APPENDIX A
STATE AND FEDERAL PERMITS FOR 2020 BIOTA COLLECTION

STATE OF MAINE
DEPARTMENT OF INLAND FISHERIES AND WILDIFE

PERMIT

Wood Environment & Infrastructure Solutions 1075 Big Shanty Road NW Suite 100 Kennesaw, GA 30144	**Date** **Effective** 04/01/2020	**Expiration** 10/31/2020
	Renewable **Yes** ☐ **No** ☐	**Fee** N/A

Name of Principal Officer (If business) Jonathan Bourdeau – 770-421-3361	**Type of Permit** **SCIENTIFIC FISH COLLECTORS**

Location where authorized activity may be conducted
Penobsco River from Orono, Penobscot County to Harborside, Hancock County and in Mendall Marsh, Waldo County. Reference sampling will occur in Frenchman Bay in Hancock County. See Attachment 3 for specific sampling locations.

Permittee must notify the Regional Fishery Biologist prior to conducting any type of fish collections. Trapnets and gillnets are not to be used without prior written notification to the District Warden. This permit must be carried on the person of the permittee while exercising the privileges granted herein. This permit is non-transferable and permitted activities can only be conducted by those individuals listed on this permit.

Condition(s) of the permit: to comply with a US District Court Order requiring sampling for mercury contamination to be conducted in the Penobscot River and Bay.

Gear: eel pots, hoop nets, seines, cast nets, minnow traps, and commercial lobster traps

Species and Numbers: the specimens required are summarized in Table 1. A Maine Department of Marine Resources Special License application will also be submitted for these collection activities.

Disposition: The specimens will be dispatched for whole body tissue sampling analysis.

Subpermittees: Only the following subpermittees can engage in the permitted activities.

Paul Haywood, Louise Venne, Brad Wolfe, Lauren Tierney, Thomas Gerhard, Shawna Couplin, Madeline Bruno, Travis Otis

All applicants must provide and follow a written disinfection and biosecurity plan. The plan should include policies and procedures for removal of aquatic plants, cleaning and disinfection of field equipment between collection sites, as well as reporting aquatic invasive fish species to the MDIFW (287-5263).

Work on DPS salmon rivers should be cleared with the DMR, Sea Run Fisheries and Habitat.

When working on tribal lands please contact the appropriate tribal official.

Reporting requirements: Copies of any data forms and associated reports must be submitted to the Fisheries Division in our Augusta Office 284 State Street, Augusta, Maine 04333by the end of the calendar year.

Signature of authorized agency representative	**Director of Fisheries**	**Date**
		5-13-20

STATE OF MAINE
INLAND FISHERIES & WILDLIFE

FISHERIES DIVISION
284 STATE STREET-STA #41
AUGUSTA, MAINE 04333
PHONE 207-287-5261 FAX 207-287-6395

APPLICATION FOR SCIENTIFIC COLLECTORS PERMIT

Affiliation or Company name: Wood Environment & Infrastructure Solutions

Principal Officer: Jonathan Bourdeau

Address: 1075 Big Shanty Road NW, Suite 100, Kennesaw, GA 30144

Telephone Number (770) 421-3361

Dates of Collection April - October 2020, sampling not to occur during Atlantic salmon spawning season.

Purpose of collection: The purpose of this collection is to comply with a US District Court Order requiring sampling for mercury contamination to be conducted in the Penobscot River and Bay. Table 1 and Figure 1 describe the biota monitoring.

Location: Penobscot River from Orono, Penobscot County to Harborside, Hancock County, and in Mendall Marsh, Waldo County. Reference sampling will occur in Frenchman Bay in Hancock County. See Attachment 3 for specific sampling locations.
(water names, township, county)

Type of gear: Gear to be used includes eel pots, hoop nets, seines, cast nets, minnow traps, and commercial lobster traps.

Species and Numbers to be collected:
The specimens required are summarized in Table 1. A Maine Department of Marine Resources Special License application will also be submitted for these collection activities.

