisms for reporting such discharges;*

- *Address the categories of non-storm water discharges listed in Section I.B.2 only if you identify them as significant contributor of pollutants to your small MS4 (discharges or flows from firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States);*

- *Define appropriate BMPs for this minimum control measure and measureable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in your storm water discharges to the maximum extent practicable;*

- *Conduct periodic inspections of the storm sewer outfalls in dry weather conditions for detection of non-storm water discharges and illegal dumping. The permittee may establish a prioritization plan for inspection of outfalls, placing priority on outfalls with the greatest potential for non-storm water discharges. Major/high priority outfalls shall be inspected at least annually; and*

- *Provide an annual evaluation of illicit discharge detection and elimination BMPs and measurable goals. Report on this evaluation in the Annual Report pursuant to Part V.C.1.*

Given these objectives, the IDDE will accomplish the following:

- Define illicit discharges and provide relevant examples;

- Provide detailed mapping of the location of all stormwater outfalls;

- Detail the ordinances and other regulatory mechanisms that prohibit illicit discharges to the MS4 and allow appropriate enforcement procedures to detect, prevent, or eliminate these types of releases;

- Outline the IDDE Personnel and their responsibilities;

- Describe BMPs, including policies and procedures used by the City to detect and eliminate illicit discharges or other pollutants;

- Detail the testing procedures and results of all sampling activities;

- Detail the results and other data related to outfall inspection activities;

- Provide pertinent documentation related to the NPDES General Permit including the NOI and Annual Facility Inspection Report;

- Provide detailed information for operators that hold current permits from the IEPA to discharge to the City's MS4; and

- Provide a resource for City staff and regulators regarding inspection, training,

enforcement, and recordkeeping procedures for the IDDE program.

The IDDE program will be reviewed annually during the City's Annual Facility Inspection as required by the NPDES Phase II Permit. A copy will be kept for public viewing on the City website (http://northlakecity.com/) and the Public Works Department, located at 100 W Palmer Ave, Northlake, IL 60164. A copy of the most recent Annual Facility Inspection Report is provided in Appendix 2.

1.3 Background

The City of Northlake (located in Cook County) encompasses an area of approximately 3.2 square miles, with a population approximately of 12,400 residents. The City is an established community with a wide variety of residential, commercial, industrial, and other land uses. A Street Map and Zoning District Map are included as Exhibits 1 and 2, respectively. Per the ordinances and regulations of Cook County, the City is responsible for the inspection, enforcement, and execution of the IDDE program. The City's receiving waterway is Addison Creek. There are approximately 101 outfalls located within the City. All the outfalls are located along Addison Creek. Outfall Maps are provided as Exhibits 3, 4, 5, 6, and 7.

1.4 Definition of Illicit Discharge

An illicit discharge is defined by the Environmental Protection Agency (EPA) as:

any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

The Illinois Environmental Protection Agency (IEPA) General Permit No. ILR40 for Discharges from Small Municipal Separate Storm Sewer Systems further authorizes the following additional discharges, provided that they have been determined not to be substantial contributors of pollutants:

- *Water line and fire hydrant flushing,*
- *Landscape irrigation water,*
- *Rising ground waters,*
- *Ground water infiltration,*
- *Pumped ground water,*
- *Discharges from potable water sources, (excluding wastewater discharges from water supply treatment plants)*
- *Foundation drains,*
- *Air conditioning condensation,*
- *Irrigation water, (except for wastewater irrigation),*
- *Springs,*
- *Water from crawl space pumps,*

- *Footing drains,*
- *Storm sewer cleaning water,*
- *Water from individual residential car washing,*
- *Routine external building washdown which does not use detergents,*
- *Flows from riparian habitats and wetlands,*
- *Dechlorinated pH neutral swimming pool discharges,*
- *Residual street wash water,*
- *Discharges or flows from fire fighting activities,*
- *Dechlorinated water reservoir discharges, and*
- *Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed).*

Additional information regarding the permitted discharges can be found in the General NPDES Permit No. ILR40 included in Appendix 1.

1.5 Examples of Illicit Discharges

As previously mentioned, illicit discharges are releases that are not composed entirely of stormwater that can come in many forms and from various sources. Residents dumping grass clippings into the creek behind their home, neighbors pouring used oil down a storm drain, or a gasoline spill at the filling station are all examples of illicit discharges. The City is responsible for preventing these types of activities through education and outreach; as well as responding, tracing, and eliminating any reported illicit discharges. Figures 1 through 5 show examples of illicit discharges:

Figure 1: Example of Illicit Discharge – Commercial Carwash Draining to the MS4

Figure 2: Example of Illicit Discharge – Surcharging Sanitary Sewer Manhole

Figure 3: Example of Illicit Discharge – Spilling or Dumping of Paint down Stormwater Inlet

Figure 4: Example of Illicit Discharge – Leaking Commercial Dumpster

Figure 5: Example of Illicit Discharge – Spilling or Dumping of Motor Oil

2. IDDE Program Description

2.1 Ordinances

As previously mentioned, the City falls under the regulatory authority of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) in Cook County, which has ordinances that prohibit the discharge of non-stormwater flows into the MS4. Additionally, the City has separate regulations that also prohibit these types of discharges. A copy of the applicable portion of the City's Municipal Code is provided in Appendix 3. Within Cook County, the City is responsible for the inspection and enforcement of the ordinance. All ordinances include enforcement procedures such as fines to encourage compliance.

2.2 IDDE Personnel

All aspects of the City's IDDE program are managed and staffed by the qualified and trained professionals listed below.

Name	*Title*	*Phone Number*	*Email Address*
Jeffrey Sherwin	Mayor	(708) 343-8700	northlakemayor@comcast.net
Dale Roberts	Superintendent of Public Works	(708) 562-0940	droberts@northlakecity.com

Provided below are brief descriptions of each person's responsibilities as they relate to the IDDE program:

- Mr. Sherwin is the City Mayor and is in charge of the overall implementation of the IDDE program.
- Mr. Roberts is the Superintendent of Public Works and is in charge of the municipal activities related to the IDDE program.

2.3 Detection and Elimination

The City has taken a proactive approach to the detection and elimination of illicit discharges. This approach includes periodic inspection of outfalls, employee training, public education, sampling and testing, and program assessment and evaluation. The City regularly performs activities aimed at preventing or reducing the release of pollutants by capturing them before they can be collected by stormwater runoff and discharged to the MS4.

2.4 Reporting Procedures

The City Public Works Department is responsible for the investigation of all reported illicit discharges. Exceptions occur only when the potential for situation involving the discharge of hazardous waste exists. In these instances, the City Fire Department, IEPA or another appropriate agency is contacted for assistance. The telephone number and email contact information for the City of Northlake Public Works Department is readily available on the City's website (http://northlakecity.com/) for reporting purposes.

2.5 Inspection and Tracing

The City conducts inspections of the MS4 outfalls as required by the ILR40 permit. These visual inspections are performed by trained personnel to identify the physical characteristics that may indicate an illicit discharge is present. These identifiable physical characteristics include colors, odors, floatable debris, staining, deposits, benthic growth, and/or the presence of excessive vegetation. A copy of the physical indicators for visual inspections is included in Appendix 4. These inspections are performed during periods of dry weather. Additionally, the inspections are performed with the aid of an outfall inspection checklist. A copy of the outfall inspection checklist is provided in Appendix 5.

The City's outfall inspections are performed by City staff and contracted professionals. Each outfall inspection checklist is accompanied by a photograph of the outfall at the time of the inspection, if appropriate. The most recent inspection checklist and photos for the outfalls are provided in Appendix 6.

Based on the most recent outfall inspections, a comprehensive list was generated of outfalls that may require additional assessment to determine whether or not an illicit discharge may be present. A list with descriptions of additional activities that may be needed is provided in Appendix 7.

If necessary, the City Public Works staff will perform tracing procedures to determine the source of a potential illicit discharge. The City maintains an accurate GIS-based outfall map, as well as other storm sewer location documents such as original development plans, county data, etc., that can be utilized to determine the possible source of illicit discharge.

2.6 Sampling and Testing

If an outfall inspection yields indicators of a potential illicit discharge, the City may initiate the collection of samples and laboratory testing. These tests may include:

- pH
- B.O.D.
- C.O.D
- Chlorine
- Suspended Solids
- Chlorides
- Ammonia Nitrogen
- Dissolved Oxygen
- Settleable Solids
- Volatile Solids
- Fecal Coliform
- Hardness
- Phosphorus

During the most recent outfall inspections, there were no flows from outfalls that were determined to be in need of sampling and testing.

2.7 Contributing Facilities

The City has a number of facilities within its boundaries that are required to obtain separate NPDES permits from the IEPA to discharge to the MS4. These facilities are considered contributing facilities and storm structures in these areas are monitored by the City for compliance with their NPDES permits. A list of these facilities and a location map for each is provided in Appendix 8. It should be noted that several facilities listed, no longer have active permits as they have expired.

2.8 Training

Employee education and training is a vital component of the City's overall MS4 NPDES program, as well as the IDDE program. The City regularly provides training for employees on a variety of topics related to illicit discharges, good housekeeping, spill prevention, proper maintenance procedures, and other pertinent stormwater topics.

As part of their in-house training program, the City provides staff with detailed instruction on how to identify illicit discharges and the procedures for reporting them if one is discovered. An example presentation is provided in Appendix 9.

2.9 Documentation and Recordkeeping

The City maintains appropriate copies of all inspection materials, checklists, and training documentation in this IDDE report. The materials included are regularly updated during the Annual Facility Inspection process and include the most up-to-date documents.

3. Program Assessment and Evaluation

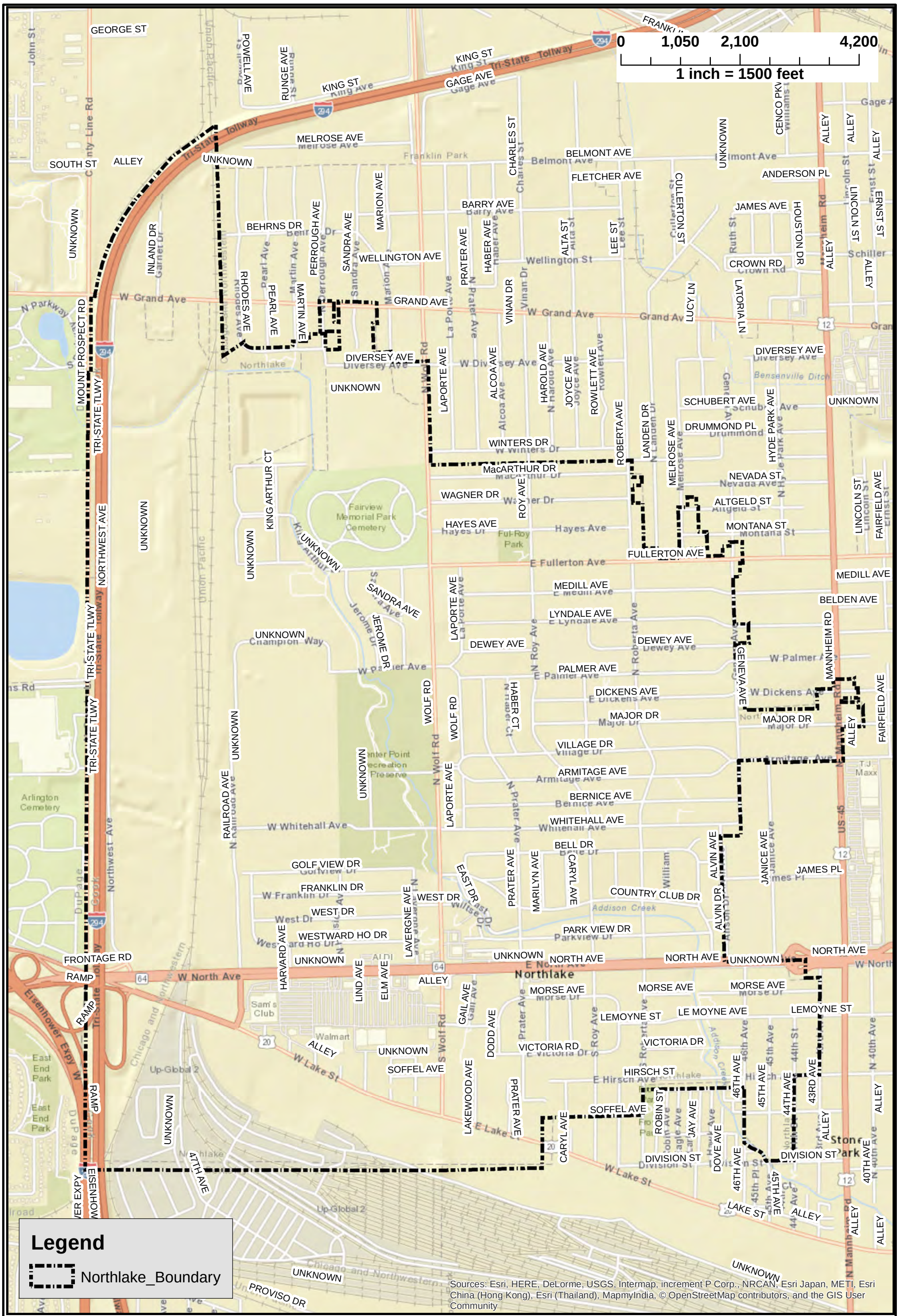
3.1 IDDE Program Assessment

As required by their MS4 Permit, the City conducts annual inspections of their municipal facilities and an annual assessment of their NPDES program. The assessment and inspections are carried out by qualified personnel and documented by staff with appropriate forms and procedures. During this evaluation process, the IDDE program is audited for efficiency and effectiveness to verify that it is meeting the needs of the City and the requirements of the NPDES General Permit conditions.

3.2 Audits

As needed, the City will perform self-audits of their NPDES and IDDE programs or will contract this task to a qualified professional. Additionally, this IDDE report and related documents should be provided to the appropriate regulatory personnel during an audit or compliance evaluation.

EXHIBITS



DSGN.	MJB	CHKD.	

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

CLIENT	PROJECT NO.	
CITY OF NORTHLAKE	R940032.HR214	
TITLE		DATE 7/25/16
CITY OF NORTHLAKE STREET MAP		EXHIBIT 1

CITY OF NORTHLAKE ILLINOIS

OFFICIAL ZONING MAP

- R-1 SINGLE FAMILY RESIDENCE DISTRICT
- R-2 TWO FAMILY RESIDENCE DISTRICT
- R-3 GENERAL RESIDENCE DISTRICT
- (C) CONDOMINIUM DISTRICT (ALL DISTRICTS ZONED R-3, B-2, B-3, SEE DISTRICT REGULATIONS)
- B-1 RETAIL BUSINESS DISTRICT
- B-2 RETAIL AND SERVICE BUSINESS DISTRICT
- B-3 OFFICE BUSINESS DISTRICT
- B-4 HIGH RISE HOTELS AND MOTELS
- I-1 LIMITED INDUSTRIAL DISTRICT
- I-2 GENERAL INDUSTRIAL DISTRICT
- F-1 FLOOD PLAN DISTRICT
- OPEN SPACE
- R-2A THREE FAMILY RESIDENCE
- I-3 SPECIAL INDUSTRIAL DISTRICT
- R-3A SPECIAL RESIDENCE DISTRICT

ADOPTED AS PART OF THE NORTHLAKE ZONING ORDINANCE

THIS IS TO CERTIFY THIS "ZONING MAP" IS A PART OF THE "NORTHLAKE ZONING ORDINANCE" INCOPERATED IN AND A PART OF A COMPREHENSIVE AMENDMENT ADOPTED JUNE 22, 1971 AS ORDINANCE NO. C-15-71 AND ATTACHED THERETO.

BY: _____ MAYOR

ATTEST: _____ CITY CLERK

APPROVED

ALD. _____ ALD. _____

ALD. _____ ALD. _____

ALD. _____ ALD. _____

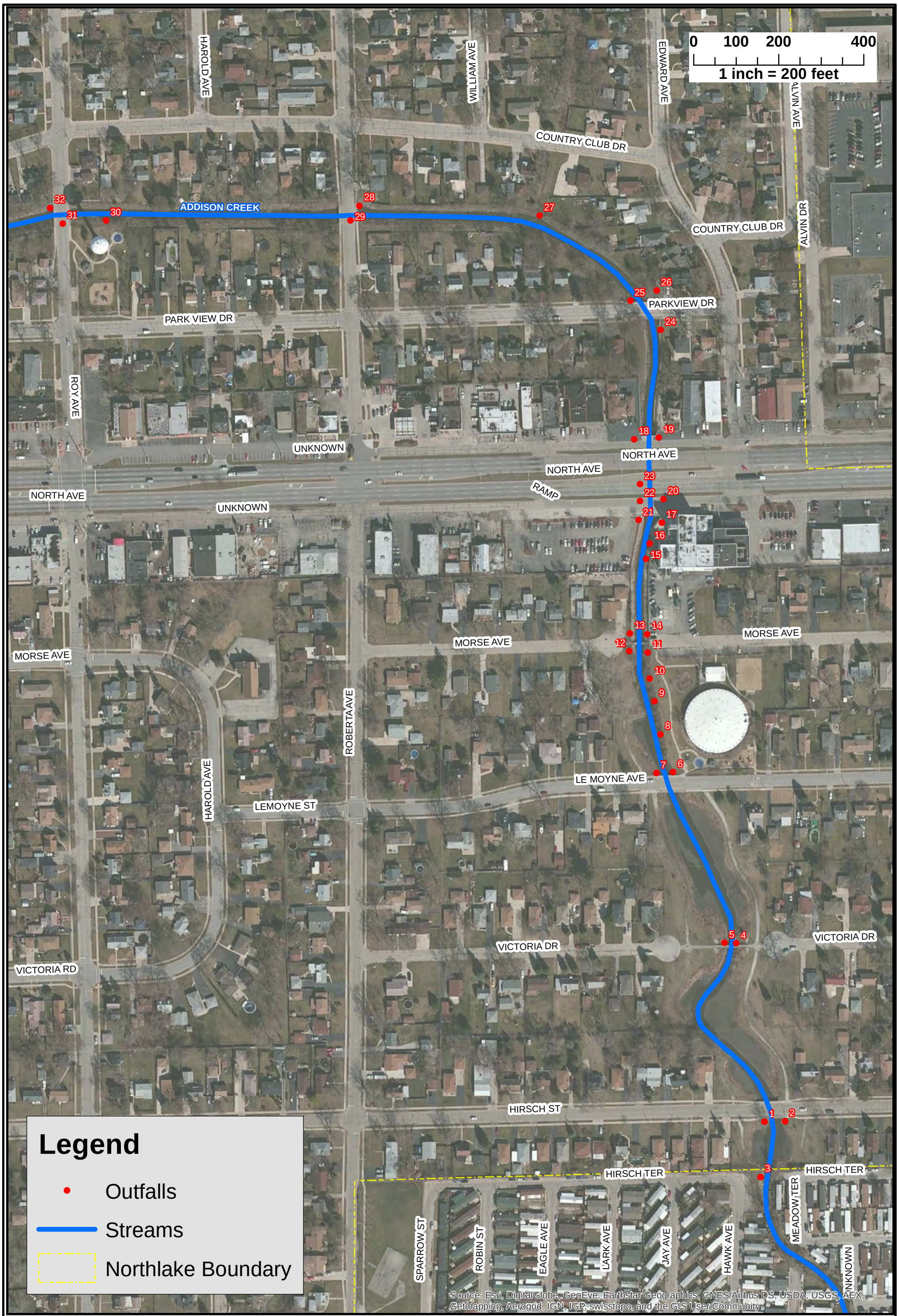
ALD. _____ ALD. _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

Exhibit2

REVISED: JANUARY 2008

N:\NLAKE\9432AA\zones.dgn



DSGN.	MJB	CHKD.	BMK

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: OUTFALL INSPECTION MAP GUIDE
SOUTHEAST BRANCH

DATE: 9/28/16

EXHIBIT 3

DSGN.	MJB	CHKD.	BMK

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

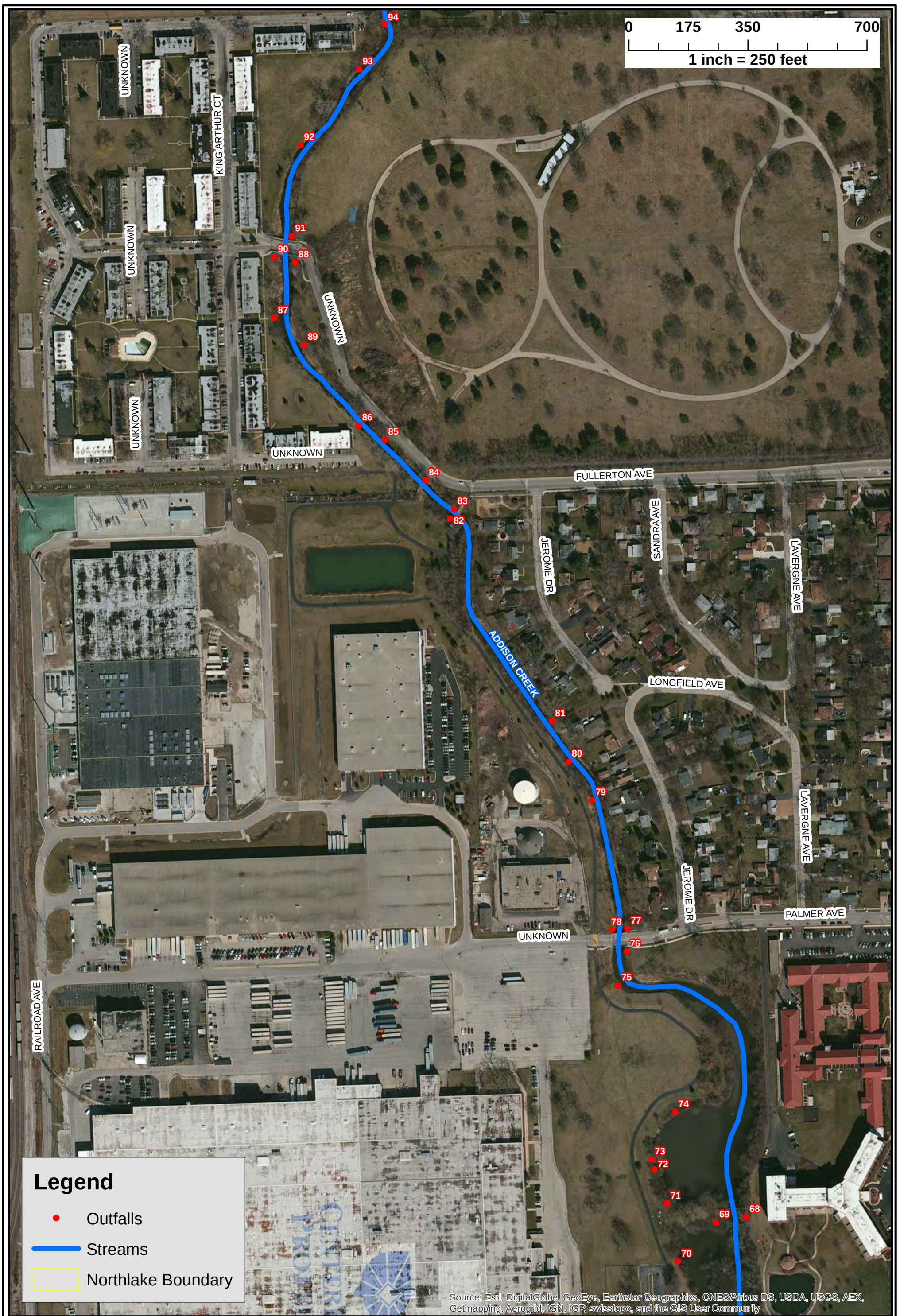
CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: OUTFALL INSPECTION MAP GUIDE
SOUTH CENTRAL BRANCH

DATE: 9/28/16

EXHIBIT 4



DSGN.	MJB	CHKD.	BMK

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: OUTFALL INSPECTION MAP GUIDE
CENTRAL BRANCH

DATE: 9/28/16

EXHIBIT 5

DSGN.	MJB	CHKD.	BMK

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

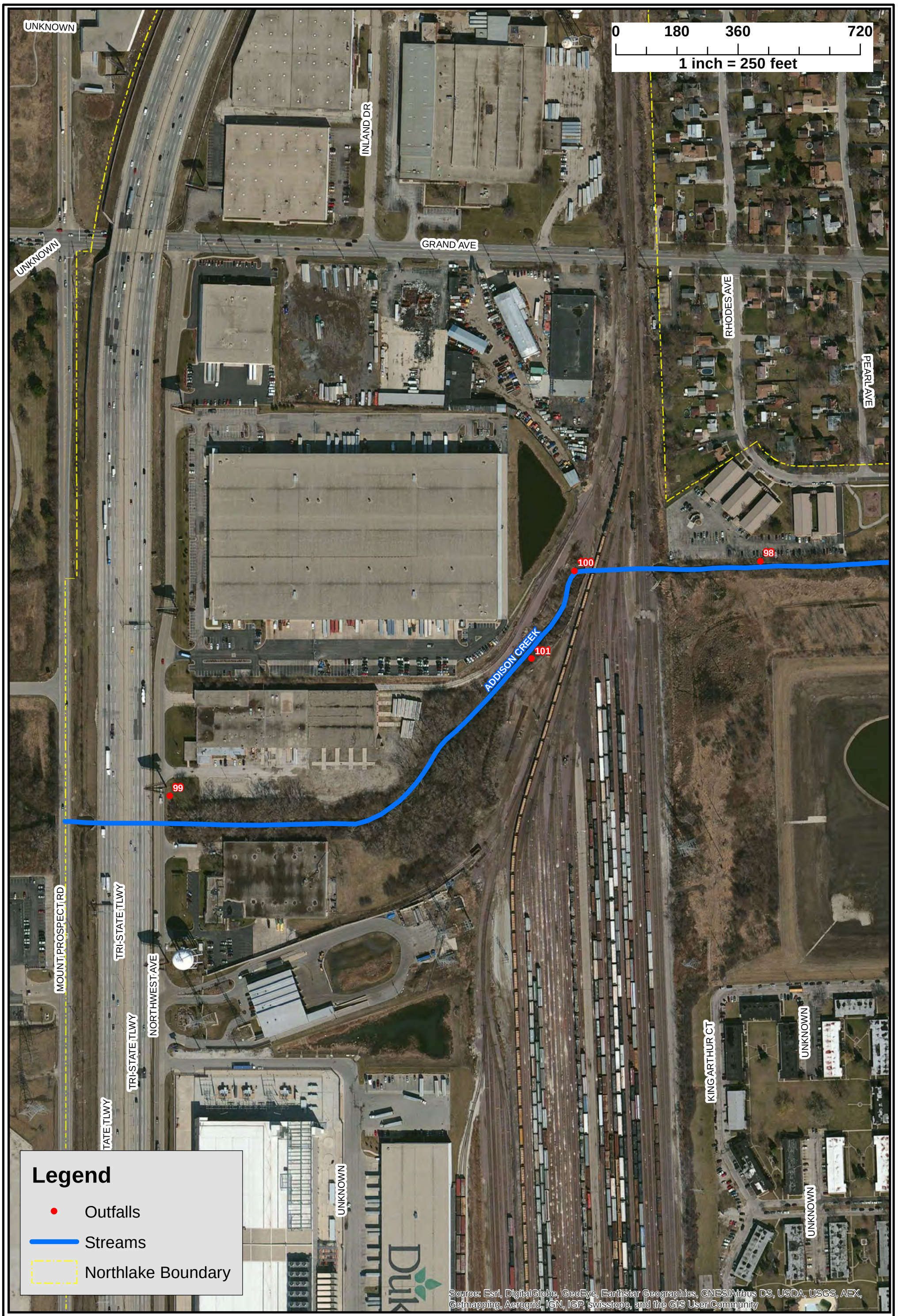
CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: OUTFALL INSPECTION MAP GUIDE
NORTH CENTRAL BRANCH

DATE: 9/28/16

EXHIBIT 6



DSGN.	MJB	CHKD.	BMK

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: OUTFALL INSPECTION MAP GUIDE
NORTHWEST BRANCH

DATE: 9/28/16

EXHIBIT 7

APPENDIX 1

City of Northlake Notice of Intent (NOI)
and IEPA General NPDES Permit No. ILR40

Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Notice of Intent for New or Renewal of General Permit for Discharges from Small Municipal Separate Storm Sewer Systems - MS4's

Part I. General Information

1. MS 4 Operator Name: City of Northlake
2. MS4 Mailing Address: 55 E. North Ave

   City: Northlake State: IL
3. Operator Type: City Other:
4. Operator Status: Local Other:
5. Name(s) of governmental entity(ies) in which MS4 is located:

   Cook County
6. Area of land that drains to your MS4 in square miles: 4.4
7. Latitude and Longitude at approximate geographical center of MS4 for which you are requesting authorization to discharge:

   Latitude: 87 Degrees 53 Minutes: 44 Seconds:

   Longitude: 41 Degrees: 55 Minutes: 02 Seconds:
8. Name(s) of known receiving waters

   Addison Creek

   Addison Creek South Tributary

   Golfview Ditch

9. Persons responsible for implementation or coordination of Stormwater Management Program:

Name: Jeffrey Sherwin Title: Mayor Phone: 708-343-8700

Area of Responsibility: Overall Implementation

Name: Christopher B. Burke Eng Ltd Title: City Engineer Phone: 847-823-0500

Area of Responsibility:

Part II. Best Management Practices (include shared responsibilities) which have been implemented or are proposed to be implemented in the MS4 area:

A. Public Education and Outreach

Qualifying Local Programs:

The City performs a variety of activities that meet the requirements of the Public Education and Outreach minimum control measure. These activities include BMP's: A.1, A.3 and A.6.

