## **Appendix T: Data Sheets**

The following data sheets are to be used in association with the SOPs in Appendices A - S of the CBEP Programmatic QAPP. Not every SOP has an associated data sheet, as some SOPs record almost entirely digital data (e.g., photo stations, drone surveys, and continuous water quality monitoring). Some SOPs require project specific data sheets as methods can be highly variable (e.g., discrete water quality monitoring and SHARP surveys). In this case, project-specific data sheets will be included with the SAP.

#### Data Sheets

Rapid Assessment of Marsh Sites Cover Sheet	2
Rapid Assessment of Marsh Sites Supplementary Data Sheets	
Rapid Assessment of Eelgrass Sites Cover Sheet	11
Rapid Assessment of Water Quality Cover Sheet	12
Monumented Cross Sections Data Sheet	13
Longitudinal Channel Profile Data Sheet	15
CBEP Total Station Data Sheet	17
RTK Data Sheet	18
Surface Water Hydrology Data Sheets	19
Porewater Salinity Data Sheet	25
Marsh Vegetation Data Sheet	26
Plant Species of Concern Data Sheet	33
Feldspar Marker Horizon Data Sheet	36
Eelgrass Density Monitoring Data Sheet	37
Eelgrass Phenology Data Sheets	39
Crab Trapping Data Sheet	
Presence/Absence Fish Monitoring Data Sheet	45

#### **Tidal Marsh Rapid Assessment Data Sheet**

Site Na	ame:		Date:
Field C	Crew:		Weather:
Site En	ntrance Coordinates (Latitude, Longituge):		
Was a	Desktop Assessment done prior to site visit?		
	Yes		No
Data/c	observations collected (check boxes and staple ap	propriat	e data sheets to this cover sheet)
	Site of interest GPS coordinates		Soil horizon thickness
	General notes/obsrvations		Soil cores
	Hand-drawn maps		Vegetation
	Notes on anthropogenic structures		Plant Species of Concern (SOCs)
	Surface water salinity		Other (list below)
	Description of soil layers		Other data:
Were	e site photos taken?		<u> </u>
	Yes		No
If Yes,	on what camera and what photo numbers?		
Site N	Notes:		
	<b>Conclusions</b> (need for additional surveys, an SA ed to partners?):	P, or Lor	ng-term Monitoring? What information will be



Recorder:	
Start date:	
SITE ID #:	

# TIDAL CROSSING - CULVERT DATA SHEET

STRI	ICTII	RF	CHAR	$\Delta \cap I$	FRI	STI	CS
$\sigma$	ノレーひ	$\Gamma$	CHAR	AUI	$-$ L $\Gamma$ I	JII	$\cup$

Culvert #:	Function:



Recorder:	
Start date:	
SITE ID #:	

# TIDAL CROSSING – SITE DATA SHEET

Overall Site Start Time: \_\_:\_

STATION	INFORMATION
31/\IIOI\	

Weather:		Precip. last 24 hrs:	
Waterbody:		Street/Crossing:	
Fish Barrier ID#:		Town:	
Predicted low tide time:		Predicted low tide height:	
Downstream tidal stage:	high mid-high m	nid mid-low low	
Tide direction upon arrival:	incoming outgoing	slack	

SITE G	PS COORDINATES; (UTN	Л, ZONE 19 N, NAD 1	983)
Easting	0	Northing	

	CROSSING CHARACTERISTICS				
Structural Integrity:	structural failure / obstruction / shoulder or bank erosion / rip-rap, debris in channel Photo #:  Description:				
Utilities present:	overhead lines / pump station / sewer / water / fuel / other (describe):				
Evidence of current use:	fire pond / swimming area / skating pond / other (describe):				
Low-lying development	Structures: house / building / retaining wall / dock. Describe:				
upstream:	Transportation: road / driveway / pathway. Describe:				
	Landscaping: lawn / garden / other. Describe:				

#### **OBSERVATIONS OF SCOUR & IMPOUNDMENT**

	Unrestricted without pooling	Photo #:		Unrestricted without pooling	Photo #:
_	Flow detained and/or some		٤	Flow detained and/or some erosion	
aп	erosion		ea		
Jpstream	Minor pool and/or erosion		vnstr	Minor pool and/or erosion	
Ď	Significant pooling and/or erosion		Dov	Significant pooling and/or erosion	
	Major pooling and/or erosion			Major pooling and/or erosion	

#### STAKEHOLDER INTERACTIONS

Abutter wner Other:	Name:	Property address:	Contact info:	
Questions, concerns, comments:				
Abutter wner Other:	Name:	Property address:	Contact info:	
Questions, concerns, comments:				

Overall Site End Time: \_\_:\_



Recorder:	
Start date:	
SITE ID #:	

		VISIIAL	ASSESSMENT		Start Time::
Upstream		Crossing/culvert		Downstream	
Scour Po			cked across high	Scour Po	
	rsh/ channel bank	marsh		Low marsh/ channel bank	
slumping	,			slumping	
	ded/slack water at low	Obstruction within structure		Perch at low tide	
tide				Debris Jam	
Debris J	am			Wrack build up along bank	
		Impacts to v	vater velocity:		
Species	Stand size:			Species of	Stand size:
of	Large	Tide Direction:	Incoming Outgoing	concern:	Large
concern:	Small				Small
	Individuals				Individuals
	Ditching	Upstream			Ditching
	Fill	'			Fill
	Dumping				Dumping
	Pipe discharge	downstream			Pipe discharge
Other	Stormwater			Other	Stormwater runoff
visible	runoff			visible	Agricultural impacts
impacts:	Agricultural			impacts:	Describe:
•	impacts			•	
	Describe:				
	At stream grade				At stream grade
	Inlet drop				Inlet drop
Inlet	Perched			Outlet	Perched
condition	Deformed			condition	Deformed
CONTUITION	Beaver fencing			CONTRICTOR	Beaver fencing
	Blocked (circle)				Blocked (circle)