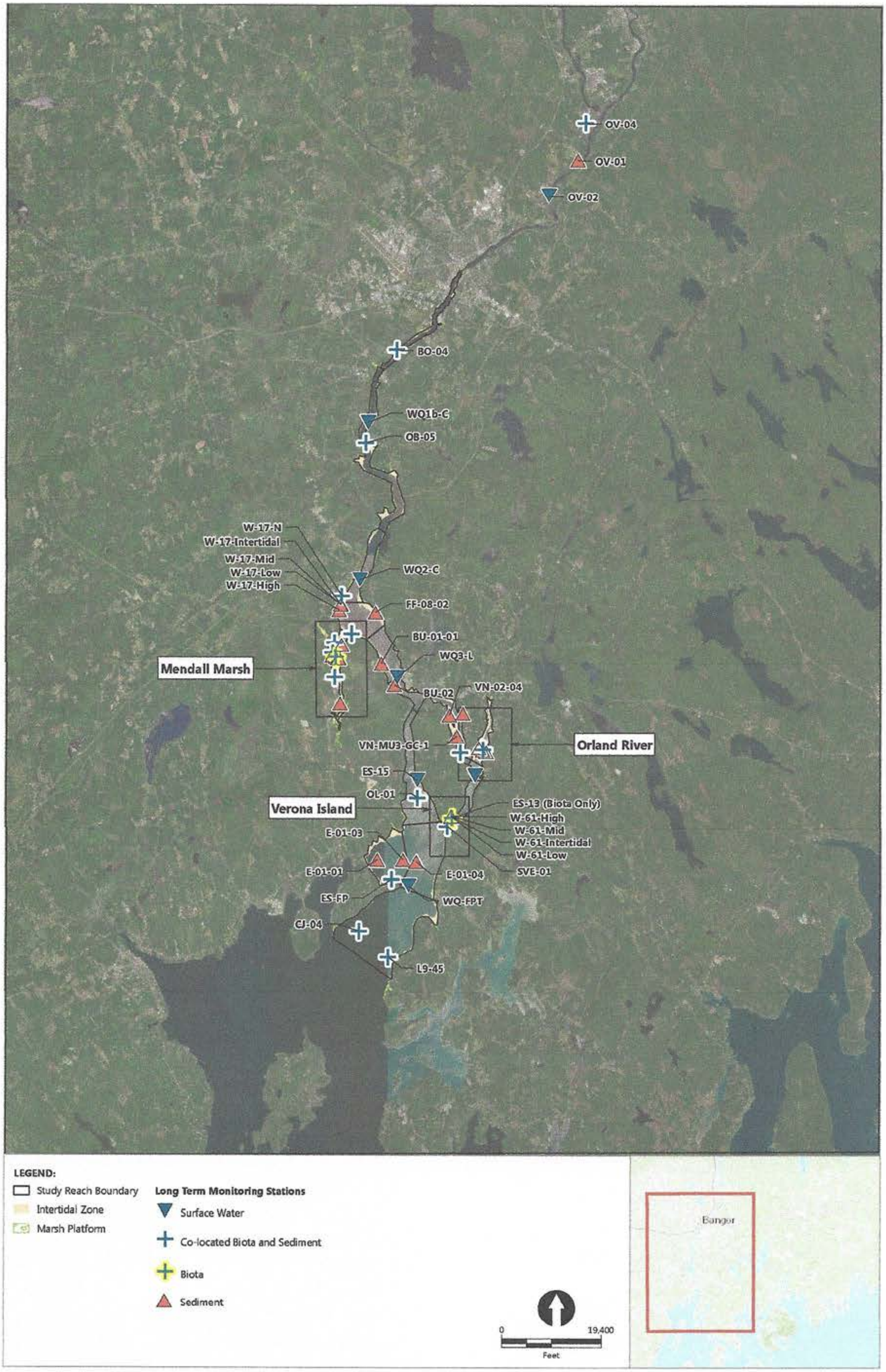
What disposition will be made of the specimens collected? The specimens will be dispatched for whole body tissue sampling analysis.