Measurable Goals (include shared responsibilities)

☒ A.1 Distributed Paper Material

Brief Description of BMP:

The City will continue to produce and make available brochures on topics related to stormwater quality. These topics may include steps the public can take to reduce pollutants to stormwater runoff or the impacts of stormwater runoff on local water bodies.

Measurable Goals, including frequencies:

The brochures will be developed to target developers, commercial and industrial facility operators and residents. The goal of this program is to increase the awareness of impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Milestones:

Go to Additional Pages

Year 1:

The Public Works Department will continue to produce and make the informational material and brochures.

Year 2:

The Public Works Department will continue to produce and make the informational material and brochures.

Year 3:

The Public Works Department will continue to produce and make the informational material and brochures.

Year 4:

The Public Works Department will continue to produce and make the informational material and brochures.

Year 5:

The Public Works Department will continue to produce and make the informational material and brochures.

☐ A.2 Speaking Engagement

☒ A.3 Public Service Announcement

Brief Description of BMP:

The City will include a storm water and/or ambient water quality related article once a year in the City's newsletter.

Measurable Goals, including frequencies:

The City newsletter article will be developed to target developers, commercial and industrial facility operators and interested citizens. The goal of this program is to increase the awareness of impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Milestones:

Year 1:

The City will include a storm water and/or ambient water quality related article in the City newsletter each year.

Year 2:

The City will include a storm water and/or ambient water quality related article in the City newsletter each year.

Year 3:

The City will include a storm water and/or ambient water quality related article in the City newsletter each year.

Year 4:

The City will include a storm water and/or ambient water quality related article in the City newsletter each year.

Year 5:

The City will include a storm water and/or ambient water quality related article in the City newsletter each year.

Go to Additional Pages

☐ A.4 Community Event

☐ A.5 Classroom Education Material

☒ A.6 Other Public Education (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has website links that includes information on household hazardous waste disposal, recycling and various stormwater/ water quality information. The contact information also allows residents to report stormwater and/or water quality information to the City.

The City will create a website link on the City's website to include information on the potential effects on storm water discharge due to climate change.

Measurable Goals, including frequencies:

The City will continue to target developers, commercial and industrial facility operators and residents. The goal of this program is to increase the awareness of impacts of stormwater discharges on water bodies, the potential effects of climate change on storm water discharges and the steps that the public can take to reduce pollutants in storm water runoff.

Milestones:

Year 1:

The City will continue to provide the website links and update as needed.

Year 2:

The City will continue to provide the website links and update as needed.

Year 3:

The City will continue to provide the website links and update as needed.

Year 4:

The City will continue to provide the website links and update as needed.

Year 5:

The City will continue to provide the website links and update as needed.

Go to Additional Pages

B.Public Participation/Involvement

Measurable Goals (include shared responsibilities)

Qualifying Local Programs:

The City performs a variety of activities that meet the requirements of the Public Participation and Involvement minimum control measure. These activities include BMP's: B.2, B.3, B.6 and B.7.

☒ B.2 Educational Volunteer (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City coordinates with local groups to perform clean up activities. These activities directly reduce the amount of pollutants entering the City's storm sewer system.

Measurable Goals, including frequencies:

The goal of this activity is to encourage active public participation in ambient water quality programs and increase the visibility of water quality issues.

Milestones:

Year 1:

The City will continue with the clean up activities and work to increase participation.

Year 2:

The City will continue with the clean up activities and work to increase participation.

Year 3:

The City will continue with the clean up activities and work to increase participation.

Year 4:

The City will continue with the clean up activities and work to increase participation.

Year 5:

The City will continue with the clean up activities and work to increase participation.

Go to Additional Pages

☒ B.3 Stakeholder Meeting (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City participates and coordinates with the Chicago Area Waterways Chloride Initiative work group led by the Metropolitan Water Reclamation District of Greater Chicago.

Measurable Goals, including frequencies:

The goal of this Initiative is to identify best management practices that are most appropriate and cost effective for the region to be used by municipalities.

Milestones:

Year 1:

The City will continue to participate.

Year 2:

The City will continue to participate.

Year 3:

The City will continue to participate.

Year 4:

The City will continue to participate.

Year 5:

The City will continue to participate.

Go to Additional Pages

☒ B.4 Public Hearing (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City will hold a public meeting to discuss topics including steps the public can take to reduce pollutants to stormwater runoff or the impacts of stormwater runoff on local water bodies.

Measurable Goals, including frequencies:

The goal is to increase public education and involvement regarding the Village's stormwater management and NDPES program and their knowledge on ways they can help.

Milestones:

Year 1:

The City will hold a public meeting at least once a year.

Year 2:

The City will hold a public meeting at least once a year.

Year 3:

The City will hold a public meeting at least once a year.

Year 4:

The City will hold a public meeting at least once a year.

Year 5:

The City will hold a public meeting at least once a year.

Go to Additional Pages

☐ B.5 Volunteer Monitoring

☒ B.6. Program Involvement (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City coordinates with local groups to perform clean up activities. These activities directly reduce the amount of pollutants entering the City's storm sewer system.

Measurable Goals, including frequencies:

This activity has the goal of encouraging active public participation in ambient water quality programs and increasing the visibility of water quality issues.

Milestones:

Year 1:

The City will continue with the clean up activities and work to increase participation.

Year 2:

The City will continue with the clean up activities and work to increase participation.

Year 3:

The City will continue with the clean up activities and work to increase participation.

Year 4:

The City will continue with the clean up activities and work to increase participation.

Year 5:

The City will continue with the clean up activities and work to increase participation.

Go to Additional Pages

☒ B.7 Other Public Involvement (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The Public Works Department provides contact information on the City website to allow residents to report stormwater or water quality related issues.

Measurable Goals, including frequencies:

The goal of this program is to provide active citizen participation in detection of illicit discharges to the storm sewer system and problems with drainage features. This program will also aid the Public Works Department in the detection of illicit discharges

Milestones:

Year 1:

The City will continue to provide the appropriate contact information to report illicit discharges or other stormwater issues.

Year 2:

The City will continue to provide the appropriate contact information to report illicit discharges or other stormwater issues.

Year 3:

The City will continue to provide the appropriate contact information to report illicit discharges or other stormwater issues.

Year 4:

The City will continue to provide the appropriate contact information to report illicit discharges or other stormwater issues.

Year 5:

The City will continue to provide the appropriate contact information to report illicit discharges or other stormwater issues.

Go to Additional Pages

C. Illicit Discharge Detection and Elimination

Qualifying Local Programs:

The City and Cook County perform a variety of activities that meet the requirements of the Illicit Discharge Detection and Elimination minimum control measure. These activities include BMP's: C.1, C.2, C.3, C.4, C.5, C.6, C.7 and C.10.

Measurable Goals (include shared responsibilities)

☒ C.1 Sewer Map Preparation (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City currently has a complete storm sewer map of the City and outfalls to receiving streams.

Measurable Goals, including frequencies:

The goal of this program is to develop a storm sewer map for the City to allow for quicker, more accurate tracing procedures.

Milestones:

Year 1:

The Public Works Department will continue to update the map as needed.

Year 2:

The Public Works Department will continue to update the map as needed.

Year 3:

The Public Works Department will continue to update the map as needed.

Year 4:

The Public Works Department will continue to update the map as needed.

Year 5:

The Public Works Department will continue to update the map as needed.

Go to Additional Pages

☒ C.2 Regulatory Control Program (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City and County have ordinances in place to prohibit non-stormwater discharges to the municipal separate storm sewer system.

Measurable Goals, including frequencies:

The goal of this program is to eliminate any non-storm water discharges to the storm sewer system.

Milestones:

Year 1:

The City will continue to enforce the regulatory control measures to prohibit or eliminate non-stormwater discharges.

Year 2:

The City will continue to enforce the regulatory control measures to prohibit or eliminate non-stormwater discharges.

Year 3:

The City will continue to enforce the regulatory control measures to prohibit or eliminate non-stormwater discharges.

Year 4:

The City will continue to enforce the regulatory control measures to prohibit or eliminate non-stormwater discharges.

Year 5:

The City will continue to enforce the regulatory control measures to prohibit or eliminate non-stormwater discharges.

Go to Additional Pages

☒ C.3 Detection/Elimination Prioritization Plan (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures for handling the report of a possible illicit discharge to storm sewer systems. The City also has procedures for tracking reports of illicit discharges and the enforcement measures the Code to facilitate the elimination of illicit discharges once they are discovered, tracked and investigated.

Measurable Goals, including frequencies:

The goal of this program is to develop a procedure for receiving, tracking, investigating and eliminating illicit discharges to the storm sewer system.

Milestones:

Year 1:

The City will continue the illicit discharge procedures.

Year 2:

The City will continue the illicit discharge procedures.

Year 3:

The City will continue the illicit discharge procedures.

Year 4:

The City will continue the illicit discharge procedures.

Year 5:

The City will continue the illicit discharge procedures.

Go to Additional Pages

☒ C.4 Illicit Discharge Tracing Procedures (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures for handling the report of a possible illicit discharge to storm sewer systems. The City also has procedures for tracking reports of illicit discharges and the enforcement measures the Code to facilitate the elimination of illicit

Measurable Goals, including frequencies:

The goal of this program is to develop a procedure for tracking, investigating and eliminating illicit discharges to the storm sewer system.

Milestones:

Year 1:

The City will continue the illicit discharge procedures.

Year 2:

The City will continue the illicit discharge procedures.

Year 3:

The City will continue the illicit discharge procedures.

Year 4:

The City will continue the illicit discharge procedures.

Year 5:

The City will continue the illicit discharge procedures.

Go to Additional Pages

☒ C.5 Illicit Source Removal Procedures (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures for handling the report of a possible illicit discharge to storm sewer systems. The City also has procedures for tracking reports of illicit discharges and the enforcement measures the Code to facilitate the elimination of illicit discharges once they are discovered, tracked and investigated.

Measurable Goals, including frequencies:

The goal of this program is to develop a procedure for tracking, investigating and eliminating illicit discharges to the storm sewer system.

Milestones:

Year 1:

The City will continue the illicit discharge procedures.

Year 2:

The City will continue the illicit discharge procedures.

Year 3:

The City will continue the illicit discharge procedures.

Year 4:

The City will continue the illicit discharge procedures.

Year 5:

The City will continue the illicit discharge procedures.

Go to Additional Pages

☒ C.6 Program Evaluation and Assessment (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City performs an annual audit of the NPDES program and Stormwater Management Program Plan to verify compliance with the permit requirements and overall effectiveness of the program. The City will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans.

Measurable Goals, including frequencies:

The goal of this activity to assess the City's NPDES program for compliance and effectiveness as well as ensure compliance with applicable TMDLs and Watershed Management Plans.

Milestones:

Year 1:

The City will continue to perform the annual evaluation and assessment.

Year 2:

The City will continue to perform the annual evaluation and assessment.

Year 3:

The City will continue to perform the annual evaluation and assessment.

Year 4:

The City will continue to perform the annual evaluation and assessment.

Year 5:

The City will continue to perform the annual evaluation and assessment.

Go to Additional Pages

☒ C.7 Visual Dry Weather Screening (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City will perform inspections of all MS4 outfalls during dry weather conditions or as determined by the inspection prioritization plan.

Measurable Goals, including frequencies:

The goal of this activity is to identify outfalls with potential illicit discharges.

Milestones:

Year 1:

The City will continue to perform annual inspections.

Year 2:

The City will continue to perform annual inspections.

Year 3:

The City will continue to perform annual inspections.

Year 4:

The City will continue to perform annual inspections.

Year 5:

The City will continue to perform annual inspections.

Go to Additional Pages

☐ C.8 Pollutant Field Testing

☐ C.9 Public Notification

☒ C.10 Other Illicit Discharge Controls (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City performs annual monitoring of the receiving waters upstream and downstream of all MS4 discharge points.

A segment of Addison Creek (GLA-04) is in an approved TMDL water quality plan (Total Maximum Daily Loads for Salt Creek Illinois, dated October 2004).

A segment of Addison Creek (GLA-04) is identified on the IEPAs 303d list as impaired for aquatic life (alpha. - BHC, copper, hexachlorobenzene, total phosphorus, PCBs, and sedimentation) and aesthetic quality (bottom deposits, total phosphorus and visible oil).

The Village will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans. The Village will continue the monitoring program.

Measurable Goals, including frequencies:

The goal of this activity is to monitor receiving streams for potential changes due to the discharge of stormwater and ensure compliance with applicable TMDLs and Watershed Management Plans to reduce waste load allocations.

Milestones:

Year 1:

The City will continue the monitoring program.

Year 2:

The City will continue the monitoring program.

Year 3:

The City will continue the monitoring program.

Year 4:

The City will continue the monitoring program.

Year 5:

The City will continue the monitoring program.

Go to Additional Pages

D. Construction Site Runoff Control

Measurable Goals (include shared responsibilities)

Qualifying Local Programs:

The City performs a variety of activities that meet the requirements of the Construction Site Runoff Control minimum control measure. This program relates to BMP numbers D.1, D.2, D.4, D.5 and D.6.

☒ D.1 Regulatory Control Program (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that require construction site runoff controls. These procedures include review of the site development plans by qualified staff and inspection/enforcement procedures.

Measurable Goals, including frequencies:

The goal of these activities are to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the construction site runoff control program.

Year 2:

The City will continue the construction site runoff control program.

Year 3:

The City will continue the construction site runoff control program.

Year 4:

The City will continue the construction site runoff control program.

Year 5:

The City will continue the construction site runoff control program.

Go to Additional Pages

☒ D.2 Erosion and Sediment Control BMPs (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that require construction site runoff controls. These procedures include review of the site development plans by qualified staff and inspection/enforcement procedures.

Measurable Goals, including frequencies:

The goal of these activities are to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the construction site runoff control program.

Year 2:

The City will continue the construction site runoff control program.

Year 3:

The City will continue the construction site runoff control program.

Year 4:

The City will continue the construction site runoff control program.

Year 5:

The City will continue the construction site runoff control program.

Go to Additional Pages

☐ D.3 Other Waste Control Program

☒ D.4 Site Plan Review Procedures (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that require construction site runoff controls. These procedures include review of the site development plans by qualified staff and inspection/enforcement procedures.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the construction site runoff control program.

Year 2:

The City will continue the construction site runoff control program.

Year 3:

The City will continue the construction site runoff control program.

Year 4:

The City will continue the construction site runoff control program.

Year 5:

The City will continue the construction site runoff control program.

Go to Additional Pages

☒ D.5 Public Information Handling Procedures (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures in place for addressing reports from residents related to construction site runoff.

Measurable Goals, including frequencies:

The City will continue to address the reporting of problems related to construction site runoff.

Milestones:

Year 1:

The City will continue the program to address reports related to construction site runoff control issues.

Year 2:

The City will continue the program to address reports related to construction site runoff control issues.

Year 3:

The City will continue the program to address reports related to construction site runoff control issues.

Year 4:

The City will continue the program to address reports related to construction site runoff control issues.

Year 5:

The City will continue the program to address reports related to construction site runoff control issues.

Go to Additional Pages

☒ D.6 Site Inspection/Enforcement Procedures (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that require construction site runoff controls. These procedures include review of the site development plans by qualified staff and inspection/enforcement procedures.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the construction site runoff control program.

Year 2:

The City will continue the construction site runoff control program.

Year 3:

The City will continue the construction site runoff control program.

Year 4:

The City will continue the construction site runoff control program.

Year 5:

The City will continue the construction site runoff control program.

Go to Additional Pages

☐ D.7 Other Construction Site Runoff Controls

E. Post-Construction Runoff Control

Qualifying Local Programs:

The City performs a variety of activities that meet the requirements of the Post-Construction Runoff Control minimum control measure. This relates to BMP numbers E.2, E.3, E.4, E.5 and E.6.

Measurable Goals (include shared responsibilities)

- ☐ E.1 Community Control Strategy
- ☒ E.2 Regulatory Control Program

Brief Description of BMP:

The City has ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling post-construction site runoff. These procedures are amendable to modification due to climate change. These procedures include review of the BMP designs by qualified staff and inspection/enforcement during and after construction.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the post construction runoff control program.

Year 2:

The City will continue the post construction runoff control program.

Year 3:

The City will continue the post construction runoff control program.

Year 4:

The City will continue the post construction runoff control program.

Year 5:

The City will continue the post construction runoff control program.

Go to Additional Pages

- ☒ E.3 Long Term O & M Procedures

(You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling post-construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/ enforcement during and after construction.

The City in accordance with MWRDGC WMO guidelines has procedures in place requiring the identification and responsible entity for long term maintenance of post construction BMPs required for development and an ordinance in place to ensure the preservation of natural features on development sites including the preservation of depressional storage.

Measurable Goals, including frequencies:

The City will continue these activities during the permitting process to identify and develop long term maintenance plans of BMPs and to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the post construction runoff control program.

Year 2:

The City will continue the post construction runoff control program.

Year 3:

The City will continue the post construction runoff control program.

Year 4:

The City will continue the post construction runoff control program.

Year 5:

The City will continue the post construction runoff control program.

Go to Additional Pages

☒ E.4 Pre-Construction Review of BMP Designs (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling post-construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/ enforcement during and after construction.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the post construction runoff control program.

Year 2:

The City will continue the post construction runoff control program.

Year 3:

The City will continue the post construction runoff control program.

Year 4:

The City will continue the post construction runoff control program.

Year 5:

The City will continue the post construction runoff control program.

Go to Additional Pages

☒ E.5 Site Inspections During Construction (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/enforcement during and after construction.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the post construction runoff control program.

Year 2:

The City will continue the post construction runoff control program.

Year 3:

The City will continue the post construction runoff control program.

Year 4:

The City will continue the post construction runoff control program.

Year 5:

The City will continue the post construction runoff control program.

Go to Additional Pages

☒ E.6 Post-Construction Inspections

Brief Description of BMP:

The City has ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling post-construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/ enforcement during and after construction.

Measurable Goals, including frequencies:

The City will continue these activities to reduce or prevent the discharge of pollutants from construction sites to the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue the post construction runoff control program.

Year 2:

The City will continue the post construction runoff control program.

Year 3:

The City will continue the post construction runoff control program.

Year 4:

The City will continue the post construction runoff control program.

Year 5:

The City will continue the post construction runoff control program.

Go to Additional Pages

☐ E.7 Other Post-Construction Runoff Controls

F. Pollution Prevention/Good Housekeeping

Measurable Goals (include shared responsibilities)

Qualifying Local Programs:

The City performs a variety of activities that meet the requirements of the Post-Construction Runoff Control minimum control measure. This relates to BMP numbers F.1, F.2, F.3, F.4, F.5, and F.6.

☒ F.1 Employee Training Program (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City will continue provide the training and other presentations that provide guidance and procedures for employees to reduce or eliminate the discharge of pollutants from City owned facilities and activities to the storm sewer system.

Measurable Goals, including frequencies:

The City will continue to educate Public Works employees of current practices that contribute to storm water pollution and/or to develop new procedures and make revisions to existing procedures that will curtail the discharge of pollutants to storm sewer systems by Public Works employees, annually.

Milestones:

Year 1:

The City will continue the pollution prevention and good housekeeping program to reduce or prevent the discharge of pollutants from municipal activities to the storm sewer system.

Year 2:

The City will continue the pollution prevention and good housekeeping program to reduce or prevent the discharge of pollutants from municipal activities to the storm sewer system.

Year 3:

The City will continue the pollution prevention and good housekeeping program to reduce or prevent the discharge of pollutants from municipal activities to the storm sewer system.

Year 4:

The City will continue the pollution prevention and good housekeeping program to reduce or prevent the discharge of pollutants from municipal activities to the storm sewer system.

Year 5:

The City will continue the pollution prevention and good housekeeping program to reduce or prevent the discharge of pollutants from municipal activities to the storm sewer system.

Go to Additional Pages

☒ F.2 Inspection and Maintenance Program (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures and inspection forms for the routine inspections of ponds, stream channels and storm sewer outfalls. The City typically completes the inspection cycle once every three years or as funding allows.

Measurable Goals, including frequencies:

The City will continue the inspection and maintenance program to identify and repair any stormwater issues with the municipal separate storm sewer system.

Milestones:

Year 1:

The City will continue with the inspection and maintenance program.

Year 2:

The City will continue with the inspection and maintenance program.

Year 3:

The City will continue with the inspection and maintenance program.

Year 4:

The City will continue with the inspection and maintenance program.

Year 5:

The City will continue with the inspection and maintenance program.

Go to Additional Pages

☒ F.3 Municipal Operations Storm Water Contro(You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures and policies in place to prevent or reduce the discharge of pollutants from municipal operations and actions.

Measurable Goals, including frequencies:

The City will continue the municipal operations waste control program to curtail the discharge of pollutants to storm sewer systems by Public Works employees.

Milestones:

Year 1:

The City will continue the municipal operations stormwater control program.

Year 2:

The City will continue the municipal operations stormwater control program.

Year 3:

The City will continue the municipal operations stormwater control program.

Year 4:

The City will continue the municipal operations stormwater control program.

Year 5:

The City will continue the municipal operations stormwater control program.

Go to Additional Pages

☒ F.4 Municipal Operations Waste Disposal (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City has procedures and policies to require the appropriate of municipal generated wastes.

Measurable Goals, including frequencies:

The City will continue the municipal operations waste control program to curtail the discharge of pollutants to storm sewer systems by Public Works employees.

Milestones:

Year 1:

The City will continue the municipal waste operations control program.

Year 2:

The City will continue the municipal waste operations control program.

Year 3:

The City will continue the municipal waste operations control program.

Year 4:

The City will continue the municipal waste operations control program.

Year 5:

The City will continue the municipal waste operations control program.

Go to Additional Pages

☒ F.5 Flood Management/Assess Guidelines (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City ordinances require the appropriate management of development and other uses within special flood hazard areas.

Measurable Goals, including frequencies:

The City will continue to enforce the ordinance regarding potential uses of the special flood hazard area to limit potential for the discharge of contaminants to the storm sewer system.

Milestones:

Year 1:

The City will continue the special flood hazard area development and use requirements.

Year 2:

The City will continue the special flood hazard area development and use requirements.

Year 3:

The City will continue the special flood hazard area development and use requirements.

Year 4:

The City will continue the special flood hazard area development and use requirements.

Year 5:

The City will continue the special flood hazard area development and use requirements.

Go to Additional Pages

☒ F.6 Other Municipal Operations Controls (You may need to go to the next page to fill in this information)

Brief Description of BMP:

The City performs a variety of activities that reduce or prevent pollutants including pesticides, herbicides, fertilizers and trash from entering the storm sewer system and to minimize exposure. These activities are part of the City's municipal operations

Measurable Goals, including frequencies:

The City will continue the municipal operations controls to reduce/minimze or prevent the discharge of pollutants to storm sewer systems by Public Works employees.

Milestones:

Year 1:

The City will continue the municipal operations control program.

Year 2:

The City will continue the municipal operations control program.

Year 3:

The City will continue the municipal operations control program.

Year 4:

The City will continue the municipal operations control program.

Year 5:

The City will continue the municipal operations control program.

Go to Additional Pages

Part III. Certification

I certify under penalty of law that this document an all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fines and imprisonment.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony (415 ILCS 5/44 (h)).

Jeffrey Sherwin	Mayor	May 19, 2016
Authorized Representative Name	Title	Date

Authorized Representative Signature

You may complete this form online and save a copy locally before printing and signing the form. It should then be sent to:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Attn: Permit Section
P.O. Box 19276
1021 North Grand Avenue East
Springfield, IL 62794-9276

Information required by this form must be provided to comply with 415 ILCS 5/39 (2000). Failure to do so may prevent this form from being processed and could result in your application being denied.

