# STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR

# 2021 MULTI-SECTOR GENERAL PERMIT (MSGP)







## NORWOOD MEMORIAL AIRPORT

111 ACCESS ROAD, NORWOOD, MA MAY 2021

Prepared for:

Norwood Airport Commission 566 Washington Street Norwood, MA 02062

Prepared by:

**Epsilon Associates**3 Mill and Main Place, Suite 250 Maynard, MA 01754

Table A-1 General Facility Information

General Information			
Facility Name	Norwood Memorial Airport		
Physical Address	111 Access Road, Norwood, MA 02062 (Norfolk County)		
Facility Coordinates (WGS 84)	42.1906°N, 71.1739°W		
	Outfall 1: 42.1930°N, 71.1762°W		
Outfall Coordinates (WGS 84)	Outfall 2: 42.1830°N, 71.1650°W		
,	Outfall 3: 42.1861°N, 71.1755°W		
	Neponset River (Confluence with East Branch, Canton to		
Receiving Water Bodies	confluence with Mother Brook, Boston) (Waterbody ID# MA73-02)		
Ü	Purgatory Brook (Waterbody ID# MA73-24)		
Receiving Watershed	Neponset		
MSGP Industrial Sector	Sector S; Subsector S1 (Air Transportation Facilities)		
Airport Authority			
Airport Authority Name	Norwood Airport Commission		
Mailing Address	111 Access Road, Norwood, MA 02062		
SIC Code	4581 (Airports, Flying Fields, and Airport Terminal Services)		
MSGP ID#	MAR05CY6		
	Russ Maguire, Airport Manager		
CM/DDD Control	781-255-5615 / rmaguire@norwoodma.gov		
SWPPP Contacts	Mark Raymond, Assistant Airport Manager		
	781-255-5615 / mraymond@norwoodma.gov		
Airport Tenant (Fixed Base Opera	itor)		
Fixed Pace Operator Mana	FP-1-1		
Fixed Base Operator Name	Flight Level Norwood, LLC		
Mailing Address	125 Access Road, Norwood, MA 02062		
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Mailing Address	125 Access Road, Norwood, MA 02062		
Mailing Address SIC Code	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services)		
Mailing Address SIC Code MSGP ID#	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR05J02X		
Mailing Address SIC Code	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR05J02X Mike Krawczyk, FBO Manager		
Mailing Address SIC Code MSGP ID# SWPPP Contacts	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR05J02X Mike Krawczyk, FBO Manager 781-769-8680 x102 / mikek@flightlevelaviation.com Nicholas W. Burlingham, V.P. and General Counsel 860-941-1129 / nburlingham@flightlevelaviation.com		
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Mailing Address SIC Code MSGP ID# SWPPP Contacts Airport Tenant (Fixed Base Operation	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR05J02X Mike Krawczyk, FBO Manager 781-769-8680 x102 / mikek@flightlevelaviation.com Nicholas W. Burlingham, V.P. and General Counsel 860-941-1129 / nburlingham@flightlevelaviation.com  Itor) Boston Executive Helicopters 209 Access Road, Norwood, MA 02062		
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Mailing Address SIC Code MSGP ID#  SWPPP Contacts  Airport Tenant (Fixed Base Operative Base Operator Name Mailing Address SIC Code MSGP ID#  SWPPP Contact  Airport Owner	125 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR05J02X Mike Krawczyk, FBO Manager 781-769-8680 x102 / mikek@flightlevelaviation.com Nicholas W. Burlingham, V.P. and General Counsel 860-941-1129 / nburlingham@flightlevelaviation.com  Boston Executive Helicopters 209 Access Road, Norwood, MA 02062 4581 (Airports, Flying Fields, and Airport Terminal Services) MAR053840 Christopher R. Donovan, President 781-603-6186 / christopherdonovan1@gmail.com Christopher Donovan Jr., Manager 508-889-7850 / Christopher.Donovan.Jr.@gmail.com		
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**Table A-2** Receiving Water Impairments

Receiving Water <sup>1</sup>	Impairments	TMDL
	Debris	N/A (Non-Pollutant)
	Trash	N/A (Non-Pollutant)
	DDT in Fish Tissue	None Established
Neponset River	Dissolved Oxygen*	None Established
(Confluence with East	Escherichia Coli (E. Coli)	EPA TMDL# 2592
Branch, Canton to	Fecal Coliform	EPA TMDL# 2592
confluence with Mother	Flocculant Masses	None Established
Brook, Boston)	Metals*	None Established
(Waterbody ID# MA73-02)	Oil and Grease*	None Established
(Waterbody ID# WA73-02)	PCBs In Fish Tissue	None Established
	Scum/Foam	None Established
	Turbidity*	None Established
Dumantam , Brank	Debris	N/A (Non-Pollutant)
Purgatory Brook	Trash	N/A (Non-Pollutant)
(Waterbody ID# MA73-24)	Escherichia Coli (E. Coli)	EPA TMDL# 2592
(vvaterbody 10# IVIA73-24)	Fecal Coliform	EPA TMDL# 2592

<sup>\*</sup> Pollutant with no established TMDL and for which an analytical method exists under 40 CFR 136. TSS is to be used as an indicator of Turbidity, per Section 4.2.5.1 of the MSGP.

Table A-3 Stormwater Pollution Prevention Team

Team Member (Name or Title)	Individual Responsibilities
	Outfall monitoring
Airport Manager or	Public contact person
Assistant Airport Manager	Monthly/quarterly routine facility inspections
(Norwood Airport Commission)	Quarterly discharge sampling
	Visual assessments of discharge samples
(with EST Associates – water	Impaired waters monitoring
sampling / testing services)	Indicator monitoring
FBO Manager	Maintenance of FlightLevel fuel tank farm and fueling station
(FlightLevel)	Quarterly inspection of catch basin system
	Maintenance of B.E.H. fuel tank farm and fueling station
FBO President	Regular inspections of B.E.H. building oil/water separator, and
(Boston Executive Helicopters)	outdoor StormCeptor manhole

Receiving Water Reference: <a href="https://mywaterway.epa.gov/community/010900010803/overview">https://mywaterway.epa.gov/community/010900010803/overview</a> and <a href="https://www.mass.gov/doc/final-massachusetts-year-2016-integrated-list-of-waters/download">https://www.mass.gov/doc/final-massachusetts-year-2016-integrated-list-of-waters/download</a>

## **TABLE OF CONTENTS**

1.0	FACIL	TY AND SWPPP OVERVIEW		1-1
	1.1	MSGP Applicability		1-1
	1.2	SWPPP Maintenance and Revision	1	1-3
	1.3	Certification by Norwood Airport	Commission (Airport Authority)	1-4
	1.4	Certification by FlightLevel Norwo	od (Airport Tenant)	1-5
	1.5	Certification by Boston Executive	Helicopters (Airport Tenant)	1-6
2.0	INDU:	TRIAL ACTIVITIES AND CONTROLS		2-1
	2.1	Industrial Activities Exposed to Sto	ormwater	2-1
	2.2	Non-Stormwater Discharges		2-3
	2.3	Non-Exposed Industrial Activities		2-3
	2.4	Spills and Leaks		2-4
	2.5	<b>Endangered Species Determination</b>	n	2-5
	2.6	Historic Properties Determination		2-5
	2.7	Sampling Data Summary (2015 M	SGP)	2-5
	2.8	Stormwater Discharges from Majo	or Storm Events	2-6
	2.9	Posting of Permit Coverage Sign		2-6
3.0	SCHE	ULES AND PROCEDURES		3-1
	3.1	Notice of Intent (NOI) Submittal		3-2
	3.2	Unauthorized Non-Stormwater Di	scharges Evaluation	3-2
	3.3	Monthly Runway De-Icing Chemic	al Record	3-2
	3.4	Monthly / Quarterly Routine Facil	ity Inspections	3-3
	3.5	Quarterly Preventive Maintenance	e Program of Stormwater System	3-4
	3.6	Quarterly Stormwater Sampling		3-5
		3.6.1 Visual Assessments of D	ischarge Samples	3-6
		3.6.2 Indicator Monitoring (Pa	AH)	3-6
		3.6.3 Impaired Waters Monito	oring	3-7
	3.7	Annual Summary Report		3-9
	3.8	Annual Employee Training		3-10
	3.9	Routine Public SWPPP Update		3-11
	3.10	·		
4.0	CORR	CTIVE ACTIONS		4-1
	4.1	SWPPP Review and Revision Requ	irements	4-1
	4.2	Corrective Action Deadlines		
	4.3	Corrective Action Documentation		4-2

## **LIST OF APPENDICES**

Appendix A	Site Maps
Appendix B	Notice of Intent and Acknowledgment
Appendix C	Non-Stormwater Discharge Inspection Documentation
Appendix D	Routine Facility Inspections
Appendix E	Quarterly Visual Sample Inspections
Appendix F	Indicator Monitoring Results / Impaired Waters Monitoring Results
Appendix G	Annual Summary Reports
Appendix H	Endangered Species Notifications
Appendix I	Corrective Action Documentation
Appendix J	Sampling Results from Previous Permit Term

## **LIST OF TABLES**

Table A-1	General Facility Information	ii
Table A-2	Receiving Water Impairments	iii
Table A-3	Stormwater Pollution Prevention Team	iii
Table 1-1	SWPPP Cross-Reference	1-2
Table 1-2	SWPPP Revision Log	1-3
Table 2-1	Industrial Activities, Pollutants, and Controls	2-7
Table 3-1	Activity Schedule	3-1
Table 3-2	Impaired Waters Monitoring Parameters	3-8

## 1.0 FACILITY AND SWPPP OVERVIEW

Norwood Memorial Airport is a general aviation airport located approximately 12 air miles southwest of the City of Boston. The Airport was originally built in 1942 by the U.S. Navy to support the war effort. Since 1946, the Airport has been a public-use airport owned by the Town of Norwood, with about 165 aircraft (single and multi-engine turboprops, pistons, jets and helicopters) based on site year-round. The Airport accommodates about 60,000 take-offs and landings each year and operates 24/7 under the authority of the Norwood Airport Commission.

Two runways (one main "17/35" runway, and a second "10/28" runway for daylight use only) are supported by a series of taxiways and aircraft parking/servicing aprons. The apron areas consist of approximately 30 acres of paved surfaces, sub-structures, and buildings. Services include aircraft/avionics maintenance, fueling, aerial surveys and photography, videography, air cargo, sightseeing flights, electronic newsgathering, traffic reporting, aerial spraying, airborne law enforcement support, flight instruction, aircraft rentals, and a weather station. Certain aircraft services (incl. fueling, short/long-term hangar and tie-down space, and on-site maintenance) are provided by FlightLevel Norwood and Boston Executive Helicopters, which are each a Fixed Base Operator (FBO) and tenant facility at the Airport.

The Airport's property line includes 688 acres in total, of which approximately 160 acres is used for industrial purposes and exposed to stormwater (the balance is undeveloped). There are 3 stormwater outfalls to either the Neponset River or Purgatory Brook, which are each in proximity to the Airport as shown in the Site Map (Appendix A). These outfall discharges are regulated under EPA's National Pollutant Discharge Elimination System (NPDES) program – specifically, the 2021 Multi-Sector General Permit (MSGP).