Names of subpermittees: Paul Haywood, Louise Venne, Brad Wolfe, Lauren Tierney, Thomas Gerhard, Shawna Couplin, Madeline Bruno, Travis Otis.

Signature Jonathan Bourdeau Date 4/17/20

*** You must include your biosecurity plan with this application.**

If you are working on a watershed where Atlantic salmon are listed as endangered or threatened, you may need to acquire an additional permit from either National Marine Fishery Service 866-7322 or U. S. Fish & Wildlife, Old Town 827-5938.



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ANCHOR QEA

Figure 4
2020 Monitoring Stations – Penobscot River
Phase III Engineering Study
Penobscot River

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ANCHOR QEA

Figure 5
2020 Monitoring Stations – Mendall Marsh
Phase III Engineering Study
Penobscot River

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Figure 6
2020 Monitoring Stations – Orland River
Phase III Engineering Study
Penobscot River

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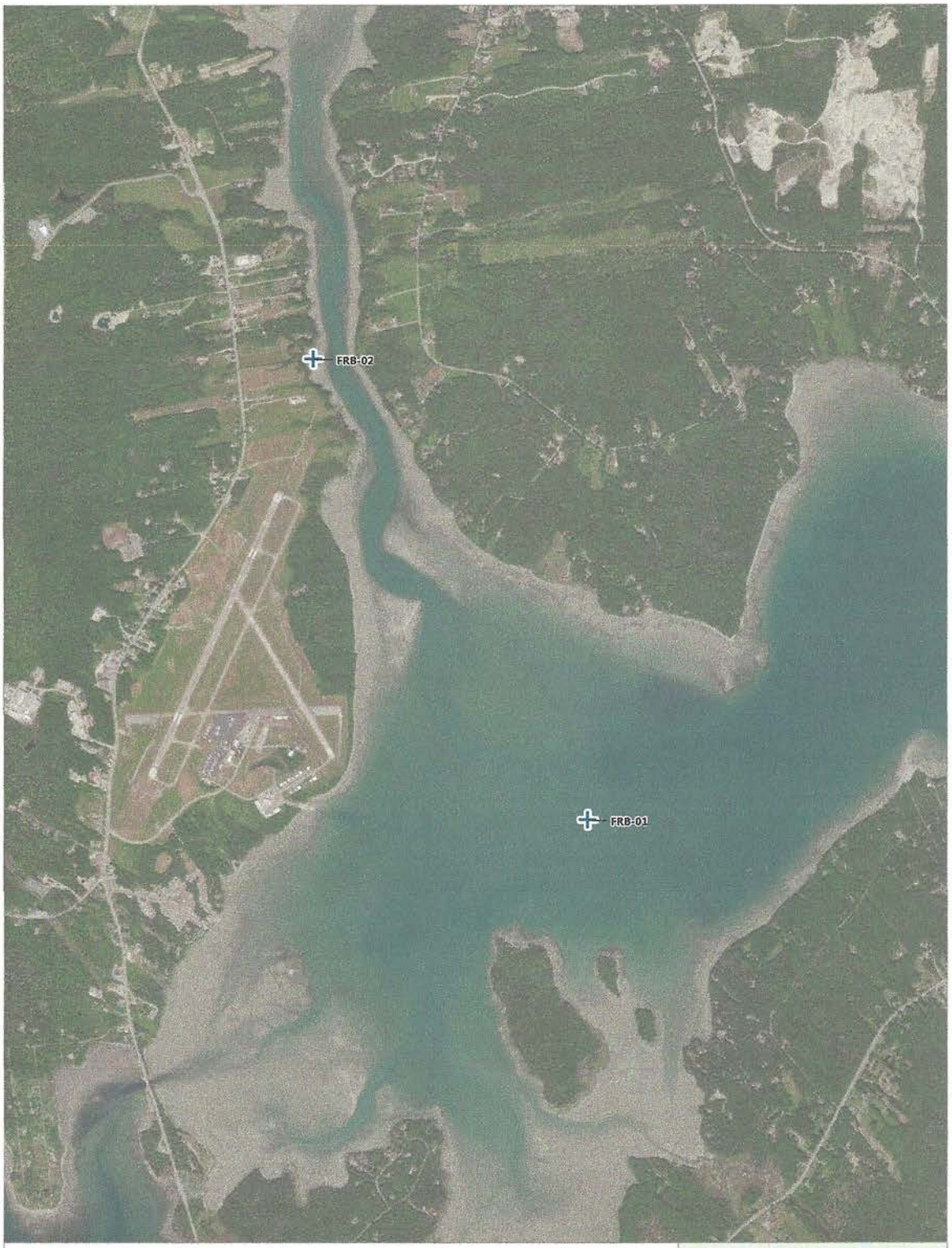
Figure 7
2020 Monitoring Stations – Verona Island
Phase III Engineering Study
Penobscot River