Additional Info - Page 1

A. Public Education and Outreach

BMP Number _____

Add Another BMP

Delete Last Entry

Additional Info - Page 2

B. Public Participation/Involvement

BMP Number _____

Add Another BMP

Delete Last Entry

Additional Info - Page 3

C. Illicit Discharge Detection and Elimination

BMP Number C10

The City Health Department Inspection forms specifically address non-stormwater discharges into the storm sewer system from commercial sources.

Add Another BMP

Delete Last Entry

Additional Info - Page 4

D. Construction Site Runoff Control

BMP Number _____

Add Another BMP

Delete Last Entry

Additional Info - Page 5

E. Post-Construction Runoff

BMP Number _____

Add Another BMP

Delete Last Entry

Additional Info - Page 6

F. Pollution Prevention/Good

BMP Number _____

Add Another BMP

Delete Last Entry

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

217/782-0610

February 10, 2016

Re: General NPDES Permit ILR40 for Discharge from Small Municipal Separate Storm Sewer Systems (MS4)

Dear Permittee:

Enclosed with this letter is the reissued General NPDES Permit ILR40 for the discharge of storm water from small MS4s. Significant changes have been made in the final permit based on comments received by the Agency. Please review the final permit and make any necessary modifications to your storm water management program. The Agency has also provided a list of permit modifications and a summary of responses to comments received by the Agency.

Please note that the Agency will be reviewing the Notice of Intent (NOI) for all NOIs that have been received. If you have not submitted an NOI, you must submit a NOI within 90 days of the effective date of the permit. A separate permit coverage letter will be sent by the Agency to persons who have submitted a complete NOI after review of the NOI.

Should you have any questions or comments regarding this letter, please contact Melissa Parrott or Cathy Demeroukas of my staff at (217) 782-0610 or at the above address.

Sincerely,

Alan Keller

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:16020801bah/MS4 NOI Letter

4302 N. Main St., Rockford, IL 61103 (815) 987-7760
595 S. State, Elgin, IL 60123 (847) 608-3131
2125 S. First St., Champaign, IL 61820 (217) 278-5800
2009 Mall St., Collinsville, IL 62234 (618) 346-5120

9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000
412 SW Washington St., Suite D, Peoria, IL 61602 (309) 671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601

PLEASE PRINT ON RECYCLED PAPER

General NPDES Permit No. ILR40

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand East
P.O. Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Discharges from Small Municipal Separate Storm Sewer Systems

Expiration Date: February 28, 2021

Issue Date: February 10, 2016

Effective Date: March 1, 2016

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of only storm water from small municipal separate storm sewer systems (MS4s), as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must submit a Notice of Intent (NOI) as described in Part II of this permit to the Illinois Environmental Protection Agency (Illinois EPA). Authorization, if granted, will be by letter and include a copy of this permit.

Alan Keller

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

NPDES/Hutton/stormwater/MS4/MSFinal2-9-16.daa

CONTENTS OF GENERAL PERMIT ILR40

PART I. COVERAGE UNDER GENERAL PERMIT ILR40 ..... Page 2

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS ..... Page 3

PART III. SPECIAL CONDITIONS ..... Page 4

PART IV. STORM WATER MANAGEMENT PROGRAMS ..... Page 6

PART V. MONITORING, RECORDKEEPING, AND REPORTING ..... Page 12

PART VI. DEFINITIONS AND ACRONYMS ..... Page 14

ATTACHMENT H. STANDARD CONDITIONS ..... Page 16

PART I. COVERAGE UNDER GENERAL PERMIT ILR40

A. Permit Area

This permit covers all areas of the State of Illinois.

B. Eligibility

1. This permit authorizes discharges of storm water from MS4s as defined in 40 CFR 122.26 (b)(16) as designated for permit authorizations pursuant to 40 CFR 122.32.

2. This permit authorizes the following non-storm water discharges provided they have been determined not to be substantial contributors of pollutants to a particular small MS4 applying for coverage under this permit:

   - Water line and fire hydrant flushing,
   - Landscape irrigation water,
   - Rising ground waters,
   - Ground water infiltration,
   - Pumped ground water,
   - Discharges from potable water sources, (excluding wastewater discharges from water supply treatment plants)
   - Foundation drains,
   - Air conditioning condensate,
   - Irrigation water, (except for wastewater irrigation),
   - Springs,
   - Water from crawl space pumps,
   - Footing drains,
   - Storm sewer cleaning water,
   - Water from individual residential car washing,
   - Routine external building washdown which does not use detergents,
   - Flows from riparian habitats and wetlands,
   - Dechlorinated pH neutral swimming pool discharges,
   - Residual street wash water,
   - Discharges or flows from fire fighting activities
   - Dechlorinated water reservoir discharges, and
   - Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed).

3. Any municipality covered by this general permit is also granted automatic coverage under Permit No. ILR10 for the discharge of storm water associated with construction site activities for municipal construction projects disturbing one acre or more. The permittee is granted automatic coverage 30 days after Agency receipt of a Notice of Intent to Discharge Storm Water from Construction Site Activities from the permittee. The Agency will provide public notification of the construction site activity and assign a unique permit number for each project during this period. The permittee shall comply with all the requirements of Permit ILR10 for all such construction projects.

C. Limitations on Coverage

The following discharges are not authorized by this permit:

1. Storm water discharges that are mixed with non-storm water or storm water associated with industrial activity unless such discharges are:

   a. In compliance with a separate NPDES permit; or

   b. Identified by and in compliance with Part I.B.2 of this permit.

2. Storm water discharges that the Agency determines are not appropriately covered by this general permit. This determination may include discharges identified in Part 1.B.2 or that introduce new or increased pollutant loading that may be a significant contributor of pollutants to the receiving waters.

3. Storm water discharges to any receiving water specified under 35 Ill. Adm. Code 302.105(d) (6).

4. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), drywall compound, wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.

5. Discharges from dewatering activities (including discharges from dewatering of trenches and excavations) are allowable if managed by appropriate controls as specified in a project's storm water pollution prevention plan, erosion and sediment control plan, or storm water management plan.

D. Obtaining Authorization

In order for storm water discharges from small MS4s to be authorized to discharge under this general permit, a discharger must:

1. Submit a Notice of Intent (NOI) in accordance with the requirements of Part II using an NOI form provided by the Agency (or a photocopy thereof).

2. Submit a new NOI in accordance with Part II within 30 days of a change in the operator or the addition of a new operator.

3. Unless notified by the Agency to the contrary, an MS4 owner submitting a complete NOI in accordance with the requirements of this permit will be authorized to discharge storm water from their small MS4s under the terms and conditions of this permit 30 days after the date that the NOI is received. Authorization will be by letter and include a copy of this permit. The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

A. Deadlines for Notification

1. If an MS4 was automatically designated under 40 CFR 122.32(a)(1) to obtain permit coverage, then you were required to submit an NOI or apply for an individual permit by March 10, 2003.

2. If an MS4 has coverage under the previous general permit for storm water discharges from small MS4s, you must renew your permit coverage under this part. Unless previously submitted for this general permit, you must submit a new NOI within 90 days of the effective date of this reissued general permit for storm water discharges from small MS4s to renew your NPDES permit coverage. The permittee shall comply with any new provisions of this general permit within 180 days of the effective date of this permit and include modifications pursuant to the NPDES permit in its Annual Report.

3. If an MS4 is designated in writing by Illinois EPA under 40 CFR 122.32(a)(2) during the term of this general permit, then you are required to submit an NOI within 180 days of such notice.

4. MS4s are not prohibited from submitting an NOI after established deadlines for NOI submittals. If a late NOI is submitted, your authorization is only for discharges that occur after permit coverage is granted. Illinois EPA reserves the right to take appropriate enforcement actions against MS4s that have not submitted a timely NOI.

B. Contents of Notice of Intent

Dischargers seeking coverage under this permit shall submit the Illinois MS4 NOI form. The NOI shall be signed in accordance with Standard Condition 11 of this permit and shall include all of the following information:

1. The street address, county, and the latitude and longitude of the municipal office for which the notification is submitted;

2. The name, address, and telephone number of the operator(s) filing the NOI for permit coverage and the name, address, telephone number, and email address of the person(s) responsible for implementation and compliance with the MS4 Permit; and

3. The name and segment identification of the receiving water(s), whether any segments(s) is or are listed as impaired on the most recently approved list pursuant to Section 303(d) of the Clean Water Act or any currently applicable Total Maximum Daily Load (TMDL) or alternate water quality study, and the pollutants for which the segment(s) is or are impaired. The most recent 303(d) list may be found at http://www.epa.state.il.us/water/water-quality/index.html. Information regarding TMDLs may be found at http://www.epa.state.il.us/water/tmdl/.

4. The following shall be provided as an attachment to the NOI:

   a. A description of the best management practices (BMPs) to be implemented and the measurable goals for each of the storm water minimum control measures in paragraph IV. B. of this permit designed to reduce the discharge of pollutants to the maximum extent practicable;

   b. The month and year in which you implemented any BMPs of the six minimum control measures, and the month and year in which you will start and fully implement any new minimum control measures or indicate the frequency of the action;

   c. For existing permittees, provide adequate information or justification on any BMPs from previous NOIs that could not be implemented; and

   d. Identification of a local qualifying program, or any partners of the program if any.

5. For existing permittees, certification that states the permittee has implemented necessary BMPs of the six minimum control measures.

C. All required information for the NOI shall be submitted electronically and in writing to the following addresses:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

epa.ms4noipermit@illinois.gov

D. Shared Responsibilities

Permittees may partner with other MS4s to develop and implement their storm water management program. Each MS4 must fill out the NOI form. MS4s may also jointly submit their individual NOI in coordination with one or more MS4s. The description of their storm water management program must clearly describe which permittees are responsible for implementing each of the control measures. Each permittee is responsible for implementation of best management practices for the Storm Water Management Program within its jurisdiction.

PART III. SPECIAL CONDITIONS

A. The Permittee's discharges, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

B. If there is evidence indicating that the storm water discharges authorized by this permit cause, or have the reasonable potential to cause or contribute to a violation of water quality standards, you may be required to obtain an individual permit or an alternative general permit or the permit may be modified to include different limitations and/or requirements.

C. If a TMDL allocation or watershed management plan is approved for any water body into which you discharge, you must review your storm water management program to determine whether the TMDL or watershed management plan includes requirements for control of storm water discharges. If you are not meeting the TMDL allocations, you must modify your storm water management program to implement the TMDL or watershed management plan within eighteen months of notification by the Agency of the TMDL or watershed management plan approval. Where a TMDL or watershed management plan is approved, the permittee must:

1. Determine whether the approved TMDL is for a pollutant likely to be found in storm water discharges from your MS4.

2. Determine whether the TMDL includes a pollutant waste load allocation (WLA) or other performance requirements specifically for storm water discharge from your MS4.

3. Determine whether the TMDL addresses a flow regime likely to occur during periods of storm water discharge.

4. After the determinations above have been made and if it is found that your MS4 must implement specific WLA provisions of the TMDL, assess whether the WLAs are being met through implementation of existing storm water control measures or if additional control measures are necessary.

5. Document all control measures currently being implemented or planned to be implemented to comply with TMDL waste load allocation(s). Also include a schedule of implementation for all planned controls. Document the calculations or other evidence that shows that the WLA will be met.

6. Describe and implement a monitoring program to determine whether the storm water controls are adequate to meet the WLA.

7. If the evaluation shows that additional or modified controls are necessary, describe the type and schedule for the control additions/revisions.

8. Continue requirements 4 through 7 above until monitoring from two continuous NPDES permit cycles demonstrate that the WLAs or water quality standards are being met.

9. If an additional individual permit or alternative general permit includes implementation of work pursuant to an approved TMDL or alternate water quality management plan, the provisions of the individual or alternative general permit shall supersede the conditions of Part III.C. TMDL information may be found at http://www.epa.state.il.us/water/tmdl/.

D. If the permittee performs any deicing activities that can cause or contribute to a violation of an applicable State chloride water quality standard, the permittee must participate in any watershed group(s) organized to implement control measures which will reduce the chloride concentration in any receiving stream in the watershed.

E. Authorization: Owners or operators must submit either an NOI in accordance with the requirements of this permit or an application for an individual NPDES Permit to be authorized to discharge under this General Permit. Authorization, if granted will be by letter and include a copy of this Permit. Upon review of an NOI, the Illinois EPA may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

1. Automatic Continuation of Expired General Permit: Except as provided in III.E.2 below, when this General Permit expires the conditions of this permit shall be administratively continued until the earliest of the following:

   a. 150 days after the new General Permit is reissued;

   b. The Permittee submits a Notice of Termination (NOT) and that notice is approved by Illinois EPA;

   c. The Permittee is authorized for coverage under an individual permit or the renewed or reissued General Permit;

   d. The Permittee's application for an individual permit for a discharge or NOI for coverage under the renewed or reissued General Permit is denied by the Illinois EPA; or

   e. Illinois EPA issues a formal permit decision not to renew or reissue this General Permit. This General Permit shall be automatically administratively continued after such formal permit decision.

2. Duty to Reapply:

   a. If the permittee wishes to continue an activity regulated by this General Permit, the permittee must apply for permit coverage before the expiration of the administratively continued period specified in III.E.1 above.

   b. If the permittee reapplies in accordance with the provisions of III.E.2.a above, the conditions of this General Permit shall continue in full force and effect under the provisions of 5 ILCS 100/10-65 until the Illinois EPA makes a final determination on the application or NOI.

   c. Standard Condition 2 of Attachment H is not applicable to this General Permit.

F. The Agency may require any person authorized to discharge by this permit to apply for and obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual or alternative general NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual or alternative general NPDES permit application required by the Agency under this paragraph, then the applicability of this permit to the individual or alternative general NPDES permittee is automatically terminated by the date specified for application submittal.

G. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the Agency. The request will be granted by issuing an individual permit or an alternative general permit if the reasons cited by the owner are adequate to support the request.

H. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be.

PART IV. STORM WATER MANAGEMENT PROGRAMS

A. Requirements

The permittee must develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from their MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act. The permittee's storm water management program must include the minimum control measures described in section B of this Part. For new permittees, the permittee must develop and implement specific program requirements by the date specified in the Agency's coverage letter. The U.S. Environmental Protection Agency's National Menu of Storm Water Best Management Practices (http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm) and the most recent version of the Illinois Urban Manual should be consulted regarding the selection of appropriate BMPs.

B. Minimum Control Measures

The 6 minimum control measures to be included in the permittee's storm water management program are:

1. Public Education and Outreach on Storm Water Impacts

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs as necessary to comply with the terms of this section.

a. Distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The educational materials shall include information on the potential impacts and effects on storm water discharge due to climate change. Information on climate change can be found at http://epa.gov/climatechange/. The permittee shall incorporate the following into its education materials, at a minimum:

i. Information on effective pollution prevention measures to minimize the discharge of pollutants from private property and activities into the storm sewer system, on the following topics:

A. Storage and disposal of fuels, oils and similar materials used in the operation of or leaking from, vehicles and other equipment;
B. Use of soaps, solvents or detergents used in the outdoor washing of vehicles, furniture and other property,
C. Paint and related décor;
D. Lawn and garden care; and
E. Winter de-icing material storage and use.

ii. Information about green infrastructure strategies such as green roofs, rain gardens, rain barrels, bioswales, permeable piping, dry wells, and permeable pavement that mimic natural processes and direct storm water to areas where it can be infiltrated, evaporated or reused.

iii. Information on the benefits and costs of such strategies and provide guidance to the public on how to implement them.

b. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in the permittee's storm water discharges to the maximum extent practicable; and

c. Provide an annual evaluation of public education and outreach BMPs and measurable goals. Report on this evaluation in the Annual Report pursuant to Part V.C.1.

2. Public Involvement/Participation

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs as necessary to comply with the terms of this section.

a. At a minimum, comply with State and local public notice requirements when implementing a public involvement/ participation program;

b. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP, which must ensure the reduction of all of the pollutants of concern in the permittee's storm water discharges to the maximum extent practicable;

c. Provide a minimum of one public meeting annually for the public to provide input as to the adequacy of the permittee's MS4 program. This requirement may be met in conjunction with or as part of a regular council or board meeting;

d. The permittee shall identify environmental justice areas within its jurisdiction and include appropriate public involvement/participation. Information on environmental justice concerns may be found at http://www.epa.gov/environmentaljustice/. This requirement may be met in conjunction with or as part of a regular council or board meeting; and

e. Provide an annual evaluation of public involvement/participation BMPs and measurable goals. Report on this evaluation in the Annual Report pursuant to Part V.C.1.

3. Illicit Discharge Detection and Elimination

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs as necessary to comply with the terms of this section.

a. Develop, implement, and enforce a program to detect and eliminate illicit connections or discharges into the permittee's small MS4;

b. Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters that receive discharges from those outfalls. Existing permittees renewing coverage under this permit shall update their storm sewer system map to include any modifications to the sewer system;

c. To the extent allowable under state or local law, prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and actions, including enforceable requirements for the prompt reporting to the MS4 of all releases, spills and other unpermitted discharges to the separate storm sewer system, and a program to respond to such reports in a timely manner;

d. Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system;

e. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and the requirements and mechanisms for reporting such discharges;

f. Address the categories of non-storm water discharges listed in Section I.B.2 only if you identify them as significant contributor of pollutants to your small MS4 (discharges or flows from firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States);

g. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in your storm water discharges to the maximum extent practicable;

h. Conduct periodic inspections of the storm sewer outfalls in dry weather conditions for detection of non-storm water discharges and illegal dumping. The permittee may establish a prioritization plan for inspection of outfalls, placing priority on outfalls with the greatest potential for non-storm water discharges. Major/high priority outfalls shall be inspected at least annually; and

i. Provide an annual evaluation of illicit discharge detection and elimination BMPs and measurable goals. Report on this evaluation in the Annual Report pursuant to Part V.C.1.

4. Construction Site Storm Water Runoff Control

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs as necessary to comply with the terms of this section.

a. Develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the permittee's small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more or has been designated by the permitting authority.

At a minimum, the permittee must develop and implement the following:

i. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state or local law;

ii. Erosion and Sediment Controls - The permittee shall ensure that construction activities regulated by the storm water program require the construction site owner/operator to design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:

A. Control storm water volume and velocity within the site to minimize soil erosion;
B. Control storm water discharges, including both peak flow rates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
C. Minimize the amount of soil exposed during construction activity;
D. Minimize the disturbance of steep slopes;
E. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
F. Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal, and maximize storm water infiltration, unless infeasible; and
G. Minimize soil compaction and preserve topsoil, unless infeasible.

iii. Requirements for construction site operators to control or prohibit non-storm water discharges that would include concrete and wastewater from washout of concrete (unless managed by an appropriate control), drywall compound, wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution;

iv. Require all regulated construction sites to have a storm water pollution prevention plan that meets the requirements of Part IV of NPDES permit No. ILR10, including management practices, controls, and other provisions at least as protective as the requirements contained in the Illinois Urban Manual, 2014, or as amended including green infrastructure techniques where appropriate and practicable;

v. Procedures for site plan reviews which incorporate consideration of potential water quality impacts and site plan review of individual pre-construction site plans by the permittee to ensure consistency with local sediment and erosion control requirements;

vi. Procedures for receipt and consideration of information submitted by the public; and

vii. Site inspections and enforcement of ordinance provisions.

b. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in your storm water discharges to the maximum extent practicable.

c. Provide an annual evaluation of construction site storm water control BMPs and measureable goals in the Annual Report pursuant to Part V.C.1.

5. Post-Construction Storm Water Management in New Development and Redevelopment

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs, as necessary, to comply with the terms of this section.

a. Develop, implement, and enforce a program to address and minimize the volume and pollutant load of storm water runoff from projects for new development and redevelopment that disturb greater than or equal to one acre, projects less than one acre that are part of a larger common plan of development or sale or that have been designated to protect water quality, that discharge into the permittee's small MS4 within the MS4's jurisdictional control. The permittee's program must ensure that appropriate controls are in place that would protect water quality and reduce the discharge of pollutants to the maximum extent practicable. In addition, each permittee shall adopt strategies that incorporate the infiltration, reuse, and evapotranspiration of storm water into the project to the maximum extent practicable. The permittee shall also develop and implement procedures for receipt and consideration of information submitted by the public.

b. Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for all projects within the permittee's jurisdiction for all new development and redevelopment that disturb greater than or equal to1 acre (at a minimum) that will reduce the discharge of pollutants and the volume and velocity of storm water flow to the maximum extent practicable. These strategies shall include effective water quality and watershed protection elements and shall be amenable to modification due to climate change. Information on climate change can be found at http://www.epa.gov/climatechange/. When selecting BMPs to comply with requirements contained in this Part, the permittee shall adopt one or more of the following general strategies, listed in order of preference below. The proposal of a strategy shall include a rationale for not selecting an approach from among those with a higher preference.

   i. Preservation of the natural features of development sites, including natural storage and infiltration characteristics;

   ii. Preservation of existing natural streams, channels, and drainage ways;

   iii. Minimization of new impervious surfaces;

   iv. Conveyance of storm water in open vegetated channels;

   v. Construction of structures that provide both quantity and quality control, with structures serving multiple sites being preferable to those serving individual sites; and

   vi. Construction of structures that provide only quantity control, with structures serving multiple sites being preferable to those serving individual sites.

c. If a permittee requires new or additional approval of any development, redevelopment, linear project construction, replacement or repair on existing developed sites, or other land disturbing activity covered under this Part, the permittee shall require the person responsible for that activity to develop a long term operation and maintenance plan including the adoption of one or more of the strategies identified in Part IV.B.5.b. of this permit.

d. Develop and implement a program to minimize the volume of storm water runoff and pollutants from public highways, streets, roads, parking lots, and sidewalks (public surfaces) through the use of BMPs that alone or in combination result in physical, chemical, or biological pollutant load reduction, increased infiltration, evapotranspiration, and reuse of storm water. The program shall include, but not be limited to the following elements:

   i. Annual Training for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public surfaces in current green infrastructure or low impact design techniques applicable to such projects; and

   ii. Annual Training for all contractors retained to manage or carry out routine maintenance, repair, or replacement of public surfaces in current green infrastructure or low impact design techniques applicable to such projects. Contractors may provide training to their employees for projects which include green infrastructure or low impact design techniques.

e. Develop and implement a program to minimize the volume of storm water runoff and pollutants from existing privately owned developed property that contributes storm water to the MS4 within the MS4 jurisdictional control. Such program must be documented and may contain the following elements:

   i. Source Identification – Establish an inventory of storm water and pollutants discharged to the MS4;

   ii. Implementation of appropriate BMPs to accomplish the following:

      A. Education on green infrastructure BMPs;
      B. Evaluation of existing flood control techniques to determine the feasibility of pollution control retrofits;
      C. Evaluation of existing flood control techniques to determine potential impacts and effects due to climate change;
      D. Implementation of additional controls for special events expected to generate significant pollution (fairs, parades, performances);
      E. Implementation of appropriate maintenance programs, (including maintenance agreements, for structural pollution control devices or systems);
      F. Management of pesticides and fertilizers; and
      G. Street cleaning in targeted areas.

f. Infiltration practices should not be implemented in any of the following circumstances:

i. Areas/sites where vehicle fueling and/or maintenance occur;

ii. Areas/sites with shallow bedrock which allow movement of pollutants into the groundwater;

iii. Areas/sites near Karst features;

iv. Areas/sites where contaminants in soil or groundwater could be mobilized by infiltration of storm water;

v. Areas/sites within a delineated source water protection area for a public drinking water supply where the potential for an introduction of pollutants into the groundwater exists. Information on groundwater protection may be found at:

http://www.epa.state.il.us/water/groundwater/index.html

vi. Areas/sites within 400 feet of a community water supply well if there is not a wellhead protection delineation area or within 200 feet of a private water supply well. Information on wellhead protection may be found at :

http://www.epa.state.il.us/water/groundwater/index.html

g. Develop and implement an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects, public surfaces, and existing developed property as set forth above to the extent allowable under state or local law.

h. Require all regulated construction sites to have post-construction management plans that meet or exceed the requirements of Part IV.D.2.h of NPDES permit No. ILR10 including management practices, controls, and other provisions at least as protective as the requirements contained in the most recent version of the Illinois Urban Manual, 2014.

i. Ensure adequate long-term operation and maintenance of BMPs.

j. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in your storm water discharges to the maximum extent practicable.

k. Within 3 years of the effective date of the permit, the permittee must develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects that are associated with the permittee or that discharge to the MS4. This process must include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting the project objectives. This will also include assessment of any potential impacts and effects on flood management projects due to climate change.

l. Provide an annual evaluation of post-construction storm water management BMPs and measureable goals in the Annual Report pursuant to Part V.C.1 .

6. Pollution Prevention/Good Housekeeping for Municipal Operations

New permittees shall develop and implement elements of their storm water management program addressing the provisions listed below. Existing permittees renewing coverage under this permit shall maintain their current programs addressing this Minimum Control Measure, updating and enhancing their storm water management programs as necessary to comply with the terms of this section.

a. Develop and implement an operation and maintenance program that includes an annual training component for municipal staff and contractors and is designed to prevent and reduce the discharge of pollutants to the maximum extent practicable.

b. Pollution Prevention- The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from municipal properties, infrastructure, and operations. At a minimum, such measures must be designed, installed, implemented and maintained to:

i. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

ii. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, chemical storage tanks, deicing material storage facilities and temporary stockpiles, detergents, sanitary waste, and other materials present on the site to precipitation and to storm water;

iii. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures; and

iv. Provide regular inspection of municipal storm water management BMPs. Based on inspection findings, the permittee shall determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of structural storm water BMPs. Necessary maintenance shall be completed as soon as conditions allow to prevent or reduce the discharge of pollutants to storm water.

c. Deicing material must be stored in a permanent or temporary storage structure or seasonal tarping must be utilized. If no permanent structures are owned or operated by the Permittee, new permanent deicing material storage structures shall be constructed within two years of the effective date of this permit. Storage structures or stockpiles shall be located and managed to minimize storm water pollutant runoff from the stockpiles or loading/unloading areas of the stockpiles. Stockpiles and loading/unloading areas should be located as far as practicable from any area storm sewer drains. Fertilizer, pesticides, or other chemicals shall be stored indoors to prevent any discharge of such chemicals within the storm water runoff.

d. Using training materials that are available from USEPA, the State of Illinois, or other organizations, the permittee's program must include annual employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, operation of storage yards, snow disposal, deicing material storage handling and use on roadways, new construction and land disturbances, and storm water system maintenance procedures for proper disposal of street cleaning debris and catch basin material. In addition, training should include how flood management projects impact water quality, non-point source pollution control, green infrastructure controls, and aquatic habitat.

e. Define appropriate BMPs for this minimum control measure and measurable goals for each BMP. These measurable goals must ensure the reduction of all of the pollutants of concern in your storm water discharges to the maximum extent practicable.

f. Provide an annual evaluation of pollution prevention/good housekeeping for municipal operations and measureable goals in the Annual Report pursuant to Part V.C.1.