## 1.1 MSGP Applicability

The airport authority (Norwood Airport Commission) and the tenant facility / fixed base operators (FlightLevel Norwood and Boston Executive Helicopters) are each classified under SIC Code #4581; the Airport is therefore subject to Sections 1-7 of the 2021 MSGP, as well as Section 8, Industrial Sector S (Air Transportation).

Under "Sector S", the MSGP permit authorizes stormwater discharges from those portions of the air transportation facility that are involved in aircraft maintenance (including rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations. The term "deicing" means both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made otherwise. The MSGP does <u>not</u> authorize the discharge of aircraft, ground vehicle, runway and equipment wash waters; nor the dry weather discharge of deicing chemicals (excluding discharge resulting from snowmelt).

As required under "Sector S", the Norwood Airport Commission, FlightLevel Norwood, and Boston Executive Helicopters are each submitting an individual Notice of Intent (NOI). Table 1-1 summarizes this SWPPP's compliance with applicable MSGP requirements.

Note: The Airport also includes other tenant businesses (e.g., helicopter services, flight schools, restaurant) that, as far as we are aware, do not meet MSGP applicability criteria and are not discussed further in this SWPPP.

Table 1-1 SWPPP Cross-Reference

Category	Sub-Category	Section of 2021 MGSP	Section of SWPPP
Stormwater Pollution Prevention Team	N/A	6.2.1	1.0, Table A-3
	Activities at the Facility		1.0
Site Description	General Location Map	6.2.2	Appendix A
	Site Map		Appendix A
Summary of Potential Pollutant Sources	N/A	6.2.3	2.1, 2.3, 2.4, Table 2-1
Description of Control Measures	N/A	6.2.4	2.1, 2.3, 2.4, Table 2-1
Schedules and Procedures	N/A	6.2.5	Table 3-1
Documentation to support eligibility considerations under	Documentation regarding endangered and threatened species and critical habitat protection	6.2.6.1	2.5
other federal laws	Documentation regarding historic properties	6.2.6.2	2.6
Signature requirements	N/A	6.2.7	1.3, 1.4, 1.5
	Drainage Area Site Map	8.S.5.1	Appendix A
	Potential Pollutant Sources	8.S.5.2	2.1, 2.3, Table 2-1
Industrial Sector S- specific requirements	Vehicle and Equipment Wash Water Requirements	8.5.5.3	2.1, 2.3, Table 2-1
	Control Measures Used for Management of Snow Melt	8.0.5.4	2.1, 2.3, Table 2-1
Massachusetts- specific requirements	SWPPP Availability	9.1.2.2	1.2

#### 1.2 SWPPP Maintenance and Revision

The Stormwater Pollution Prevention Team at the Airport consists of the individuals listed in Table A-3. These personnel will maintain stormwater control measures, and will take corrective actions as required. Each person will have access to this Plan and the team will implement modifications as required.

This SWPPP is distributed to the Stormwater Pollution Prevention Team in electronic and hardcopy form; and will also be publicly available on the Airport's Document Center website. The 2021 MSGP is available for reference on U.S. EPA's web site at: <a href="https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp">https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp</a> Any SWPPP updates shall be prepared no later than 45 days after conducting the final routine facility inspection for each year.

The SWPPP will also be revised if any pertinent changes occur at the facility, if additional instructions are received from U.S. EPA / MassDEP, or if any conditions occur as described in Section 4 which require a review and revision of the SWPPP. Revisions are tracked in Table 1-2.

If MassDEP requests a copy of the Stormwater Pollution Prevention Plan (SWPPP), it will be provided within 14 days in accordance with Section 9.1.2.2 of the MSGP.

Table 1-2 SWPPP Revision Log

	Review Date	Preparer(s)	Comments / Amendments
		Norwood Airport, with	
1	May 2021	Epsilon Associates	Initial SWPPP preparation under 2021 MSGP
2			
3			
4			
5			

## 1.3 Certification by Norwood Airport Commission (Airport Authority)

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained 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.

In accordance with Appendix B, Subsection 11 of the Multi-Sector General Permit, I certify that I am a principal executive officer of the Town of Norwood Airport Commission.

This Plan represents current facility operations and will be revised accordingly when changes occur at the facility, or when any of the corrective action thresholds from Part 5 of the 2021 MSGP are triggered. Any subsequent changes to this Plan will be signed, dated and noted in the revision history (Table 1-2).

SIGNATURE:	Rus Maguire	
Name:	Russ Maguire	
TITLE:	Airport Manager	
DATE:	May 5, 2021	

## 1.4 Certification by FlightLevel Norwood (Airport Tenant)

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained 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.

In accordance with Appendix B, Subsection 11 of the Multi-Sector General Permit, I certify that I am a responsible corporate officer of FlightLevel Norwood.

This Plan represents current facility operations and will be revised accordingly when changes occur at the facility, or when any of the corrective action thresholds from Part 5 of the 2021 MSGP are triggered. Any subsequent changes to this Plan will be signed, dated and noted in the revision history (Table 1-2).

SIGNATURE:	Mus .	
NAME:	Nicholas W. Borlingham	
TITLE:	VP and Ceneral Cornsel	
DATE:	May 5, 2021	

## 1.5 Certification by Boston Executive Helicopters (Airport Tenant)

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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained 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.

In accordance with Appendix B, Subsection 11 of the Multi-Sector General Permit, I certify that I am a responsible corporate officer of Boston Executive Helicopters.

This Plan represents current facility operations and will be revised accordingly when changes occur at the facility, or when any of the corrective action thresholds from Part 5 of the 2021 MSGP are triggered. Any subsequent changes to this Plan will be signed, dated and noted in the revision history (Table 1-2).

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NAME:

TITLE:

DATE:

Christopher Donovar

President Mana

## 2.0 INDUSTRIAL ACTIVITIES AND CONTROLS

In brief, stormwater within the aircraft maintenance area (incl. de-icing areas) is collected by a series of catch basins and surface channels, which ultimately discharge to either Purgatory Brook or the Neponset River (depending on the location) via three outfalls.

- Outfall 1 is the outlet of a subsurface discharge channel to Purgatory Brook, just north of the 10/28 runway. This outfall represents the endpoint of all on-site discharge channels to Purgatory Brook.
- Outfall 2 is the outlet of a surface-level stormwater channel (nearly one mile in length) to the Neponset River, at the southeastern end of the facility. Note: since the channel's actual discharge point to the River is in an undeveloped area and physically inaccessible, the sampling point will be the nearest physically accessible location to the River on this channel, for any required sampling/monitoring activities (see Section 3 of this SWPPP). This outfall represents the endpoint of all on-site discharge channels to the Neponset River, except for those captured in "Outfall 3".
- ♦ Outfall 3 is the outlet of a subsurface discharge channel to a wetland area just off the southern edge of the paved aircraft tie-down area on leasehold lots A,B,C. This wetland area ultimately drains to the Neponset River.

Stormwater elsewhere throughout the facility is absorbed into exposed ground or runs off as sheet flow. Stormwater diagrams are provided in Appendix A.

## 2.1 Industrial Activities Exposed to Stormwater

Table 2-1 details the facility's industrial activities that may be exposed to stormwater (and where spills and leaks may occur), as well as the corresponding pollutants and control measures. The site maps in Appendix A provide also provide the locations of selected key areas where spills or leaks may occur. Additional details on activities identified by "Sector S" of the 2021 MSGP are as follows:

## Runway De-Icing

The Airport plans to conduct de-icing of runways 17/35 and 10/28 during the permit term. The application season for anti-icing/de-icing fluids typically runs from December through April, though, in rare cases based on weather, the application of fluids might be expected to occur outside of these months. The application itself would be effected during conditions of snow and freezing rain, especially when the airport experiences periods of prolonged freezing conditions on the runways. This would then necessitate the need to increase the pavement's friction coefficient through the application of anti-icing/de-icing fluids.

As suggested within the "Sector S" of the MSGP, the Airport will use potassium acetate as an alternative to urea and glycol-based deicing chemicals. The liquid pavement anti-icing/de-icing

fluid is expected to be Cryotech E36 potassium acetate (LTL Class 65; NMFC#45650), applied in a diluted form with 50% water. This will be used sparingly, and only during periods of extended icing.

The facility does not conduct any "clear ice deicing" (i.e., no deicing fluids are applied during non-precipitation events). In the unlikely event that this needs to be done in the future to respond to extreme weather, usage will continue to be limited to only the Cryotech E36 material described above, and only the minimum necessary amount will be used.

## Aircraft De-Icing

The facility does not conduct any aircraft de-icing operations. If an aircraft de-icing plan is proposed in the future, it will be reviewed to ensure MSGP compliance and this SWPPP will be updated accordingly prior to implementation.

## Vehicle and Equipment Wash Water

Washing is only conducted using "dry wash" techniques throughout the facility, which do not generate any waste liquid. Byproducts are buffed out of the vehicle surfaces and managed as solid waste. The only exception is that a limited amount of wet washing is conducted in designated indoor areas connected to the Town sewer, including but not limited to Buildings 11, 13 (a.k.a. Hangar 10), 14 (Boston Executive Helicopters), 15, 17, 20-25, and 26. The used wash water generated in these buildings is fully isolated from the stormwater system; it is routed to a floor sump in each building and then to the Town sanitary sewer system. The sumps at Buildings 15 and 17 are also equipped with an oil/water separator. The sump at the Boston Executive Helicopters building is equipped with an oil-water separator (inspected monthly).

## **Snow Melt**

Snow is generally left in place and there are no designated collection areas, except that snow would be blown into snowbanks on either side of the two main runways. This is essentially clean (uncontaminated) snow with the same characteristics as the stormwater runoff described in this Plan. Snow may also be trucked off site by the Town of Norwood during extreme storm events.

## Salt Storage

No salt is stored at the Airport. The Town's Department of Public Works applies salt as needed to the public parking area, using their own off-site stockpiles.

## Run-On from Adjacent Areas

The northwestern section of airport property includes a leased / commercial space which includes a Verizon operations yard, and a large automobile parking/storage area. The Town of Norwood also owns adjacent wetland property to the west. There has been no evidence of run-

on from these areas causing stormwater pollution, but appropriate corrective action will be taken should this occur in the future.

## 2.2 Non-Stormwater Discharges

The following non-stormwater discharges (where applicable to the Airport) are permitted under Section 1.2.2.1 of the 2021 MSGP:

- Discharges from emergency/unplanned fire-fighting activities.
- ♦ Fire hydrant flushings.
- Potable water, including uncontaminated water line flushings.
- Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids
- Irrigation/landscape drainage, provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling.
- Pavement wash waters, provided that detergents or hazardous cleaning products are not used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities, or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and the facility has implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement).
- External building/structure washdown / power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols) and the facility has implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement).
- Uncontaminated ground water or spring water.
- Foundation or footing drains where flows are not contaminated with process materials.