Recorder:	
Start date:	
SITE ID #:	

LOCAL BENCHMA
---------------

Start Time: \_\_:\_

Easting:	0	Northing:	
Benchmark description:			Benchmark Photo #(s):
Plan sketch of benchmark	location:		

End Time: \_\_:\_



Recorder:	
Start date:	
SITE ID #:	

# STRUCTURAL ELEVATIONS DATA SHEET

	ROAD/CROSSING PROFILE			Start Time::_	
	Location	Stadia Rod Reading ( )	Relative elevation above Lowest Point (Calculated)	Comme	nts
	Local benchmark				
D/S	High marsh surface				
D/S	Base of bank				
D/S	Top of bank				
D/S	Edge of pavement				
	Crown				
U/S	Edge of pavement				
U/S	Top of bank				
U/S	Base of bank				
U/S	High marsh surface				

End Time: \_\_:\_



Recorder:		
Start date:		
SITE ID #:		
	Start Time:	:

# TIDAL CROSSING – MARSH ELEVATION DATA SHEET (P.1)

	Transect Location (ft.)	Stadia Rod	Relative elevation above Lowest Point	Comments
		Reading	(Calculated)	
	Local Benchmark			
	Upland edge – river right, 0'			
	Easting: 0 Northing:			
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
_	10			
ear	Top channel bank (river right)			
str	Easting: 0 Northing: Top channel bank (river left)			
Downstream	Top channel bank (river left)			
Do	Easting: 0 Northing:			
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	Upland edge (river left)			
	Easting: 0 Northing:			

End Time: \_\_:\_\_



Recorder:	
Start date:	
SITE ID #:	
	Start Time:

# TIDAL CROSSING – MARSH ELEVATION DATA SHEET (P.2)

	Transect Location (ft.)	Stadia Rod Reading	Relative elevation above Lowest Point (Calculated)	Comments
	Local Benchmark	3		
	Upland edge (river right), 0' Easting: 0 Northing:			
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
eam	Top channel bank (river right) Easting: 0 Northing:			
Upstream	Easting: 0 Northing:  Top channel bank (river left)  Easting: 0 Northing:			
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	Top channel bank (river right), 0' Easting: 0Northing:			

End Time: \_\_:\_\_



Recorder:	
Start date:	
SITE ID #:	

## DESKTOP ANALYSIS DATA SHEET

#### SITE INFORMATION Site Code: Date: Town: Road: Road Ownership: Abutting Land Use within 250 feet: Land Ownership/Contact: Outcome: Forested: \_\_\_\_% Agriculture:\_\_\_% Other:\_\_\_% Developed:\_\_\_% Comments: Transect Location Drawn(U/S): Elevation Transect Location Drawn(D/S): Elevation Channel Channel Vegetation Vegetation Structure Location: Northing: Easting: 0\_ Utilities: Affected Wetland Area: SURVEY CONTROLPOINT (KNOWN ELEVATION) Easting: 0\_ Northing: Benchmark Description: Note: Survey control points can be found online at <a href="http://www.maine.gov/mdot/mapviewer/dataviewer/Index.html?app=survey">http://www.maine.gov/mdot/mapviewer/dataviewer/Index.html?app=survey</a> CHANNEL INFORMATION Low Tide Time: Low Tide Height: High Tide Time: High Tide Height: Channel Width(U/S): Channel Width(D/S): Scour Pool Width: Scour Pool Length: **Upstream Flood Risks:**

Data Sheets: Parcel Map with Landowner:

#### **Eelgrass Rapid Assessment Data Sheet**

Site Na	ame:			Date:
Field C	Crew:	Weather:		Tide Height:
Site Co	oordinates (Latitude	e, Longituge):		
How	vas site accessed	<b>1?</b> (wading, kayaking, sno	rkeling, SCU	BA, etc.)
Data/o	observations colle	cted (check boxes and stapl	le appropriate	data sheets to this cover sheet)
	Site of interest GF	PS coordinates		Eelgrass phenology
	General notes/ob	srvations		Water quality (temperature, turbidity, pH, etc.)
	Hand-drawn map	S		Light
	Notes on anthrop	ogenic structures		Sediment characteristics
	Observational ee	grass metrics		Other (list below)
	Quadrat based e	elgrass metrics		Other data:
Were	site photos ta	ken?		
	Yes			No
If Yes,	with what camera	/s and how can photos be i	dentified?	
Site I	Notes:			
	Conclusions (ne	eed for additional surveys, a	n SAP, or Lon	g-term Monitoring? What information will be provided

## Water Quality Rapid Assessment Data Sheet

Site Na	ime:		Date:
Field C	rew:		Weather:
Site Co	oordinates (Latitude, Longituge):		
Site Ty			
	Fresh Brackish		Marine Tide Height:
Data/o	bservations collected (check boxes and staple ap	propriate	data sheets to this cover sheet)
	Site of interest GPS coordinates		E. coli
	General notes/obsrvations		Chlorides
	Hand-drawn maps		Sediment characteristics
	Notes on anthropogenic structures		Plankton/algae sample
	Nutrient grab samples		Other (list below)
	Standard probe parameters (temperature, depth, salinity/conductivity, DO, turbidity, pH, etc.)		Other data:
	Satimity/conductivity, DO, turbidity, pri, etc.,		
Were	site photos taken?		
	Yes		No
If Yes,	with what camera/s and how can photos be ident	tified?	
Site N	Notes (include a description of what equipme	ent was	
used f	or any quantitative data collection):		
Site (	Conclusions (need for additional surveys, an SA	P orlone	s-term Monitoring? What information will be
	ed to partners?):	אויטם וט , וו	3-tellitrionitoling. What information with 50
<b>P. 3</b>	a to parties.		
1			