C. Qualifying State, County, or Local Program

If an existing qualifying local program requires a permittee to implement one or more of the minimum control measures of Part IV. B. above, the permittee may follow that qualifying program's requirements rather than the requirements of Part IV.B. above. A qualifying local program is a local, county, or state municipal storm water management program that imposes, at a minimum, the relevant requirements of Part IV. B. Any qualifying local programs that permittees intend to follow shall be specified in their storm water management program.

D. Sharing Responsibility

1. Implementation of one or more of the minimum control measures may be shared with another entity, or the entity may fully take over the control measure. A permittee may rely on another entity only if:

a. The other entity implements the control measure;

b. The particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement;

c. The other entity agrees to implement any minimum control measure on the permittee's behalf. A written agreement of this obligation is recommended. This obligation must be maintained as part of the description of the permittee's Storm Water Management Program. If the other entity agrees to report on the minimum control measure, the permittee must supply the other entity with the reporting requirements contained in Part V.C of this permit. If the other entity fails to implement the minimum control measure on the permittee's behalf, then the permittee remains liable for any discharges due to that failure to implement the minimum control measure.

E. Reviewing and Updating Storm Water Management Programs

1. Storm Water Management Program Review- The permittee must perform an annual review of its Storm Water Management Program in conjunction with preparation of the annual report required under Part V.C. The permittee must include in its annual report a plan for complying with any changes or new provisions in this permit, or in any State or federal regulations. The permittee must also include in its annual report a plan for complying with all applicable TMDL Report(s) or watershed management plan(s). Information on TMDLs may be found at:

http://www.epa.state.il.us/water/tmdl/.

2. Storm Water Management Program Update - The permittee may modify its Storm Water Management Program during the life of the permit in accordance with the following procedures:

a. Modifications adding (but not subtracting or replacing) components, controls, or requirements to the Storm Water Management Program may be made at any time upon written notification to the Agency;

b. Modifications replacing an ineffective or infeasible BMP specifically identified in the Storm Water Management Program with an alternate BMP may be requested at any time. Unless denied by the Agency, modifications proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If the request is denied, the Agency will send the permittee a written response giving a reason for the decision. The permittee's modification requests must include the following:

i. An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);

ii. Expectations on the effectiveness of the replacement BMP; and

iii. An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

c. Modification of any ordinances relative to the storm water management program, provided the updated ordinance is at least as stringent as the provisions stipulated in this permit; and

d. Modification requests or notifications must be made in writing and signed in accordance with Standard Condition II of Attachment H.

3. Storm Water Management Program Updates Required by the Agency. Modifications requested by the Agency must be made in writing, set forth the time schedule for permittees to develop the modifications, and offer permittees the opportunity to propose alternative program modifications to meet the objective of the requested modification. All modifications required by the Permitting Authority will be made in accordance with 40 CFR 124.5, 40 CFR 122.62, or as appropriate 40 CFR 122.63. The Agency may require modifications to the Storm Water Management Program as needed to:

a. Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;

b. Include more stringent requirements necessary to comply with new federal or State statutory or regulatory requirements; or

c. Include such other conditions deemed necessary by the Agency to comply with the goals and requirements of the Clean Water Act.

PART V. MONITORING, RECORDKEEPING, AND REPORTING

A. Monitoring

The permittee must develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts within 180 days of the effective date of this permit. The program should be tailored to the size and characteristics of the MS4 and the watershed. The permittee shall provide a justification of its monitoring and assessment program in the Annual Report. By not later than 180 days after the effective date of this permit, the permittee shall initiate an evaluation of its storm water program. The plan for monitoring/evaluation shall be described in the Annual Report. Evaluation and/or monitoring results shall be provided in the Annual Report. The monitoring and assessment program may include evaluation of BMPs and/or direct water quality monitoring as follows:

1. An evaluation of BMPs based on estimated effectiveness from published research accompanied by an inventory of the number and location of BMPs implemented as part of the permittee's program and an estimate of pollutant reduction resulting from the BMPs, or

2. Monitoring the effectiveness of storm water control measures and progress towards the MS4's goals using one or more of the following:

a. MS4 permittees serving a population of less than 25,000 may conduct visual observations of the storm water discharge documenting color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution; or

b. MS4 permittees may evaluate storm water quality and impacts using one or more of the following methods;

i. Instream monitoring in the highest level hydrological unit code segment in the MS4 area. Monitoring shall include, at a minimum, quarterly monitoring of receiving waters upstream and downstream of the MS4 discharges in the designated stream(s).

ii. Measuring pollutant concentrations over time.

iii. Sediment monitoring.

iv. Short-term extensive network monitoring. Short-term sampling at the outlets of numerous drainage areas to identify water quality issues and potential storm water impacts, and may help in ranking areas for implementation priority. Data collected simultaneously across the MS4 to help characterize the geographical distribution of pollutant sources.

v. Site-specific monitoring. High-value resources such as swimming beaches, shellfish beds, or high-priority habitats could warrant specific monitoring to assess the status of use support. Similarly, known high-priority pollutant sources or impaired water bodies with contaminated aquatic sediments, an eroding stream channel threatening property, or a stream reach with a degraded fish population could be monitored to assess impacts of storm water discharges and/or to identify improvements that result from the implementation of BMPs.

vi. Assessing physical/habitat characteristics such as stream bank erosion caused by storm water discharges.

vii. Outfall/Discharge monitoring.

viii. Sewershed-focused monitoring. Monitor for pollutants in storm water produced in different areas of the MS4. For example, identify which pollutants are present in storm water from industrial areas, commercial areas, and residential areas.

ix. BMP performance monitoring. Monitoring of individual BMP performance to provide a direct measure of the pollutant reduction efficiency of these key components of a MS4 program.

x. Collaborative watershed-scale monitoring. The permittee may choose to work collaboratively with other permittees and/or a watershed group to design and implement a watershed or sub-watershed-scale monitoring program that assesses the water quality of the water bodies and the sources of pollutants. Such programs must include elements which assess the impacts of the permittee's storm water discharges and/or the effectiveness of the BMPs being implemented.

c. If ambient water quality monitoring under 2b above is performed, the monitoring of storm water discharges and ambient monitoring intended to gauge storm water impacts shall be performed within 48 hours of a precipitation event greater than or equal to one quarter inch in a 24-hour period. At a minimum, analysis of storm water discharges or ambient water quality shall include the following parameters: total suspended solids, total nitrogen, total phosphorous, fecal coliform, chlorides, and oil and grease. In addition, monitoring shall be performed for any other pollutants associated with storm water runoff for which the receiving water is considered impaired pursuant to the most recently approved list under Section 303(d) of the Clean Water Act.

B. Recordkeeping

The permittee must keep records required by this permit for 5 years after the expiration of this permit. Records to be kept under this Part include the permittee's NOI, storm water management plan, annual reports, and monitoring data. All records shall be kept onsite or locally available and shall be made accessible to the Agency for review at the time of an on-site inspection. Except as otherwise provided in this permit, permittees must submit records to the Agency only when specifically requested to do so. Permittees must post their NOI, storm water management program plan, and annual reports on the permittee's website. The permittee must make its records available to the public at reasonable times during regular business hours. The permittee may require a member of the public to provide advance notice, in accordance with the applicable Freedom of Information Act requirements. Storm sewer maps may be withheld for security reasons.

C. Reporting

The permittee must submit Annual Reports to the Agency by the first day of June for each year that this permit is in effect. If the permittee maintains a website, a copy of the Annual Report shall be posted on the website by the first day of June of each year. Each Report shall cover the period from March of the previous year through March of the current year. Annual Reports shall be maintained on the permittees' website for a period of 5 years. The Report must include:

1. An assessment of the appropriateness and effectiveness of the permittee's identified BMPs and progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the permittee's identified measurable goals for each of the minimum control measures;

2. The status of compliance with permit conditions, including a description of each incidence of non-compliance with the permit, and the permittee's plan for achieving compliance with a timeline of actions taken or to be taken;

3. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

4. A summary of the storm water activities the permittee plans to undertake during the next reporting cycle, including an implementation schedule;

5. A change in any identified BMPs or measurable goals that apply to the program elements;

6. Notice that the permittee is relying on another government entity to satisfy some of the permit obligations (if applicable);

7. Provide an updated summary of any BMP or adaptive management strategy constructed or implemented pursuant to any approved TMDL or alternate water quality management study. Use the results of your monitoring program to assess whether the WLA or other performance requirements for storm water discharges from your MS4 are being met; and

8. If a qualifying local program or programs with shared responsibilities is implementing all minimum control measures on behalf of one or more entities, then the local qualifying program or programs with shared responsibilities may submit a report on behalf of itself and any entities for which it is implementing all of the minimum control measures.

The Annual Reports shall be submitted to the following office and email addresses:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Municipal Annual Inspection Report
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

epa.ms4annualinsp@illinois.gov

PART VI. DEFINITIONS AND ACRONYMS

All definitions contained in Section 502 of the Clean Water Act, 40 CFR 122, and 35 Ill. Adm. Code 309 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided. In the event of a conflict, the definition found in the statute or regulation takes precedence.

Best Management Practices (BMPs) means structural or nonstructural controls, schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BMP is an acronym for "Best Management Practices."

CFR is an acronym for "Code of Federal Regulations."

Control Measure as used in this permit refers to any Best Management Practice or other method used to prevent or reduce storm water runoff or the discharge of pollutants to waters of the State.

CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 ET. seq.

Discharge when used without a qualifier, refers to discharge of a pollutant as defined at 40 CFR 122.2.

Environmental Justice (EJ) means the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies

Environmental Justice Area means a community with a low-income and/or minority population greater than twice the statewide average. In addition, a community may be considered a potential EJ community if the low-income and/or minority population is less than twice the state-wide average but greater than the statewide average and it has identified itself as an EJ community. If the low-income and/or minority population percentage is equal to or less than the statewide average, the community should not be considered a potential EJ community.

Flood management project means any project which is intended to control, reduce or minimize high stream flows and associated damage. This may also include projects designed to mimic or improve natural conditions in the waterway.

Green Infrastructure means wet weather management approaches and technologies that utilize, enhance or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration and reuse. Green infrastructure approaches currently in use include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, porous and permeable pavements, porous piping systems, dry wells, vegetated median strips, reforestation/revegetation, rain barrels, cisterns, and protection and enhancement of riparian buffers and floodplains.

Illicit Connection means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge is defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

MEP is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR 122.34.

MS4 is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to a Large, Medium, or Small Municipal Separate Storm Sewer System (e.g. "the Dallas MS4"). The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Houston MS4 includes MS4s operated by the city of Houston, the Texas Department of Transportation, the Harris County Flood Control District, Harris County, and others).

Municipal Separate Storm Sewer is defined at 40 CFR 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

NOI is an acronym for "Notice of Intent" to be covered by this permit and is the mechanism used to "register" for coverage under a general permit.

NPDES is an acronym for "National Pollutant Discharge Elimination System."

Outfall is defined at 40 CFR 122.26(b) (9) and means a point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

Owner or Operator is defined at 40 CFR 122.2 and means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

Permitting Authority means the Illinois EPA.

Point Source is defined at 40 CFR 122.2 and means any discernable, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutants of Concern means pollutants identified in a TMDL waste load allocation (WLA) or on the Section 303(d) list for the receiving water, and any of the pollutants for which water monitoring is required in Part V.A. of this permit.

Qualifying Local Program is defined at 40 CFR 122.34(c) and means a local, state, or Tribal municipal storm water management program that imposes, at a minimum, the relevant requirements of paragraph (b) of Section 122.34.

Small Municipal Separate Storm Sewer System is defined at 40 CFR 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State [sic], city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State [sic] law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States, but is not defined as "large" or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

Storm Water is defined at 40 CFR 122.26(b) (13) and means storm water runoff, snowmelt runoff, and surface runoff and drainage.

Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

SWMP is an acronym for "Storm Water Management Program."

TMDL is an acronym for "Total Maximum Daily Load."

Waters (also referred to as waters of the state or receiving water) is defined at Section 301.440 of Title 35: Subtitle C: Chapter I of the Illinois Pollution Control Board Regulations and means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"You" and "Your" as used in this permit is intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

Attachment H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8-Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

(1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.

(2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated

facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records.**

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application.** All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization.** If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) **Reporting requirements.**

(a) **Planned changes.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Transfers.** This permit is not transferable to any person except after notice to the Agency.

(d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(e) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(2) Any upset which exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.

(g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).

(h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) **Bypass.**

(a) Definitions.

(1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).

(c) Notice.

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

(d) Prohibition of bypass.

(1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:

(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(iii) The permittee submitted notices as required under paragraph (13)(c).

(2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) **Upset.**

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).

(4) The permittee complied with any remedial measures required under paragraph (4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:

(a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

(b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:

(1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;

(2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and

(3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.

(16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

(3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or

(4) The level established by the Agency in this permit.

(b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

(17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:

(a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and

(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:

(a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;

(b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and

(c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.

(19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

(20) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.

(21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.

(22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both.
Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).

(23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

(26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.

(27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.

(28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

(Rev. 7-9-2010 bah)

APPENDIX 2

City of Northlake Annual Facility Inspection Report

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
ANNUAL FACILITY INSPECTION REPORT
NPDES PERMIT FOR STORM WATER DISCHARGES
FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

Complete each section of this report.

REPORT PERIOD:	FROM: MARCH 2015	TO: MARCH 2016

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

NAME: City of Northlake		TELEPHONE NUMBER: 708-343-8700
MAILING ADDRESS: 55 E. North Avenue		
CITY: Northlake	STATE: IL	ZIP: 60164
CONTACT PERSON: Jeffrey Sherwin (Person responsible for Annual Report)		

NAME(S) OF GOVERNMENTAL ENTITY(IES) IN WHICH MS4 IS LOCATED: (As it appears on the current permit)

Cook County	

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. CHANGES TO BEST MANAGEMENT PRACTICES (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

1. Public Education and Outreach	☐	4. Construction Site Runoff Control	☐
2. Public Participation/Involvement	☐	5. Post-Construction Runoff Control	☐
3. Illicit Discharge Detection & Elimination	☒	6. Pollution Prevention/Good Housekeeping	☐

B.
Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C.
Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D.
Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E.
Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F.
Attach a list of construction projects that your entity has paid for during the reporting period.

SIGNATURE:	DATE: May 20, 2016

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Table of Contents

Part A. Changes to Best Management Practices A-1

Part B. Status of Compliance with Permit Conditions B-1

Part C. Information and Data Collection Results C-1

Part D. Summary of Year 14 Stormwater Activities D-1

Part E. Notice of Qualifying Local Program E-1

Part F. Construction Projects Conducted During Year 13 .....F-1

Part A. Changes to Best Management Practices

Note: **X indicates BMPs performed that were proposed in your NPDES permit**
✓ indicates changes to BMPs proposed in your NPDES permit

Year 14	Year 15	Year 16	Year 17	Year 18	
MS4					
A. Public Education and Outreach					
X	X	X	X	X	A.1 Distributed Paper Material
					A.2 Speaking Engagement
X	X	X	X	X	A.3 Public Service Announcement
					A.4 Community Event
					A.5 Classroom Education Material
X	X	X	X	X	A.6 Other Public Education
B. Public Participation/Involvement					
					B.1 Public Panel
X	X	X	X	X	B.2 Educational Volunteer
					B.3 Stakeholder Meeting
					B.4 Public Hearing
X	X	X	X	X	B.5 Volunteer Monitoring
X	X	X	X	X	B.6 Program Coordination
X	X	X	X	X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination					
X	X	X	X	X	C.1 Storm Sewer Map Preparation
X	X	X	X	X	C.2 Regulatory Control Program
X	X	X	X	X	C.3 Detection/Elimination Prioritization Plan
X	X	X	X	X	C.4 Illicit Discharge Tracing Procedures
X	X	X	X	X	C.5 Illicit Source Removal Procedures
✓	✓	✓	✓	✓	C.6 Program Evaluation and Assessment
					C.7 Visual Dry Weather Screening
					C.8 Pollutant Field Testing
					C.9 Public Notification
✓	✓	✓	✓	✓	C.10 Other Illicit Discharge Controls

Year 14	Year 15	Year 16	Year 17	Year 18	
MS4					
D. Construction Site Runoff Control					
X	X	X	X	X	D.1 Regulatory Control Program
X	X	X	X	X	D.2 Erosion and Sediment Control BMPs
					D.3 Other Waste Control Program
X	X	X	X	X	D.4 Site Plan Review Procedures
					D.5 Public Information Handling Procedures
					D.6 Site Inspection/Enforcement Procedures
					D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control					
					E.1 Community Control Strategy
X	X	X	X	X	E.2 Regulatory Control Program
					E.3 Long Term O&M Procedures
X	X	X	X	X	E.4 Pre-Const Review of BMP Designs
					E.5 Site Inspections During Construction
					E.6 Post-Construction Inspections
					E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping					
X	X	X	X	X	F.1 Employee Training Program
X	X	X	X	X	F.2 Inspection and Maintenance Program
X	X	X	X	X	F.3 Municipal Operations Storm Water Control
					F.4 Municipal Operations Waste Disposal
					F.5 Flood Management/Assess Guidelines
					F.6 Other Municipal Operations Controls

Part B. Status of Compliance with Permit Conditions

(Provide the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable [MEP], and your identified measurable goals for each of the minimum control measures.)

The status of BMPs and measurable goals performed in Year 13 are described below.

1. Public Education and Outreach

The City of Northlake (City) committed to conduct Public Education and Outreach as part of its permit. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. The City committed to implementation of BMPs related to A.1, A.3, and A.6. The status or progress for each of the measurable goals related to these BMPs is presented below.

A.1 Distributed Paper Material
Measurable Goals: *Make informational material and brochures available to the public.*

The City has obtained informational brochures related to stormwater education and water quality and made them available for distribution.

A.3 Public Service Announcement
Measurable Goals: *The City will include a stormwater and\or water quality related article in the City newsletter once a year.*

The City has obtained articles related to stormwater/water quality and included a stormwater or water quality article in the City newsletter annually.

A.6 Other Public Education
Measurable Goals: *The City will monitor website links and update as new information becomes available.*

The City has obtained informational website links and will post at least one on the City website by the end of the permit year.

2. Public Participation/Involvement

The City committed to performing activities and services related to the Public Participation/Involvement minimum control measure under BMP numbers B.2, B.5, B.6 and B.7. The status or progress for each of the measurable goals related to these BMPs is presented below.

B.2 Educational Volunteer, B.5 Volunteer Monitoring and B.6 Program Coordination
Measurable Goals: *The City and the ACRCD will continue to work with participants to identify programs and activities for each school or group.*

The City will continue to support and work with the Adison Creek River Conservancy District (ACRCD) on water quality and stream enhancement activities.

B.7 Other Public Involvement

Measurable Goals: *The City will post the form or link on the City website and track reports by location and problem. They City will continue to address problems with in a timely manner.*

The City has posted contact information on the City website to allow residents to report possible illicit discharges and/or stormwater maintenance problems. The City will work to provide a Citizens Report form or direct link to the Public Works Department during the next permit year.

3. Illicit Discharge Detection and Elimination

The City committed to perform some activities related to the Illicit Discharge Detection and Elimination minimum control under BMP numbers C.1, C.2, C.3, C.4, C.5, C.6 and C.10. The status or progress for each of the measurable goals related to these BMPs is presented below.

C.1 Storm Sewer Map Preparation

Measurable Goals: *The City will continue to update the storm sewer map to reflect new and re-development.*

The City has completed a storm sewer map of the City showing the location of all outfalls and receiving waters. The City's storm sewer map is continually updated as appropriate.

C.2 Regulatory Control Program

Measurable Goals: *The City and MWRDGC will continue to enforce the Ordinance.*

The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) Sewage and Waste Control Ordinance prohibits the discharge of wastes of any kind to the waters of the state under the jurisdiction of the MWRD and the City.

C.2 Regulatory Control Program, C.3 Detection/Elimination Prioritization Plan, C.4 Illicit Discharge Tracing Procedures and C.5 Illicit Source Removal Procedures

Measurable Goals: *The City will enforce procedures and guidelines for eliminating illicit discharges once they are reported and investigated.*

The City has developed procedures for investigating reports of illicit discharges and prepared forms to document these reports.

C.6 Program Evaluation and Assessment

Measurable Goals: *The City will perform a yearly evaluation of its NPDES program and BMPs selected to for effectiveness in meeting the specified goals.*

The City has performed yearly program compliance monitoring and evaluation to determine the effectiveness of the overall program and the BMPs selected.

C.10 Other Illicit Discharge Controls

Measurable Goals: *The City perform annual monitoring of the receiving streams upstream and downstream of all MS4 discharge points.*

The City continues to perform annual monitoring of the receiving streams upstream and downstream of the MS4 discharges to determine the effectiveness of the program and selected BMPs.

4. Construction Site Runoff Control

The City committed to performing activities and services related to the Construction Site Runoff Control minimum control measure under BMP numbers D.1, D.2 and D.4. The status or progress for each of the measurable goals related to these BMPs is presented below.

D.1 Regulatory Control Program, D.2 Erosion and Sediment Control BMPs and D.4 Site Plan Review Procedures
Measurable Goal: *The City will continue the review and inspection procedures.*

The City will continue the procedures to require sediment and erosion measures for all developments over 1 acre within the City meet the requirements contained in the Illinois Urban Manual.

5. Post-Construction Runoff Control

The City committed to performing activities and services related to the Post-Construction Site Runoff Control minimum control measure under BMP numbers E.2 and E.4. The status or progress for each of the measurable goals related to this BMP is presented below.

E.2 Regulatory Control Program
Measurable Goal: *The City will enforce the Ordinance revisions.*

The City has procedures to require the site design for development projects that disturb more than 1 acre have controls in place that would protect water quality and reduce the discharge of pollutants for the life of the development project. The City enforces these regulations in accordance with the MWRDGC Watershed Management Ordinance (WMO).

E.4 Pre-Construction Review of BMP Designs
Measurable Goal: *The City will continue to review and inspect stormwater BMPs within site development plans and onsite during and after construction.*

The City will continue the plan and review procedures that include the review and inspection of stormwater BMPs.

6. Pollution Prevention/Good Housekeeping

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. The City committed to perform activities for BMP numbers F.1, F.2 and F.3. The status or progress for each of the measurable goals related to these BMPs is presented below.

F.1 Employee Training Program and F.3 Municipal Operations Storm Water Control
Measurable Goals: *The City will continue with in-house training and modify procedures as necessary to curtail the discharge of pollutants to storm sewer systems by City employees.*

The City will continue annual in-house training and modify procedures as necessary to prevent the discharge of pollutants to the storm sewer system by City employees. The City has procedures regarding the storage of spoil piles, sediment removal and stores salt in a covered facility.

F.2 Inspection and Maintenance Program
The Public Works Department procedures require routine inspections of ponds, stream channels and storm sewer outfalls by Public Works staff. Non-routine inspection visits are required to address comments from residents and the Fire Department Hazardous Materials Unit reports. Inspection forms are used for each inspection and these inspections are tracked. The goal of this BMP will be to continue inspections of ponds,

streams and outfalls to identify potential maintenance problems or other activities that may contribute to pollutants being added to stormwater runoff.

Measurable Goals: *The Public Works Department will continue the inspection program.*

The City will continue the inspection program and will utilize the inspection forms to document these activities.

Part C. Information and Data Collection Results

(Provide information and water quality sampling/monitoring data related to illicit discharge detection and elimination collected during the reporting period.)

Year 13 activities related to illicit discharge detection and elimination consisted primarily of program planning efforts. Therefore, no information or data was collected during this period.

Part D. Summary of Year 14 Stormwater Activities

(Present a summary of the storm water activities you plan to undertake during the next reporting cycle, including an implementation schedule in the sections following the table.)

The table shown below summarizes the BMPs committed to for Year 14. Specific BMPs and measurable goals for Year 14 program development activities are presented in the sections following the table.

Note: X indicates BMPs committed to for Year 14.

Year 14 MS4	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
X	A.3 Public Service Announcement
	A.4 Community Event
	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public Participation/Involvement	
	B.1 Public Panel
X	B.2 Educational Volunteer
	B.3 Stakeholder Meeting
	B.4 Public Hearing
X	B.5 Volunteer Monitoring
X	B.6 Program Coordination
X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

Year 14 MS4	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
	F.6 Other Municipal Operations Controls

1. Public Education and Outreach

The City is committing to conduct Public Education and Outreach as part of its permit. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. The City commits to implementation of BMPs related to A.1, A.3, and A.6 as described below.

A.1 Distributed Paper Material
The City will make available informational brochures to the public to increase awareness of impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff.

Measurable Goals: *The City will make the informational material and brochures available at the Public Works Department and City Hall.*

A.3 Public Service Announcement
The City will include a stormwater and/or water quality related article once a year in the City's newsletter.

Measurable Goals: *The City will include a stormwater and/or water quality related article once a year in the City's newsletter.*

A.6 Other Public Education
The City will create a website link on the City website to the public to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff. The City will also post their NOI on the City website.

Measurable Goals: *The City will post and monitor website link(s) and update as new information becomes available.*

2. Public Participation/Involvement

The City will perform activities and services related to the Public Participation/Involvement minimum control measure. BMPs will be implemented under BMP numbers B.2, B.5, B.6 and B.7 as described below.

B.2 Educational Volunteer, B.5 Volunteer Monitoring and B.6 Program Coordination
The ACRCD will provide organization, supplies and/or training to local schools, businesses or civic groups for water quality and stream enhancement activities.

Measurable Goals: *The City and the ACRCD will continue to work with participants to identify programs and activities for each school or group.*

B.7 Other Public Involvement
The City will create a Citizens Report Form or similar method on the City website that includes reporting illicit discharges to the storm sewer system and maintenance problems associated with ponds, streams, or outfalls.

Measurable Goals: *The City will post the form or link on the City website and track reports by location and problem. The City will continue to address problems in a timely manner.*

3. Illicit Discharge Detection and Elimination

The City commits to performing some activities related to the Illicit Discharge Detection and Elimination minimum control. BMPs will be implemented under BMP numbers C.1, C.2, C.3, C.4 and C.5 as described below.

C.1 Storm Sewer Map Preparation
The City will prepare a storm sewer map of the entire City including the names of all outfalls and receiving streams.

Measurable Goals: *The City will update the storm sewer map to reflect new and re-development.*

C.2 Regulatory Control Program
The City and MWRD will continue to enforce the MWRD ordinance that prohibits non-stormwater discharges to any storm sewer within the City or under the jurisdiction of the MWRD.

