Table 3. Details for sampling biota and water quality parameters. Water Quality Grab sample information presented here is based on laboratory used during 2014 field season, the State of Maine Health and Environmental Testing Laboratory (HETL). Preservation and holding times subject to change.

Parameter	Sampling techniques	Sample area/volume	Sample preservation Maximum holding time	Analysis location	SOP in App. D	Quality Control Procedures
BIOTA:						
Macroinvertebrates	Artifical Substrate; dipnet measured sweep	100-m reach; 1m	95% Ethanol; 5 years	Field; MDEP - Augusta; taxonomist	i, vii	Check pick 1 in 10 samples; taxonomists maintain reference collections
Algae	Periphytometer, natural substrate, phytoplankton	100-m reach; 1L	M3; 5 years	Field; MDEP - Augusta; taxonomist	vi	Taxonomist maintains reference collections
WATER QUALITY:						
Dissolved oxygen	Place Hanna field meter in channel	--	--	Field	ii	Calibrate field meter according to SOP
Specific conductance	Place Hanna field meter in channel	--	--	Field	ii	Calibrate field meter according to SOP
Temperature (instantaneous)						
pH						
Temperature (continuous)	HOBO Water Temp Pro	--	--	Record in field; download onto office computer using HOBO Ware Pro	v	Perform Precision test according to SOP.
Flow velocity (average)	Global flow meter	--	--	Field	iii	Calibrate field meter according to SOP.
Nutrients - TKN	Grab sample	237 ml	$4^{o}C$; 24 h to preservation (H_2SO_4), 28 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; spike sample; blank sample.
- NO3+NO2-N		237 ml	acidify (H_2SO_4),<$6^{o}C$; 28 d		iv, xii	
- NH3-N		237 ml	<$6^{o}C$; 24 h		iv, xii	
- Total-P		125 ml	$4^{o}C$; 48 h to preservation, 28 d		iv, xii	
- OPO4-P		237 ml	$4^{o}C$; 48 h		iv, xii	
- Chlorophyll *a*	Grab sample	1 L	$4^{o}C$, buffer with $MgCO_3$; filter within 24 h or freeze within 48 h, freeze filter; 28 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; blank sample.

Table 3, continued

Parameter	Sampling techniques	Sample area/volume	Sample preservation Maximum holding time	Analysis location	SOP in App. D	Quality Control Procedures
Total Suspended Solids	Grab sample	500 ml	4°C; 7 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; blank.
Total Dissolved Solids	Grab sample	250 ml	4+/-2°C; 7 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; blank.
Dissolved Organic Carbon	Grab sample	250 ml	acidify (H_2SO_4),+ 4°C; 28 d	HETL	iv, xii	Lab: 1 duplicate per 20 samples; spike sample; blank.
Chloride	Grab sample	237 ml	28 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; spike sample; blank sample.
Alkalinity (CaCO3)	Grab sample	474 mL	2-6°C; 14 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; blank sample.
True Color	Grab sample	237 mL	4°C; 28 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; spike sample; blank sample.
Silicon, dissolved silica	Grab sample	250 mL	4°C; 7 d	HETL	iv, xii	Lab: 1 duplicate per 10 samples; spike sample; blank; check sample.