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ANCHOR QEA

Figure 8
2020 Monitoring Stations – Frenchmans Bay Reference Location
Phase III Engineering Study
Penobscot River

TABLE 1

APPLICATION FOR SCIENTIFIC COLLECTORS PERMIT

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

NUMBER OF FISH, SHELLFISH, AND AQUATIC INVERTEBRATE SPECIMENS REQUIRED FOR THE PROPOSED PENOBSCOT RIVER MONITORING PLAN - 2020

	Species			
	American Eel (*Anguila rostrata*)	Atlantic Tomcod (*Microgadus tomcod*)	Rainbow Smelt (*Osmerus mordax*)	Lobster (*Homarus americanus*)
	Collection Methods			
	baited eel pots	hoop nets, eel pots, seining	hoop nets, minnow traps, seining	commercial traps
	Sample Months			
Sample Location	April - August	September - October	September - October	September - October
Penobscot River and Bay Locations				
OV-04	20			
BO-04	20	20	20	
OB-05	20	20	20	
OB-01	20	20	20	
ES-02		20	20	20
OL-01		20	20	20
SVE-01		20	20	20
ES-FP		20	20	20
CJ-04				20
L9-45				20
Reference Location				
FRB-01				20
FRB-02		20	20	
Total Number of Samples	**80**	**160**	**160**	**140**

Notes:

Locations are arranged in north-to-south order within the Penobscot River and Bay Locations group.

A Maine Department of Marine Resources Special License application will also be submitted.

Prepared by: RRP 04/07/2020

Checked by: JAB 04/09/2020

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

JANET T. MILLS

PATRICK C. KELIHER
COMMISSIONER

May 27, 2020
SPECIAL LICENSE NUMBER ME 2020-52-02
Amended 6-11-2020

Acting under the authority vested in the Commissioner of Marine Resources (DMR) by virtue of 12 M.R.S.A. § 6074, I hereby issue subject to renewal, a Special License to **JONATHAN BORDEAU** of Wood Environment and Infrastructure Solutions (Wood). This Special License exempts said Jonathan Bordeau and the individuals listed below from 12 MRSA§6505-C, pertaining to the eel harvesting license, 12 M.R.S.A. §6431(1) lobster size; 12 M.R.S.A. §6433 related to escape vents, 12 M.R.S.A. §6501 commercial fishing license, Chapter 25.65 lobster closure in the Penobscot River, Chapter 40.12(B) method of take for smelt, Chapter 55.59, pertaining to area fishing closures; Chapter 55.06(E) related to net or trap tending. This Special License is issued subject to the following conditions:

1. **Who:** Kenneth Haywood, Louise Venne, Brad Wolfe, Lauren Tierney, Thomas Gerhard, Shawna Couplin, Madeline Bruno, and Travis Otis

Vessels:
Vessel Name: First Team
Owner: Travis Otis
Vessel Safety Issuance: #276753 expires June 30, 2020

2. **What:** The purpose of the proposed Penobscot River monitoring is the further characterization of current conditions in the Penobscot River and Bay. Collection of fish and lobster for tissue sampling as ordered by US District Court. Table 1 describes the biota monitoring, including the list of species and estimated number of specimens per species.
3. **Where:** **Figure 1** shows the sample locations.
4. **When:** Date of issuance-December 31, 2020. Sampling will not occur during the Atlantic salmon spawning season for the Penobscot River.
5. **How:** Collection will be performed using a variety of techniques and gear types described below:

Lobster: Travis Otis (commercial lobsterman) will be deploying DMR provided lobster traps. The traps are 3' single parlor with vents disabled. Undersized lobsters may be sampled.