Measurable Goals: *The City and MWRD will enforce the Ordinance.*

C.2 Regulatory Control Program, C.3 Detection/Elimination Prioritization Plan, C.4 Illicit Discharge Tracing Procedures, and C.5 Illicit Source Removal Procedures
The City has procedures for handling the report of a possible illicit discharge to storm sewer systems. The City developed procedures for tracking reports of illicit discharges and enforcement guidelines to facilitate the elimination of illicit discharges once they are discovered, tracked and investigated.

Measurable Goals: *The City will enforce procedures and guidelines for eliminating illicit discharges once they are reported and investigated.*

C.6 Program Evaluation and Assessment
The City will perform yearly program compliance monitoring and evaluation to determine the effectiveness of the overall program and the BMPs selected.

Measurable Goals: *The City will perform a yearly evaluation of its NPDES program and BMPs selected to for effectiveness in meeting the specified goals.*

C.10Other Illicit Discharge Controls
The City will perform annual monitoring of the receiving streams upstream and downstream of the MS4 discharges.

Measurable Goals: *The City perform annual monitoring of the receiving streams upstream and downstream of all MS4 discharge points.*

4. Construction Site Runoff Control

The City will perform activities and services related to the Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP numbers D.1, D.2, D.4 and D.6 as described below.

D.1 Regulatory Control Program, D.2 Erosion and Sediment Control BMPs and D.4 Site Plan Review Procedures, D.6 Site Inspection/Enforcement Procedures
The City has a regulatory control program that requires sediment and erosion control measures for all developments over 1 acre within the City. The City requires that these measures be submitted to the City during the Site Plan Review Procedures and provides resources on sediment and erosion control BMPs. The City also performs inspections on development sites during construction to verify compliance with the development plans and local codes and procedures. In addition, the City will continue to update the Ordinance and Public Works procedures to meet the NPDES requirements.

Measurable Goal: *The City will continue the review and inspection procedures.*

5. Post-Construction Runoff Control

The City will perform activities and services related to the Post-Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP number E.2, E.4, E.5, and E.6 as described below.

E.2 Regulatory Control Program, E.4 Pre-Construction Review of BMP Designs, E.5 Site Inspections During Construction, E.6 Post Construction Inspections

The City Engineer's regulatory control program for post construction runoff control includes site development plan review procedures to specifically evaluate structural and nonstructural stormwater BMPs and inspection of the site during and after construction to verify compliance with the approved plans and NPDES requirements. The program also includes guidelines for enforcement procedures to make sure developments comply with local codes and ordinances.

Measurable Goals: *The City will continue to review and inspect stormwater BMPs within site development plans and onsite during and after construction.*

6. Pollution Prevention/Good Housekeeping

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. The City will perform BMPs under BMP numbers F.1 and F.3 as described below.

F.1 Employee Training Program and F.3 Municipal Operations Storm Water Control

The City will hand out literature and/or provide in-house presentations that provide guidance and procedures for employees to reduce or eliminate the discharge of pollutants from City owned facilities to the storm sewer system. The goal of this BMP will be to educate City employees of current practices that contribute to stormwater pollution and/or to develop new procedures and make revisions to existing procedures that will curtail the discharge of pollutants to storm sewer systems by City employees.

Measurable Goals: *The City will continue annual in-house training and modify procedures as necessary to curtail the discharge of pollutants to storm sewer systems by City employees.*

F.2 Inspection and Maintenance Program

The Public Works Department procedures require routine inspections of ponds, stream channels and storm sewer outfalls by Public Works staff. Non-routine inspection visits are required to address comments from residents and the Fire Department Hazardous Materials Unit reports. Inspection forms are used for each inspection and these inspections are tracked. The goal of this BMP will be to continue inspections of ponds, streams and outfalls to identify potential maintenance problems or other activities that may contribute to pollutants being added to stormwater runoff.

Measurable Goals: *The Public Works Department will continue the inspection program.*

Part E. Notice of Qualifying Local Program

The City of Northlake Municipal Code (Code), Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), the Addison Creek River Conservancy District (ACRCD), and the City of Northlake Public Works Department are considered Qualifying Local Programs (QLPs) that count towards satisfying the requirements of the six minimum control measures. Listed below is a summary of the activities performed by the QLPs during Year 13. In general, all activities performed by the QLPs during Year 13 will be continued in subsequent years.

1. Public Education and Outreach:
The City does not currently have a qualifying local program for public education and outreach.

2. Public Participation/Involvement:
The ACRCD governs the preservation and maitnenance of Addison Creek and holds monthly public meetings to discuss activities and issues related to the Creek. This program relates to BMP numbers B.1, B.3, and B.4.

3. Illicit Discharge Detection and Elimination:
The MWRDGC Sewage and Waste Control Ordinance prohibits the discharge of wastes of any kind to the waters of the state under the jurisdiction of the MWRD. Additionally, the City of Northlake Municipal Code places restrictions on the type and composition of substances that may be discharged to any natural outlets, waters, or storm sewers within the City. These programs relate to BMP C.2.

4. Construction Site Runoff Control:
The City has a soil erosion and sediment control program that requires erosion control plans to be included in all plan submittals and inspection of construction sites to ensure compliance with approved design and standards. This program relates to BMP numbers D.1, D.4 and D.6.

5. Post-Construction Runoff Control:

The City of Northlake Municipal Code and the MWRDGC WMO has provisions to address the quality of stormwater runoff, as well as standards to ensure the long-term operation and maintenance of stormwater facilities. In addition, the MWRDGC requires post construction BMPs for volume control. The WMO and City Code provides permit and design requirements for stormwater detention facilities and requires owners to maintain stormwater facilities to prevent the degradation of local water quality. The City also has a soil erosion and sediment control program that requires the inspection of construction sites to ensure compliance with approved design and standards. This relates to BMP numbers E.2, E.3, E.5 and E.6.

6. Pollution Prevention/Good Housekeeping:
The City of Northlake Municipal Code has standards aimed at reducing the amount of pollutants discharged into the stormsewer system and promoting regular maintenance and long-term operation of stormsewer systems within the City. The City requires all privately owned drainage systems be subjected to inspection not less than once a year with reports to be filed detailing inpection results and any deficiencies found. The Ordinance also requires all pet owners to be responsible for the removal and sanitary disposal of all animal waste in the City. This relates to BMP numbers F.2 and F.6.

Part F. Construction Projects Conducted During Year 13

(Provide a list of construction projects your entity has paid for during the reporting period.)

There was one project over 1 acre funded by the City during Year 13.

1. Grant Park Bike Path (1.66 acres), started May 2015, completed September 2015.

APPENDIX 3

City of Northlake Municipal Code:
Water and Sewers Chapter

ARTICLE B. SEWER USE AND SERVICE

7-7B-1: RULES AND DEFINITIONS:

"Shall" is mandatory; "may" is permissible. Unless the context specifically indicates otherwise, the meanings of the terms used in this article shall be as follows:

FEDERAL GOVERNMENT:

Administrator: The administrator of the U.S. environmental protection agency.

Federal Act: The federal clean water act (33 USC 466 et seq.) as amended, (Pub. L. 95-217).

Federal Grant: The U.S. government participation in the financing of the construction of treatment works as provided for by title II grants for construction of treatment works, of the act and implementing regulations.

LOCAL GOVERNMENT:

Approving Authority: The director of public services.

City: The city of Northlake.

This Code: The code of the city of Northlake.

NPDES PERMIT: Any permit or equivalent document or requirements issued by the administrator or, where appropriated by the director, after enactment of the federal clean water act to regulate the discharge of pollutants pursuant to section 402 of the federal act.

PERSON: Any and all persons, natural or artificial, including any individual, firm, company, municipal or private corporation, association, society, institution enterprise, governmental agency or other entity.

SEWER TYPES AND APPURTENANCES:

Building Drain: That part of the lowest piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer or other approved point of discharge, beginning five feet (5') (1.5 m) outside the inner face of the building wall.

Building Sewer: The extension from the building drain to the public sewer or other place of disposal.

Combined Sewer: A sewer which is designed and intended to receive wastewater, storm, surface and ground water drainage.

Easement: An acquired legal right for the specific use of land owned by others.

Lift Station: An apparatus or pump used for pumping wastewater or sewage from a lower to higher elevation, particularly where the elevation of the sources is not sufficient for gravity flow.

Public Sewer: A sewer provided by or subject to the jurisdiction of the city. It shall also include sewers within or outside the city boundaries that serve one or more persons that ultimately discharge into the city sanitary (or combined) sewer system, even though those sewers may not have been constructed with city funds.

Sanitary Sewer: A sewer that conveys sewage or industrial wastes or a combination of both, and into which storm, surface and ground water or polluted industrial wastes are not intentionally admitted.

Sewer: A pipe or conduit for conveying sewage or any other waste liquids, including storm, surface and ground water drainage.

Sewerage: The system of sewers and appurtenances for the collection, transportation and pumping of sewage.

Storm Sewer: A sewer that carries storm, surface and ground water drainage but excludes sewage and industrial wastes other than unpolluted cooling water.

Stormwater Runoff: That portion of the precipitation that is drained into the sewers.

STATE GOVERNMENT:

Director: The director of the Illinois environmental protection agency.

State Act: The Illinois anti-pollution bond act of 1970.

State Grant: The state of Illinois participation in the financing of the construction of treatment works as provided for by the Illinois anti-pollution bond act and for making such grants as filed with the secretary of state of the state of Illinois.

TREATMENT:

Pretreatment: The treatment of wastewaters from sources before introduction into the wastewater treatment works.

Wastewater Treatment Works: An arrangement of devices and structures for treating wastewater, industrial wastes and sludge. Sometimes used as synonymous with "waste treatment plant" or "pollution control plant".

TYPES OF CHARGES:

Basic User Charge: The basic assessment levied on all users of the public sewer system.

Capital Improvement Charge: A charge levied on users to improve, extend or reconstruct the sewage treatment works.

Debt Service Charge: The amount to be paid each billing period for payment of interest, principal and coverage of outstanding loan, bond, etc.

Local Capital Cost Charge: Charges for costs, other than the operation, maintenance and replacement costs, i.e. debt service and capital improvement costs.

Replacement: Expenditures for obtaining and installing equipment, accessories or appurtenances which are necessary during the useful life of the treatment works to maintain the capacity and performance for which such works were designed and constructed. The term "operation and maintenance" includes replacement.

Sewerage Fund: The principal accounting designation for all revenues received in the operation of the sewerage system.

Surcharge: The assessment, in addition to the basic user charge and debt service charge, which is levied on those persons whose wastes are greater in strength than the concentration values established in this article.

Useful Life: The estimated period during which the collection system and/or treatment works will be operated.

User Charge: A charge levied on users of treatment works for the cost of operation, maintenance and replacement.

Wastewater Service Charge: The charge, per quarter or month, levied on all users of the wastewater facilities. The service charge shall be computed as outlined in this article and shall consist of the total or the basic user charge, the local capital cost and a surcharge, if applicable.

USER TYPES:

Commercial User: Includes transit lodging, retail and wholesale establishments or places engaged in selling merchandise or rendering services.

Control Manhole: A structure located on a site from which industrial wastes are discharged. Where feasible, the manhole shall have an interior drop. The purpose of a "control manhole" is to provide access for the city representative to sample and/or measure discharges.

Industrial Users: Includes establishments engaged in manufacturing activities involving the mechanical or chemical transformation of materials of substance into products.

Institutional/Governmental User: Includes schools, churches, penal institutions and users associated with federal, state and local governments.

Residential User: All dwelling units such as houses, mobile homes, apartments and permanent multi-family dwellings.

User Class: The type of user, "residential", "institutional/governmental", "commercial" or "industrial" as defined herein.

WASTEWATER AND ITS CHARACTERISTICS:

BOD (Denoting Biochemical Oxygen Demand): The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty degrees Celsius (20°C), expressed in milligrams per liter.

Effluent Criteria: Are defined in any applicable NPDES permit.

Floatable Oil: Oil, fat or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of floatable fat if it is properly pretreated, and the wastewater does not interfere with the collection system.

Garbage: Solid wastes from the domestic and commercial preparation, cooking and dispensing of food and from the handling, storage and sale of food.

Industrial Waste: Any solid, liquid or gaseous substance discharged, permitted to flow or escaping from any industrial, manufacturing, commercial or business establishment or process or from the development, recovery or processing of any natural resource as distinct from sanitary sewage.

Major Contributing Industry: An industrial user of the publicly owned treatment works that: a) Has a flow of fifty thousand (50,000) gallons or more per average workday; or b) has a flow greater than ten percent (10%) of the flow carried by the municipal system receiving the waste; or c) has in its waste, a toxic pollutant in toxic amounts as defined in standards issued under section 307(a) of the federal act; or d) is found by the permit issuing authority, in connection with the issuance of the NPDES permit to the publicly owned treatment works receiving the waste, to have significant impact, either singly or in combination with other contributing industries, on that treatment works or upon the quality of effluent from that treatment works.

Milligrams Per Liter: A unit of the concentration of water or wastewater constituent. It is 0.001 gram of the constituent in one thousand milliliters (1000 ml) of water. It has replaced the unit formerly used, commonly, parts per million, to which it is approximately equivalent, in reporting the results of water and wastewater analysis.

ppm: Parts per million by weight.

pH: The logarithm (base 10) of the reciprocal of the hydrogen ion concentration expressed by one of the procedures outlined in the IEPA division of laboratories manual of laboratory methods.

Population Equivalent: A term used to evaluate the impact of industrial or other waste on a treatment works or stream.

Properly Shredded Garbage: The wastes from the preparation, cooking and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch ($^1/_2$") (1.27 cm) in any dimension.

Sewage: Used interchangeably with "wastewater".

Slug: Any discharge of water, sewage or industrial waste which, in concentration of any given constituent or in quantity of flow, exceeds, for any period of duration longer than fifteen (15)

minutes, more than five (5) times the average twenty four (24) hour concentration of flows during normal operation.

Suspended Solids (SS): Solids that either float on the surface of or are in suspension in water, sewage or industrial waste and which are removable by a laboratory filtration device. Quantitative determination of suspended solids shall be made in accordance with procedures set forth in the IEPA division of laboratories manual of laboratory methods.

Unpolluted Water: Water quality equal to or better than the effluent criteria in effect, or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.

Wastewater: The spent water of a community. From this standpoint, of course, it may be a combination of the liquid and water carried wastes from residences, commercial buildings, industrial plants and institutions, together with any groundwater, surface water and stormwater that may be present.

Water Quality Standards: Are defined in the water pollution regulations of Illinois.

WASTEWATER FACILITIES: The structures, equipment and processes required to collect, carry away and treat domestic and industrial wastes and transport effluent to a watercourse.

WATERCOURSE AND CONNECTIONS:

Natural Outlet: Any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.

Watercourse: A channel in which a flow of water occurs, either continuously or intermittently. (Ord. O-49-90, 8-20-1990; amd. Ord. O-06-94, 3-7-1994; Ord. O-23-2013, 11-18-2013)

7-7B-2: USE OF PUBLIC SEWERS REQUIRED:

A. It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the City or in any area under the jurisdiction of the City any human or animal excrement, garbage or other objectionable waste.

B. It shall be unlawful to discharge to any natural outlet within the City or in any area under the jurisdiction of the City any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this Article.

C. Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank cesspool or other facility intended or used for the disposal of sewage.

D. The owner of all the houses, buildings or properties used for human occupancy, employment, recreation or other purposes situated within the City and abutting on any street, alley or right of way in which there is now located or may in the future be located any public sanitary sewer of the City is hereby required, at his expense, to install suitable toilet facilities therein and to connect such facilities directly with the proper public sewer in accordance with the provisions of this Article within ninety (90) days after date of official notice to do so; provided, that public sewer is within two hundred feet (200') of property line. (Ord. O-34-90, 6-18-90)

7-7B-3: PRIVATE SEWAGE DISPOSAL:

7-7B-3-1: PRIVATE SEWAGE DISPOSAL CODE:

A. Code Adopted: A certain document, three (3) copies of which are on file in the office of the City Clerk being marked and designated as "The BOCA National Private Sewage Disposal Code, Second Edition, 1990", as published by the Building Officials and Code Administrators International, Inc., is hereby adopted as the Private Sewage Disposal Code of the City for the control of buildings and structures as herein provided, and each and all of the regulations, provisions, penalties, conditions and terms of said BOCA National Private Sewage Disposal Code are hereby referred to, adopted and made a part hereof as if fully set out in this Section, with the additions, insertions, deletions and changes, if any, prescribed in subsection B hereof or as may be amended by other provisions of this Article.

There is hereby adopted each and every revision of said Code hereinafter made, said Code being revised annually by BOCA International, Inc., and a new and revised edition of the Code being published every three (3) years. Said revised Code and all supplements thereto, when adopted by BOCA International Inc., shall supersede all other previous editions, supplements and printings in conflict therewith. The provisions of such Codes shall govern all matters covered therein to the extent that the same are not in conflict with any provisions of this City Code or other ordinances of the City.

B. Amendments to Code: The following sections are hereby revised as follows:

Section PS-100.1. City of Northlake
Section PS-104.1. July 1, 1990
Section PS-114.2. As may be adopted from time to time by the City Council
Section PS-117.4. Misdemeanor,$500.00, 30 days
Section PS-118.2. $50.00; $500.00
Section PS-404.2.5. July 1, 1990; July 1, 1991; July 1, 1992
Section PS-404.2.6. July 1, 1990; July 1, 1991
(Ord. O-33-90, 6-18-90)

7-7B-3-2: ADDITIONAL PRIVATE SEWAGE DISPOSAL REGULATIONS:

A. Private System Permitted: Where a public sanitary (or combined) sewer is not available under the provisions of subsection 7-7B-2D of this Article, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this Section 7-7B-3-2. Such a system shall be approved by the Metropolitan Water Reclamation District of Greater Chicago (MWRD), Cook County Health Department or other regulatory agency as required.

B. Permit Requirements: Before commencement of construction of a private sewage disposal system, the owner shall first obtain a written permit. The application for such permit shall be made on a form furnished by the regulatory agency. The applicant shall supplement by any plans, specifications and other information as deemed necessary by the regulatory agency. All permit and inspection fees shall be paid to the regulatory agency at the time the application is filed.

C. Inspections: A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the regulatory agency. He shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the regulatory agency when the work is ready for final inspection and before any underground portions are covered.

D. Construction Specifications: The type, capacities, location and layout of a private sewage disposal system shall comply with all recommendations of the State of Illinois Private Sewage Disposal Licensing Act and Code[1] and with the State of Illinois Environmental Protection Agency. No septic tank or cesspool shall be permitted to discharge to any natural outlet.

E. Connection to Public Sewer:

1. At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in subsection 7-7B-2D of this Article, a direct connection shall be made to the public sewer in compliance with this Article, and any septic tanks, cesspools and similar private sewage disposal facilities shall be abandoned per the requirements of the regulatory agency.

2. When a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days, and the private sewage disposal system shall be cleaned of sludge and abandoned per the requirements of the regulatory agency.

F. Responsibility of Owner: The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, and at no expense to the City.

G. Provisions Nonlimiting: No statement contained in this Section shall be construed to interfere with any additional requirements that may be imposed by any regulatory agency. (Ord. O-34-90, 6-18-90)

7-7B-4: BUILDING SEWERS AND CONNECTIONS:

A. Permit Requirements:

1. Permit Required: No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and the City.

2. Classification of Permits: There shall be two (2) classes of building sewer permits:

   a. For residential wastewater service, and

   b. For commercial or industrial wastewater service. (Ord. O-34-90, 6-18-90)

   In either case, the owner or his agent shall make application on a special form furnished by the Metropolitan Water Reclamation District. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the Metropolitan Water Reclamation District. For a residential sewer permit, there shall be a fee of four hundred dollars ($400.00) payable to the City at the time the application is filed. For a commercial or industrial sewer permit, there shall be a fee of one thousand dollars ($1,000.00) payable to the City at the time the application is filed. The industry, as a condition of permit authorization, must provide information describing its wastewater constituents, characteristics and type of activity. All other permit and inspection fees must be paid by the applicant to the Metropolitan Water Reclamation District and the City, as applicable. (Ord. O-34-90, 6-18-90; 1992 Code)

3. Restrictions on Issuance of Permit: A building sewer permit will only be issued and a sewer connection shall only be allowed if it can be demonstrated that the downstream sewerage facilities, including sewers, pump stations and wastewater treatment facilities, have sufficient reserve capacity to adequately and efficiently handle the additional anticipated waste load.

B. Separate Sewer Required: A separate and independent building sewer shall be provided for every building; except, that where one building stands at the rear of another or an interior lot, and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building sewer from the front building may be extended to the rear building, and the whole considered as one building sewer.

C. Use of Old Building Sewers: Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the City, to meet all requirements of this Article.

D. Construction Specifications:

1. The size, slope, alignment, materials of construction of a building sewer and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench shall all conform to the requirements of the Building and Plumbing Codes[2] or other applicable rules and regulations of the Metropolitan Water Reclamation District. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American Society of Testing Materials, Water Pollution Control Federation Manual of Practice No. 9, and Standard Specifications for Water and Sewer Main Construction in Illinois shall apply.

2. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by such a means which is approved in accordance with subsection G1 of this Section.

E. Connections to Public Sewers:

1. The applicant for the building sewer permit shall notify the Metropolitan Water Reclamation District and the City when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Metropolitan Water Reclamation District and the City or a representative.

2. The connection of the building sewer into the public sewer shall conform to the requirements of the Building and Plumbing Codes[3] or other applicable rules and regulations of the City or the procedures set forth in appropriate specifications of the American Society of Testing Materials, Water Pollution Control Federation Manual of Practice No. 9, and Standard Specifications for Water and Sewer Main Construction in Illinois. All such connections shall be made gas-tight and watertight. Any deviation from the prescribed procedures and materials must be approved by the Metropolitan Water Reclamation District and the City.

F. Excavations: All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazards. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the City.

G. Discharges into System:

1. All disposal by any person into the sewer system is unlawful except those discharges in compliance with Federal Standards promulgated pursuant to the Federal Act and more stringent State and local standards.

2. No person(s) shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

H. Liability of Owner: All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer. (Ord. O-34-90, 6-18-90)

7-7B-5: USE RESTRICTIONS:

7-7B-5-1: DISCHARGE OF EFFLUENT:

No person shall discharge, or cause to be discharged, any storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water or unpolluted industrial process waters to any sanitary sewer.

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers or to a natural outlet approved by the Metropolitan Water Reclamation District. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Metropolitan Water Reclamation District, to a storm sewer, combined sewer or natural outlet. (Ord. O-34-90, 6-18-90)

7-7B-5-2: PROHIBITED SUBSTANCES:

No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:

A. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.

B. Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance or create any hazard in the receiving waters of the sewage treatment plant.

C. Any waters or wastes having a pH lower than 5.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.

D. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

7-7B-5-3: MATERIALS UNDER SPECIAL REVIEW:

A. No person shall discharge or cause to be discharged the following described substances, materials, waters or wastes if it appears likely, in the opinion of the Metropolitan Water Reclamation District, that such wastes can harm either the sewers, sewage treatment process or equipment, have an adverse effect on the receiving stream or can otherwise endanger life, limb, public property or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the Metropolitan Water Reclamation District will give consideration to such factors as the quantities of subject materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and maximum limits established by regulatory agencies. The substances prohibited are:

1. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150°) Fahrenheit, (65°C).

2. Any waters or wastes containing toxic or poisonous materials or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty two degrees and one hundred fifty degrees (32° - 150°) Fahrenheit (0°C - 65°C).

3. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths ($^3/_4$) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Metropolitan Water Reclamation District and the City.

4. Any waters or wastes containing strong acid, iron pickling wastes or concentrated plating solution whether neutralized or not.

5. Any waters or wastes containing iron, chromium, copper, zinc or similar objectionable or toxic substances or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Metropolitan Water Reclamation District for such materials.

6. Any waters or wastes containing phenols or other taste- or odor-producing substances in such concentrations exceeding limits which may be established by the Metropolitan Water Reclamation District as necessary after treatment of the composite sewage to meet the requirements of the State, Federal or other public agencies of jurisdiction for such discharge to the receiving waters.

7. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Metropolitan Water Reclamation District in compliance with applicable State or Federal regulations.

8. Any wastes or waters having a pH in excess of 9.5.

9. Any mercury or any of its compounds in excess of 0.0005 mg/l as Hg at any time except as permitted by the Metropolitan Water Reclamation District in compliance with applicable State and Federal regulations.

10. No waste to any public sewer system shall contain more than ten (10) mg/l total cyanide; provided any sample tested shall not release more than two (2) mg/l of cyanide when tested at a pH of 4.5 and at a temperature of sixty six degrees (66°) Centigrade (150°F) for a period of thirty (30) minutes. Nothing in this subsection shall limit the authority of the Metropolitan Water Reclamation District of Greater Chicago from imposing more stringent limits on cyanide discharges.

11. Materials which exert or cause:

    a. Unusual concentration of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate);

    b. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);

    c. Unusual BOD, chemical oxygen demand or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works;

    d. Unusual volume of flow or concentrations of waste constituting "slugs" as defined herein.

12. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of agencies having jurisdiction over discharge to the receiving waters.

B. If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated herein and/or which are in violation of the standards for pretreatment provided in 40 CFR 403, June 26, 1978, and any amendments thereto, and which, in the judgment of the Metropolitan Water Reclamation District, may have a deleterious effect upon the sewage works, processes, equipment or receiving waters or which otherwise create a hazard to life or constitute a public nuisance, the Metropolitan Water Reclamation District may:

1. Reject the wastes;

2. Require pretreatment to an acceptable condition for discharge to the public sewers;

3. Require control over the quantities and rates of discharge; and/or

4. Require payment to cover the added costs of handling and treating the wastes not covered by existing taxes or sewer charges, under the provisions of Section 7-7B-6 of this Article. If the Metropolitan Water Reclamation District permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the requirements of all applicable codes, ordinances and laws. (Ord. O-34-90, 6-18-90)

7-7B-5-4: INTERCEPTORS:

Grease, oil and sand interceptors shall be provided when, in the opinion of the Metropolitan Water Reclamation District and City, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any flammable wastes, sand or other harmful ingredients; except, that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Metropolitan Water Reclamation District and the City, and shall be located as to be readily and easily accessible for cleaning and inspection. (Ord. O-34-90, 6-18-90)

7-7B-5-5: PRELIMINARY TREATMENT:

Where preliminary treatment or flow-equalizing facilities are provided, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense. (Ord. O-34-90, 6-18-90)

7-7B-5-6: MEASUREMENTS, TESTS AND ANALYSES:

A. Each industry shall be required to install a control manhole and, when required by the Metropolitan Water Reclamation District, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole, together with such necessary meters and other appurtenances, in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located and shall be constructed in accordance with plans approved by the Metropolitan Water Reclamation District and City. The manhole shall be installed by the owner at his own expense, and shall be maintained by him so as to be safe and accessible at all times.