#### **CROSS SECTION DATA SHEET**

CROSS SECTIO	ON INF	ORMA	ATION										
Site Name:					Station #	:	D	ate:	Time:				
Observers:	Stadia	rod:				Auto level/recorder:							
Photo #s:	River R	River R River L Upstream Downstream Other											
BENCHMARKS	SENCHMARKS/TIE-INS TO OTHER CROSS SECTIONS												
BM/Statio	n	Lo	Mid	Hi	Angle α	Туре		Notes					
FS BS													
FS BS													
Height of instru	ment cal	lculate	d from	benchm	arks, in off	ice:		NAVD88?	Yes / No				
Photo #s:     River R River L Upstream Downstream Other       BENCHMARKS/TIE-INS TO OTHER CROSS SECTIONS       BM/Station     Lo     Mid     Hi     Angle α     Type     Notes       FS     BS													
Upstream										Downstream			

Provide a sketch of the general form of the channel about 10 stream widths upstream and downstream of the cross section. Show approximate location of the cross section, vegetation transect and wells. Sketch significant debris, plant growth, deep pools or other features.



#### CROSS SECTION MEASUREMENTS

Station:	Date:	Observers:
Ref. Elevation (BM, XS tie-in), s	stadia rod:	BM/Tie-In Notes:

Trar	sect Location	Stadia Rod	<b>Description</b> (high/low transition, top bank, base bank, thalweg,
		Reading (dec. ft.)	etc.)
٠. ا	Monument, XS#		
Start	UTM: 4 2 E		
St	48N		
	Distance on transect:		
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
30	Monument, XS#		
p	UTM: 4 2 E 4 8 N		
End	48N		
	Distance on transect:		



#### LONGITUDINAL PROFILE SURVEY DATA SHEET

Site Name:			SITE ID#				
Town, State:			Waterbody:				
Pre-restoration Post-	estoration	(circle one)	Date & Time:				
Form completed by:			Stadia rod:				
Upstream end (UTM) E			N				
Downstream end (UTM)	E		N				

	BENCHMARKS									
Station Lo Mid Hi Angle α Location (UTM)										
					E	N				
					E	N				
					E	N				
					E	N				
	E N									
					E	N				

#### LONGITUDINAL MEASUREMENTS

	Distance (ft.)	Lo	Mid	Hi	Angle α	Notes
1	, ,					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						



	Distance (ft.)	Lo	Mid	Hi	Angle α	Notes
23	(1.0.)					
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						

# TOTAL STATION SET UP — FIELD FORM



LIVING SHORELINES SITE INFORMATION											
Site Name:			Date/Time	e:		Station #:					
Purpose:											
Weather:	Weather:										
Carlson Folder L	ocation:		File	Name:							
Location re. benchmarks:	Strive to triangulate between 3 benchmarks. Center the TS within the triangle.										
OBSERVERS											
Total Station	Prism Rod	Oth	er								
		<del>-</del>									
Location		Northi	ng	Easting	Pl	hoto #					
Set up location (											
Secondary set up	ງ (if applicable)										
Benchmark:											
Benchmark:											
Benchmark:											
Calculated locati	on of OCC1				Ele	evation (m):					
SET UP INFORM	ATION										
Height of instru	ment (m) at OCC1	.:	Mea	sured rod h	eight at	start (m):					
Foot used on pr	ism pole (circle on	<b>1e):</b> Ru	ıbber foot / r	ound metal fo	ot / point	ed metal foot					
Notes:											

Appendix A

Static Occupation Field Sheet

Site Name:\_

Entered in Database? (date and initials)			
OPUS Solution obtained?			
RINEX File Name	_	 _	
Data Cleared?			
Data Downloaded? (date and initials)			
Antenna Height (adaptor = .25 m; rod = .25			
Date/Time Recovered			
Date/Time Deployed			
SET/Monument Name			
Observers			
Trimble Model			
Trimble Serial Number			



## **Deployment Check List**

☐ Graph and QA/QC data

#### SITE: **ONSET HOBO Loggers** LOGGER SN: **Pre-Deployment** ☐ Notation of serial number and location LOGGER SN: to be placed ☐ Removal of all data on loggers DEPLOYMENT DATE:\_\_\_\_ ☐ Removal of all data on shuttle ☐ Programming (delayed start, 6 minute intervals) **Deployment** Bring into the field: ☐ Clipboard with ☐ Spare AA batteries ☐ Auto level datasheets & pencil ☐ Tripod ☐ Camera ☐ GPS ☐ Stadia Rod (dec. ft) Deployment equipment: ☐ Water level loggers ☐ ½" PVC housing (4) ☐ Screws for installation of micro (2)☐ ¾" PVC housing (4) station ☐ Conductivity ☐ 6" zip-ties ☐ Regular screwdriver loggers (2) ☐ Mallet ☐ USB Micro station ☐ Refractometer ☐ Homer Bucket ☐ Barometric ☐ DI Water ☐ Knife/scissors to cut pressure sensor zip-ties ☐ Syringe & tubing ☐ Needle nose pliers ☐ Signs with CBEP ☐ Micro station ☐ 2 posts (short) contact info. housing Retrieval ☐ Homer Bucket ☐ Regular screwdriver ☐ Syringe & tubing ☐ Knife/scissors to cut ☐ Refractometer zip-ties □ DI Water **Post-Deployment** ☐ Clean loggers ☐ Clean housing ☐ Download data ☐ Export data to N: drive ☐ Correct elevation to benchmark

