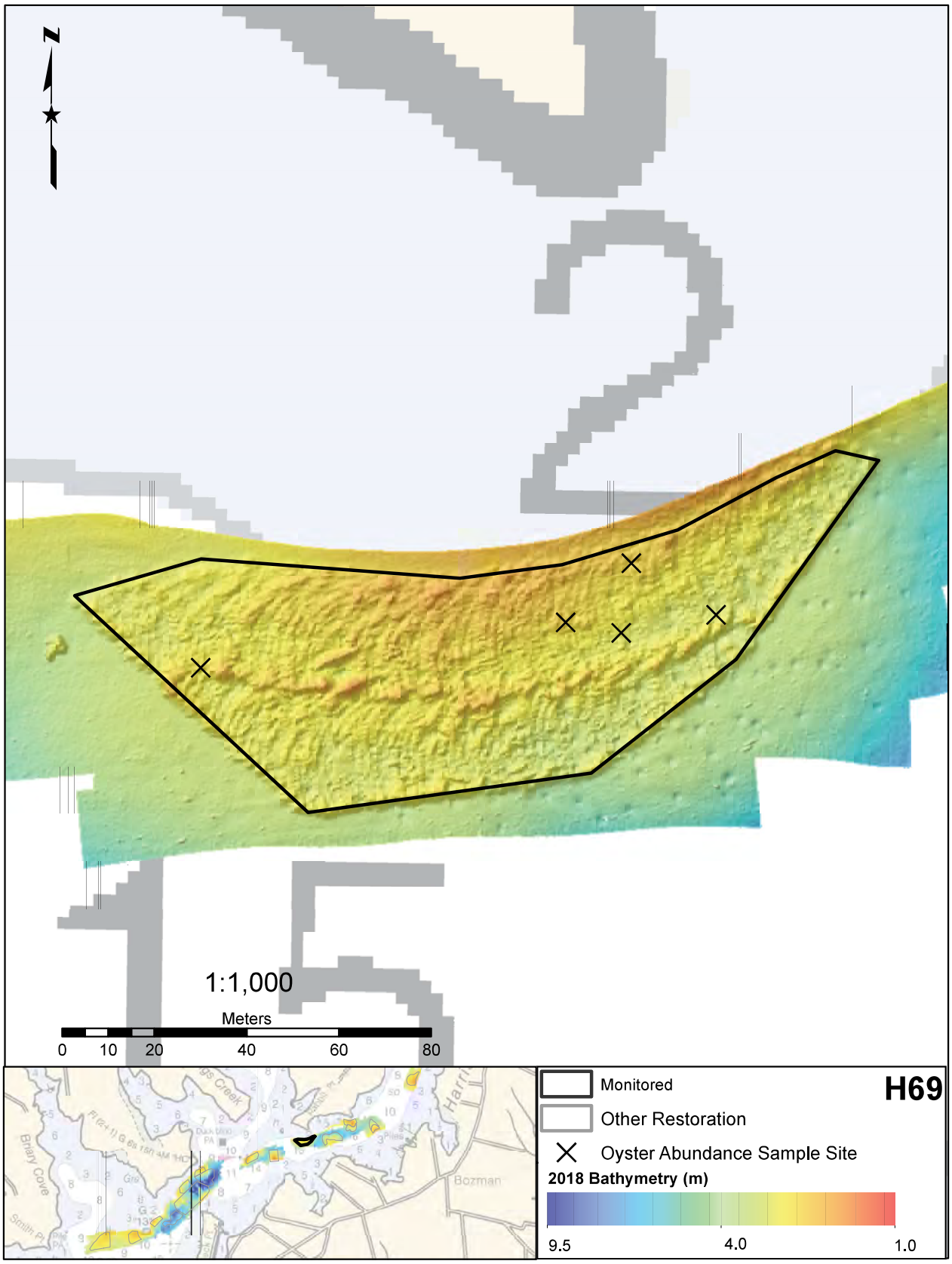
Reef H69 AltSub_37

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

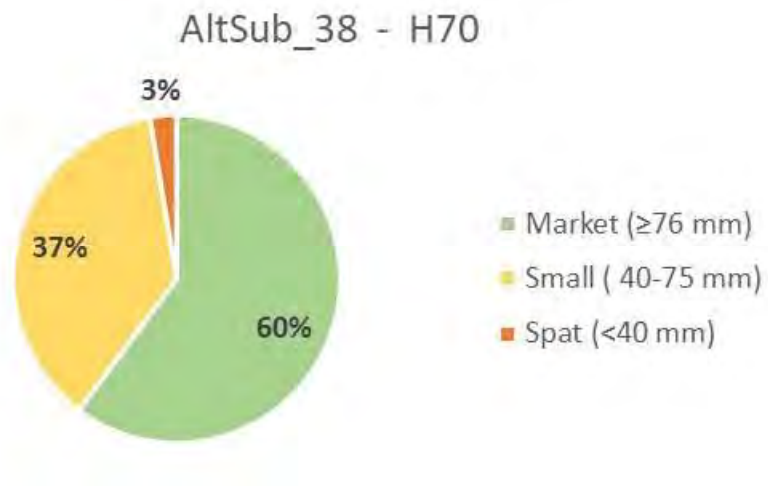


Reef H70 AltSub_38

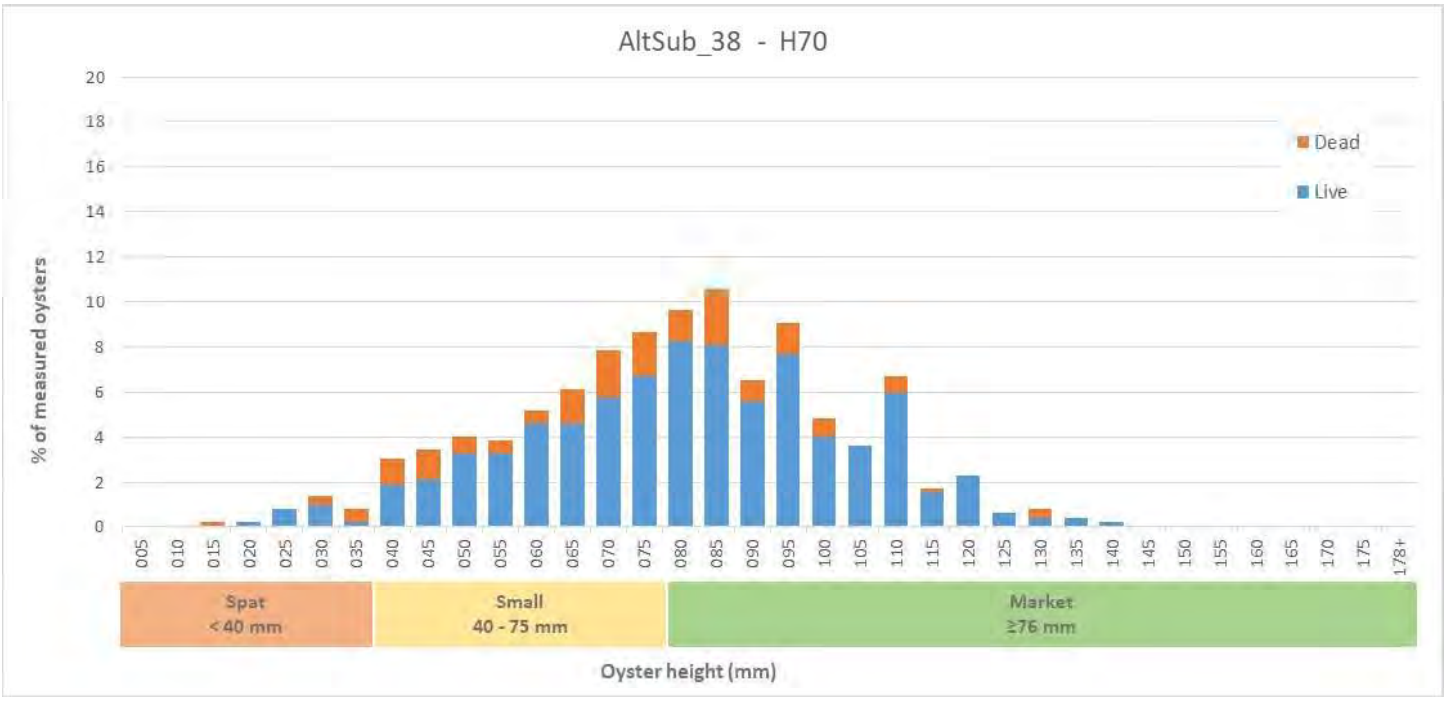
Reef Information	**Report reef ID**	**H70**
	Geodatabase Site_ID	AltSub_38
	Tributary	Harris Creek
	Reef area (acres)	1.84
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	10/30/2018
	# samples taken	4
	# live oysters measured	419
	# live oysters counted	907
	# dead oysters counted	134
	% of oysters that were dead	13%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	453.50
	Standard error of live density (#/m^2)	17.13
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	223.50
	Standard error of live density on stone	42.58
	Average live density on shell--all shell types (#/m^2)	229.00
	Standard error of live density on shell-aall shell types	35.27
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	438.35
	Standard error of live biomass	20.79
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	37.50
	Standard error of shell volume	2.72
	Average brown shell across all samples (%)	49%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.06
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H70 AltSub_38