B. The owner of any property serviced by a building sewer carrying industrial wastes shall provide laboratory measurements, tests and analyses of waters and wastes to illustrate compliance with this Article and any special conditions for discharge established by the Metropolitan Water Reclamation District and the City or regulatory agencies having jurisdiction over the discharge.

The number, type and frequency of laboratory analyses to be performed by the owner shall be as stipulated by the Metropolitan Water Reclamation District, but no less than once per year, the industry must supply a complete analysis of the constituents of the wastewater discharge to assure that the Federal, State and local standards are being met. The owner shall report the results of measurements and laboratory analyses to the Metropolitan Water Reclamation District at such times and in such a manner as prescribed by the Metropolitan Water Reclamation District. The owner shall bear the expense of all measurements, analyses and reporting required by the Metropolitan Water Reclamation District. At such times as deemed necessary, the Metropolitan Water Reclamation District and the City reserve the right to take measurements and samples for analysis by an outside laboratory service.

C. All measurements, tests and analyses of the characteristics of water and wastes to which reference is made in this Article shall be determined in accordance with the latest edition of IEPA Division of Laboratories Manual of Laboratory Methods and shall be determined at the control manhole provided or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb and property. The particular analysis involved will determine whether a twenty four (24) hour composite of all outfalls of a premises is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from twenty four (24) hour composites of all outfalls, where pH's are determined from periodic grab samples. (Ord. O-34-90, 6-18-90)

7-7B-5-7: SPECIAL AGREEMENTS:

No statement contained in this Section shall be construed as preventing any special agreement or arrangement between the Metropolitan Water Reclamation Division or the City and any industrial concern, whereby an industrial waste of unusual strength or character may be accepted by the Metropolitan Water Reclamation Division or City for treatment, subject to payment therefor, in accordance with Section 7-7B-6 of this Article, by the industrial concern; provided such payments are in accordance with Federal and State guidelines for user charge system. (Ord. O-34-90, 6-18-90)

7-7B-6: RATES AND CHARGES:

7-7B-6-1: BASIS FOR WASTEWATER SERVICE CHARGES; COMPUTATION:

The sanitary sewer charge for the use of and for service supplied by the wastewater facilities of the City shall consist of a basic user charge, a debt service charge, a capital improvement charge and applicable surcharges.

A. Basic User Charge: The basic user charge is levied on all users to recover the operation, maintenance and replacement (O, M & R) costs and shall be based on water usage as recorded by water meters or sewage meters. The basic user charge shall be computed as follows:

1. Estimate the annual sanitary sewer volume.

2. Estimate the projected annual revenue required to operate and maintain the sewer system, including a replacement fund for the year, for all works categories (O, M & R).

3. Proportion the estimated O, M & R costs to each user class by volume.

4. Compute costs per one thousand (1,000) gallons for normal domestic strength sewage.

B. Debt Service Charge: The debt service charge is computed by apportioning the annual debt service as a charge per one thousand (1,000) gallons.

C. Capital Improvement Charge: The capital improvement charge is levied on users to provide for capital improvements, extensions or reconstruction of the sewage treatment works. The capital improvement charge is computed by apportioning the annual amount to be accrued as a charge per one thousand (1,000) gallons.

D. Computation of Sanitary Sewer Service Charge: The sanitary sewer service charge shall be computed by the following formula:

CW = CC + CD + CM + (Vu-X)CU

Where CW = Amount of sanitary sewer service charge ($) per billing period.

CC = Capital improvement charge

CD = Debt service charge

CM = Minimum charge for operation, maintenance and replacement

Vu = Wastewater volume for the billing period.

X = Allowable consumption in gallons for the minimum charge

CU = Basic user charge for operation, maintenance and replacement.
(Ord. O-49-90, 8-20-90)

7-7B-6-2: MEASUREMENT OF FLOW:

The volume of flow used for computing basic user charges and surcharges shall be the metered water consumption read to the lowest even increment of tons of gallons.

A. If the person discharging wastes into the public sewers procures any part, or all, of his water from sources other than the public waterworks system, all or part of which is discharged into the public sewers, the person shall install and maintain, at his expense, water meters of a type approved by

the metropolitan water reclamation district of greater Chicago (MWRDGC) for the purpose of determining the volume of water obtained from these other sources.

B. Devices for measuring the volume of waste discharged may be required by the MWRDGC or the city, as applicable, if these volumes cannot otherwise be determined from metered water consumption records.

C. Metering devices for determining the volume of waste shall be installed, owned and maintained by the person. Following approval and installation, such meters may not be removed, unless service is canceled, without the consent of the MWRDGC. (Ord. O-49-90, 8-20-1990)

7-7B-6-3: RATES AND CHARGES ESTABLISHED:

A. Basic User Charge: There is hereby established a basic monthly user charge of forty four cents ($0.44) per one thousand (1,000) gallons of metered water consumption to be applied to all users to recover OM&R costs.

B. Capital Improvement Charge: There is hereby established a monthly capital improvement charge of eleven cents ($0.11) per one thousand (1,000) gallons to each user of the sanitary sewer system. (Ord. O-33-2003, 12-15-2003)

C. Sanitary Sewer Service Charges:

1. Residential Users: A charge of four dollars thirty cents ($4.30) per month shall be applied to all residential users.

2. Nonresidential Users: A charge of seventy three cents ($0.73) per one thousand (1,000) gallons.

3. Nonresidential Users Over Fifty Million Gallons: A charge of forty three cents ($0.43) per one thousand (1,000) gallons.

D. Nonmetered Users: All nonmetered residential users of the wastewater facilities shall pay a flat rate charge of four dollars thirty cents ($4.30) per month. (Ord. O-20-2011, 11-7-2011)

In the event use of the sanitary sewer services is determined by the city to be in excess of twenty thousand (20,000) gallons per month, the city may require such flat rate user to install metering devices on the water supply and sewer main to measure the amount of service supplied. (Ord. O-33-2003, 12-15-2003)

E. Lift Station: In addition to all charges, any residential user serviced by a lift station shall pay an additional monthly charge of twenty two dollars ($22.00). (Ord. O-23-2013, 11-18-2013)

7-7B-6-4: REVIEW AND REVISION OF CHARGES; NOTICE:

The adequacy of the sanitary sewer service charge shall be reviewed, not less often than annually, by certified public accountants for the city in the annual audit report. The sanitary sewer service charge shall be revised periodically to reflect a change in local capital costs or OM&R costs.

The users of the sanitary sewer services will be notified annually, in conjunction with a regular bill, of the rate and that portion of the user charges which are attributable to the sanitary sewer operation, maintenance and replacement. (Ord. O-49-90, 8-20-1990)

7-7B-6-5: BILLS FOR SERVICE; DELINQUENCIES:

A. Rendering Bills: Bills for sewer service shall be sent out by the city finance department on the first day of the month succeeding the period for which the service is billed.

B. Payment Of Bills; Liability For Service: The rates or charges for services shall be payable monthly or bimonthly depending on the classifications of service for which bills are rendered. The owner of the premises, the occupant thereof and the user of the service shall be jointly and severally liable to pay for the service to such premises, and the service is furnished to the premises by the city only upon the condition that the owner of the premises, occupant and user of the services are jointly and severally liable therefor to the city.

C. Delinquencies:

1. Discontinuance Of Service: If the charges for such services are not paid within thirty (30) days after rendition of the bill for such services, such services shall be discontinued without further notice and shall not be reinstated until all claims are settled.

2. Liens; Notice And Foreclosure:

a. Whenever a bill for sewer service remains unpaid for sixty (60) days after it has been rendered, the city clerk is hereby authorized and directed to file with the county recorder of deeds a statement of lien claim. This statement shall contain the legal description of the premises served, the amount of the unpaid bill and a notice that the city claims a lien for this amount as well as for all charges subsequent to the period covered by the bill. If the user whose bill is unpaid is not the owner of the premises, and the city finance department has notice of this, notice shall be mailed to the owner of the premises, if his address be known, by the finance department whenever such bill remains unpaid for the period forty five (45) days after it has been rendered.

The failure of the City Clerk to record such lien or to mail such notice or the failure of the owner to receive such notice shall not affect the right to foreclose the lien for unpaid bills as mentioned herein.

b. Property subject to a lien for unpaid charges shall be sold for nonpayment of the same, and the proceeds of the sale shall be applied to pay the charges, after deducting costs, as is the case in the foreclosure of statutory liens. Such foreclosure shall be by bill-in-equity in the name of the City. The City Prosecutor is hereby authorized and directed to institute such proceedings in the name of the City in any court having jurisdiction over such matters against any property for which the bill has remained unpaid forty five (45) days after it has been rendered. (Ord. O-49-90, 8-20-90; amd. Ord. O-18-93, 6-7-93)

D. Final Payment Upon Transfer Of Property:

1. Receipt Of Payment Required: No single-family residence, multiple-family residence, apartment, business, commercial or industrial structure of building (hereinafter referred to as "property") shall be sold, leased, conveyed, assigned or transferred in any way, unless the owner, seller, lessor, conveyor, assignor or transferor (hereinafter referred to as "transferor") obtains, from the City Finance Department, a stamped receipt of payment based upon a final water meter reading (hereinafter referred to as "receipt"). The receipt shall be presented to the Department of Public Services prior to issuance of a certificate of compliance or a conditional certificate of compliance.

2. Application For Final Meter Reading: A transferor shall apply to the City for a final water meter reading no later than seventy two (72) hours before the date of closing or transfer. (Ord. O-37-95, 8-7-95)

7-7B-6-6: DISPOSITION OF REVENUES:

All revenues and moneys derived from the operation of the sewerage system shall be deposited in the sewerage account of the Sewerage Fund. The City Treasurer shall receive all such revenues from the sewerage system and all other funds and moneys incident to the operation of such system as may be delivered to him and deposit the same in the account of the fund designated as the "Sewerage Fund of the City". The Treasurer shall administer such Fund in every respect in the manner provided by statute of the "Revised Cities and Villages Act", effective January 1942[4].

All such revenues and moneys shall be held by the City Treasurer separate and apart from his private funds and separate and apart from all other funds of the City, and all of said sum, without any deductions whatever, shall be delivered to the City Treasurer not more than ten (10) days after receipt of the same, or at such time be directed by the Mayor and City Council. (Ord. O-49-90, 8-20-90)

7-7B-6-7: BOOKS AND RECORDS; AUDIT:

A. Accounts Kept; Annual Audit: The City Finance Department shall establish a proper system of accounts and shall keep proper books, records and accounts in which complete and correct entries shall be made of all transactions relative to the sewerage system, and at regular annual intervals, he shall cause to be made an audit by an independent auditing concern of the books to show the receipts and disbursements of the sewerage system.

In addition to the customary operating statements, the annual audit report shall also reflect the revenues and operating expenses of the wastewater facilities, including a replacement cost, to indicate that sewer service charges under the waste cost recovery system do in fact meet these regulations. In this regard, the financial information to be shown in the audit report shall include the following:

1. Flow date showing total gallons received at the wastewater plant for the current fiscal year.

2. Billing data to show total number of gallons billed per fiscal year.

3. Debt service for the next succeeding fiscal year.

4. Number of users connected to the systems.

5. Number of nonmetered users.

A list of users discharging nondomestic and industrial wastes and volume of waste discharged.

B. Access To Records: The Illinois Environmental Protection Agency or its authorized representative shall have access to any books, documents, papers and records of the City which are applicable to the City system of user charges for the purpose of making audit, examination, excerpts and transcriptions thereof to insure compliance with the terms of special and general conditions to any State grant. (Ord. O-49-90, 8-20-90)

7-7B-6-8: EFFECTIVE DATE OF RATES AND CHARGES:

The rates and service charges established for user charges in this Section 7-7B-6 shall be effective as of the next fiscal year beginning May 1, 1991, and on bills to be rendered for the next succeeding month being June 1991 for monthly users and on bills to be rendered for the next succeeding bi-monthly period June 1991 for bi-monthly users. (Ord. O-49-90, 8-20-90)

7-7B-6-9: APPEALS:

The method for computation of rates and service charges established for user charges in this Section 7-7B-6 shall be made available for a user within ten (10) days of receipt of a written request for such. Any disagreement over the method used or in the computations thereof shall be remedied by the Budget Officer within thirty (30) days after notification of a formal written appeal outlining the discrepancies. (Ord. O-49-90, 8-20-90; 1992 Code)

7-7B-6-10: PENALTY:

Any person violating any provision of this Section 7-7B-6 shall be fined not less than fifty dollars ($50.00) nor more than five hundred dollars ($500.00) for each offense. (Ord. O-49-90, 8-20-90)

7-7B-7: PROTECTION FROM DAMAGE:

No unauthorized person shall maliciously, wilfully or negligently break, damage, destroy or tamper with any structure, appurtenance or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct. (Ord. O-34-90, 6-18-90)

7-7B-8: POWERS AND AUTHORITY OF INSPECTORS:

A. The Metropolitan Water Reclamation District or the City and other duly authorized employees thereof, the Illinois Environmental Protection Agency and the U.S. Environmental Protection Agency, bearing proper credentials and identification, shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling and testing in accordance with the provisions of this Article. The Metropolitan Water Reclamation District or the City or their representatives shall have the authority to inquire into any processes including metallurgical, chemical, oil refining, ceramic, paper or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterway or facilities for waste treatment. (Ord. O-34-90, 6-18-90; 1992 Code)

B. While performing the necessary work on private properties referred to in subsection A of this Section, the Metropolitan Water Reclamation District or City or duly authorized employees thereof, the Illinois Environmental Protection Agency and the U.S. Environmental Protection Agency shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the aforementioned employees and shall indemnify the company against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operating, except as such may be caused by negligence or failure of the company to maintain conditions as required in subsection 7-7B-5-6B of this Article.

C. The Metropolitan Water Reclamation Division and City and other duly authorized employees thereof, bearing proper credentials and identification shall be permitted to enter all private properties through which the City holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved. (Ord. O-34-90, 6-18-90)

7-7B-9: VIOLATIONS AND PENALTIES:

A. Notice of Violation; Permit Revocations: Unless otherwise provided, any person found to be violating any provision of this Article, except Section 7-7B-7 shall be served by the City with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. The City may revoke any permit for sewage disposal as a result of any violation of any provision of this Article.

B. Penalties: Any person who shall continue any violation beyond the time limit provided for in subsection A above shall be guilty of a misdemeanor and, on conviction thereof, shall be fined in the amount not more than five hundred dollars ($500.00) for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

C. Liability of Violator: Any person violating any of the provisions of this Article shall become liable to the City by reasons of such violation. (Ord. O-34-90, 6-18-90; 1992 Code)

ARTICLE A. WATER POLLUTION[1]

4-4A-1: DEFINITIONS:

When used in this Article, the following words and terms shall have the meanings ascribed to them in this Section:

OUTLET: The point of discharge of an effluent or other substance into the underground, ditch or other area, watercourse or other body of surface or ground water and onto any surface or place.

WATER POLLUTION: An impairment of the quality of the underground or surface waters by sewage, dead animals, garbage, discarded metal articles, industrial wastes or any other thing which adversely affects the use of such water for domestic, industrial, agricultural, navigational, recreational or other purposes.

WATERCOURSE: Any channel, either natural or artificial, for the flow of water. (1976 Code §20-1-1)

4-4A-2: UNLAWFUL POLLUTION:

A. Generally: No person shall discharge or deposit wastes or sewage which creates a public nuisance, a menace to the public safety, pollution or contamination of underground or surface waters or impairs the use of any private sewer, storm drain channel or public or private property.[2] (1976 Code §20-1-2)

B. Pollution of Swimming Pools: Every person who illegally pollutes in any manner the water of any swimming pool shall be guilty of violating this Article. (1976 Code §20-1-11)

4-4A-3: PERMIT TO DISCHARGE:

A. Permit Required: No person shall discharge without a permit into any watercourse, tributary thereof, retention pond or storm sewer; onto the ground, into the ground by percolation orinjection, or into any ditch; or into the air, any of the following:

1. Wastes, sewage, contaminants, polluted water or soil;

2. Water or soil that has been treated for wastes, sewage, contaminants or any pollution;

3. Water or soil used in the treatment of wastes, sewage, contaminants or any pollution.

Said permit shall be subject to the review of the City Engineer and approval of the City Council. The City Council may place any conditions, stipulations or requirements on the applicant as a condition to issuance of the permit which it deems in the best interest of the City and in order to protect the health, safety and welfare of the community. (Ord. 0-21-93, 6-7-93)

B. Application for Permit: The application for a discharge permit shall be in writing, signed by the applicant and filed with the City. The application shall state:

1. Name and address of applicant;

2. Type of wastes or sewage to be discharged;

3. Quantity to be discharged, maximum amounts per hour per day;

4. Treatment given to discharge, if any;

5. Proof by affidavit of compliance with all ordinances and County, State and Federal laws concerning pollution of waterways. (1976 Code §20-1-5; 1992 Code)

C. Investigations and Inspections:

1. Investigation and Inspection of Applicant:

a. The City shall cause an investigation to be made of the facts stated in the application for a permit to discharge into the City waterways.

b. The City shall cause an inspection to be made of the premises and facilities to be used for the discharges to ascertain the fitness of such premises and facility to comply with the ordinances and County, State and Federal laws concerning water pollution. (1976 Code §20-1-6; 1992 Code)

2. Periodic Inspections: The City shall inspect the premises and facilities of any permittee hereunder to insure compliance is being had with all ordinances and County, State and Federal laws concerning water pollution. (1976 Code §20-1-7; 1992 Code)

3. Inspection Fees: The applicant shall be charged all actual costs to the City for the initial inspections, all subsequentinspections, investigations, testing of air, soil, water and ground, monitoring of discharges, equipment and operations and all other necessary costs. (Ord. 0-21-93, 6-7-93)

D. Issuance of Permit: Upon fulfilling the requirements of this Section the City shall grant a discharge permit to the applicant. (1976 Code §20-1-9; 1992 Code)

4-4A-4: REQUIRED TREATMENT OF POLLUTED WATERS:

No person shall discharge from any outlet any sanitary sewage, industrial wastes or other polluted

liquids except when the same has been treated as required by law. (1976 Code §20-1-3)

4-4A-5: DETERGENTS:

A. Definitions: When used in this Section, the following words and terms shall have the meanings ascribed to them herein:

DAIRY EQUIPMENT, BEVERAGE EQUIPMENT and FOOD PROCESSING EQUIPMENT: That equipment used in the production of milk and dairy products, foods and beverages including the processing, preparation or packaging thereof for consumption.

INDUSTRIAL CLEANING EQUIPMENT: Machinery and other tools used in cleaning processes during the course of industrial manufacturing, production and assembly.

MACHINE DISHWASHER: Equipment manufactured for the purpose of cleaning dishes, glassware and other utensils involved in food preparation, consumption or use, using a combination of water agitation and high temperatures.

POLYPHOSPHATE BUILDER or PHOSPHOROUS: A water softening and soil suspending agent made from condensed phosphates, including pyrophosphates, triphosphates, tripolyphosphates, metaphosphates and glassy phosphates used as a detergent ingredient but shall not include "polyphosphate builders" or "phosphorous" which is essential for medical, scientific or special engineering use under such conditions and regulations as may be prescribed, after hearing, by the Department of Health and Inspectional Services.

RECOMMENDED USE LEVEL: The amount of synthetic detergent or detergent which the manufacturer thereof recommends for use per wash load, at which level, the synthetic detergent or detergent will effectively perform its intended function.

SYNTHETIC DETERGENT or DETERGENT: Any cleaning compound which is available for household use, laundry use, other personal uses or industrial use which is composed of organic and inorganic compounds, including soaps, water softeners, surface active agents, dispersing agents, foaming agents,buffering agents, builders, fillers, dyes, enzymes and fabric softeners, whether in the form of crystals, powders, flakes, bar, liquids, sprays or any other form. (1976 Code §20-1-12)

B. Detergents to be Labeled: No person shall sell, offer or expose for sale any synthetic detergent or detergent, whether in the form of crystals, powders, flakes, bars, liquids, sprays or any other form, in the City unless the container, wrapper or other packaging thereof shall be clearly labeled with respect to its polyphosphate builder or phosphorus ingredient content clearly and legibly set forth thereon in terms of percentage of phosphorus by weight, expressed as elemental phosphorus per container, wrapper or other packaging thereof, as well as grams of phosphorus, expressed as elemental phosphorus, per recommended use level. (1976 Code § 20-1-13)

C. Phosphate Content Limited:

1. No person shall sell, offer or expose for sale:

   a. Any synthetic detergent or detergent containing more than eight and seven-tenths percent (8.7%) of phosphorus by weight, expressed as elemental phosphorus, within the city.

   b. Any synthetic detergent or detergent which requires a recommended use level of said synthetic detergent or detergent which contains more than seven (7) grams of phosphorus by weight, expressed as elemental phosphorus, within the city. (1976 Code § 20-1-14)

   c. Any synthetic detergent or detergent containing any phosphorus, expressed as elemental phosphorus, including synthetic detergents or detergents manufactured for machine dishwashers, dairy equipment, beverage equipment, food processing equipment and industrial cleaning equipment, within the city, from and after January 1, 1977. (1976 Code § 20-1-14; amd. Ord. O-08-76, 4-13-1976)

2. Synthetic detergents or detergents manufactured for use in machine dishwashers, dairy equipment, beverage equipment, food processing equipment and industrial cleaning equipment shall not be subject to the limitations set forth in subsections C1a and C1b of this section, but are hereby made expressly subject to the provisions of subsection C1c of this section.

3. The concentration of phosphorus by weight, expressed as elemental phosphorus, in any synthetic detergent or detergent shall be determined by the current applicable method prescribed by the American society for testing and materials (ASTM). (1976 Code § 20-1-14)

D. Penalties: Any person found guilty of violating, disobeying, omitting, neglecting, or refusing to comply with, or resisting or opposing the enforcement of any of the provisions of this section, except when otherwise specifically provided, shall bepunished by a fine of not more than five hundred dollars ($500.00) or shall be punishable as a misdemeanor by incarceration in the county jail for a term not to exceed six (6) months under procedures set forth in section 5/1-2-1.1 of the Illinois municipal code, as amended[3], or by both fine and imprisonment. A separate and distinct offense shall be regarded as committed each day on which such person shall continue or permit any such violation or failure to comply is permitted to exist after notification thereof. (1976 Code § 20-1-15; amd. 1992 Code)

APPENDIX 4

Physical Indicators of Outfall Visual Inspections

Visual Inspection of Outfalls
Physical Conditions

Observed Conditions	Possible Problems	Possible Causes
Color		
Muddy, Cloudy	Indicates elevated levels of suspended solids giving the water a muddy or cloudy appearance	Erosion is the most common source. Land use associated with soil erosion include mining, farming, construction, and unpaved roads
Dark Reds, Purple, Blues, Blacks	May indicate organic dye pollution	Originating from clothing manufacture or textile mills
Orange-Red	May indicate the presence of copper or iron	Copper can be both a pollutant and naturally occurring
Blue	May indicate the presence of copper which can cause skin irritations and death of fish	Copper is sometimes used as a pesticide in which case an acrid (sharp) odor might also be present
Foam	May indicate the presence of soap or detergent	Excessive foam is usually the result of soap and detergent pollution. Moderate levels of foam can also result from decaying algae, which indicates nutrient pollution.
Multi-colored (oily sheen)	Indicates the presence of oil or gasoline floating on the surface of the water. Oil and gasoline can cause poisoning, internal burning of the gastrointestinal tract and stomach ulcers	Oil and gasoline pollution can be caused by leaks in fuel lines and underground tanks, automotive junk yards, nearby service stations, wastes from boats, or runoff from roads and parking lots.
No Unusual Color	Not necessarily an indicator of clean water	Many pesticides, herbicides, chemicals, and other pollutants are colorless or produce no visible signs of contamination
Odors		
Sulfur (rotten eggs)	May indicate the presence of organic pollution	Possible domestic or industrial waste.
Musty	May indicate presence of organic pollution	Possible sewage discharge, livestock waste, decaying algae, or decomposition of other organic pollution
Harsh	May indicate presence of chemicals	Possible industrial or pesticide pollution
Chlorine	May indicate the presence of over chlorinated effluent	Sewage treatment plant or a chemical industry
No unusual smell	Not necessarily an indicator of clean water	Many pesticides and herbicides from agriculture and forestry runoff are colorless and odorless as are many chemicals discharged by industry
Vegetation		
Excessive plant growth	Overgrown area	Fertilizers from residential or farm areas; nutrients from food wastes
Inhibited plant growth	Dead, dying plants	Industrial discharges; High or Low pH water; scour from high flows (not pollution)

Guidelines for Visual Inspections Of Stormwater Outfalls

Visual inspections for signs of storm water contamination should be performed routinely. Flows and outfalls should be observed during dry periods to determine the presence of any stains, sludge, odors, and other abnormal conditions.

It is also useful for visual inspections to be made at all stormwater outfall locations during the first hour of a storm event, once runoff has reached its maximum flow rate. Inspectors should examine the discharge for the presence of floating and suspended materials, oil and grease, discoloration, turbidity, foam and odor.

Specific Parameters to look for in completing a visual inspection include the following:

Odor: Discharge odors can vary widely. Some may indicate the source of the contamination. Industrial discharges may smell like a particular spoiled product, oil, gasoline, a specific chemical, or a solvent. For example, the decomposition of organic wastes in a discharge will release sulfide compounds creating an intense smell of rotten eggs. Significant sanitary wastewater contributions will also cause pronounced and distinctive odors.

Color: Color may indicate inappropriate discharges especially from industrial sources. Industrial discharges may be any color. Dark colors, such as brown, gray or black are most common. For instance, flow contaminated by meat processing industries is usually a deep reddish brown.

Turbidity: Turbidity is often affected by the degree of gross contamination. Industrial flows can be cloudy or opaque (highly turbid). Sanitary wastewater is also often cloudy in nature. Erosion is the most common source of cloudy water.

Floatable Matter: A contaminated flow may also contain floatable solids or liquids. Identifying floatables can often aid in finding the source of the contamination because these substances are usually direct products or byproducts of a manufacturing process or sanitary system. Examples of floatables are animal fats, spoiled food products, oils, plant parts, solvents, sawdust, foams, packing materials and fuel.

Deposits and Stains: Deposits and stains (residues) are any type of coating that remains after a non-storm water discharge has ceased. Deposits or stains usually are of a dark color and usually cover the area surrounding the storm discharge. They often contain fragments of floatable substances and at times take the form of a crystalline or amorphous powder. An example is the coating of white crystalline powder formed on sewer outfalls by nitrogenous fertilizer wastes.