## 2.3 Non-Exposed Industrial Activities

Many Airport/tenant activities are fully confined indoors (not exposed to stormwater) and are therefore not discussed further in this Plan. Where applicable, these activities also comply with the good housekeeping activities specified in Section 8.S.4.1 of the MSGP. These include:

- Aircraft, Ground Vehicle and Equipment Maintenance Areas: Maintenance operations are conducted inside a series of hangars to minimize exposure of aircraft and aircraft parts to precipitation. Dry washing methods are used except in specific designated locations (see Section 2.1), and the Airport does not permit the practice of hosing down hangar floors.
- Aircraft, Ground Vehicle and Equipment Storage Areas: Aircraft and vehicles awaiting maintenance are generally kept within hangars, i.e., no designated outdoor area is necessary. Vehicles may be stored on outdoor ramps provided that any fluid leaks are collected by drip pans or similar measures.
- Material Storage Areas: Raw materials (de-icing chemicals, lubricants, cleaning solutions, batteries, paint, etc.) are kept indoors. Similarly, collection and storage of industrial waste (waste paint, used oils, hydraulic fluids, spent solvents, waste aircraft fuel, etc.) is also confined indoors or in outdoor areas with secondary containment. Containers of all such materials are also kept plainly labeled.
- ♦ Wash water drainage from inside selected buildings (see Section 2.1)
- ♦ Parts Maintenance (cleaning, degreasing, sanding etc.)
- Building floor drains and sanitary drains (sanitary water proceeds to Town sanitary sewer system)
- ♦ On-site tenant businesses not discharging stormwater
- ♦ Storage of off-road vehicles, e.g., snow removal equipment

## 2.4 Spills and Leaks

Consistent with the records in MassDEP's reportable release portal<sup>2</sup>, there have been no reportable spills or leaks in the three years preceding this Plan. The most significant area where a leak could occur is at the fuel tank farms; their locations are shown in Appendix A.

In accordance with federal regulations (40 CFR 112), the Airport also maintains a SPCC Plan (maintained separately on site) which applies to the storage and handling of petroleum products at the facility, and contains additional spill prevention procedures outside the scope of this SWPPP. It covers the prevention of spills, response procedures if a spill should occur, and employee training. If additional support is required, contact information for applicable internal and external contacts is provided in the facility's SPCC Plan. The Airport relies primarily on outside clean-up contractors for emergency response to large spills.

https://eeaonline.eea.state.ma.us/portal#!/search/wastesite

## 2.5 Endangered Species Determination

A recent review of the U.S. Fish and Wildlife Services (FWS) tool at <a href="http://ecos.fws.gov/ipac/">http://ecos.fws.gov/ipac/</a> indicated that one threatened species, the Northern Long-Eared Bat, may exist in proximity to the facility. This is a non-aquatic (terrestrial) species which would not feasibly be affected by the stormwater discharge. Furthermore, no listed critical habitats are located within the affected area. A review of U.S. National Marine Fisheries Service (NMFS) maps at <a href="http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm">http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm</a> has also indicated that the facility is not in proximity to any NMFS-listed species.

The facility should therefore be classified according to "Criterion A" with regard to endangered species protection (no listed species in the action area), which is consistent with its previous enrollment under the 2015 MSGP. The U.S. FWS report referenced above is provided in Appendix H of this Plan.

## 2.6 Historic Properties Determination

Norwood Memorial Airport has previously determined under the 2008 and 2015 MSGP that there have been no impacts on historic properties. The 2021 MSGP represents a renewal of prior coverage without any relevant changes in operations. However, during the permit term the Airport may perform a localized catch basin installation to prevent ponding, or other minor maintenance projects to the stormwater system that require a subsurface disturbance of less than one acre.

The Airport is not located in Indian country lands, and prior earth disturbances determined that historic properties do not exist at this location; the Airport is therefore eligible for MSGP coverage under "Criterion B" for historic properties. It should also be noted that the Massachusetts Cultural Resource Information System (MACRIS), an electronic resource provided by the Massachusetts Historical Commission, does not list any historic properties in proximity to the Airport's stormwater collection system; the only nearby property listed is an aboveground bridge outside the eastern property line. (https://mhc-macris.net/towns.aspx)

## 2.7 Sampling Data Summary (2015 MSGP)

Under the previous permit term, the facility was enrolled in the 2015 MSGP and conducted Impaired Waters Monitoring for E. Coli, Total Suspended Solids, Dissolved Oxygen, Total Phosphorus, and 5-day Biochemical Oxygen Demand (BOD). These results, also provided in Appendix J of this Plan, indicate that these pollutants had been consistently present in low to moderate levels which were within expected levels for typical suburban pavement runoff. The only exception was that E. Coli levels were several orders of magnitude higher during the 2018 sampling event at all outfalls for an undetermined reason, likely associated with high summer temperatures and possibly associated with run-on from the Town wetland area to the west (the Airport's sanitary waste is routed to the Town's municipal system and is isolated from the

stormwater system). E. Coli levels returned to normal in 2019 and 2020, and no potential onsite sources of E. Coli pollution were evident.

## 2.8 Stormwater Discharges from Major Storm Events

Due to its proximity to the Neponset River, a significant portion of the airport's property is located within the FEMA floodplain and floodway. In 2010, three days of significant rain forced the airport to close to all aircraft other than helicopters due to complete inundation of both runways. Flooding of some level occurs every two to three years. While flooding has not reached airport structures, some based aircraft have been impacted by flooding. It should also be noted that roughly 500ft of the eastern end of Runway 10/28, and the MALSF (lighting system) access road south of Runway 17/35 is in the mapped FEMA floodway.

These flood events have not been observed to have any significant impact on stormwater pollution, since flooding would not occur during the de-icing season and the majority of industrial activities are confined indoors as detailed elsewhere in this Plan. In general, the Airport would use best management practices during a flood event (e.g., postponing fuel deliveries and aircraft maintenance). However, the unpaved MALSF access road is subject to consistent flooding, which may add sediment and vehicle fluids; therefore paving of this road may be a future structural improvement project at the Airport.

## 2.9 Posting of Permit Coverage Sign

In accordance with Section 1.3.5 of the 2021 MSGP, the Airport will post a sign or other notice of 2021 MSGP permit coverage at a safe, publicly accessible location in close proximity to the facility, using a font large enough to be readily viewed from a public right-of-way. At minimum, the sign must include:

- ◆ The statement: "Norwood Memorial Airport is permitted for industrial stormwater discharges under the U.S. EPA's Multi-Sector General Permit (MSGP)"
- ♦ The NPDES ID number (MAR05CY6)
- ♦ A contact phone number for obtaining additional facility information;
- ◆ The Uniform Resource Locator (URL) for this SWPPP; and
- ◆ The statement: "To report observed indicators of stormwater pollution, contact [optional: include facility point of contact and] EPA at: (617) 918-1577

The facility will also perform periodic maintenance of the sign to ensure that it remains legible, visible, and factually correct (see Section 3).

## TABLE 2-1: EXPOSED INDUSTRIAL ACTIVITIES

Exposed Industrial Activity	Potential Associated Stormwater Pollutants	Potentially Affected Outfall	Control Procedures
Salt Spreading (Parking Area)	Salt, Vehicle Fluids	1,2,3	Service is provided by the Town Department of Public Works, therefore no salt storage is required on site.
General Roadway Traffic (Auto and Aircraft)	Sediment, Vehicle Fluids, Transported Materials (if any), Dust, Metals	1,2,3	Operational experience has found that regular sweeping is not required (i.e., no significant particle accumulation), except during rare occasions as a result of construction activity.  Selected catch basins are equipped with oil filtering devices.
Public Parking Area	Sediment, Vehicle Fluids, Transported Materials (if any), Dust, Metals	1	Operational experience has found that regular sweeping is not required (i.e., no significant particle accumulation), except during rare occasions as a result of construction activity.
Municipal Solid Waste Storage	Trash, Debris	1,2,3	Trash and debris is collected in dumpsters throughout the site, equipped with lids that are closed when not in use.  Dumpsters are located away from roof spouts.  Dumpsters are emptied weekly by a licensed waste hauler.
MALSF Lighting System Maintenance (unpaved access road)	Sediment, Vehicle Fluids, Transported Materials (if any), Dust	2	Vehicle traffic is very infrequent, and limited to dry periods or emergencies
Underground fuel storage farm 2 x 12,000-gallon jet fuel tanks 2 x 12,000-gallon aviation gasoline tanks (FlightLevel)	Jet Fuel, Aviation Gasoline	1	Compliance with MassDEP UST regulation 310 CMR 80, incl. triennial third party inspections, high level alarm, continuous leak monitoring, trained/certified "Class A-C" operators Maintenance of SPCC Plan containing fuel delivery, spill prevention and response procedures
Refueling operations at fuel storage farm (FlightLevel)	Jet Fuel, Aviation Gasoline	1	Direct fueling to or from fuel storage farm is conducted over containment pads.  Truck delivery area is equipped with a subsurface oil/water separator.  Maintenance of SPCC Plan containing fuel delivery, spill prevention and response procedures  Selected catch basins are equipped with oil/water separators.
Mobile aircraft refueling operations (FlightLevel)	Jet Fuel, Aviation Gasoline	1,2,3	All aircraft re-fueling is conducted on paved surfaces (tiedowns, parking apron) Refueling trucks remain on paved areas when not in use

## TABLE 2-1: EXPOSED INDUSTRIAL ACTIVITIES

Exposed Industrial Activity	Potential Associated Stormwater Pollutants	Potentially Affected Outfall	Control Procedures
			Spill kits and related equipment (e.g., drip pans) are maintained
			on site and used as appropriate
Underground fuel storage farm			Compliance with MassDEP UST regulation 310 CMR 80, incl.
1 x 20,000-gallon jet fuel tank	Jet Fuel, Aviation Gasoline	1,2	triennial third party inspections, high level alarm, continuous
1 x 10,000-gallon aviation gasoline tank			leak monitoring, trained/certified "Class A-C" operators
(Boston Executive Helicopters)			Maintenance of SPCC Plan containing fuel delivery, spill
(Boston Executive Hencopters)			prevention and response procedures
	Jet Fuel, Aviation Gasoline		Direct fueling to or from fuel storage farm is conducted on
		1,2	paved, impervious surfaces, and containment pad.
			Truck delivery area contains a containment pad. Delivery
			procedures are followed.
			Maintenance of SPCC Plan containing fuel delivery, spill
Refueling operations at fuel storage farm			prevention and response procedures
(Boston Executive Helicopters)			Fuel delivery procedures include usage of drain blockers
			Dry oil absorbent materials are maintained on site and used as
			appropriate
			Rainwater is filtered through a StormCeptor style manhole with
			shutoff, before discharge to stormwater system.
			The fueling area is never hosed down or washed.
			All re-fueling is conducted on paved surfaces (tie-downs,
Mobile aircraft refueling operations	Jet Fuel, Aviation Gasoline	1,2,3	parking apron)
(Boston Executive Helicopters)			Refueling trucks remain on paved areas when not in use
			Dry oil absorbent materials are maintained on site and used as
			appropriate
			Only "dry washing" is conducted in outdoor areas.
			"Wet washing" is only conducted indoors in 4 designated
			buildings isolated from the stormwater system (wash water is
	Sediment, Vehicle Fluids,		collected in sumps and routed to the Town sanitary sewer
Outdoor aircraft / ground vehicle washing	Metals	1,2,3	system.)