Percent of Measured Oysters in the Market, Small, and Spat Categories



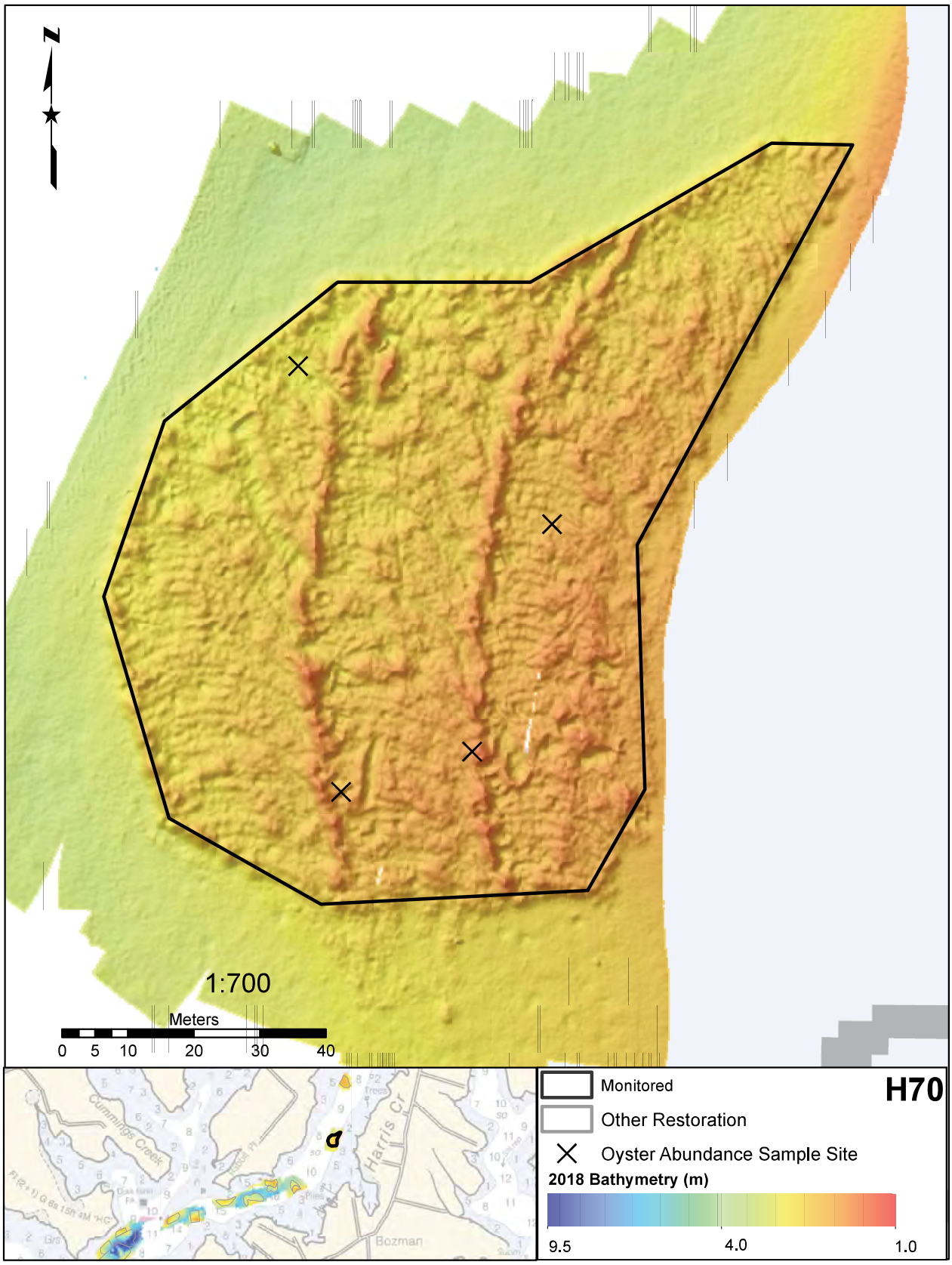
Shell Height of Oysters Measured on Reef



