

Appendix F. Seagrass Condition Monitoring Data Sheets

NPS Vital Signs Seagrass Monitoring -- SeagrassNet Monitoring Protocol -- Cross Transect A												
Location:	SGNet Code:		Personnel:				Date:			Time:		
State/Country:	Station A Nearshore		Comments: (include weather, tide stage)									
Quadrat #	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
Distance Along Transect (m) (left to right viewed from shore)	2	7	8	16	18	25	26	33	38	40	44	46
Photograph Taken (✓)												
% Cover Total												
% Cover <i>Zostera marina</i>												
% Cover <i>Ruppia maritima</i>												
Canopy ht (cm; dominant sp)												
Density <i>Zm</i>												
Dens Source (TL,TR,BL,BR,E)												
Repro shoots <i>Zm</i> (1/4m ²)												
Repro shoots <i>Rm</i> (1/4m ²)												
Grazing (dom sp, whole shoot) Tr (0-1%), Low (2-30%), High (31-100%)												
Epiphytes (dom sp, most epiphytized leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Wasting Index (<i>Zm</i> , most inf. leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Biomass Core Collected (✓) plastic (0.0035 m²) core												

	Left (0 m)	Center (25 m)	Right (50 m)
GPS Coordinates if relocated SAME if unchanged from last sampling date			
Distance Onshore to Bed Edge (m) (shoots or patches ≤ 1m apart)			
Distance Onshore to Last Shoot (m)			
Surface Sediment (cobble, gravel, sand, mud)			
Sediment Sample Collected (✓)			
Voucher Specimen Collected (✓)	n/a		n/a
Water Depth (m) at Time (local) Same time at all 3 positions on all 3 cross transects.	at	at	at
Salinity and Temperature	n/a		n/a
Light logger	Serial number collected at time	at	Serial number deployed at time
Temperature logger	Serial number collected at time	at	Serial number deployed at time

Appendix F. Seagrass Condition Monitoring Data Sheets (continued).

NPS Vital Signs Seagrass Monitoring -- SeagrassNet Monitoring Protocol -- Cross Transect **B**

Location:	SGNet Code:		Personnel:				Date:				Time:	
State/Country:	Station B Mid-depth		Comments: (include weather, tide stage)									
Quadrat #	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Distance Along Transect (m) (left to right viewed from shore)	9	10	15	17	22	25	28	31	35	37	39	45
Photograph Taken (✓)												
% Cover Total												
% Cover <i>Zostera marina</i>												
% Cover <i>Ruppia maritima</i>												
Canopy ht (cm; dominant sp)												
Density <i>Zm</i>												
Dens Source (TL,TR,BL,BR,E)												
Repro shoots <i>Zm</i> (1/4m ²)												
Repro shoots <i>Rm</i> (1/4m ²)												
Grazing (dom sp, whole shoot) Tr (0-1%), Low (2-30%), High (31-100%)												
Epiphytes (dom sp, most epiphytized leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Wasting Index (<i>Zm</i> , most inf. leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Biomass Core Collected (✓) plastic (0.0035 m ²) core												

	Left (0 m)	Center (25 m)	Right (50 m)
GPS Coordinates if relocated SAME if unchanged from last sampling date			
Surface Sediment (cobble, gravel, sand, mud)			
Sediment Sample Collected (✓)			
Voucher Specimen Collected (✓)	n/a		n/a
Water Depth (m) at Time (local) Same time at all 3 positions on all 3 cross transects.	at	at	at
Salinity and Temperature	n/a		n/a

Appendix F. Seagrass Condition Monitoring Data Sheets (continued).

NPS Vital Signs Seagrass Monitoring -- SeagrassNet Monitoring Protocol -- Cross Transect **C**

Location:	SGNet Code:	Personnel:	Date:	Time:								
State/Country:	Station C Offshore	Comments: (include weather, tide stage)										
Quadrat #	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Distance Along Transect (m) (left to right viewed from shore)	5	7	10	18	19	22	26	34	35	38	43	44
Photograph Taken (✓)												
% Cover Total												
% Cover <i>Zostera marina</i>												
% Cover <i>Ruppia maritima</i>												
Canopy ht (cm; dominant sp)												
Density <i>Zm</i>												
Dens Source (TL,TR,BL,BR,E)												
Repro shoots <i>Zm</i> (1/4m ²)												
Repro shoots <i>Rm</i> (1/4m ²)												
Grazing (dom sp, whole shoot) Tr (0-1%), Low (2-30%), High (31-100%)												
Epiphytes (dom sp, most epiphytized leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Wasting Index (<i>Zm</i> , most inf. leaf) Tr (0-1%), Low (2-30%), High (31-100%)												
Biomass Core Collected (✓) plastic (0.0035 m ²) core												
	Left (0 m)			Center (25 m)				Right (50 m)				
GPS Coordinates if relocated SAME if unchanged from last sampling date												
Distance Onshore to Bed Edge (m) (shoots or patches ≤ 1m apart)												
Distance Onshore to Last Shoot (m)												
Surface Sediment (cobble, gravel, sand, mud)												
Sediment Sample Collected (✓)												
Voucher Specimen Collected (✓)	n/a							n/a				
Water Depth (m) at Time (local) Same time at all 3 positions on all 3 cross transects.	at			at				at				
Salinity and Temperature	n/a							n/a				
Light logger	Serial number collected at time			at		Serial number deployed at time			at			
Temperature logger	Serial number collected at time			at		Serial number deployed at time			at			

Appendix F. Seagrass Condition Monitoring Data Sheets (continued).

NPS Vital Signs Seagrass Monitoring -- SeagrassNet Monitoring Protocol -- Biomass

Location:	SGNet Code:	Personnel:	Sampling Date:	Time:								
State/Country:	Comments: (include processing date)											
Quadrat #	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
Distance Along Transect (m) (left to right viewed from shore)	2	7	8	16	18	25	26	33	38	40	44	46
Zostera shoot count												
Zostera leaf weight (g)												
Zostera sheath weight (g)												
Zostera Root/Rhizome weight (g)												
Ruppia shoot count												
Ruppia leaf weight (g)												
Ruppia Root/Rhizome weight (g)												
Quadrat #	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
Distance Along Transect (m) (left to right viewed from shore)	9	10	15	17	22	25	28	31	35	37	39	45
Zostera shoot count												
Zostera leaf weight (g)												
Zostera sheath weight (g)												
Zostera Root/Rhizome weight (g)												
Ruppia shoot count												
Ruppia leaf weight (g)												
Ruppia Root/Rhizome weight (g)												
Quadrat #	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Distance Along Transect (m) (left to right viewed from shore)	5	7	10	18	19	22	26	34	35	38	43	44
Zostera shoot count												
Zostera leaf weight (g)												
Zostera sheath weight (g)												
Zostera Root/Rhizome weight (g)												
Ruppia shoot count												
Ruppia leaf weight (g)												
Ruppia Root/Rhizome weight (g)												