## TABLE 2-1: EXPOSED INDUSTRIAL ACTIVITIES

Exposed Industrial Activity	Potential Associated Stormwater Pollutants	Potentially Affected Outfall	Control Procedures
			The sumps at Buildings 11, 15, 17, and 26 are equipped with an oil/water separator. The sump at the Boston Executive Helicopters building is equipped with an oil/water separator (inspected monthly).
Runway De-Icing	De-Icing Chemicals	1,2	Only potassium acetate (Cryotech E36) is used, as an alternative to urea or glycol based de-icing chemicals.  De-icing will be conducted sparingly, and only during periods of extended icing.  De-icing chemicals are stored indoors.  The facility does not conduct any "clear ice deicing" (i.e., no deicing fluids are applied during non-precipitation events)
Miscellaneous Construction Projects	TBD	1,2,3	During the construction of any required airport improvements, the Airport's consultants and contractors would employ construction BMPs for erosion and sediment control and for general environmental protection (including compliance with Conservation Commission / Wetlands regulations and Construction General Permit regulations, where applicable).
*As-Needed Fire Fighting / Fire Hydrant Flushing	None	N/A	N/A
*Uncontaminated condensate from air conditioners, coolers/chillers, other compressors, and from the outside storage of refrigerated gases or liquids	None	N/A	N/A
*Irrigation/Landscape drainage (using pesticides, herbicides, and fertilizers applied in accordance with approved labeling)	Commercial pesticides, herbicides, fertilizers (varies)	Any	N/A
*Pavement wash waters where no detergents or hazardous cleaning products are used	None	N/A	N/A

TABLE 2-1: EXPOSED INDUSTRIAL ACTIVITIES

Exposed Industrial Activity	Potential Associated Stormwater Pollutants	Potentially Affected Outfall	Control Procedures
*External building / structure washdown /			
power wash water that does not use		N/A	N/A
detergents or hazardous cleaning products	None		
and the appropriate control measures have	None		
been implemented to minimize discharges of			
mobilized solids and other pollutants			

<sup>\*</sup> Designated as an authorized non-stormwater discharge under Section 1.2.2 of the MSGP

## 3.0 SCHEDULES AND PROCEDURES

Routine stormwater maintenance, monitoring and reporting activities required under the MSGP are summarized in Table 3-1 below, and further detailed in the following subsections. Records of these activities will be kept with this SWPPP for a period of at least three years from the date that coverage under the 2021 MSGP expires or is terminated. This SWPPP includes Appendices to be used for storage of applicable records.

Table 3-1 Activity Schedule

Frequency	Activity	Responsible Party	Section of Plan
One-Time (by 5/30/2021)	Submit Notice of Intent (NOI)	Norwood Airport, FlightLevel, B.E.H.	3.1
One-Time (by 2/28/2022)	Conduct Unauthorized Non-Stormwater Discharges Evaluation	Norwood Airport	3.2
Weekly	Typical Waste Pickups by Vendor	Norwood Airport	N/A
Monthly	Routine inspections for leaks and conditions of drums, tanks and containers (refer to SPCC Plan maintained separately)	FlightLevel, B.E.H.	N/A
Monthly	Record the type & quantity of runway de-icing chemical used	Norwood Airport	3.3
Monthly (de-icing season) Quarterly (other times)	Routine Facility Inspections (at least one inspection per year when a discharge is occurring)	Norwood Airport	3.4
Quarterly	Preventive Maintenance of Stormwater System	FlightLevel, B.E.H.	3.5
Quarterly	Stormwater Sampling of Each Outfall	Norwood Airport	3.6
Quarterly	Visual Assessments of Discharge Samples (with at least one assessment per year capturing snowmelt)	Norwood Airport	3.6.1
Twice per Year, during	Indicator Monitoring (PAH) of Each Outfall	Norwood Airport	3.6.2
1 <sup>st</sup> and 4 <sup>th</sup> years of MSGP coverage	Submit Indicator Monitoring "DMR" Reports within 30 days of receiving lab results	Norwood Airport, FlightLevel, B.E.H.	3.6.2
Annual	Impaired Waters Monitoring (Oil & Grease, Dissolved Oxygen, Total Metals) of Outfalls 2 and 3	Norwood Airport	3.6.3
(depending on results)	Submit Impaired Waters Monitoring "DMR" Reports within 30 days of receiving lab results	Norwood Airport, FlightLevel, B.E.H.	3.6.3
Annual by January 30	Submit Annual Summary Report	Norwood Airport, FlightLevel, B.E.H.	3.7
Annual	Employee Training	Norwood Airport, FlightLevel, B.E.H.	3.8
Annual, within 45 days of the year's final Routine Facility Inspection	Routine Public SWPPP Update	Norwood Airport	3.9
As Needed	Stormwater culvert dredging (by County)	Norwood Airport	3.10

The Airport is not subject to the following types of monitoring:

- ♦ <u>Benchmark Monitoring</u>: only applies if the Airport uses more than 100,000 gallons of pure glycol in glycol- based deicing fluids, and/or 100 tons or more of urea on an average annual basis (per Table 8.S-2 of the 2021 MSGP)
- ♦ Effluent Limitation Monitoring: only applies if the Airport uses pavement deicers containing urea (per Table 8.S-3 of the 2021 MSGP). Since effluent limitation monitoring is not conducted, the Airport must certify on the annual summary report that it does not use pavement deicers containing urea (see Section 3.7 of this SWPPP).

## 3.1 Notice of Intent (NOI) Submittal

In accordance with Sections 1.3 and 8.S.3.1 of the MSGP: the Airport Authority, FlightLevel, and Boston Executive Helicopters are each submitting a Notice of Intent (NOI) for the 2021 MSGP by May 30, 2021. A copy of EPA's authorization email will be kept on file with this SWPPP. If after submitting the NOI, any fields need to be corrected or updated, a "Change NOI" form will be submitted within 30 calendar days after the change occurs.

## 3.2 Unauthorized Non-Stormwater Discharges Evaluation

In accordance with Section 6.2.3.4 of the MSGP: by the end of the first year of MSGP coverage (i.e., by 2/28/2022), the Airport will inspect and document all discharge points at the facility. Documentation will include:

- ♦ The date of the evaluation;
- ♦ A description of the evaluation criteria used;
- ◆ A list of the discharge points or onsite drainage points that were directly observed during the evaluation; and
- ♦ If there are any unauthorized non-stormwater discharges, an explanation of everything that was done to immediately eliminate the unauthorized discharge per Part 5 of the 2021 MSGP.

## 3.3 Monthly Runway De-Icing Chemical Record

In accordance with Section 8.S.5.2 of the MSGP: a record of the types of all de-icing chemicals (including the Safety Data Sheets [SDS]) used and the monthly quantities, either as measured or, in the absence of metering, using best estimates, must be maintained.

## 3.4 Monthly / Quarterly Routine Facility Inspections

A member of the Stormwater Pollution Prevention Team will conduct routine facility inspections in accordance with Sections 3.1 and 8.S.6 of the MSGP. Inspections will be conducted at least monthly during all months during which deicing chemicals may be used, and at least quarterly at other times of the year. At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring.

## Each routine facility inspection must cover:

- Areas identified in this SWPPP and those that are potential pollutant sources
- Areas where spills and leaks have occurred in the past three years;
- Discharge points;
- ♦ Control measures used to comply with effluent limits;
- ♦ In accordance with Section 1.3.5 of the 2021 MSGP, this inspection includes periodic maintenance of the posted permit coverage sign to ensure that it remains legible, visible, and factually correct.

## The inspector must watch for:

- ◆ Industrial materials, residue or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- ◆ Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas;
- Erosion of soils, channel and streambank erosion and scour in the immediate vicinity of discharge points;
- Unauthorized non-stormwater discharges;
- ♦ Control measures needing replacement, maintenance or repair; and
- During an inspection occurring during a stormwater event or stormwater discharge: observe control measures implemented to comply with effluent limits to ensure they are functioning correctly. Also observe discharge points (or if such discharge locations are inaccessible, inspect nearby downstream locations.)

## Documentation of each inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of stormwater control measures at the facility, including:
  - A description of any stormwater discharges occurring at the time of the inspection;
  - Any previously unidentified stormwater discharges from and/or pollutants at the facility;
  - Any evidence of, or the potential for, pollutants entering the stormwater drainage system;
  - Observations regarding the physical condition of and around all stormwater discharge points, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
  - Any stormwater control measures needing maintenance, repairs, or replacement;
- ◆ Any additional stormwater control measures needed to comply with the permit requirements;
- ♦ Any incidents of noncompliance; and
- ◆ A statement, signed and certified in accordance with Appendix B, Subsection 11 of the MSGP.

## 3.5 Quarterly Preventive Maintenance Program of Stormwater System

In accordance with Section 2.1.2.3 of the MSGP, the Airport conducts a preventive maintenance program of the stormwater management system, primarily including the catch basins, drainage culverts, and associated equipment (oil/water separators, etc.) This preventive maintenance program is completed at least on a quarterly basis, and includes but is not limited to:

- Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe;
- Regular inspections of hoses, nozzles, emergency shut off switches; spill clean-up kits; and other equipment associated with the fuel farm;

- Regular clearing of sediment or debris from drainage swales; and
- Removal sand, debris, garbage, and organic matter from paved surfaces.
- ◆ Inspection by Boston Executive Helicopters of the indoor oil/water separator (typically done monthly), and the outdoor StormCeptor manhole at the B.E.H. building.

Any deficiencies are tracked to completion in accordance with Section 4 of this SWPPP.

## 3.6 Quarterly Stormwater Sampling

Once per quarter, a stormwater discharge sample will be collected from each Outfall to conduct the visual assessments of discharge samples and impaired waters monitoring required under the 2021 MSGP (see Sections 3.6.1 and 3.6.2 of this SWPPP). Sampling requirements begin in the first full quarter following either May 30, 2021 or the date of discharge authorization, whichever date comes later. These samples must be collected in such a manner that the samples are representative of the stormwater discharge. At the facility's discretion, additional samples may be taken during separate runoff events and used to determine the average benchmark parameter concentration for facility discharges.

All required monitoring must be performed on a storm event that results in an actual discharge ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (three days). The 72-hour (3-day) storm interval does not apply if the facility is able to document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs.

For each monitoring event, except snowmelt monitoring, the facility must identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event. For snowmelt monitoring, the facility must identify the date of the sampling event.

Exceptions to quarterly sampling are shown below. The required total number of samples must still be collected. The facility must also indicate in Net-DMR that there was no monitoring for the respective monitoring period.

• Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, the facility must take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included with the SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, electrical storms, or situations that otherwise make sampling impractical, such as extended frozen conditions.

- ♦ <u>Climates with Irregular Stormwater Runoff</u>: If freezing conditions exist that prevent runoff from occurring for extended periods, then samples for the quarterly visual assessments may be distributed during seasons when precipitation runoff occurs.
- ♦ <u>Areas Subject to Snow</u>: In areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge, taking into account the exception described above for climates with irregular stormwater runoff.

## 3.6.1 Visual Assessments of Discharge Samples

The visual assessment must be made of a sample in a clean, colorless glass or plastic container, and examined in a well-lit area. The inspector must visually inspect or observe the sample for the following water quality characteristics:

- ♦ Color
- ♦ Odor
- Clarity (diminished)
- ♦ Floating solids
- ♦ Settled solids
- Suspended solids
- ♦ Foam
- ♦ Oil sheen; and
- Other obvious indicators of stormwater pollution.

The individual conducting the monitoring will circulate the results to the rest of the Stormwater Pollution Prevention Team (Table A-3) when available. The visual assessment findings are not submitted to EPA, unless specifically requested to do so. However, the findings are summarized in the annual report (see Section 3.7 of this SWPPP). Whenever the visual assessment shows evidence of stormwater pollution, corrective action procedures are initiated as described in Section 4 of this SWPPP.

## 3.6.2 Indicator Monitoring (PAH)

In accordance with Sections 4.2.1.1 and Table 8.S-1 of the MSGP, the Airport must conduct indicator monitoring bi-annually (i.e., sample twice per year) in the first and fourth years of permit coverage. The first year of permit coverage begins in the first full quarter of permit coverage (commencing no earlier than May 30, 2021), followed by two years of no monitoring.

Bi-annual monitoring resumes in the fourth year of permit coverage for another year, after which it may be discontinued for the remainder of the permit coverage.

Facilities in climates with irregular stormwater discharges may modify this schedule provided the revised schedule is reported to EPA by the due date of the first indicator monitoring sample (using the EPA Regional contacts in Part 7.8 of the MSGP), and this revised schedule is kept with this SWPPP. The Airport must also indicate in Net-DMR any 3-month interval that a sample was not taken.

The Airport must monitor stormwater discharges for the 16 individual priority pollutant PAHs identified at Appendix A to 40 CFR Part 423 (naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.) Samples must be analyzed using EPA Method 625.1, or EPA Method 610/Standard Method 6440B, consistent with 40 CFR Part 136 analytical methods.

The individual conducting the monitoring will circulate the results to the rest of the Stormwater Pollution Prevention Team (Table A-3) when available. Results must be submitted to EPA within 30 days of receiving complete laboratory results, using EPA's electronic NetDMR system. The same results will be submitted in parallel by the Norwood Airport Authority, FlightLevel, and Boston Executive Helicopters.

## 3.6.3 Impaired Waters Monitoring

In accordance with Section 4.2.5 of the MSGP, the Airport must monitor all pollutants for which the waterbody is impaired with no EPA-approved or established TMDL, and a standard analytical method exists in 40 CFR Part 136.

Table A-2 of this SWPPP lists the impairments of the waters to which the facility discharges. The facility must therefore conduct impaired waters monitoring for the pollutants listed in Table 3-2.

**Table 3-2** Impaired Waters Monitoring Parameters

Outfall(s)	Pollutant	Allowable Test Methods (simplified – see 40 CFR 136 for details)
		Standard Method 4500-O (B-F)-2011
		Standard Method 4500-O G-2011
		ASTM D888-09 (A), (B), (C)
		973.45B
		I-1575-78, I-1576-78
002 and 003		Hach Method 10360
to Neponset River	Dissolved Oxygen	In-Situ Method 1002-8-2009
002 and 003		EPA 1664 Rev. A, Rev. B
to Neponset River	Oil & Grease	Standard Method 5520 B-2011
002 and 003		EPA 200.2, 200.7, 200.8, 200.9
to Neponset River	Metals	
		Standard Method 2540 D-2011
002 and 003		ASTM D5907-13
to Neponset River	TSS <sup>3</sup>	I-3765-85

The individual conducting the monitoring will circulate the results to the rest of the Stormwater Pollution Prevention Team (Table A-3) when available. Results must be submitted to EPA within 30 days of receiving complete laboratory results, using EPA's electronic NetDMR system. The same results will be submitted in parallel by the Norwood Airport Authority, FlightLevel, and Boston Executive Helicopters.

Monitoring is required annually in the first year of permit coverage and again in the fourth year of permit coverage, unless a pollutant causing impairment is detected, in which case annual monitoring must continue for that pollutant, as follows:

<u>Year One of permit coverage</u>: The Airport must take the first annual sample in the first year of permit coverage, which begins in the first full quarter following May 30, 2021 or the date of discharge authorization, whichever date comes later.

- 1) If monitoring results indicate the monitored pollutant is not detected, the Airport may discontinue monitoring for that pollutant until Year Four of permit coverage.
- 2) If monitoring results indicate that the monitored pollutant is detected, the Airport must continue to monitor for the pollutant(s) annually until no longer detected, after which the Airport may discontinue monitoring for that pollutant until Year Four of permit coverage.

<sup>&</sup>lt;sup>3</sup> TSS is an indicator of Turbidity, per Section 4.2.5.1 of the MSGP

<u>Year Four of permit coverage</u>: Annual monitoring resumes in the fourth year of permit coverage for another year for the same parameters monitored in the first year (as they are all potentially associated with the facility's industrial activity – see Table 2-1).

- 1) If monitoring results indicate the monitored pollutant is not detected, the Airport may discontinue monitoring for that pollutant for the remainder of permit coverage.
- 2) If the monitoring results indicate that the monitored pollutant is detected, the Airport must continue to monitor for the pollutant(s) annually until no longer detected, after which the Airport may discontinue monitoring for that pollutant for the remainder of permit coverage.

<u>Natural Background Exception</u>: If any sampling results indicate the monitored pollutant is detected, but it is determined that its presence is caused solely by natural background sources, the Airport may discontinue monitoring for that pollutant for the duration of permit coverage. Any such determination will be documented and maintained with this SWPPP, and will include:

- 1) An explanation of why you believe that the presence of the pollutant of concern in the discharge is not related to the activities or materials at the facility;
- 2) Data and/or studies that tie the presence of the pollutant of concern in the discharge to natural background sources in the watershed.

Natural background pollutants include those that occur naturally as a result of native soils, and vegetation, wildlife, or ground water. Natural background pollutants do not include legacy pollutants from earlier activity on site, or pollutants in run-on from neighboring sources that are not naturally occurring.

## 3.7 Annual Summary Report

In accordance with Section 7.4 of the MSGP, the Airport must submit an Annual Report to EPA by January 30th for each year of permit coverage, containing information generated from the past calendar year. The following information must be included:

- ♦ A summary of the past year's routine facility inspection documentation.
- ♦ A statement certifying that the Airport does not use pavement deicers containing urea.
- A summary of the past year's visual assessment documentation.
- ◆ A summary of the past year's corrective action (see Section 4 of this SWPPP). If the Airport has not completed required corrective action at the time the annual report is submitted, describe the status of any outstanding corrective action(s).

- ◆ A description of any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that the Airport is in compliance with the permit.
- ◆ A statement, signed and certified in accordance with Appendix B, Subsection 11 of the MSGP.

Separate annual summary reports will be submitted in parallel by the Norwood Airport Authority, FlightLevel, and Boston Executive Helicopters.

## 3.8 Annual Employee Training

In accordance with Section 2.1.2.8 of the MSGP, annual training is provided to all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to comply with the MSGP / SWPPP (e.g., inspectors, maintenance personnel), including all members of the stormwater pollution prevention team. Training ensures the following personnel understand the requirements of the MSGP / SWPPP and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures)
- Personnel responsible for the storage and handling of chemicals and materials that could become pollutants discharged via stormwater
- Personnel who are responsible for conducting and documenting monitoring and inspections
- Personnel who are responsible for taking and documenting corrective actions

Personnel must be trained in the following topics, as related to the scope of their job duties:

- ♦ An overview of what is in the SWPPP
- ◆ Spill response procedures, good housekeeping, maintenance requirements, and material management practices
- The location of all the controls required by the MGSP / SWPPP, and how they are to be maintained
- The proper procedures to follow with respect to pollution prevention requirements
- When and how to conduct inspections, record applicable findings, and take corrective actions
- ♦ Emergency procedures.

## 3.9 Routine Public SWPPP Update

As required by Section 6.4.1 of the MSGP, any required updates to the publicly posted SWPPP should be posted no later than 45 days after conducting the final routine facility inspection for the year.

## 3.10 Dredging of Stormwater Culverts

The County of Norfolk periodically dredges the stormwater drainage culverts to improve flow (to aid in mosquito control). This service will be requested from the County whenever it is observed that the water flow in the culverts is ponding or has otherwise stagnated.

## 4.0 CORRECTIVE ACTIONS

Corrective action requirements are provided in Part 5 of the 2021 MSGP and are summarized below. Any corrective action-related documentation will be stored with this SWPPP.

## 4.1 SWPPP Review and Revision Requirements

When any of the following conditions occur or are detected during an inspection, monitoring or other means, or EPA informs the facility that any of the following conditions have occurred, this SWPPP will be reviewed and revised, as appropriate, (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of control measures) so that the effluent limits are met and pollutant discharges are minimized:

- ♦ An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this permit to a water of the U.S.) occurs at the facility.
- ◆ The facility's control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in the MSGP.
- ♦ A required control measure was never installed, was installed incorrectly, or not in accordance with the MSGP, or is not being properly operated or maintained.
- ♦ Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).
- Construction or a change in design, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged.

## 4.2 Corrective Action Deadlines

## **Immediate Actions**

The Airport must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until it can implement a permanent solution, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events. The term "immediately" means that the day the Airport finds a condition requiring corrective action, it must take all reasonable steps to minimize or prevent the discharge of pollutants until it can implement a permanent solution. However, if a problem is identified too late in the work day to initiate corrective action, the Airport must perform the corrective action the following work day morning. The term "all reasonable steps" means one must respond to the conditions triggering the corrective action, such as cleaning up any exposed materials that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangements (i.e., scheduling) for a new stormwater control measure to be installed.

## **Subsequent Actions**

If additional actions are necessary beyond those implemented above, the Airport must complete the corrective actions (e.g., install a new or modified control and make it operational, complete the repair) before the next storm event if possible, and within 14 calendar days from the time of discovery that the condition in Part 5.1.1 is not met. If it is infeasible to complete the corrective action within 14 calendar days, the Airport must document why it is infeasible to complete the corrective action within the 14-day timeframe, and must also identify the schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45-day timeframe, the Airport may take the minimum additional time necessary to complete the corrective action, provided that it notifies the appropriate EPA Regional Office of the intention to exceed 45 days, the rationale for an extension, and a completion date, which must also be included in the corrective action documentation (see below). Where corrective actions result in changes to any of the controls or procedures documented in your SWPPP, the Airport must modify this SWPPP accordingly within 14 calendar days of completing corrective action work.