## HOBO WATER LEVEL LOGGER DEPLOYMENT DATA SHEET

SITE INFORM	ATION												
MCP Site ID#:		СВ	EP TR ID#:		Waterbody:								
Town:					Street/Structure:								
LOGGER INFO	RMATIO	NC											
Logger S/N #:			Location (UTM, 2	Zon	e 19 N, NAD 1983	Easting:		Nor	thing:		_		
Programmed By	:		Date Programme	ed:		Logging	Start Date/Tin	ne:					
Relation to struc	ture: U	pstrear	m / Downstream	No	ote:	•			Station #:				
Site Conditions:													
Description of						Photo #:							
deployment site						Photo #:							
Deployed as par a broader data s						Co-locate instrume	ed with other ents?		es / No 'N #:				
General monito objective(s):	ring												
Sketch Plan Vi	ew												
Upstream										Dow	nstream		
Provide a simple sketc road/structure. Sketc	n significant f		of the channel upstrea	m ar	nd downstream of the (	deployment loca	ation. Show locati	on of	the logger in re	elation	to the		
					n	1	NI - 4						
Date / Time:	Action:				Pers	sonnel:	Notes:						
	☐ Deploy	yment	☐ Water level che	eck	☐ Cleaning								
			ad 🗌 Retrieval										
Surveyed stadia					//: \   <b>5</b>								
Benchmark elev			Start: (ft.) @ _			enchmark de hannel botto	•						
Water surface (twice, at least       (ft.) @:         6 minutes apart):       (ft.) @:					·	strument):	oiii (at		_ (ft.) @	:(	(time)		
		•				_							
Date / Time:	Action:				Per	sonnel:	Notes:						
☐ Deployment ☐ Water level check ☐					☐ Cleaning								
	☐ Data d	lownlo	ad 🗆 Retrieval										
Surveyed stadia	rod measi	uremer	nts		1	<u> </u>				-			
Benchmark elev	ation:		Start: (ft.) @ _		: (time) <b>B</b>	enchmark de	escription:						
Water surface (t		ast	(ft.) @:_	(	-	hannel botto	m (at		(ft ) @		(time)		
6 minutes apart	:		(ft.) @:_	(	time) in	instrument):(ft.) @:(time				(cirric)			

Version: 31 July 2024

Caser Bay Estnary

## HOBO WATER LEVEL LOGGER DEPLOYMENT DATA SHEET

ate / Time:	Action:		Personnel:	Notes:	
	☐ Deploymer	t ☐ Water level check ☐ Cleaning			
		load □ Retrieval			
irveved stadi:	a rod measurem				
enchmark ele		Start: (ft.) @: (time)	Benchmark	description:	
	twice, at least	(ft.) @ : (time)	Channel bo		(6.) 0 (1:
minutes apar		(ft.) @:(time)	instrument)	:	(ft.) @: (time
	Τ		Ι _	Tu	
ate / Time:	Action:		Personnel:	Notes:	
	☐ Deploymen	t $\square$ Water level check $\square$ Cleaning			
	☐ Data down	load   Retrieval			
urveved stadia	a rod measurem				
enchmark ele		Start: (ft.) @ : (time)	Benchmark	description:	
Vater surface (twice, at least (ft.) @: (time)			Channel bo		(ft.) @: (time
minutes apart	+)•	((: ) (-)	instrument):		(ii.) @(time
		ES / OBSERVATIONS (QA/C			

Version: 31 July 2024

## HOBO CONDUCTIVITY/SALINITY LOGGER DEPLOYMENT DATA SHEET

SITE INFORMA	TION							
MCP Site ID#:		CBEP TR II	D#:	Waterbody:				
Town:	-			Street/Structure:				
LOGGER INFOR	MATION							
Logger S/N #:		Location	on (UTM, Zon	e 19 N, NAD 1983)	Easting:		Nort	thing:
Programmed By:		Date P	rogrammed:		Logging St	art Date/Tin	ne:	
Sample frequency:				Relation to structure:	Upstream	/ Downstrea	am	Station #:
Site Conditions:								
Description of					Photo #:			
deployment site:					Photo #:			
Deployed as part of	of a broader o	data set?			Co-located		S/N	<b>J</b> #:
					other insti	ruments?		
General monitorin	g objective(s	):						
Sketch Plan Viev								
Provide a simple sketch or road/structure. Sketch si			nnel upstream ar	nd downstream of the d	eployment locati	on. Show locati	on of	the logger in relation to the
ACTIVITY LOG								
[				г	, T = -			
Date / Time:	Action:			Pers	onnel: N	otes:		

Caseo Bay Estuary

Updated: 24 March 2025

## HOBO CONDUCTIVITY/SALINITY LOGGER DEPLOYMENT DATA SHEET

#### **ACTIVITY LOG**

Date / Time:	Action:	Personnel:	Notes:		
	Deployment Salinity/conductivity check				
	Cleaning Retrieval				
Refractometer	(calibrated) – measured salinity/conductivity @	(PPT) @	:(time)		
	ce, at least 6 min. apart):		: (time)		
•	ity (calibrated) – @ time	Time::_	Water Temp (C):		
Instrument:			@ logger (uS/cm):		
Take reading a	t 6 min. interval from top of hour	Sp. Conductiv	ity @ logger (uS/cm):		
Date / Time:	Action:	Personnel:	Notes:		
Date / Time.		reisonnei.	Notes.		
	Deployment Salinity/conductivity check				
	Cleaning Retrieval				
	(calibrated) – measured salinity/conductivity @		: (time)		
	ce, at least 6 min. apart):		:(time)		
Spot conductive Instrument:	ity (calibrated) – @ time		Water Temp (C):		
	t 6 min. interval from top of hour	Conductivity @ logger (uS/cm): Sp. Conductivity @ logger (uS/cm):			
rano rodanig a	to minimize various top of float	pp. conducti	11) = 10ggor (do/ 011)		
Date / Time:	Action:	Personnel:	Notes:		
	Deployment Salinity/conductivity check				
	Cleaning Retrieval				
Refractometer	(calibrated) – measured salinity/conductivity @	(PPT) @	: (time)		
	ce, at least 6 min. apart):		: (time)		
-	ity (calibrated) – @ time		Water Temp (C):		
Instrument:	t 6 min. interval from top of hour		@ logger (uS/cm): ity @ logger (uS/cm):		
rake reading a	t o min. interval from top of flour	j Sp. Conductiv	ity @ logger (d3/cm)		
DOCT DEDLO	VMTNIT NOTES / ODSEDVATIONS (DAIN		C FTC \		
POST-DEPLO	YMENT NOTES / OBSERVATIONS (RAIN	NFALL, QA/Q	C, ETC.)		