Vegetation: Stormwater discharges often affect surrounding vegetation. Industrial pollutants can cause a substantial alteration in the chemical composition and pH of the discharge water, which can affect plant growth even when the source of the contamination is intermittent. For example, nutrients from various food product wastes increase plant growth. In contrast, the discharge of chemical dyes and inorganic pigments from textile mills may decrease vegetation as these discharges are often very acidic. Even when the pollution source is gone the vegetation surrounding the discharge will continue to show the effects of the contamination. In order to accurately judge if the vegetation surrounding a discharge is normal, the observer must take into account recent weather conditions as well as the time of year. Increased or inhibited plant growth near storm water outfalls as well as dead and decaying plants is often a sign of pollution. However, it is important to distinguish whether plant damage is caused by contamination or by the physical effects of increased flows, such as scour.

Structural Damage: Structural damage is also a sign of industrial discharge contamination. Cracked or deteriorated concrete or peeling surface paint at an outfall usually indicates the presence of severely contaminated discharges. Contaminants causing this type of damage are usually very acidic or basic and are usually industrial in nature. For instance, discharges from primary metal industries may cause structural damage because their batch dumps are highly acidic.

References:

EPA Stormwater Management Fact Sheet. Visual Inspection

Global Rivers Environmental Education Network

APPENDIX 5

Outfall Inspection Checklist

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours: Last 48 hours:		
Latitutde:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	_____' _____"	Ft, In	Tape measure
	Measured length	_____' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

APPENDIX 6

Completed Outfall Inspection Checklists and Photographs

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 1	
Today's date: July 1, 2016		Time (Military): 13:40	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.903156	Longitude: -87.889952	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1720 IMG_1721	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

SW of bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 21"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 1

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 2	
Today's date: July 1, 2016		Time (Military): 13:43	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.903303	Longitude: -87.889859	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1722	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

NE of bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 24"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	Chipping
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Trash in Water

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 2

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Allison creek		Outfall ID: 3	
Today's date: July 1, 2016		Time (Military): 13:53	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.902807	Longitude: -87.889993	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1723	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	Coming over the top
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Trash in area

Addison Creek – Outfall 3

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 4	
Today's date: July 1, 2016		Time (Military): 14:01	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.904311	Longitude: -87.890205	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1724	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

NE of Pedestrian bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☑ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 4

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 5	
Today's date: July 1, 2016		Time (Military): 14:04	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours 0.00	
Latitutde: 41.904313	Longitude: -87.890285	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1726	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
NW of Ped bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 5

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 6	
Today's date: July 1, 2016		Time (Military): 14:14	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.905412	Longitude: -87.890758	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1732	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
NE of bridge (Le Moyne Ave)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☑ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 29" x 26"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	Brown Water
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 6

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 7	
Today's date: July 1, 2016		Time (Military): 14:15	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.905420	Longitude: -87.890882	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1734 IMG_1735	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 7

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 8	
Today's date: July 5, 2016		Time (Military): 10:42	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.905699	Longitude: -87.890905	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1745 IMG_1746	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known): 100 ft north at bridge (Le Moyne Ave)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☑ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No		
2. If yes, collected from:	☐ Flow	☐ Pool		
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM	☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 8

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 9	
Today's date: July 5, 2016		Time (Military): 10:45	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.905892	Longitude: -87.89094	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1747	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
15 ft north of power lines

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 9

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 10
Today's date: July 5, 2016	Time (Military): 10:50
Investigators: JW SH	Form completed by: JW
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.90605 Longitude: -87.890954	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1748 IMG_1749 IMG_1750

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): 30 ft South of ~~bridge~~ Pedestrian bridge near hospital

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☑ Other: Ceramic	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	Slight gray water color
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Trash in pool.

Tree roots getting very close to pipe.

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 10

Addison Creek – Outfall 10

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 11	
Today's date: July 5, 2016		Time (Military): 10:54	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.906220	Longitude: -87.890976	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1751 IMG_1752	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Extensive ~~damage~~ damage
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Bottom of pipe is fully corroded and needs replacing

Addison Creek – Outfall 11

Addison Creek – Outfall 11

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 12	
Today's date: July 5, 2016		Time (Military): 10:56	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.906223	Longitude: -87.891083	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1755	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 12

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 13	
Today's date: July 5, 2016		Time (Military): 11:00	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.906297	Longitude: -87.891034	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1757 IMG_1759	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 13

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 14	
Today's date: July 5, 2016		Time (Military): 11:01	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.906298	Longitude: -87.890988	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1760	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 30"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 14

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 15	
Today's date: July 5, 2016		Time (Military): 11:07	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.906827	Longitude: -87.890930	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1761 IMG_1762	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Middle of hospital

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 8"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Significant corrosion
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	Extreme flow liner
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: gray / white	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☑ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 15

Addison Creek – Outfall 15

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 16	
Today's date: July 5, 2016		Time (Military): 11:11	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.906933	Longitude: -87.890919	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1763 IMG_1765	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
25 ft South of North ave

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☑ Green ☑ Other: White	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 16

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 17	
Today's date: July 5, 2016		Time (Military): 11:15	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitude: 41.907069	Longitude: -87.890859	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1766 IMG_1768	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 48"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☑	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☑ Other:	☑ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☑ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☑ Other: Red	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 17

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 18	
Today's date: July 5, 2016		Time (Military): 12:17	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.907545	Longitude: -87.891028	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IM6_1769 IM6_1770	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 18

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 19	
Today's date: July 5, 2016		Time (Military): 12:21	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.907544	Longitude: -87.890883	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1771	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 19

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 20	
Today's date: July 5, 2016		Time (Military): 12:43	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.907163	Longitude: -87.890870	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1772	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
30 ft under bridge on East side

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 20

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 21	
Today's date: July 5, 2016		Time (Military): 12:46	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.907122	Longitude: -87.890278	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1773	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
15 ft under bridge on West side

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 21

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 22
Today's date: July 5, 2016	Time (Military): 12:48
Investigators: JW SH	Form completed by: JW
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.907179 Longitude: -87.890985	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1775

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
25 ft under bridge on W side

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: gray	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 22

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 23	
Today's date: July 5, 2016		Time (Military):	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.60		
Latitutde: NA	Longitude: NA	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: NA	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

35 ft Under bridge (Inaccesible) West side of creek

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	Along the Wall
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	Along the Wall
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Not accessible to take a picture

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek		Outfall ID: 24	
Today's date: July 5, 2016		Time (Military): 13:06	
Investigators: SH JW		Form completed by: SH	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908283	Longitude: -87.890836	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1778 IMG_1779 IMG_1780 IMG_1781	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☐ Single ☑ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 20"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle bottom ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☑	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☑ Other:	☑ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	bottom
Abnormal Vegetation	☐	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

top bottom

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 24

Addison Creek – Outfall 24

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 25	
Today's date: July 5, 2016		Time (Military): 13:11	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908470	Longitude: -87.891087	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1782	IMG_1783

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☑ Corrosion ☐ Peeling Paint	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 25

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 26	
Today's date: July 5, 2016		Time (Military): 13:14	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908424	Longitude: -87.890893	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1785 IMG_1786	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☑ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Extensive corrosion
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 26

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 27	
Today's date: July 5, 2016		Time (Military): 13:23	
Investigators: JW SM		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.909006	Longitude: -87.891858	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1787 IMG_1788	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Power lines

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	Brown / Black water
Pipe benthic growth	☑	☐ Brown ☑ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 27

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 28	
Today's date: July 5, 2016		Time (Military): 13:29	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.90906	Longitude: -87.893419	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1789 IMG_1790	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Roberta bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☒	☐ Oily ☒ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 28

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 29	
Today's date: July 5, 2016		Time (Military): 13:34	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908987	Longitude: -87.893525	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1791 IMG_1792	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):
South side of bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	Standing Water in the pipe
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 29

Addison Creek – Outfall 29

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 30	
Today's date: July 5, 2016		Time (Military): 13:45	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908992	Longitude: -87.895694	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1793	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):
Next to Water tower

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 3"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☑ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☑ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 30

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 31	
Today's date: July 5, 2016		Time (Military): 13:47	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.02 Last 48 hours: 0.00		
Latitutde: 41.909016	Longitude: -87.896026	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1794	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☒ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
Under bridge on South Side

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☒ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	Pipes offset
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☑ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 31

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek		Outfall ID: 32	
Today's date: July 5, 2016		Time (Military): 13:50	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.909084	Longitude: -87.896122	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1795	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):
NW side of bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 28"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☑ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 32

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 33	
Today's date: July 5, 2016		Time (Military): 14:12	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908552	Longitude: -87.899383	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1798 IMG_1797	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known): NE side of bridge (Prater Ave)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 30"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☑ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 33

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 34	
Today's date: July 5, 2016		Time (Military): 14:15	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.903418	Longitude: -87.899520	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1799 IMG_1800	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Under NW side of bridge (Prater Ave)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☒ Corrosion	Extensive Corrosion
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☒ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

CMP pipe needs repairs

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 34

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 35	
Today's date: July 5, 2016		Time (Military): 14:20	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908523	Longitude: -87.899612	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1802 IMG_1803	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
NW Side of bridge (Prater Ave)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 42"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☑ Oil Sheen ☑ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: gray	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☑ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 35

Addison Creek – Outfall 35

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 36
Today's date: July 5, 2016	Time (Military): 14:23
Investigators: JW SH	Form completed by: JW
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.908328 Longitude: -87.899686	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1804 IMG_1809 IMG_1808

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

On Curved Wall

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	Extensive Algae buildup
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 36

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 37	
Today's date: July 15, 2016		Time (Military): 14:26	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908173	Longitude: -87.899810	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1805 IMG_1806 IMG_1807	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
Under Parkview Dr

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 36"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 37

Addison Creek – Outfall 37

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 38	
Today's date: July 5, 2016		Time (Military): 14:30	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908456	Longitude: -87.899822	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1810 IMG_1811	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

1st big tree on north side of creek

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 38

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 39	
Today's date: July 5, 2016		Time (Military): 14:32	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.908407	Longitude: -87.900038	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1812	IMG_1813

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☒	☐ Excessive ☒ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 39

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 40	
Today's date: July 5, 2016		Time (Military): 14:39	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908412	Longitude: -87.901069	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1814 IMG_1815	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

North side of creek at the bend

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 40

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 41	
Today's date: July 5, 2016		Time (Military): 14:41	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908352	Longitude: -87.901104	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1816 IMG_1817	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
South side of creek at the bend

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Buried under sediment and rocks

Addison Creek – Outfall 41

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 42	
Today's date: July 5, 2016		Time (Military): 14:45	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.908762	Longitude: -87.90279	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1818	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	Grass invading outfall
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 42

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 43	
Today's date: July 5, 2016		Time (Military): 14:52	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908352	Longitude: -87.900549	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1820	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
70 ft east of Fire hydrant

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 43

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 44	
Today's date: July 5, 2016		Time (Military): 14:56	
Investigators: JW JH		Form completed by: JW	
Temperature (°F): 83	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908387	Longitude: -87.900126	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1821	IMG_1822

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☐ Inhibited	Weeds and grass invading
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 44

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 45	
Today's date: July 11, 2016		Time (Military): 13:40	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908942	Longitude: -87.901222	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1856	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):
By the Weir

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 45

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 46	
Today's date: July 11, 2016		Time (Military): 13:41	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.908925	Longitude: -87.901149	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1857 IMG_1858 IMG_1859	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

By Weir

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 46

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 47	
Today's date: July 11, 2016		Time (Military): 13:45	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours 0.00	Last 48 hours: 0.00	
Latitutde: 41.909181	Longitude: -87.901446	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1860	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 47

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 48	
Today's date: July 11, 2016		Time (Military): 13:49	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.909284	Longitude: -87.901438	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1861 IMG_1862	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Brush by power line

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No 60% ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 48

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 49	
Today's date: July 11, 2016		Time (Military): 13:55	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.909348	Longitude: -87.901758	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1863	IMG_1864

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☑ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 49

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 50	
Today's date: July 12, 2016		Time (Military): 14:05	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.909520	Longitude: -87.902097	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1867	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 50

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 51
Today's date: July 11, 2016	Time (Military): 14:11
Investigators: JW JH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.910159 Longitude: -87.902547	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1869 IMG_1871

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☑ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☑ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 51

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 52	
Today's date: July 11, 2016		Time (Military): 14:15	
Investigators: JW SH		Form completed by:	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.910183	Longitude: -87.902611	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1872	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☒ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☒	☒ Excessive ☒ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☒ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 52

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 53	
Today's date: July 11, 2016		Time (Military): 14:21	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.910358	Longitude: -82.903158	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1874 IMG_1875	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

N Side of Wolf Rd

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 36"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☒ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☒	☒ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☒	☐ Oily ☒ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☒	☒ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☒ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 53

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek		Outfall ID: 54	
Today's date: July 11, 2016		Time (Military): 14:26	
Investigators: JW JH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.910239	Longitude: -87.903157	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1876 IMG_1877	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☑ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

pitched backwards

Addison Creek – Outfall 54

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 55	
Today's date: July 11, 2016		Time (Military): 1430	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.910403	Longitude: -87.903543	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1878	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known): SW Side of bridge

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Pipes offset (see photo)

Addison Creek – Outfall 55

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 56	
Today's date: July 11, 2016		Time (Military): 14:43	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.910708	Longitude: -87.903893	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1879 IMG_1880 IMG_1881 IMG_1882	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☑ Other: Pipe Arch	☐ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 36" / 60" Tall Wide	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☑ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☑ Brown ☑ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 56

Addison Creek – Outfall 56

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 57
Today's date: July 11, 2016	Time (Military): 14:44
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.910701 Longitude: -87.903892	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1883 IMG_1885 IMG_1886

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 42"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☐ Clear ☐ Brown ☑ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☑	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☑ 3 – Opaque
Floatables -Does Not Include Trash!!	☑	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☑ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☑ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 57

Addison Creek – Outfall 57

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 58	
Today's date: July 12, 2016		Time (Military): 9:38	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.912145	Longitude: -87.903921	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1892	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

SW of bridge by baseball

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 5"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Highly corroded
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 58

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 59	
Today's date: July 12, 2016		Time (Military): 9:59	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.912129	Longitude: -87.903927	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1893	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☑ Other: [redacted] Corrugated plastic	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 8"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 59

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 60	
Today's date: July 12, 2016		Time (Military): 10:01	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.911853	Longitude: -87.904161	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1894	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☒	☒ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 60

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek		Outfall ID: 61	
Today's date: July 12, 2016		Time (Military): 10:03	
Investigators: 9 JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.911412	Longitude: -87.904110	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1895	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known): Under Pederstrian bridge along trail

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☑ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 61

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 62	
Today's date: July 12, 2016		Time (Military): 10:08	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.912465	Longitude: -87.904245	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1896	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 62

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 63
Today's date: July 12, 2016	Time (Military): 10:18
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.912910 Longitude: -87.904648	GPS Unit: GPS LMK #:
Camera: Iphone 6 Iphone 6	Photo #s: IMG_1898 IMG_1899 IMG_1900

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 60"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	~~[illegible]~~ coming over the top
Poor pool quality	☑	☐ Odors ☑ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	Brown pool
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 63

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek		Outfall ID: 64	
Today's date: July 12, 2016		Time (Military): 10:21	
Investigators: [redacted] JW SM		Form completed by: SM	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.913621	Longitude: -87.904756	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1901	IMG_1902

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ [illegible]ors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 64

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 65	
Today's date: July 12, 2016		Time (Military): 10:27	
Investigators: JW SH		Form completed by: SH	
Temperature (°F):	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.913967	Longitude: -87.905052	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1903	IMG_1904

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 5"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 65

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 66	
Today's date: July 12, 2016		Time (Military): 14:28	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.914690	Longitude: -87.905425	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1905	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 66

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 67	
Today's date: July 12, 2016		Time (Military): 14:42	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.914152	Longitude: -87.905138	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1907 IMG_1908	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☑ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

16 different outfalls under bridge (Automatic Electric Dr)

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☑ Other: 16	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☑ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfalls completely filled with sediment

Addison Creek – Outfall 67

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 68
Today's date: July 12, 2016	Time (Military): 15:04
Investigators: JW SH	Form completed by: JW
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitude: 41.915621 Longitude: -87.905706	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1909 IMG_1910

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☑ Other: Ceramic	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☑ Odors ☐ Colors ☑ Floatables ☑ Oil Sheen ☑ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: Gray	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 68

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison creek	Outfall ID: 69
Today's date: July 13, 2016	Time (Military): 13:58
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.915583 Longitude: -87.906052	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1915 IMG_1916 IMG_1917

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Bench table

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☑ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☑ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	Bottom ~~one~~ One

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 69

Addison Creek – Outfall 69

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 70	
Today's date: July 13, 2016		Time (Military): 14:10	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.915211	Longitude: -87.906424	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1918	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☑ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 70

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 71	
Today's date: July 13, 2016		Time (Military): 14:30	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.915765	Longitude: -87.906555	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1922	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☑ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 71

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 72	
Today's date: July 13, 2016		Time (Military): 14:37	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.915975	Longitude: -87.906695	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1925 IMG_1926	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☒ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☒ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 72

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 73	
Today's date: July 13, 2016		Time (Military): 14:39	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.916081	Longitude: -87.906733	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1927	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 73

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 74
Today's date: July 15, 2016	Time (Military): 9:36
Investigators: JW SH	Form completed by: JW
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.916458	Longitude: -87.906467
GPS Unit:	GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1962 IMG_1963 IMG_1964 IMG_1965

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 50"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☐ Clear ☐ Brown ☑ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☑ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☑	See severity	☐ 1 – Slight cloudiness	☑ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☑ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

~~Pipes~~ Concrete slabs not connected so water is falling out prematurely

Addison Creek – Outfall 74

Addison Creek – Outfall 74

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 75	
Today's date: July 15, 2016		Time (Military): 9:40	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.917465	Longitude: -87.907084	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1966	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☑ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 75

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 76	
Today's date: July 15, 2016		Time (Military): 9:54	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.917726	Longitude: -87.906948	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1968 IMG_1969	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Standing water in outfall / pipe

Addison Creek – Outfall 76

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 77
Today's date: July 15, 2016	Time (Military): 9:59
Investigators: JW SH	Form completed by: JW
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Latitutde: 41.917911 Longitude: -87.906986	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_1970 IMG_1971

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 20"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 77

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 78	
Today's date: July 15, 2016		Time (Military): 10:09	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.917911	Longitude: -87.907127	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1972 IMG_1973 IMG_1974	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 20"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Bottom corroded out
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Bottom of pipe completely corroded and needs replacement very soon

Addison Creek – Outfall 78

Addison Creek – Outfall 78

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 79	
Today's date: July 15, 2016		Time (Military): 10:13	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.918936	Longitude: -87.907348	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1975	IMG_1976

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 79

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 80	
Today's date: July 15, 2016		Time (Military): 10:23	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00	
Latitutde: 41.919319	Longitude: -87.907651	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1978	IMG_1979

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☑ Other: Black	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 80

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 81	
Today's date: July 15, 2016		Time (Military): 10:27	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 88	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00		
Latitutde: 41.919584	Longitude: -87.907712	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_1980 IMG_1981	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 30"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 81

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 82	
Today's date: July 19, 2016		Time (Military): 11:00	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.921217	Longitude: -87.908862	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2021 IMG_2022	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 36"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Concrete pipes not connected so water is outfalling prematurely

Addison Creek – Outfall 82

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 83	
Today's date: July 19, 2016		Time (Military): 11:01	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.921297	Longitude: -87.908799	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2023	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 83

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 84	
Today's date: July 19, 2016		Time (Military): 11:15	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.921495	Longitude: −87.909114	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2024 IMG_2025	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☑ Other: Ceramic	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☑ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	Filled with sediment
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Completely filled with sediment

Addison Creek – Outfall 84

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 85	
Today's date: July 19, 2016		Time (Military): 11:20	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.921847	Longitude: -87.909534	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2028 IMG_2029	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Completely destroyed
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Needs extensive repairs

Addison Creek – Outfall 85

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 86	
Today's date: July 19, 2016		Time (Military): 11:22	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.921952	Longitude: −87.909805	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2030	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☐ CMP ☑ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 6"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: Black	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 86

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 87	
Today's date: July 19, 2016		Time (Military): 12:02	
Investigators: JW SM		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.922847	Longitude: -87.910697	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2031 IMG_2032	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☑ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☑ Other: slight gray	☑ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 87

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 88	
Today's date: July 19, 2016		Time (Military): 12:15	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.923307	Longitude: -87.910490	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2033 IMG_2034	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☐ Green ☑ Other: White	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 88

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 89	
Today's date: July 19, 2016		Time (Military): 12:20	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 89	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.25	
Latitutde: 41.922651	Longitude: -87.910368	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2036	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	Bottom corroded out
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Needs repairs

Addison Creek – Outfall 89

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 90	
Today's date: July 19, 2016		Time (Military): 12:24	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.25	
Latitutde: 41.923347	Longitude: -87.910707	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2037	IMG_2038

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☑ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☑ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 90

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 91
Today's date: July 19, 2016	Time (Military): 12:26
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25
Latitutde: 41.923505 Longitude: -87.910537	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_2040 IMG_2041

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☑ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐ Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐ Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☑ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 91

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 92	
Today's date: July 19, 2016		Time (Military): 12:45	
Investigators: JW SM		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.924250	Longitude: -87.910431	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2044 IMG_2045 IMG_2046	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 20"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	Head destroyed
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Needs repairs

Addison Creek – Outfall 92

Addison Creek – Outfall 92

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 93
Today's date: July 19, 2016	Time (Military): 12:49
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25
Latitutde: 41.924827 Longitude: -87.909815	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_2047 IMG_2048 IMG_2049 IMG_2050

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☑ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 4"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☑	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☑ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☑ Other: slight gray	☑ 1 – Faint colors in ~~sample bottle~~	☐ 2 – Clearly visible in ~~sample bottle~~	☐ 3 – Clearly visible in outfall flow
Turbidity	☑	See severity	☑ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☑ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☑ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 93

Addison Creek – Outfall 93

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 94
Today's date: July 19, 2016	Time (Military): 12:52
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25
Latitutde: 41.925205 Longitude: -87.909559	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_2051

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 12"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Bottom is starting to corrode out. It also seems like the pipe is pitched backwards

Addison Creek – Outfall 94

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 95	
Today's date: July 19, 2016		Time (Military): 13:19	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.927654	Longitude: -87.909563	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2054	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☑ Other: DIP	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 18" Has Door that is closed	In Water: ☐ No ☑ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Door is closed so not much information to acquire

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 95

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 96
Today's date: July 19, 2016	Time (Military): 13:26
Investigators: JW SH	Form completed by: JW
Temperature (°F): 90	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25
Latitutde: 41.928313 Longitude: -87.909680	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_2055 IMG_2056

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☑	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☑ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 96

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 97	
Today's date: July 19, 2016		Time (Military): 13:28	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.928567	Longitude: -87.910056	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2057 IMG_2058	

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☑ Suburban Residential
- ☐ Commercial
- ☑ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15" Has Door	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☑ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☑ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Filled completely with sediment

Addison Creek – Outfall 97

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek	Outfall ID: 98
Today's date: July 19, 2016	Time (Military): 13:36
Investigators: JW SH	Form completed by: JW
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25
Latitutde: 41.928664 Longitude: -87.912786	GPS Unit: GPS LMK #:
Camera: Iphone 6	Photo #s: IMG_2059 IMG_2060

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 15"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☑ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☑ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 98

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 99	
Today's date: July 19, 2016		Time (Military): 13:51	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.25	
Latitutde: 41.926756	Longitude: -87.919179	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2062	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ **Closed Pipe**	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☑ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 99

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 100	
Today's date: July 19, 2016		Time (Military): 14:12	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.25		
Latitutde: 41.928607	Longitude: -87.914803	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2063 IMG_2064 IMG_2065	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☐ RCP ☑ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☐ Single ☑ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 42"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☐ No ☑ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☑	☑ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☑	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☑ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☑	☐ Excessive ☑ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☐ Brown ☐ Orange ☑ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Addison Creek – Outfall 100

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 100

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed: Addison Creek		Outfall ID: 101	
Today's date: July 19, 2016		Time (Military): 14:19	
Investigators: JW SH		Form completed by: JW	
Temperature (°F): 91	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.25	
Latitutde: 41.928028	Longitude: -87.915168	GPS Unit:	GPS LMK #:
Camera: Iphone 6		Photo #s: IMG_2066 IMG_2067	

Land Use in Drainage Area (Check all that apply):

- ☑ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☑ Closed Pipe	☑ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☑ Circular ☐ Eliptical ☐ Box ☐ Other: ____	☑ Single ☐ Double ☐ Triple ☐ Other: ____	Diameter/Dimensions: 24"	In Water: ☑ No ☐ Partially ☐ Fully With Sediment: ☑ No ☐ Partially ☐ Fully
☐ Open drainage	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: ____	☐ Trapezoid ☐ Parabolic ☐ Other: ____		Depth: ____ Top Width: ____ Bottom Width: ____	
☐ In-Stream	(applicable when collecting samples)				
Flow Present?	☑ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☑ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☑ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☑	See severity	☑ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☑ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☑	☐ Oily ☑ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☑	☑ Brown ☑ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☑ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☑ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☑ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Traffic cone lodged into the outfall