#### 4.3 Corrective Action Documentation

## 24-Hour Corrective Action Documentation

The Airport must document the existence of any of the Initial or Subsequent actions described above, within 24 hours of becoming aware of such condition. It is not required to submit this documentation to EPA, but it must be summarized in the annual summary report to EPA (section 3.7 of this SWPPP), including the following information:

- Description of the condition or event triggering the need for corrective action review.
   For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of United States, through stormwater or otherwise;
- ◆ Date the condition/triggering event was identified;
- Description of immediate actions taken to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases (see Part 2.1.2.4 of the MSGP); and
- A statement, signed and certified in accordance with Appendix B, Subsection 11 of the MSGP.

## <u>14-Day Corrective Action Documentation</u>

The Airport must also document the corrective actions taken as a result of the Initial or Subsequent actions described above, within 14 days from the time of discovery of any of those conditions/triggering events, including:

- ◆ The dates when the Airport initiated and completed (or expects to complete) each corrective action.
- If infeasible to complete the necessary corrective actions within the specified timeframe, document the rationale and schedule for installing the controls and making them operational as soon as practicable after the specified timeframe.
- ♦ If EPA was notified regarding an allowed extension of the specified timeframe, document the rationale for an extension.
- ◆ Any additional information and/or rationale that is required and/or applicable to the specified corrective action.

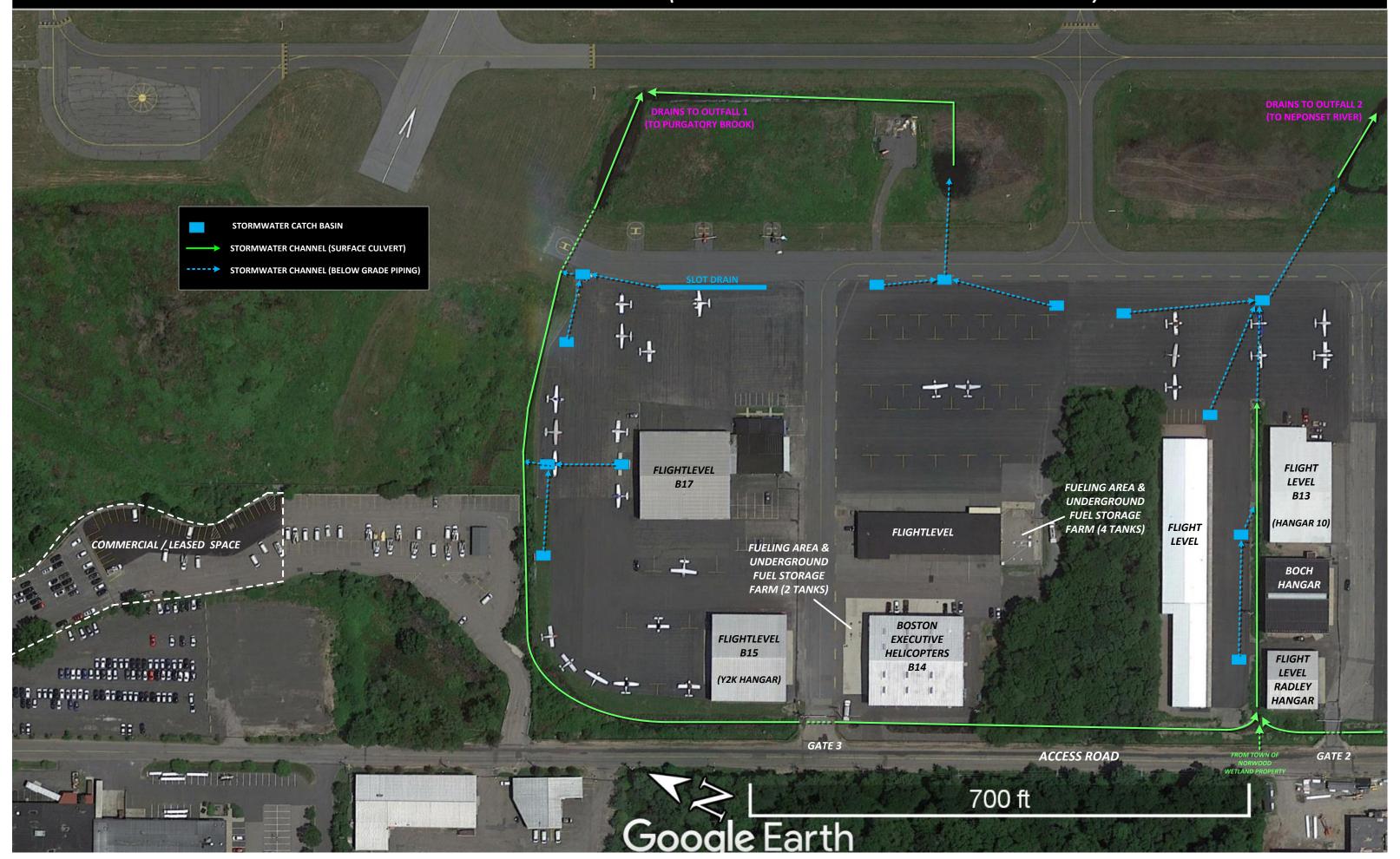
The Airport is not required to submit this documentation to EPA, unless specifically required or requested to do so, but must summarize the corrective actions in the annual summary report (section 3.7 of this SWPPP).

## Appendix A

Site Maps

# SWPPP SITE MAP 1 - NORWOOD AIRPORT (OVERVIEW) **TOWN OF** CANTON, MA 17/35 RUNWAY LIGHTING SYSTEM (MALSF) MASS. RTE. 1 ACCESS ROAD Note: Essentially all unpaved areas Google Earth within the property line are 4000 ft Wetlands as defined by MassDEP **APPROX. AIRPORT BOUNDARY (688 ACRES) DRAINAGE AREA NEPONSET RIVER (WATERBODY ID# MA73-02)** PURGATORY BROOK (WATERBODY ID# MA73-24) STORMWATER CHANNEL (SURFACE CULVERT) **AIRCRAFT MAINTENANCE AREA** (SEE SWPPP FOR IMPAIRMENT / TMDL DETAILS) STORMWATER CHANNEL (BELOW GRADE PIPING) (SEE SITE MAPS 2 & 3 FOR DETAILS)

# SWPPP SITE MAP 2 – NORWOOD AIRPORT (MAINTENANCE AND DRAINAGE AREAS – NORTH)



# SWPPP SITE MAP 3 – NORWOOD AIRPORT (MAINTENANCE AND DRAINAGE AREAS – SOUTH) OUTFALL 3 (TO WETLAND AREA, DRAINING TO NEPONSET RIVER) BLDG. 26 ADMIN BLDG. 8 86 9 8 8 STORMWATER CATCH BASIN FLIGHT LEVEL CONTROL STORMWATER CHANNEL (BELOW GRADE PIPING) GATE 1 Future planned TASO'S Catch basins A1/ RESTAURANT A2 equalize and pumped out in **PUBLIC ENTRANCE** & PARKING AREA **BLUE HILL HELICOPTERS** 888888888 ACCESS ROAD Google Earth

Notice of Intent and Acknowledgment

Non-Stormwater Discharge Inspection Documentation

# Appendix D

**Routine Facility Inspections** 

# Appendix E

**Quarterly Visual Sample Inspections** 

Indicator Monitoring Results / Impaired Waters Monitoring Results

# Appendix G

**Annual Summary Reports** 

# Appendix H

**Endangered Species Notifications** 

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

# Location

Norfolk County, Massachusetts



# Local office

New England Ecological Services Field Office

**(**603) 223-2541

**(603)** 223-0104

70 Commercial Street, Suite 300 Concord, NH 03301-5094

http://www.fws.gov/newengland

# Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

# **Mammals**

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis

Wherever found

No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty  $Act^{1}$  and the Bald and Golden Eagle Protection  $Act^{2}$ .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <a href="http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php">http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php</a>
- Measures for avoiding and minimizing impacts to birds
   <a href="http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php">http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php</a>
- Nationwide conservation measures for birds <a href="http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf">http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</a>

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.
"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

## Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

# Black-billed Cuckoo Coccyzus erythropthalmus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9399

## **Bobolink** Dolichonyx oryzivorus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Canada Warbler Cardellina canadensis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Eastern Whip-poor-will Antrostomus vociferus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Lesser Yellowlegs Tringa flavipes

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>

Breeds Oct 15 to Aug 31

Breeds May 15 to Oct 10

Breeds May 20 to Jul 31

Breeds May 20 to Aug 10

Breeds May 1 to Aug 20

Breeds elsewhere

Prairie Warbler Dendroica discolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

**Prothonotary Warbler** Protonotaria citrea

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

Rusty Blackbird Euphagus carolinus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Semipalmated Sandpiper Calidris pusilla

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Snowy Owl Bubo scandiacus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Wood Thrush Hylocichla mustelina

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Aug 31

# **Probability of Presence Summary**

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

# Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence

across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

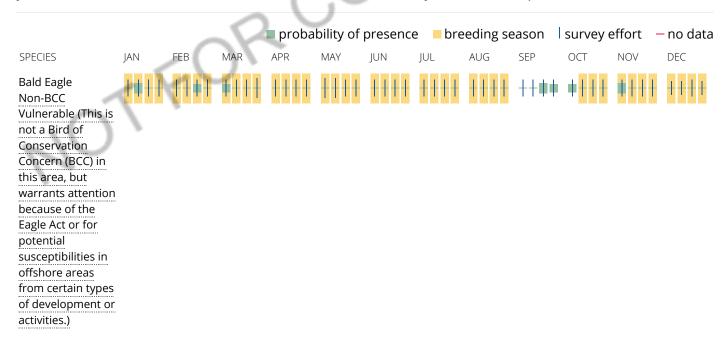
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