Casco Bay Esteary

Updated: 24 March 2025

## HOBO BARO-LOGGER DEPLOYMENT DATA SHEET

SITE INFORM	ЛАТІО	N									
MCP Site ID#:			CBEP TR ID:			Water	body:				
Town:						Street	/Structure:				
LOGGER INF	ORMA	TION									
Micro Station S	S/N #:		Location 1983):	ı (UTM,	Zone 19 N, I	NAD	Easting:		Nort	thing:	
Sensor S/N #:			Deploye	d by:			Logging Sta	art Date/Tir	ne:		
Site Conditions	S:										
Description of							Photo #:				
deployment sit	te:						Photo #:				
Deployed as pa							Co-located	with other	Ye	es / No	
a broader data	set?						instrumen	ts?	S/	N #:	
General monito	oring ob	jective(s)	:				•		•		

Sketch Plan View

Provide a simple sketch of the general form of the channel upstream and downstream of the deployment location. Show location of the logger in relation to the road/structure. Sketch significant features.

ACTIVITY LOC			
Date / Time:	Action:	Personnel:	Notes:



Version: 24 March 2025

GENERAL	INFORI	OITAN	١				1	
Observer				Recorder:			Date:	
Precip. Las	t 48			Predicted low	tide time @	Portland Station:		
hrs: Current					Tide Phase	e (spring/neap):		
weather:						- (-1- 6) 1-7		
Notes:								
PORE WA	TER SA	LINITY						
						TIDE		
Station	Locat	tion	<b>TIME</b> (24 HR)	SALINITY READING (PPT)		DIRECTION (INCOMING/ OUTGOING)		NOTES
					%	COTGOING		
					%			
				Ţ	%			
					%0			
				_	%   %			
				+	% <sub>0</sub>			
					%°			
					%			
					‰			
					%			
					%	_		
					%	<u> </u>		
					‰ ‰	<u> </u>		
				+	‰ ‰			
					%			
					% <sub>0</sub>			
				†	%			
					%			
FAUNAL (	DBSERV	'ATION	S (Species, n	umber, behavior, lo	cation)			
İ								

Vers.: 25-Mar-25

# **VEGETATION TRANSECT COVER SHEET**

STATION INFOR	RMATION						
Site Name:			Date	e/Time:		Station #:	
Weather:							
Notes (wildlife,							
invasives, etc.):							
OBSERVERS							
Plant ID	Recorder		Other				
	L						
VEGETATION T	RANSECT						
Number of plot	s sampled:			Direction	(magnetic;		
			channel → upland)				
Transect start @	🤋 channel,		Transect end @ upland,				
ft.:				ft.:			
If transect start explain:	is not zero,						
Side of marsh:				Distance l	etween plots:		
		•					
GPS COORDINA	TES; (UTM, Z	ONE 1	9 N, NA	D 1983)			
Location			asting		Northing	g	
Transect start a	t channel	4	2		48		
Transect end at	upland	4	<u> </u>		48	· <b>_</b> _	
Other:		4	2		48	· <del></del>	
Other:		4	2		48	· <del></del>	
PHOTOS @ STA	TION (LANDS	CAPE	ORIENTA	ATION)			
Location		Ph	oto#				
Transect start a	t channel:				_		
Transect end at	upland:						
Other:							
Other:							
Othory							

#### 2024 VEGETATION PLOT DATA SHEET - P.1



				Sequence:	
Location / Site				Date:	
Station #:				Time:	
Observers:					
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
				1	
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
	-				
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
	1		T	T	
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
	-				
	-				
	<u> </u>		, I	l	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
	, ,		<del></del>	1	
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	

#### VEGETATION PLOT DATA SHEET – P.2



Location / Sit	е				
Station #:				Time:	
Observers:					
				Sequence: _	
Plot #:		Distance fr	om channel:		
Plot C	comments:				
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
Plot #:		Distance fr	om channel:		
Plot C	comments:				
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
				1	
Plot #:		Distance fr	om channel:		
Plot C	comments:				
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	

## VEGETATION PLOT DATA SHEET – P.3



Location / Site					
Station #:				Time:	
Observers:					
	•			Sequence: _	
Plot #:		Distance fr	om channel:		
Plot Co	mments:			I	
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
Г				T	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
			1		
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
Γ				T	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
			1		
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
1			_	1	

## VEGETATION PLOT DATA SHEET – P.4

Location / Site					
Station #:				Time:	
Observers:					
				Sequence:	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
	T		T		
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	
	-				
				1	
Plot #:		Distance fr	om channel:		
Plot Co	mments:				
Plant Code	Percent Cover	Plant Code	Percent Cover	Notes	