Eel and tomcod: Approximately 60 commercially purchased eel traps will be deployed to catch eel and tomcod. The traps are 1-foot-square by 3-foot-long wire traps with a 2.5-inch by 2.5-inch "funnel" that runs into the trap. Approximately 30 traps may be deployed each sampling location with soak times of 1 to 2 days. Two hoop nets may also be deployed for tomcod, if the eel traps are not productive. The hoop nets are approximately 3 feet in diameter with 0.5-inch mesh and five metal hoops spanning their 20-foot length. The hoop nets would soak for 1 day (baited with dead herring, horseshoe crab (see condition below), or cat food). Non-target species would be released.

Smelt: The primary sample method will involve wading into shallow water where a seine net will be deployed. The seine net is approximately 6 feet by 50 feet with 0.125-inch mesh. Commercial minnow traps may also be deployed. The traps are two-part mesh and are 9 inches by 17.5 inches long and with a narrow, conical opening on each end. Up to 20 of these traps (four lines of five traps each) may be used and would be soaked for one day (baited with dead herring or cat food).

Specimens not required for tissue samples will be released the same day in the vicinity of capture; specimens used for tissue sampling will be stored on dry ice and transported to the laboratory for analysis. The laboratory will be responsible for final disposition of the specimens

6. **Conditions:**

- **Marine Patrol** Division I office (west of Port Clyde), Tel: 633-9595; or the Division II office (east of Port Clyde), Tel: 664-2392, *shall* be contacted prior to the startup of collecting activities to make arrangements as to the necessary frequency when to contact Marine Patrol to provide the Special License (SL) number, dates, location(s) of activities, name of special license holder, other persons in the field, and if transporting of specimens will occur who will be transporting specimens, etc.
- **Gear marking:** All buoys must be marked with "DMR."
- **Use of horseshoe crab bait:** horseshoe crab, from the mid-Atlantic, can only be used to bait eel pots. The Special License holder must maintain paperwork that proves the horseshoe crab originated in the mid-Atlantic. The Special License holder is required to produce such documentation upon request.
- encounter any listed Atlantic salmon, Atlantic sturgeon, and shortnose sturgeon, applicant will cease activities and contact NOAA Federal representative Jeff Murphy as soon as possible (jeff.murphy@noaa.gov).
- A report on research results or status (electronic format) may be requested by the Department at the end of each year and prior to renewal. Research personnel of the DMR shall have access to all biological data.
- * SL's are contingent upon all vessels holding current USCG commercial fishing safety inspections [USCG CFVS].
- No marine organism authorized under this SL shall be used for human consumption.
- Any infraction of these conditions or any violation of any Marine Resources laws shall be grounds for the immediate revocation of this Special License.
- Additional conditions may be added at the discretion of the Commissioner.

This Special License ***expires on December 31, 2020*** and has ***two*** renewals.

Deirdre Gilbert

Deirdre Gilbert
For Commissioner Patrick C. Keliher

cc: Marine Patrol Divisions I & II

Table I: Species, Collection Methods, Sample Months, and Quantity:

Sample Location	Species			
	American Eel (*Anguila rostrata*)	Atlantic Tomcod (*Microgadus tomcod*)	Rainbow Smelt (*Osmerus mordax*)	Lobster (*Homarus americanus*)
	Collection Methods			
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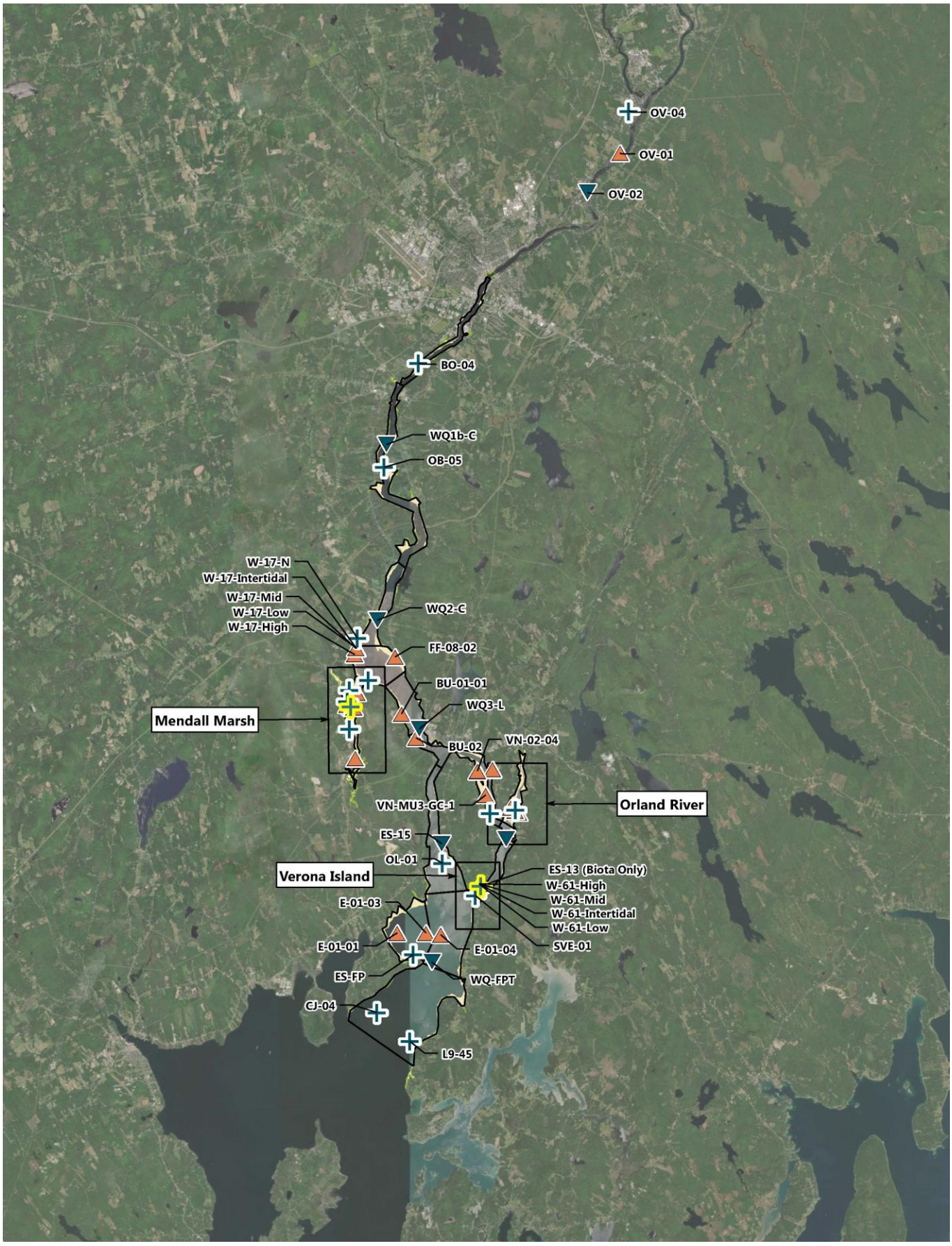
OV-04
OV-01
OV-02
BO-04
WQ1b-C
OB-05
W-17-N
W-17-Intertidal
W-17-Mid
W-17-Low
W-17-High
WQ2-C
FF-08-02
BU-01-01
WQ3-L
Mendall Marsh
BU-02
VN-02-04
VN-MU3-GC-1
Orland River
ES-15
OL-01
Verona Island
ES-13 (Biota Only)
W-61-High
W-61-Mid
W-61-Intertidal
W-61-Low
SVE-01
E-01-03
E-01-01
E-01-04
ES-FP
WQ-FPT
CJ-04
L9-45

Figure 1