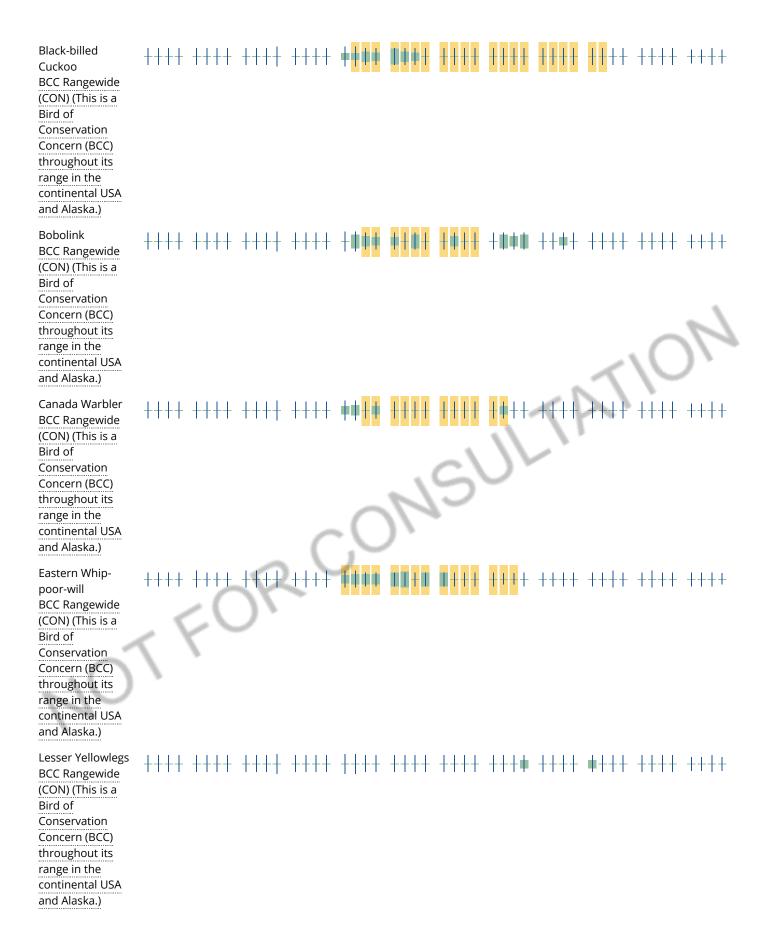
#### No Data (-)

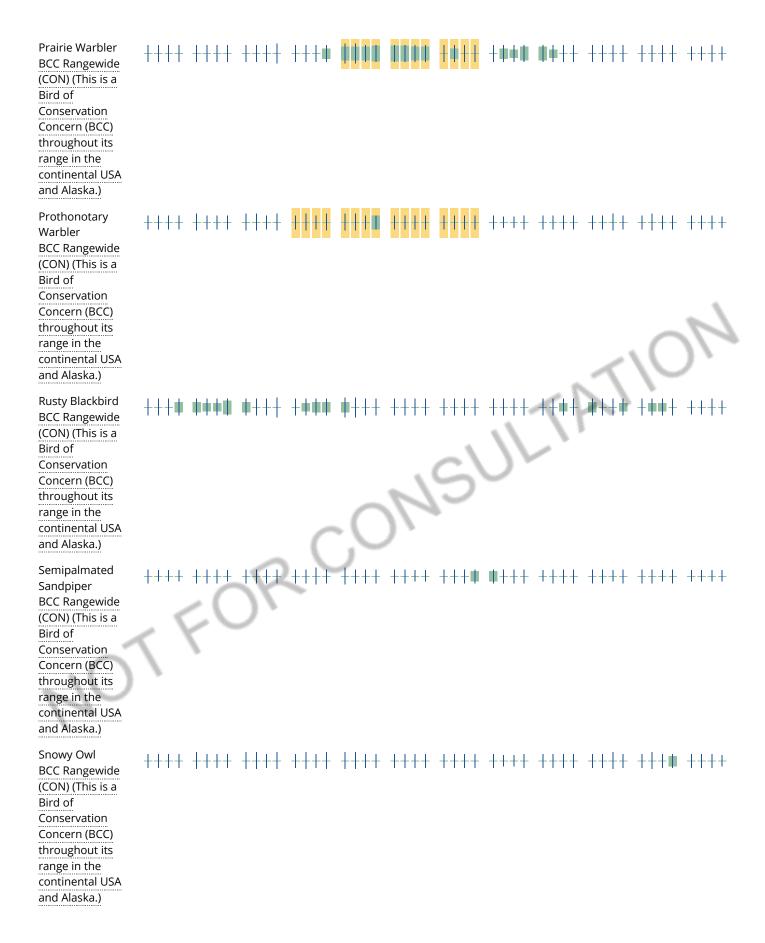
A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Wood Thrush
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



#### Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

#### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <a href="https://example.com/AKN Phenology Tool">AKN Phenology Tool</a>.

# What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen</u> science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

#### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# **Facilities**

# National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

```
FRESHWATER EMERGENT WETLAND

PEM1Ed

PEM5/SS1Ed

PEM1Eh

PEM1Fh

FRESHWATER FORESTED/SHRUB WETLAND

PFO1Ed

PSS1Ed

PSS1/FO1Ed

PSS1/FO1Ed

PFO1Cd

PFO4Ed
```

**RIVERINE** 

R2UBH R2UBHX R4SBCX R4SBC R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**Corrective Action Documentation** 

Sampling Results from Previous Permit Term

## **CERTIFICATE OF ANALYSIS**

EST Associates, Inc. Date Received: 4/12/16 Work Order #: 1604-08166

NORWOOD MEMORIA	AL AIRPORT (ANN	<b>JUAL IM</b>	PAIRED S	SAMPLING)			
Sample # 001 SAMPLE DESCRIPTION: SAMPLE TYPE: GRAB	OUTFALL 001	SAN	MPLE DATI	E/TIME: 4/12/2016@1	0:45		
	SAMPLE	DET.			DATE/	TIME	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
E. Coli	<10	10	MPN/100 ml	SM9223B 19-21ed Enum	4/12/16	14:45	GLP
BOD 5	3,3	3.0	mg/l	SM5210B 21ed	4/13/16	19:22	KL
Dissolved Oxygen	8.3		mg/l		4/12/16	22:34	AMN
Total Suspended Solids	11	2.0	mg/l	SM2540D 18-21ed	4/13/16	11:04	MMA
Total Phosphorus (as P)	0.16	0.05	mg/l	SM4500P-B,E 18-21ed	4/18/16	16:15	SPM
Temperature (field)	12.1		С		4/12/16	10:45	*CS
Sample # 002 SAMPLE DESCRIPTION: SAMPLE TYPE: GRAB	OUTFALL 002	SAN	IPLE DATE	E/ <b>TIME:</b> 4/12/2016@1	0;40		
	SAMPLE	DET.			DATE/T	IME	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
E. Coli	20	10	MPN/100 ml	SM9223B 19-21ed Enum	4/12/16	14:45	GLP
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	4/13/16	19:24	KL
Dissolved Oxygen	9.6		mg/l		4/12/16	22:36	AMN
Total Suspended Solids	7.0	2.0	mg/l	SM2540D 18-21ed	4/13/16	11:04	MMA
Total Phosphorus (as P)	0.09	0.05	mg/l	SM4500P-B,E 18-21ed	4/18/16	16:15	SPM
Temperature (field)	12.2		С		4/12/16	10:40	*CS
Sample # 003 SAMPLE DESCRIPTION: SAMPLE TYPE: GRAB	OUTFALL 003	SAM	IPLE DATE	<b>E/TIME: 4</b> /12/2016 @ 1	0:50		

	SAMPLE	DET.			DATE/7	TIME	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
E. Coli	30	10	MPN/100 ml	SM9223B 19-21ed Enum	4/12/16	14:45	GLP
BOD 5	<3.0	3.0	mg/l	SM5210B 21ed	4/13/16	19:26	KL
Dissolved Oxygen	9.4		mg/l		4/12/16	22:38	AMN
Total Suspended Solids	2.8	2.0	mg/l	SM2540D 18-21ed	4/13/16	11:04	MMA
Total Phosphorus (as P)	0.05	0.05	mg/l	SM4500P-B,E 18-21ed	4/18/16	17:30	JJG
Temperature (field)	12.1		C		4/12/16	10:50	*CS

<sup>\*</sup>CS - Field sampling data was provided by EST Associates, Inc.

## **Laboratory Report**

EST Associates, Inc.

Work Order #: 1705-09467

Project Name: NORWOOD MEMORIAL AIRPORT (ANNUAL IMPAIRED SAMPLING)

Sample Number:

001

Sample Description:

OUTFALL 001

Sample Type:

GRAB

Sample Date / Time:

5/05/2017 @ 13:20

	SAMPLE	DET.	***	* (FONTO P	DATE/TI	ANAXNOT	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALYZ	ED	ANALYST
E. Coli 18 Hour	41	10	MPN/100 ml	SM9223B	5/5/2017	17:09	GLP
Temperature (field)	12.0		С		5/5/2017	13:20	*CS
Dissolved Oxygen	9.7		mg/l		5/5/2017	21:10	AOO
BOD 5	7.5	6.0	mg/l	SM5210B 21ed	5/6/2017	11:18	AMN
Total Suspended Solids	14	2.0	mg/l	SM2540D 18-21ed	5/6/2017	14:23	AM
Total Phosphorus (as P)	0.16	0.05	mg/l	SM4500P-B,E 18-21ed	5/12/2017	10:00	DEL

Sample Number:

002

Sample Description:

**OUTFALL 002** 

Sample Type:

GRAB

Sample Date / Time:

5/05/2017 @ 13:25

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TI ANALYZ	ANALYST	
E. Coli 18 Hour	<10	10	MPN/100 ml	SM9223B	5/5/2017	17:09	GLP
Temperature (field)	12.0		C		5/5/2017	13:25	*CS
Dissolved Oxygen	8.8		mg/l		5/5/2017	21:10	AOO
BOD 5	12	6.0	mg/l	SM5210B 21ed	5/6/2017	11:20	AMN
Total Suspended Solids	71	2.0	mg/l	SM2540D 18-21ed	5/6/2017	14:23	AM
Total Phosphorus (as P)	0.08	0.05	mg/l	SM4500P-B,E 18-21ed	5/12/2017	10:00	DEL

Sample Number:

003

Sample Description:

**OUTFALL 003** 

Sample Type:

GRAB

Sample Date / Time:

5/05/2017 @ 13:30

PARAMETER E. Coli 18 Hour Temperature (field) Dissolved Oxygen BOD 5	SAMPLE DET		~~~~~~~	* COMPAND	DATE/TI	ANTAXXOT	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALYZ	ED	ANALYST
E. Coli 18 Hour	10	10	MPN/100 ml	SM9223B	5/5/2017	17:09	GLP
Temperature (field)	12.1		C		5/5/2017	13:30	*CS
Dissolved Oxygen	10.5		mg/l		5/5/2017	21:10	A00
BOD 5	6.3	6.0	mg/l	SM5210B 21ed	5/6/2017	11:22	AMN
Total Suspended Solids	32	2.0	mg/l	SM2540D 18-21ed	5/6/2017	14:23	AM
Total Phosphorus (as P)	0.06	0.05	mg/l	SM4500P-B,E 18-21ed	5/12/2017	10:00	DEL

<sup>\*</sup>CS - Field sampling data was provided by the client.

## **Laboratory Report**

EST Associates, Inc.

Work Order #: 1807-14219

Project Name: NORWOOD MEMORIAL AIRPORT (ANNUAL IMPAIRED SAMPLING)

Sample Number:

001

Sample Description:

**OUTFALL 001** 

Sample Type:

GRAB

Sample Date / Time:

7/06/2018 @ 12:10

	SAMPLE	DET.			DATE/TI	ME	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY2	ZED	ANALYST
E. Coli 18 Hour	19863	10	MPN/100 ml	SM9223B	7/6/2018	16:49	GLP
Temperature (field)	78		F		7/6/2018	12:10	*CS
Dissolved Oxygen	9.8		mg/l	SM 4500 O G	7/6/2018	19:14	NQD
BOD 5	4.6	3.0	mg/l	SM5210B 21ed	7/6/2018	23:15	AOO
Total Suspended Solids	64	2.0	mg/l	SM2540D 18-21ed	7/12/2018	16:48	BR
Total Phosphorus (as P)	0.11	0.02	mg/l	SM4500P-B,E 18-21ed	7/10/2018	20:00	SAS

Microbiological analysis performed at our Hudson, MA laboratory location. Refer to page 1 for physical address and certification numbers.