Reef H70 AltSub_38

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

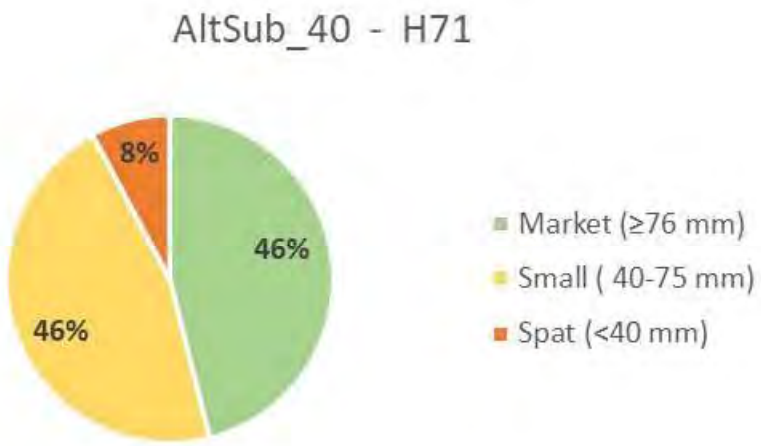


Reef H71 AltSub_40

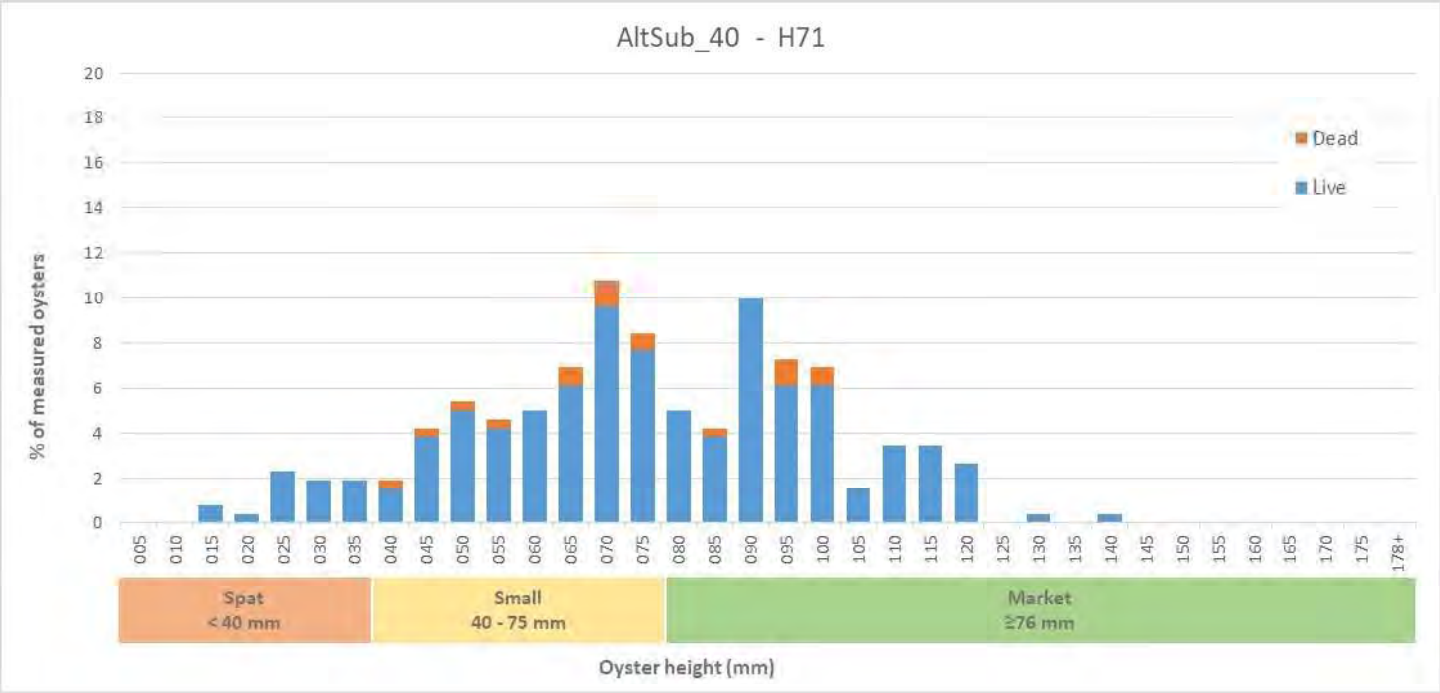
Reef Information	**Report reef ID**	**H71**
	Geodatabase Site_ID	AltSub_40
	Tributary	Harris Creek
	Reef area (acres)	6.93
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/14/2018
	# samples taken	5
	# live oysters measured	243
	# live oysters counted	409
	# dead oysters counted	24
	% of oysters that were dead	6%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	163.60
	Standard error of live density (#/m^2)	46.65
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	80%
	Average live density on stone (#/m^2)	116.80
	Standard error of live density on stone	32.56
	Average live density on shell--all shell types (#/m^2)	45.20
	Standard error of live density on shell-aall shell types	14.08
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	80%
	Average live biomass across reef (g dry weight per m^2)	142.37
	Standard error of live biomass	40.14
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	2.60
	Standard error of shell volume	0.87
	Average brown shell across all samples (%)	92%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.021
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H71 AltSub_40