City of Northlake
Illicit Discharge Detection and Elimination Program

Addison Creek – Outfall 101

APPENDIX 7

Outfall Action Items

Outfall	Flow Present?	Flow Quality	Submerged?	Concern	Action Item	Additional Notes
2	No	-	Partially	Excessive Algae/Benthic growth	Monitor	Trash in area
4	No	-	Partially	Excessive Algae/Benthic growth/Suds	Monitor	-
6	No	-	Partially	Poor pool quality	Monitor	-
8	No	-	Partially	Corrosion/Benthic growth	Monitor	-
10	Yes	Underterminable	-	Flow line stains/benthic growth/poor pool quality	Monitor	Trash in area. Sediment in pool is light brown
14	No	-	Partially	Flow line stain	Monitor	-
16	Yes	Clear	-	Corrosion/Benthic growth	Monitor	-
17	Yes	Clear	-	Odor/Benthic growth	Monitor	-
24	Yes	Clear	-	Odor/Flow line stains/Excessive algae/Benthic growth	Monitor	Double outfall. Bottom one has flow
27	No	-	Partially	Flow line stains/Excessive algae/Benthic Growth/Colors in pool	Monitor	Pool water is very dark
32	Yes	Clear	-	Flow line stains/Excessive algae/Benthic Growth	Monitor	-
35	No	-	Partially	Excessive algae/Abnormal vegetation/Oil Sheen/Benthic growth	Monitor	Should be looked at
37	Yes	Clear	-	Flow line stains/Benthic growth	Monitor	-
48	No	-	Partially	Flow line stain	Monitor	-
49	No	-	Partially	Corrosion/Benthic growth/Oil Sheen	Monitor	-
51	No	-	Partially	Abnormal Vegetation/Oil Sheen/Chipping	Monitor	The sediment in pool is very light brown
53	Yes	Clear	-	Chipping/Benthic Growth	Monitor	-
56	Yes	Clear	-	Corrosion/Suds in pool/Benthic Growth	Monitor	Pool quality is very poor
57	Yes	Opague	-	Flow line stain/Oil Sheen/Turbidity	Monitor	Should be adressed soon
63	No	-	Partially	Flow line stain/Poor Pool Quality/Abnormal Vegetation	Monitor	-
64	No	-	Partially	Excessive Algae/Flow line stain/Chipping	Monitor	-
68	No	-	Partially	Odors/Suds in pool/Oil Sheen/Benthic Growth/Cracking	Monitor	-
71	Yes	Clear	-	Benthic Growth/Flow line stain	Monitor	-
74	Yes	Cloudy	-	Benthic Growth/Flow line stain/Suds in Pool	Monitor	Should be adressed soon
76	No	-	Partially	Benthic Growth/ Flow line stain	Monitor	-
78	No	-	No	Corrosion/ Execessive Vegetation	Repair	Bottom is completely corroded and should be replaced soon
80	Yes	Clear	-	Benthic Growth/ Flow line stain/ Chipping	Monitor	-
82	Yes	Clear	-	Chipping/Flow line stain	Repair	Concrete slabs not connected
85	No	-	No	Completely destroyed	Repair	CMP is bent significantly
87	Yes	Slightly cloudy	-	Flow line stain/ Chipping	Monitor	-
89	No	-	No	Extensive Corrosion	Repair	Bottom is corroded
91	Yes	Clear	-	Abnormal Vegetation/ Benthic Growth	Monitor	-
92	No	-	No	Spalling, Cracking, Chipping	Repair	Concrete slabs not connected and significantly damaged
93	Yes	Slightly cloudy	-	Odor/Turbidity/Chipping/Benthic Growth	Monitor	The orange benthic growth is extensive and should be examined
96	Yes	Underterminable	-	Flow line stain/ Excessive Algae/ Benthic Growth/ Chipping	Monitor	-
98	Yes	Clear	-	Chipping/ Abnormal vegetation	Monitor	-
100	Yes	Clear	-	Corrosion/Abnormal vegetation/ Benthic Growth	Monitor	Double outfall
101	Yes	Slightly cloudy	-	Flow line stain/ Benthic Growth	Monitor	Traffic cone lodged into outfall

APPENDIX 8

Contributing Facilities List

Storm Water Notices of Intent Information for Construction and Industrial Activities

Home Industrial Quick Search

Search Options

***Screen Tip: First, check a search option. Next, enter the required search criteria depending on the option selected, then click "Perform Search". There are additional links available next to the record in the results grid below to view additional details about the NOI. Simply click on the desired link to view each respective area. For example, Uploaded SWPPP files, if available, can be found by clicking the "View Files" link next to the corresponding NOI record(if there are no files to view then the column is blank). Permits with a "In-Progress" Status or with NO ILR# assigned will not display as a result after clicking perform search from this search page since those permits are not complete or have not been reviewed by IEPA.**

- [ ] Find Permits By Status
- [ ] Find Permits By Owner
- [ ] Find Permits By Facility
- [x] Find Permits By Facility City
- [ ] Find Permits By Facility Address
- [ ] Find Permits By NPDES Number
- [ ] Find Permits By Permit Id
- [ ] Find Permits By County

***Screen Tip: You may sort on column headings that are underlined. Your database field you are sorting on and the current direction of the sort is listed below. To change directions click the column again. Each time you click the column, the grid will be resorted in the opposite direction.**

Search Criteria Used: Northlake

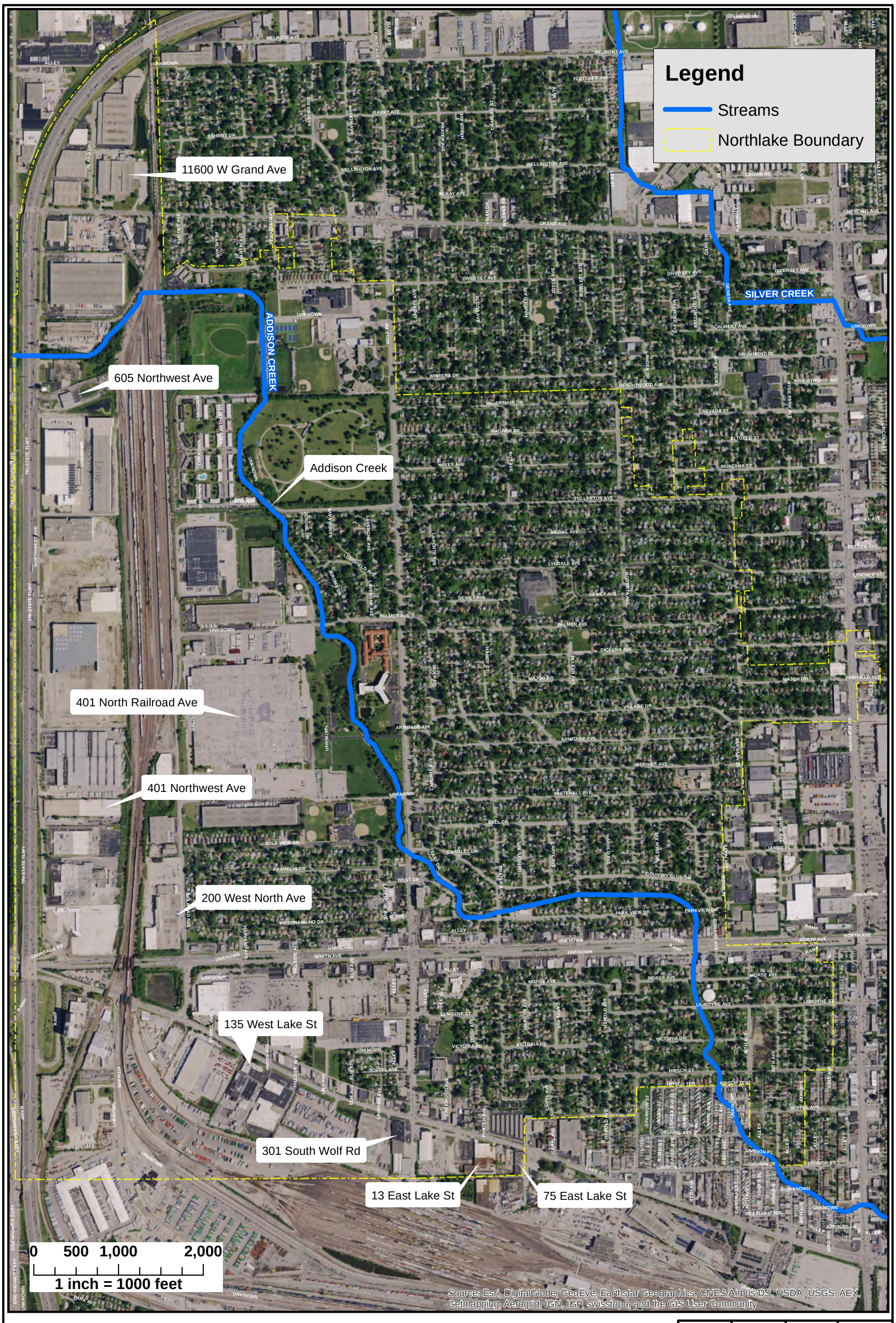
Current Sort: None **Sort Direction:** None

NPDES #	Facility Name	Facility City	Facility Address	Owner Name	Phone Number	County	Date Received	More Info.	Uploaded Files
ILR006949	NORTHLAKE TRANSFER STATION	NORTHLAKE	605 NW AVE	NORTHLAKE TRANSFER INC	708-297-3941	COOK	02-23-2011	More Info.	View Files
ILR006809	TIN INC.	NORTHLAKE	11600 W GRAND AVE	TIN INC.	913-940-0351	COOK	07-06-2009	More Info.	View Files
ILR005899	SARATOGA SPECIALTIES INC	NORTHLAKE	150 RAILROAD AVE	JOHN MORRELL & COMPANY	605-330-3656	COOK	01-31-2000	More Info.	
ILR005562	SCHOLLE CORPORATION	NORTHLAKE	2OO WEST NORTH STREET	SCHOLLE CORPORATION	708-562-7290	COOK	04-25-1997	More Info.	
ILR005354	CALLEN MANUFACTURING COMPANY	NORTHLAKE	13 EAST LAKE STREET	MARIANO RAMIREZ	708-345-0400	COOK	08-01-1997	More Info.	View Files
ILR004077	ENTENMANNS BAKERIES	NORTHLAKE	3OO W NORTH AVE	WESTON FOOEDS INC-J MCKEOWN	610-825-1140	COOK	08-21-1997	More Info.	
ILR003926	BULKMATIC TRANSPORT-NORTHLAKE	NORTHLAKE	301 W. LAKE STREET	BULKMATIC TRANSPORT COMPANY	-	COOK		More Info.	
ILR003509	INTERNATIONAL PAPER COMPANY	NORTHLAKE	401 NORTHWEST AVE.	INTERNATIONAL PAPER CO INC	708-562-6000	COOK	07-28-1997	More Info.	View Files
ILR003409	HI TEMP LLC PLANT 2	NORTHLAKE	75 E. LAKE ST.	HI TEMP LLC - MIKE LESIAK	708-410-8000	COOK		More Info.	View Files
ILR003405	HI TEMP LLC - PLANT 1	NORTHLAKE	301 S. WOLF RD.	HI TEMP LLC - MIKE LESIAK	708-410-8000	COOK		More Info.	View Files
ILR003146	SUN CHEMICAL CORP	NORTHLAKE	135 W. LAKE STREET	SUN CHEMICAL CORP	708-562-0550	COOK	08-15-1997	More Info.	View Files

ILR001908	DOMINICKS FINDER FOODS INC	NORTHLAKE	555 NORTHWEST HIGHWAY	DOMINICKS FINDER FOODS/BUGNITS	708-492-6249	COOK	08-13-1997	More Info.	
ILR005199	SCHOLLE PACKAGING	NORTHLAKE	200 WEST NORTH AVENUE	SCHOLLE PACKAGING	708-562-7290	COOK	01-30-1995	More Info.	View Files
ILR001483	ENTENMANNS	NORTHLAKE	300 WEST NORTH AVE.	GENERAL FOODS BAKING COMPANY	516-273-6000	COOK	09-29-1993	More Info.	
ILR001419	DR PEPPER/7UP BOTTLING GROUP	NORTHLAKE	401 NORTH RAILROAD AVENUE	THE AMERICAN BOTTLING COMPANY	708-947-5000	COOK	09-02-1997	More Info.	View Files
ILR001162	INTERNATIONAL PAPER	NORTHLAKE	635 NORTHWEST AVENUE	INTERNATIONAL PAPER	708-562-6900	COOK	09-29-1997	More Info.	
ILR000559	INLAND PAPERBOARD & PACKAGING	NORTHLAKE	11600 W GRAND AVENUE	INLAND PAPERBOARD & PKG/WOLFE	708-562-6100	COOK	09-15-1997	More Info.	
ILR000520	GREIF BROS-NORTHLAKE	NORTHLAKE	615 NORTHWEST AVENUE	GREIF BROS CORPORATION	614-363-1271	COOK	10-05-1992	More Info.	
ILR000329	MURNANE PACKAGING CORPORATION	NORTHLAKE	607 NORTHWEST AVENUE	FRANK SR MURNANE	708-449-1200	COOK	08-04-1997	More Info.	^

Reset Search

Contact Us



DSGN.	BMK	CHKD.	

Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road, Suite 600
Rosemont, IL 60018
(847) 823-0500 / FAX (847) 823-0520

CLIENT: CITY OF NORTHLAKE

PROJECT NO.: R940032.HR214

TITLE: CONTRIBUTING FACILITIES LOCATION MAP

DATE: 9/28/16

EXHIBIT

APPENDIX 9

IDDE Example Training Presentation

NPDES Phase II MS4 Training Seminar

Travis M. Parry, PE, CFM, CMS4S
Christopher B. Burke Engineering, Ltd.

What is NDPES?

National Pollution Discharge Elimination System

Permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States:

- Point sources are discrete conveyances such as pipes or man-made ditches
- Not for individual homes that are connected to a municipal system or use a septic system
- Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

What is an MS4?

Municipal Separate Storm Sewer System

A conveyance or system of conveyance owned by a state, city, or other public entity that discharges to waters of the United States:

- Designed or used for collecting storm water;
- Is not a combined sewer; and
- Is not part of a Publicly Owned Treatment Works (POTW)

Aspects of the MS4

- Not Always A System of Storm Sewers
- MS4's May Include:
  - Ditches
  - Curbs
  - Gutters
  - Streams
  - Wetlands
  - Drainage Swales
  - Any Storm Water Conveyance

Other MS4 - Examples

- Highway Departments
- Universities
- Local Sewer Districts
- Hospitals
- Military Bases
- Prisons
- Airports

SIU Southern Illinois University CARBONDALE

The Metropolitan Water Reclamation District of Greater Chicago

Best Management Practices

- A BMP is a method, device, or practice for removing, reducing, or preventing pollution in stormwater runoff from reaching receiving waters.
- Examples:
- Construction – Silt Fence
- Municipal – Street Sweeping

Why Are We Here?

- Required to develop a SWMP comprised of BMPs and measurable goals for each of the following six minimum control measures:

1. Public education and outreach on storm water impacts
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Construction site storm water runoff control
5. Post construction storm water management in new development and redevelopment
6. Pollution prevention/good housekeeping for municipal operations

Why Are We Here?

City must regulate all discharges to the MS4

- Construction Sites
- Commercial Uses
- Industrial Uses
- Municipal Facilities
- Private Residences

Illicit Discharges

- Any discharge to the MS4 that is not composed entirely of stormwater

Outfall Inspections

1. Background Data
2. Outfall Description
3. Quantitative Characterization
4. Physical Indicators – Flowing Only
5. Physical Indicators – Both
6. Overall Outfall Characterization
7. Data Collection
8. Other Concerns

Outfall Inspections

1. Background Data
   a) Personnel
   b) Weather (temp, rainfall, etc)
   c) Location
   d) Land Use

Outfall Inspections

2. Outfall Descriptions
   a) Type (open, closed)
   b) Material (RPC, PVC, etc)
   c) Shape
   d) Size
   e) Submerged

Outfall Inspections

Outfall Inspections

3. Quantitative Characterization
   a) Flow Parameter (volume, depth, etc)
   b) Result
   c) Unit
   d) Equipment

Outfall Inspections

4. Physical Indicators - Flowing
   a) Indicator (odor, color, etc)
   b) Presence
   c) Description (sewage, sulfur, etc)
   d) Severity

Outfall Inspections

Outfall Inspections

5. Physical Indicators - Both
   a) Indicator (Damage, stains, etc)
   b) Presence
   c) Description (cracking, oily, etc)
   d) Comments

Outfall Inspections

Outfall Inspections

6. Overall Outfall Characterization
   a) Unlikely
   b) Potential
   c) Suspect
   d) Obvious

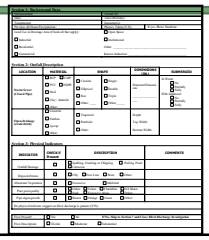
Outfall Inspections

7. Overall Outfall Characterization
   a) Sample collected
   b) Where

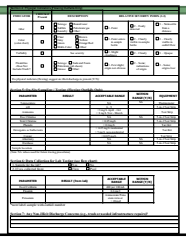
8. Non Illicit Discharge Concerns
   a) Trash
   b) Erosion
   c) Etc.

Outfall Inspections

Outfall Inspections

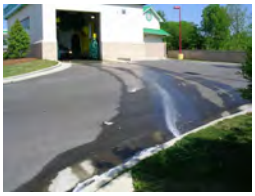


Outfall Inspections



Illicit Discharges - Examples

- Car Wash



Illicit Discharges

- Paint spills

Illicit Discharges

- Sanitary Sewer Overflows

Illicit Discharges

- Grass Clippings/Yard Waste

Illicit Discharges

- Motor Oil

Illicit Discharges

- Leaking Dumpster

Illicit Discharges

- Detergents

Illicit Discharges

- Animal Waste

Illicit Discharges

- Leaking Drums

Illicit Discharges

- Suds

Illicit Discharges

- Oil and Grease

Illicit Discharges
Sanitary Sewer Waste

- Gray Water

Illicit Discharges
Sanitary Sewer Waste

- Foam

Illicit Discharges
Sanitary Sewer Waste

- Staining

Illicit Discharges
Sanitary Sewer Waste

- Failing Septic System or cheater pipes

Illicit Discharges

- Petroleum Sheen

Illicit Discharges

- Spills

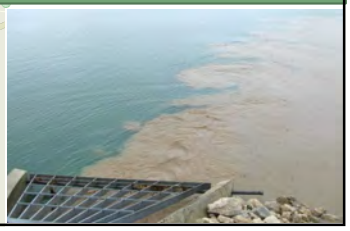
Illicit Discharges

Trash and Debris

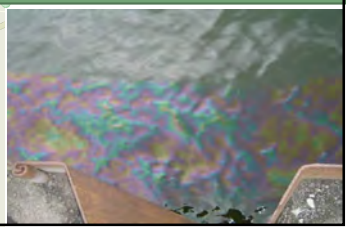
Illicit Discharges Industrial

- Chemical Odor

Illicit Discharge: Outfalls



Illicit Discharge: Oil Sheen



Illicit Discharges Industrial

- Discolored water

Illicit Discharges Agricultural Runoff

- Excessive Vegetation

Illicit Discharges Fertilizers

- Blue Green Algae

Illicit Discharges or Naturally Occurring?

- Fish kills

Illicit Discharges or Naturally Occurring?

- Foam or Suds

Illicit Discharges or Naturally Occurring?

- Staining and Discoloration

Illicit Discharges or Naturally Occurring?

- Algae Blooms

Illicit Discharges or Naturally Occurring?

- Sheens and Deposits

Illicit Discharges - Exemptions

- water line flushing
- landscape irrigation
- diverted stream flows
- rising ground waters
- uncontaminated ground water infiltration
- discharges from potable water sources
- foundation drains
- air conditioning condensation
- irrigation water
- springs
- water from crawl space pumps
- footing drains
- lawn watering
- individual residential car washing
- flows from riparian habitats and wetlands

Construction Site Runoff Control – During and Post

- A BMP is a method, device, or practice for removing, reducing, or preventing pollution in stormwater runoff from reaching receiving waters.
- Effectiveness of BMP's
- Selection
- Installation
- Maintenance

Silt Fence

- Tributary area to fence is appropriate
- Trenched into ground
- Backfilled
- Stake spacing w/ lath
- Wire Backing (if required)
- Not for Concentrated Flow
- **NOT A FIX ALL!**

Silt Fence Indicating an Erosion Problem…

Silt Fence Failure: Use Alternative

Wattles to Replace Straw Bales

- Can be used in different applications
  - Inlet Protection
  - Ditch Checks
  - Bank Stabilization
  - Perimeter Control

Wattles to Replace Straw Bales

Inlet Protection

- A variety of inlet protecting BMPs exist. Choose the appropriate BMP for each situation.
- Types of inlet protection include:
  - Filter fabric (Woven Monofilament)
  - Wattles
  - Pre-fabricated Devices
  - Filter Baskets
  - Silt fence
  - Stone
  - Vegetated Buffers
  - Any combination of the above

Inlet Protection

Inlet Protection

Result of Failing to Maintain Inlet Protection

Inlet Protection: Wattles

Prefabricated: Long Term and High Flow

Prefabricated: Long Term and High Flow

Street Inlet Protection

Street Inlets

Street Inlet Protection: Filter Fabric

- Woven Monofilament
- Low flow inlets
- Wrap around back
- Staple
- Don't puncture
  - May cause flooding
- Require Maintenance

Filter Basket

Filter Basket Cleanout

Stone Inlet Protection

Street Sweeping

- Streets are scraped, and swept to maintain sediment free roadways
- Curb ramps are constructed of non-erodible materials
- Removes dirt and debris before entering a stormwater management facility.
  - Reduces catch basin maintenance.

Dirt Ramps

Construction Entrance / Exit

- Install at:
  - Concrete Washout
  - Soil Stock Piles
  - Construction Roads
- Proper size
- Correct materials used to construct
  - DO NOT CAP WITH GRAVEL
  - Fabric Installed
- Remove accumulated sediment, install stone

Construction Entrance / Exit

Concrete/Construction Washouts

Concrete/Construction Washouts

Concrete/Construction Washouts

- Make the drivers aware
- Washout area is located at least 50' from storm drains or drainageways
- Stone driveways don't count…

Concrete/Construction Washouts

Concrete/Construction Washouts

Construction Washout

De-Watering Illicit Discharge

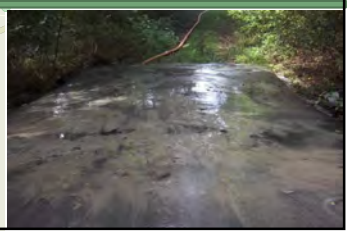
Dewatering…Floating the Pump

Dewatering…Floating the Pump

Filter Bag…Onsite

Filter Bag…At Capacity

Filter Bag…Fine Clays



Filter Bag…Fine Clays

Dewatering Activities

Dewatering Activities

Illicit Discharge From Pumping

Non-Storm Water Runoff

Hydrant Flushing

Non-Storm Water Runoff

Water Main Flushing

Unprotected Inlet

Next Stop…Violationville

Illicit Discharge

Pollutant Storage

- Store possible pollutants in an upland area, away from inlets
- Have MSDS onsite
- Include storage area in SWPPP
- Document possible pollutants in SWPPP

Pollutant Storage

Designate chemical storage area(s) onsite to store:

- Fuel Trucks
- Fuel Tanks
- Form Oil
- Hydraulic Oil
- Tar Buckets
- Port-a-Potty's

Pollutant Storage Violation

Pollutant Storage Violation

Pollutant Storage Example

Port-A-Potty

Pollutant Storage

Secondary Containment

Soil Stockpiles

- Stockpiles are surrounded by silt fence
- Stockpiles are stabilized
- Stabilized Entrances
- Location!

Stockpiles Are More Than Soil

Pollution Prevention and Good Housekeeping

- Procedures or activities that municipalities and their employees can do to prevent or reduce stormwater contamination from municipal operations.

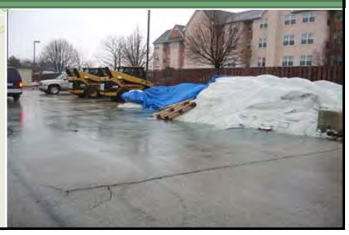
Pollution Prevention and Good Housekeeping

Municipal Activity	Potential Pollutants							
	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Particulates	Oxygen Demanding Substances
Building and Grounds Maintenance and Repair	X	X	X	X	X	X	X	X	X
Parking/Storage Area Maintenance	X	X	X	X	X	X	X		X
Waste Handling and Disposal	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Fueling			X	X		X	X		
Vehicle and Equipment Maintenance and Repair				X		X	X		
Vehicle and Equipment Washing and Steam Cleaning	X	X	X	X		X	X		
Outdoor Loading and Unloading of Materials	X	X	X	X		X	X	X	X
Outdoor Container Storage of Liquids		X		X		X	X	X	X
Outdoor Storage of Raw Materials	X	X	X			X	X	X	X
Outdoor Process Equipment	X		X	X		X	X		
Onsewater Activities			X	X	X	X	X	X	X
Landscape Maintenance	X	X	X		X			X	X

Pollution Prevention and Good Housekeeping

- Education and training are first and most important steps in reducing or preventing discharges from municipal activities

Salt Piles



Pollution Prevention and Good Housekeeping

8

Pollution Prevention and Good Housekeeping

8

Salt Storage

- Store piles under a roof or impermeable layer
  - Minimize contact with precipitation and storm water runoff
- Out of 100 yr Floodplain
- Stored on impermeable surfaces
- Contained within a curb or berm
- Store at least 50 feet from wetlands or streams
- Can contaminate surface and ground water

Salt Application

- Identify Environmentally sensitive areas on salt routes
  - Wetlands, streams, drainage swales, prairies, lakes, ground water recharge…
- Install impermeable barriers along sensitive areas
- Reduce plowing speed
- Reduce application rates at sensitive areas
- Clean out storm drains before the spring rains

Pollution Prevention and Good Housekeeping

- Municipal project with no SE/SC measures

8

Pollution Prevention and Good Housekeeping

- Salt box next to inlet

8

Pollution Prevention and Good Housekeeping

- Uncovered drums

8

Pollution Prevention and Good Housekeeping

- Oil Recycling Storage Tanks

8

Pollution Prevention and Good Housekeeping

- Inspection and maintenance procedures and schedules
  - Create and follow!

Pollution Prevention and Good Housekeeping

- Pet Waste Pick Up Station

8

Pollution Prevention and Good Housekeeping

- Demonstration Areas

8

Pollution Prevention and Good Housekeeping

- Clearly Marked Procedures and Equipment
- Signage

8

Pollution Prevention and Good Housekeeping

8

Pollution Prevention and Good Housekeeping

- Proper Disposal of Municipal Generated Wastes

8

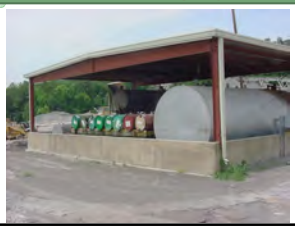
Pollution Prevention and Good Housekeeping

8

Pollution Prevention and Good Housekeeping

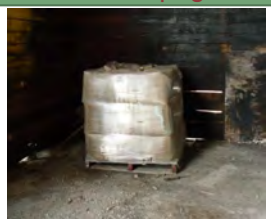
8

Pollution Prevention and Good Housekeeping



8

Pollution Prevention and Good Housekeeping



8

Pollution Prevention and Good Housekeeping

8

Pollution Prevention and Good Housekeeping

8

Pollution Prevention and Good Housekeeping

- Municipal Projects

8

Pollution Prevention and Good Housekeeping

- Watermain Breaks

8

Pollution Prevention and Good Housekeeping

- Dewater CORRECTLY!

8

How to Help

Identification – Be aware

Notification – Alert the appropriate person

Documentation – Photos, Work Orders, Emails

Elimination – React or Follow up

Failure to Comply

- Municipalities and governmental entities NOT exempt from enforcement actions

$$$

Questions ?

Photo References

www.emeraldseedandsupply.com
www.aot.state.vt.us
www.nwequipsales.com
www.aot.state.vt.us
www.greatamericantec.com
www.thedeicingbusiness.com
www.depweb.state.pa.us/news/lib/news/oilsheenJPG.jpg
www.nscc.govt.nz