#### **PLANT SPECIES CODES - 2017**

Plant Species	Code	Plant Species	Code	Plant Species	Code
Abies balsamea	ABBA	Galium trifidum	GATR	Quercus rubra	QURU
Acer rubrum	ACRU	Gaylussacia baccata	GABA	Ranunculus cymbalaria	RACY
Agrostis stolonifera	AGST	Glaux maritima	GLMA	Ribes hirtellum	RIHI
Alnus incana	ALIN	Glyceria canadensis	GLCA	Rosa palustris	ROPA
Argentina anserina	ARAN	Glyceria grandis	GLGR	Rubus hispidus	RUHI
Atriplex prostrata	ATPR	Hordeum jubatum	HOJU	Rubus sp.	RUSP
Betula populifolia	BEPO	Hypericum mutilum	HYMU	Rumex pallidus	RUPA
Bolboschoenus maritimus	BOMA	Ilex verticillata	ILVE	Ruppia maritima	RUMA
Calamagrostis canadensis	CACA	Impatiens capensis	IMCA	Salicornia depressa	SADE
Calla palustris	CLPA	Iris versicolor	IRVE	Schoenoplectus acutus	SCAC
Calystegia sepium	CASE	Juncus arcticus	JUAR	Schoenoplectus pungens	SCPU
Carex comosa	CACO	Juncus effusus	JUEF	Scirpus pendulus	SCPE
Carex crinita	CACR	Juncus gerardii	JUGE	Scirpus sp.	SCSP
Carex gynandra	CAGY	Juncus marginatus	JUMA	Scutellaria galericulata	SCGA
Carex hormathodes	CAHO	Juncus sp.	JUSP	Solanum dulcamara	SODU
Carex hystericina	CAHY	Juniperus communis	JUCO	Solidago altissima	SOAL
Carex lacustris	CALA	Lathyrus tuberosus	LATU	Solidago sempervirens	SOSE
Carex lurida	CALU	Leersia oryzoides	LEOR	Sparganium americanum	SPAM
Carex nigra	CANI	Lemna minor	LEMI	Spartina alterniflora	SPAL
Carex paleacea	CAPA	Limonium carolinianum	LICA	Spartina patens	SPPA
Carex saxatilis	CASA	Ludwigia palustris	LUPA	Spartina pectinata	SPPE
Carex scoparia	CASC	Lycopus americanus	LYAM	Spiraea alba	SPLA
Carex sp.	CASP	Lycopus uniflorus	LYUN	Spiraea tomentosa	SPTO
Carex stipata	CAST	Lysimachia terrestris	LYTE	Suaeda maritima	SAMA
Carex trisperma	CATR	Lythrum salicaria	LYSA	Symphyotrichum novi-belgii	SYNB
Carex utriculata	CAUT	Maianthemum canadense	MACA	Symphyotrichum subulatum	SYSU
Cicuta bulbifera	CIBU	Onoclea sensibilis	ONSE	Taraxacum officinale	TAOF
Cladium mariscoides	CLMA	Osmunda cinnamomea	OSCI	Thalictrum dioicum	THDI
Distichlis spicata	DISP	Osmunda regalis	OSRE	Thelypteris palustris	THPA
Drosera rotundifolia	DRRO	Panicum dichotomiflorum	PADI	Toxicodendron radicans	TORA
Dryopteris cristata	DRCR	Panicum sp.	PASP	Triglochin maritima	TRMA
Dulichium arundinaceum	DUAR	Persicaria arifolia	PEAR	Typha angustifolia	TYAN
Eleocharis palustris	ELPA	Persicaria sagittata	PESA	Typha latifolia	TYLA
Eleocharis sp.	ELSP	Phragmites americanus	PHAM	Typha x glauca	TYGL
Elymus pycnanthus	ELPY	Phragmites australis	PHAU	Utricularia sp.	UTSP
Elymus repens	ELRE	Picea glauca	PIGL	Vaccinium corymbosum	VACO
Elymus virginicus	ELVI	Picea rubens	PIRU	Vaccinium macrocarpon	VAMA
Epilobium leptophyllum	EPLE	Pinus strobus	PIST	Verbena hastata	VEHA
Equisetum pratense	EQPR	Plantago maritima	PLMA	Viola pallens	VIPA
Eragrostis pectinacea	ERPE	Poa palustris	POPA		
Euthamia graminifolia	EUGR	Polygonacea sp.	POSP		
Festuca rubra	FERU	Populus grandidentata	POGR		
Galium asprellum	GAAS	Populus tremuloides	POTR		
Galium palustre	GAPA	Proserpinaca palustris	PRPA		
	GASP	Puccinellia tenella	PUTE		

## PLANT SPECIES CODES - 2017



Common Species	Codes
Agrostis stolonifera	AGST
Argentina anserina	ARAN
Atriplex prostrata	ATPR
Bolboschoenus maritimus	вома
Calystegia sepium	CASE
Carex paleacea	CAPA
Distichlis spicata	DISP
Festuca rubra	FERU
Hypericum mutilum	HYMU
Juncus arcticus	JUAR
Juncus gerardii	JUGE
Limonium carolinianum	LICA
Lysimachia terrestris	LYTE
Plantago maritima	PLMA
Proserpinaca palustris	PRPA
Ruppia maritima	RUMA
Salicornia depressa	SADE
Schoenoplectus acutus	SCAC
Schoenoplectus pungens	SCPU
Solidago sempervirens	SOSE
Spartina alterniflora	SPAL
Spartina patens	SPPA
Spartina pectinata	SPPE
Suaeda maritima	SAMA
Symphyotrichum novi-belgii	SYNB
Triglochin maritima	TRMA
Typha angustifolia	TYAN
Typha latifolia	TYLA

Other Codes	Codes
Log / Woody Debris	Log
Litter	Litr
Moss	MOSS
Sphagnum	SPSP
Open Water	OpnW
Panne	Pann
Wrack	Wrck

<b>Unknown Species</b>	Code
Unknown Forb	UnFo
Unknown Grass	UnGr
Unknown Unspecified	UnSp