Sample Number:

002

Sample Description:

**OUTFALL 002** 

Sample Type:

GRAB

Sample Date / Time:

7/06/2018 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE/TI ANALYZ		ANALYST
FARAMETER	RESULIS	THE TARE	UNATS	METHOD	ANALII	עוצוט	ANALISI
E. Coli 18 Hour	275.5	1.0	MPN/100 ml	SM9223B	7/6/2018	16:49	GLP
Temperature (field)	78		F		7/6/2018	12:15	*CS
Dissolved Oxygen	9.0		mg/l	SM 4500 O G	7/6/2018	19:13	NQD
BOD 5	3.6	3.0	mg/l	SM5210B 21ed	7/6/2018	22:59	AOO
Total Suspended Solids	$\mathbf{n}$	2.0	mg/l	SM2540D 18-21ed	7/12/2018	16:48	BR
Total Phosphorus (as P)	0.06	0.02	mg/l	SM4500P-B,E 18-21ed	7/10/2018	20:00	SAS

Microbiological analysis performed at our Hudson, MA laboratory location. Refer to page 1 for physical address and certification numbers.

## **Laboratory Report**

EST Associates, Inc.

Work Order #: 1807-14219

Project Name: NORWOOD MEMORIAL AIRPORT (ANNUAL IMPAIRED SAMPLING)

Sample Number:

003

Sample Description:

OUTFALL 003

Sample Type:

GRAB

Sample Date / Time :

7/06/2018 @ 12:25

	SAMPLE	DET.			DATE/TI	ME	
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	<b>ANALY</b>	ZED	ANALYST
E. Coli 18 Hour	1732.9	1.0	MPN/100 ml	SM9223B	7/6/2018	16:49	GLP
Temperature (field)	79		F		7/6/2018	12:25	*CS
Dissolved Oxygen	7.4		mg/I	SM 4500 O G	7/6/2018	19:11	NQD
BOD 5	9.8	3.0	mg/l	SM5210B 21ed	7/6/2018	22:56	AOO
Total Suspended Solids	12	2.0	mg/l	SM2540D 18-21ed	7/12/2018	16:48	BR
Total Phosphorus (as P)	0.13	0.02	mg/l	SM4500P-B,E 18-21ed	7/10/2018	20:00	SAS

Microbiological analysis performed at our Hudson, MA laboratory location. Refer to page 1 for physical address and certification numbers.

<sup>\*</sup>CS - Field sampling data was provided by the client.

Serial\_No:11191911:39

Project Name:

NORWOOD MEMORIAL AP ANNUAL

Lab Number:

L1953936

Project Number: NORWOOD MEMORIAL AP

Report Date:

11/19/19

**SAMPLE RESULTS** 

Lab ID:

L1953936-01

Date Collected:

11/12/19 12:20

Client ID:

**OUTFALL 001** 

Date Received:

11/12/19

Sample Location:

125 ACCESS RD., NORWOOD, MA

Field Prep:

Not Specified

Sample Depth: Matrix:

Water

v vator								
Result Q	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
s - Westborough L	ab							
52	col/100ml	2.0	NA	2	-	11/12/19 18:55	121,9213D	DP
estborough Lab								
ND	mg/l	5.0	NA	1	Ø <del>■</del> c	11/13/19 17:20	121,2540D	DR
2.7	mg/l	0.10		1	-	11/12/19 18:20	121,4500O-C	CO
0.067	mg/l	0.010		1	11/13/19 12:05	11/14/19 09:46	121,4500P-E	SD
ND	mg/l	2.0	NA	1	11/13/19 05:45	11/18/19 11:10	121,5210B	TE
	Result Q 52 estborough Lab ND 2.7 0.067	Result   Qualifier   Units	Result   Qualifier   Units   RL	Result   Qualifier   Units   RL   MDL	Result   Qualifier   Units   RL   MDL   Pactor	Result   Qualifier   Units   RL   MDL   Pactor   Date Prepared	Result   Qualifier   Units   RL   MDL   Factor   Prepared   Date Analyzed	Result   Qualifier   Units   RL   MDL   Factor   Prepared   Date   Analyzed   Method

Serial\_No:11191911:39

**Project Name:** 

NORWOOD MEMORIAL AP ANNUAL

Lab Number:

L1953936

Project Number: NORWOOD MEMORIAL AP

Report Date:

11/19/19

**SAMPLE RESULTS** 

Lab ID:

L1953936-02

**Date Collected:** 

11/12/19 12:35

Client ID:

**OUTFALL 002** 

Date Received:

11/12/19

Sample Location: 125 ACCESS RD., NORWOOD, MA

Field Prep:

Not Specified

Sample Depth:

Matrix:

Water

Matrix.	VValei								0 0 10 10	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis	s - Westborough	h Lab								d America.
E. Coli (MF)	100		:ol/100ml	2.0	NA	2		11/12/19 18:55	121,9213D	DP
General Chemistry - Wo	estborough Lab									
Solids, Total Suspended	40.		mg/l	16	NA	3.3		11/13/19 17:20	121,2540D	DR
Dissolved Oxygen	7.9		mg/l	0.10		1		11/12/19 18:20	121,4500O-C	CO
Phosphorus, Total	0.116		mg/l	0.010		1	11/13/19 12:05	11/14/19 09:47	121,4500P-E	SD
BOD, 5 day	6.3		mg/l	2.0	NA	1	11/13/19 05:45	11/18/19 11:10	121,5210B	TE

Serial\_No:11191911:39

**Project Name:** 

NORWOOD MEMORIAL AP ANNUAL

Lab Number:

L1953936

Project Number: NORWOOD MEMORIAL AP

Report Date:

11/19/19

**SAMPLE RESULTS** 

Lab ID:

L1953936-03

Date Collected:

11/12/19 12:50

Client ID:

Date Received:

11/12/19

Sample Location: 125 ACCESS RD., NORWOOD, MA

**OUTFALL 003** 

Field Prep:

Not Specified

Sample Depth: Matrix:

Water

WIGHTA.	· · · · · ·								
Parameter	Result Quali	fier Units	RL.	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis	s - Westborough Lab								
E. Coli (MF)	56	col/100ml	2.0	NA	2	-	11/12/19 18:55	121,9213D	DP
General Chemistry - We	estborough Lab								
Solids, Total Suspended	ND	mg/l	5.0	NA	1	•	11/13/19 17:20	121,2540D	DR
Dissolved Oxygen	4.1	mg/l	0.10	==	1	: <b>=</b> 1	11/12/19 18:20	121,4500O-C	CO
Phosphorus, Total	0.051	mg/l	0.020		2	11/13/19 12:05	11/14/19 09:48	121,4500P-E	SD
BOD, 5 day	ND	mg/l	2.0	NA	1	11/13/19 05:45	11/18/19 11:10	121,5210B	TE

Serial\_No:09022016:13

**Project Name:** NORWOOD MEMORIAL AP ANNUAL

**Project Number:** NORWOOD MEMORIAL AP Lab Number:

L2035408

**Report Date:** 09/02/20

#### **SAMPLE RESULTS**

Lab ID: L2035408-01 Client ID: **OUTFALL 001** 

Sample Location: 125 ACCESS RD., NORWOOD, MA

Date Received:

Date Collected:

08/27/20 13:40

08/27/20 Not Specified Field Prep:

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis	- Westborough	Lab							
E. Coli (MF)	190	col/100ml	2.0	NA	2	-	08/27/20 18:59	121,9213D	СМ
General Chemistry - Wes	stborough Lab								
Solids, Total Suspended	14.	mg/l	5.0	NA	1	-	08/30/20 12:42	121,2540D	AA
Dissolved Oxygen	2.5	mg/l	0.10		1	-	08/27/20 18:12	121,4500O-C	JW
Phosphorus, Total	0.115	mg/l	0.010		1	08/28/20 11:00	09/01/20 09:49	121,4500P-E	SD
BOD, 5 day	11.	mg/l	2.0	NA	1	08/28/20 05:40	09/02/20 09:20	121,5210B	TE



Serial\_No:09022016:13

**Project Name:** NORWOOD MEMORIAL AP ANNUAL

Project Number: NORWOOD MEMORIAL AP

Lab Number:

L2035408

Report Date:

09/02/20

#### **SAMPLE RESULTS**

Lab ID: L2035408-02

Client ID: OUTFALL 002

Sample Location: 125 ACCESS RD., NORWOOD, MA

Date Collected: 08/27/20 13:55 Date Received: 08/27/20

Date Received: C Field Prep: N

Not Specified

Sample Depth:

Matrix: Water

Parameter	Result C	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis	- Westborough	Lab							
E. Coli (MF)	200	col/100ml	2.0	NA	2	-	08/27/20 18:59	121,9213D	СМ
General Chemistry - Wes	stborough Lab								
Solids, Total Suspended	7.3	mg/l	5.0	NA	1	-	08/30/20 12:42	121,2540D	AA
Dissolved Oxygen	4.7	mg/l	0.10		1	-	08/27/20 18:12	121,4500O-C	JW
Phosphorus, Total	0.076	mg/l	0.010		1	08/28/20 11:00	09/01/20 09:50	121,4500P-E	SD
BOD, 5 day	4.0	mg/l	2.0	NA	1	08/28/20 05:40	09/02/20 09:20	121,5210B	TE



Serial\_No:09022016:13

Project Name: NORWOOD MEMORIAL AP ANNUAL

Project Number: NORWOOD MEMORIAL AP

Lab Number:

L2035408

Report Date:

09/02/20

#### **SAMPLE RESULTS**

Lab ID: L2035408-03

Client ID: OUTFALL 003

Sample Location: 125 ACCESS RD., NORWOOD, MA

Date Collected: 08/27/20 14:15 Date Received: 08/27/20

Date Received: Field Prep:

08/27/20 Not Specified

Sample Depth:

Matrix: Water

Parameter	Result Q	Qualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Microbiological Analysis	- Westborough I	Lab							
E. Coli (MF)	300	col/100ml	10	NA	10	-	08/27/20 18:59	121,9213D	СМ
General Chemistry - We	stborough Lab								
Solids, Total Suspended	10.	mg/l	5.0	NA	1	-	08/30/20 12:42	121,2540D	AA
Dissolved Oxygen	4.3	mg/l	0.10		1	-	08/27/20 18:12	121,4500O-C	JW
Phosphorus, Total	0.118	mg/l	0.010		1	08/28/20 11:00	09/01/20 09:51	121,4500P-E	SD
BOD, 5 day	14.	mg/l	2.0	NA	1	08/28/20 05:40	09/02/20 09:20	121,5210B	TE