Percent of Measured Oysters in the Market, Small, and Spat Categories



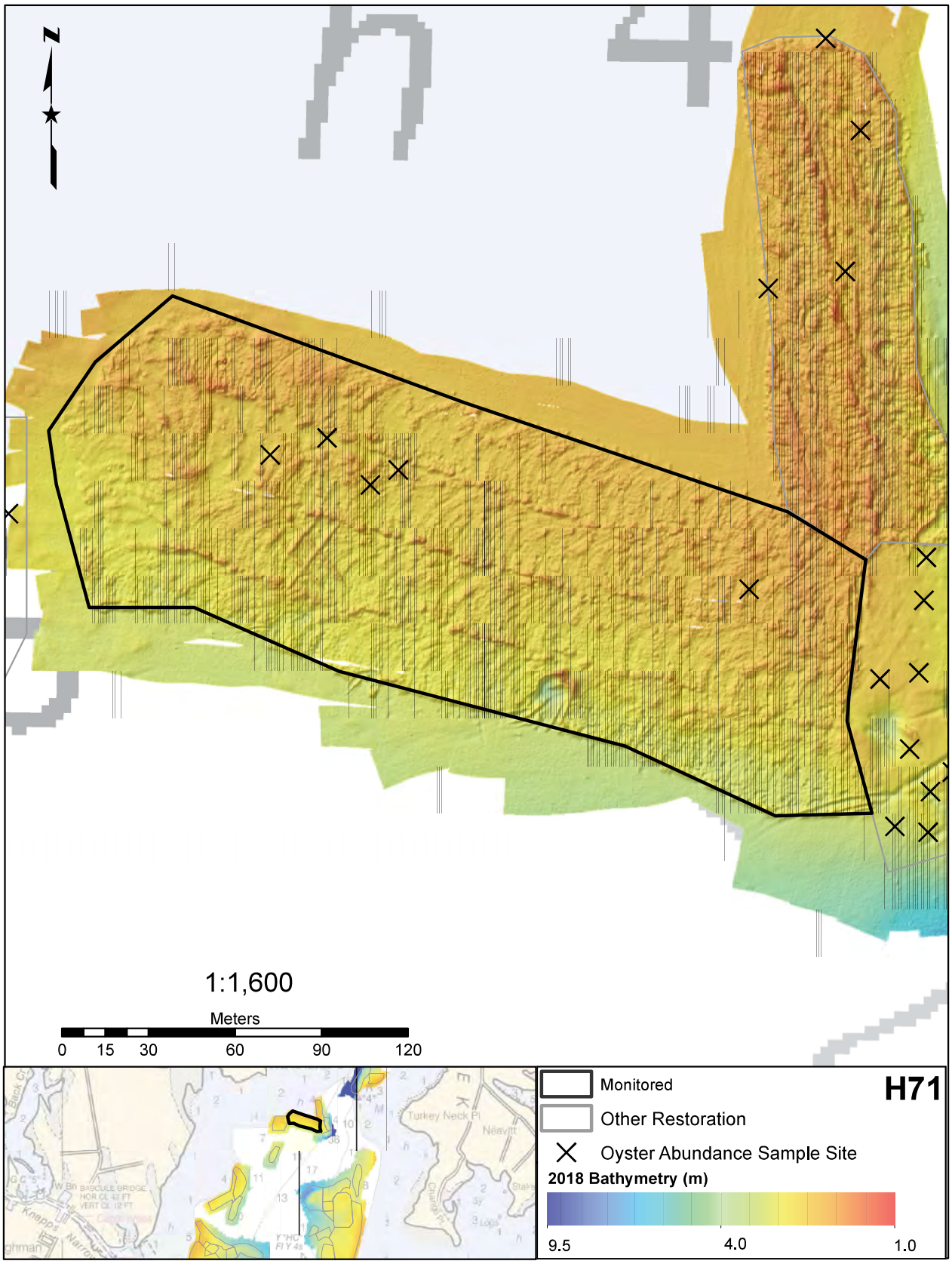
Shell Height of Oysters Measured on Reef