#### **INVASIVE PLANTS / PLANT SPECIES OF CONCERN**

Small tape reel (100m)
Invasive plants monitoring forms, clipboard, pencil
Digital camera
Flagging tape
Handheld GPS
Invasive plant identification binder, and invasive/native Phragmites binder
Map of marsh in plastic protector
Box of Ziploc bags for samples, seed heads
Black Sharpie to label plastic bags
Pruning shears to cut off seed heads
Magnifying glass on lanyard

Updated: 8/12/2024

# Invasive Plants Monitoring Form

Page: \_\_ of \_\_ PARTNERSHIP

SITE VISIT INF	ORMATIO	N						
Site name & location:				Date:				
Start time:				End time:				
Participants:								
GPS model used: (check) Objective / notes:	☐ Garmin etrex 10 ☐ Garmin GPSmap 76CSx ☐ Other:		Camera used: (check)	☐ Canor	CoolPix W30 n Powershot ous Stylus To	SD750		
OBSERVATION								
Plant species:  (check all that apply)  # of plants/stems:  (estimate)  □ Phragmites australis □ Lythrum salicaria □ 0 − 10, □ 11 − 25, If > 50, take multiple		□ Other: □ 25 − 50 e GPS points are	$0,  \Box \ 50$	) – 100,	ed > 100			
Seed heads or	•	esent? Y/N		inge of plar				
GPS ID numbe GPS Coordinat (UTM, Zone 19N, Location in ma	es: NAD 1983)	Easting: 042_	Nor	thing 48		time taken):		
Site conditions	· .							
Notes:								
OBSERVATION								
Plant species: (check all that app	s:							
# of plants/ste (estimate)			, take multiple	e GPS points are	ound the pe	,	> 100	
Seed heads or	•	esent? Y/N		inge of plar				
GPS ID numbe	• •	- ·· · · · · · · · · · ·		Photo numl		time taken):		
(UTM, Zone 19N,	Coordinates:         Easting: 042 Northing 48           Zone 19N, NAD 1983)         Image: Northing 48							
Location in marsh (station, river right/left, upland edge, etc.):								
Site conditions	s (nearby ve	egetation, pool	/panne, et	c.):				
Notes:								

Updated: 7/18/19

Invasive Plants I	Vionitoring Fo	rm	Page: of	PARTNERSHIP
OBSERVATION				
Plant species:	☐ Phragmites australis	S □ Native <i>Phragmi</i>	tes suspected	
(check all that apply)	☐ Lythrum salicaria	□ Other:		
# of plants/stems:	· ·	5, □ 25 – 50, □ 50		
(estimate)		ple GPS points around the po	erimeter	
Seed heads or flowers pr GPS ID number(s):	esente 1/10   neight	range of plants: Photo number(s) (or	timo takan):	
GPS Coordinates:	Easting: 042 N		time taken).	
(UTM, Zone 19N, NAD 1983)	Lasting. 042 N	Ortilling 48		
Location in marsh (statio	n, river right/left, uplan	d edge, etc.):		
<b>Site conditions</b> (nearby v	egetation, pool/panne,	etc.):		
Notes:				
Notes.				
OBSERVATION				
Plant species:	☐ Phragmites australis	Native Phraamii	tes suspected	
(check all that apply)	1	☐ Other:	.es suspecteu	
# of plants/stems:	· '	5, □ 25 – 50, □ 50	) – 100. □ > 100	
(estimate)	· ·	ple GPS points around the pe		
Seed heads or flowers pr	esent? Y/N Height	range of plants:		
GPS ID number(s):		Photo number(s) (or	time taken):	
GPS Coordinates:	Easting: 042 N	orthing 48		
(UTM, Zone 19N, NAD 1983)				
<b>Location in marsh</b> (statio	n, river right/left, uplan	d edge, etc.):		
Site conditions (nearby v	egetation, pool/panne,	etc.):		
, ,	-0			
Notes:				
OBSERVATION				
Plant species:	☐ Phragmites australis	s □ Native <i>Phragmi</i> s	tes suspected	
(check all that apply)	☐ Lythrum salicaria	☐ Other:		
# of plants/stems:	•	5, $\Box$ 25 – 50, $\Box$ 50	•	
(estimate)		ple GPS points around the po	erimeter	
Seed heads or flowers pr	esent? Y/N Height	range of plants:		
GPS ID number(s):	Fasting 042 N	Photo number(s) (or	time taken):	
GPS Coordinates: (UTM, Zone 19N, NAD 1983)	Easting: 042 N	ortning 48		
Location in marsh (statio	l n river right/left unlan	d edge etc ).		
	,	Jago, C.C.,.		
Site conditions (nearby v	egetation, pool/panne,	etc.):		
Notes:				

Updated: 7/18/19

# Feldspar Marker Horizon Accretion Measurement Data Sheet

Site Name:	Name: Date:								
Field Crew	<b>:</b>		Weather	:					
Site Coord	inates (La	ntitude, Lo	ongituge)	•					
Samples Collected By:									
Recorded By:									
Sampling Method:						Core			
*All measurements should be recorded in mm *									
	*Each ro	w is a sing	gle core w	rith three r	neasuren	nents with	n paired (top	and botton	n) readings *
	Co	re 1	Со	re 2	Co	re 3	# of	Core	
Plot ID	Тор	Bottom	Тор	Bottom	Тор	Bottom	Attempts	Quality	Notes
Core Qualit	y Codes:	(P) poor, (	O) OK, (G	G)G good,	(E) excell	ent, (NR)	no recovery		
	Excellen	t - Bright fe	eldspar, t	hick layer					
	Good - Fe	eldspar cl	early evid	ent, layer	moderate	ely thick			
	OK - Feld	lspar pres	ent, layer	very thin					
	Poor - Feldspar present but hard to see, spotty distribution								
Comments:									

Date:	Field Crew	/:		
Transect ID/Location:	Transec	t Start Ti	me:	
Quad Locations				
Quad photo taken?				
% cover eelgrass ( / 0.25 m²)				
% cover macroalgae (/0.25 m²)				
Density ( / 0.25 m <sup>2</sup> )				
Canopy Height (m) (80% shoots/				
handful x 4)				
# Reproductive Shoots				
,				
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations  Quad photo taken?	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations  Quad photo taken?  % cover eelgrass ( / 0.25 m²)	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations  Quad photo taken?  % cover eelgrass ( / 0.25 m²)  % cover macroalgae (/0.25 m²)  Density ( / 0.25 m²)  Canopy Height (m) (80% shoots/	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations  Quad photo taken?  % cover eelgrass ( / 0.25 m²)  % cover macroalgae (/0.25 m²)  Density ( / 0.25 m²)  Canopy Height (m) (80% shoots/handful x 4)	Transec	et Start Ti	me:	
# Reproductive Shoots Biomass sample taken (3 shoots)? Notes:  Transect ID/Location:  Quad Locations  Quad photo taken?  % cover eelgrass ( / 0.25 m²)  % cover macroalgae (/0.25 m²)	Transec	et Start Ti	me:	

Date:		Field Crev	v:		
Transect ID/Location:		Transec	ct Start Tin	ne:	
Quad Locations					
Quad photo taken?					
% cover eelgrass ( / 0.25 m²)					
% cover macroalgae (/0.25 m²)					
Density ( / 0.25 m <sup>2</sup> )					
Canopy Height (m) (80% shoots/ handful x 4)					
# Reproductive Shoots					
Biomass sample taken (3 shoots)?					
Notes:					
Transect ID/Location:	_	Transed	ct Start Tin	ne:	
Ouad Lagations					

Quad Locations			
Quad photo taken?			
% cover eelgrass ( / 0.25 m²)			
% cover macroalgae (/0.25 m²)			
Density ( / 0.25 m <sup>2</sup> )			
Canopy Height (m) (80% shoots/ handful x 4)			
# Reproductive Shoots			
Biomass sample taken (3			
Notes:			

#### Site information datasheet

Site Name:	
Site Address:	
Lat (dd.dddd°):	
Long (dd.dddd°):	
Organization:	
Access Notes:	
Site Location Type	
Tidal River Embayment Open Ocean	
OtherOther	
<u> </u>	
Bottom Type (select all that apply)	
MudSandSiltGravelShell hash	
Other	
Meadow Characteristics	
SparseDensePatchyMixed Other: StressedHealthyOther:	
StressedHealthyOther	
Describe meadow size, shape, stressors present, etc.:	
Sketch of meadow and sampling sites	

## Assessment A: Seed maturity data sheet

Site Name:	Sample Collection Date/Time:			
Sample Scorer Names:	Sample <b>Scoring</b> Date/Time:			
Org Name & Contact:				

Sample (shoot) Values: 1-5	Rhipidium  Values: 1 - x  (1 is lowest on plant)	Spathe Stage  Values: 0-6, UNK  (Separate by comma, include as many spathes as present)	Notes

# Assessment B: Quadrat sampling datasheet

Sampler Names Org Name:  Quadrat size us	ed: 1 m <sup>2</sup>	0.25 m <sup>2</sup> Random	 Time: Water Temp: 0.0625 m <sup>2</sup> Directed	Transect	
		Other:			
Quadrat Number	Repro Shoot Count Count Count		Quadrat Number	Repro Shoot Count	Vegetative Shoot Count optional
Notes:					

# Assessment C: Seed density data sheet (once per year)

Site Name:	Sample <b>Collection</b> Date/Time:	
Sampler Names:	Sample Processing Date/Time:	
Org Name & Contact:		

Sample (shoot) Values: 1-5	Rhipidium  Values: 1-x  (1 is lowest on plant)	# Seeds per Spathe Values: 0-x  (Separate by comma, include as many spathes as present)	Notes

#### 2024-2025 Maine Sea Grant Community Partner Trapping Datasheet

Organization: Trap ID: Location:								
Habitat (select): Subtidal- Dock / Subtidal- Boat / Marsh Pool / Marsh Creek / Other:								
Estimated Water Depth (m): Latitude/Longitude:								
*Grayed columns are optional*								
Date Set	Date # Blue # Green Pulled Crabs		Temp (°C)	Salinity (ppt)	DO (mg/L)	Site/Trap Notes		
Date	Carapad Width ( <b>mm</b> )	se   Sex   <u>M</u> / <u>F</u>	Female Maturity <u>A</u> dult/ <u>J</u> uv <u>O</u> vigerou	//aturity Notcl ult/ <b>J</b> uvie/ Pres		Tag ID	Crab Notes	

#### ROYAL RIVER, YARMOUTH, ME – OBSERVATIONS OF RIVER HERRING PRESENCE/ABSENCE AND BEHAVIOR

OBSERVER:					DATE:			
START TIME:					FINISH TIME:			
ROYAL RIVER GAGE READING (gage height, feet):					PORTLAND HIGH TIDE HEIGHT/TIME:			
WEATHER (current and preceding)								
MONITORING LOCATION	MEASURE	2025	2026	2027	COMMENTS (Photo #, predator observations, behavior, etc.)			
FIRST FALLS (below – head of tide)	Present (P)/ Absent (A)							
FIRST FALLS (above)	Present (P)/ Absent (A)							
BRIDGE ST DAM (below)	Present (P)/ Absent (A)							
BRIDGE ST DAM (above)	Present (P)/ Absent (A)							
MIDDLE FALLS (below)	Present (P)/ Absent (A)							
MIDDLE FALLS (above)	Present (P)/ Absent (A)							
E. ELM ST DAM (below)	Present (P)/ Absent (A)							
E ELM ST DAM (above)	Present (P)/ Absent (A)							
OTHER:	Present (P)/ Absent (A)							