Reef H71 AltSub_40

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

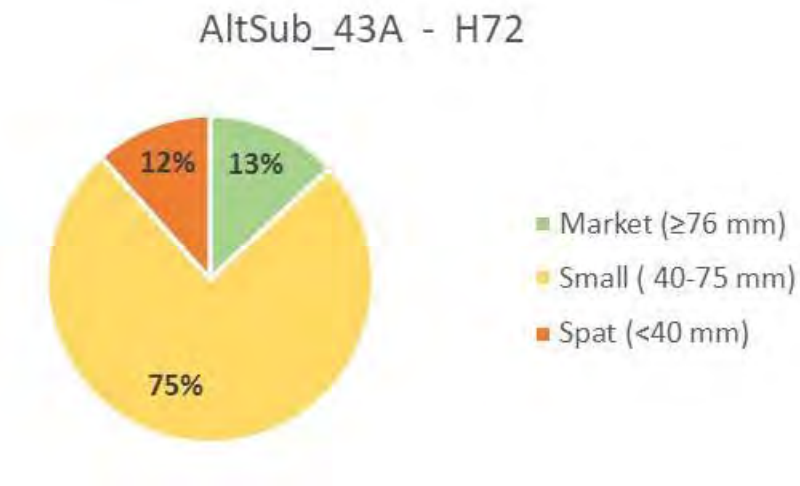


Reef H72 AltSub_43A

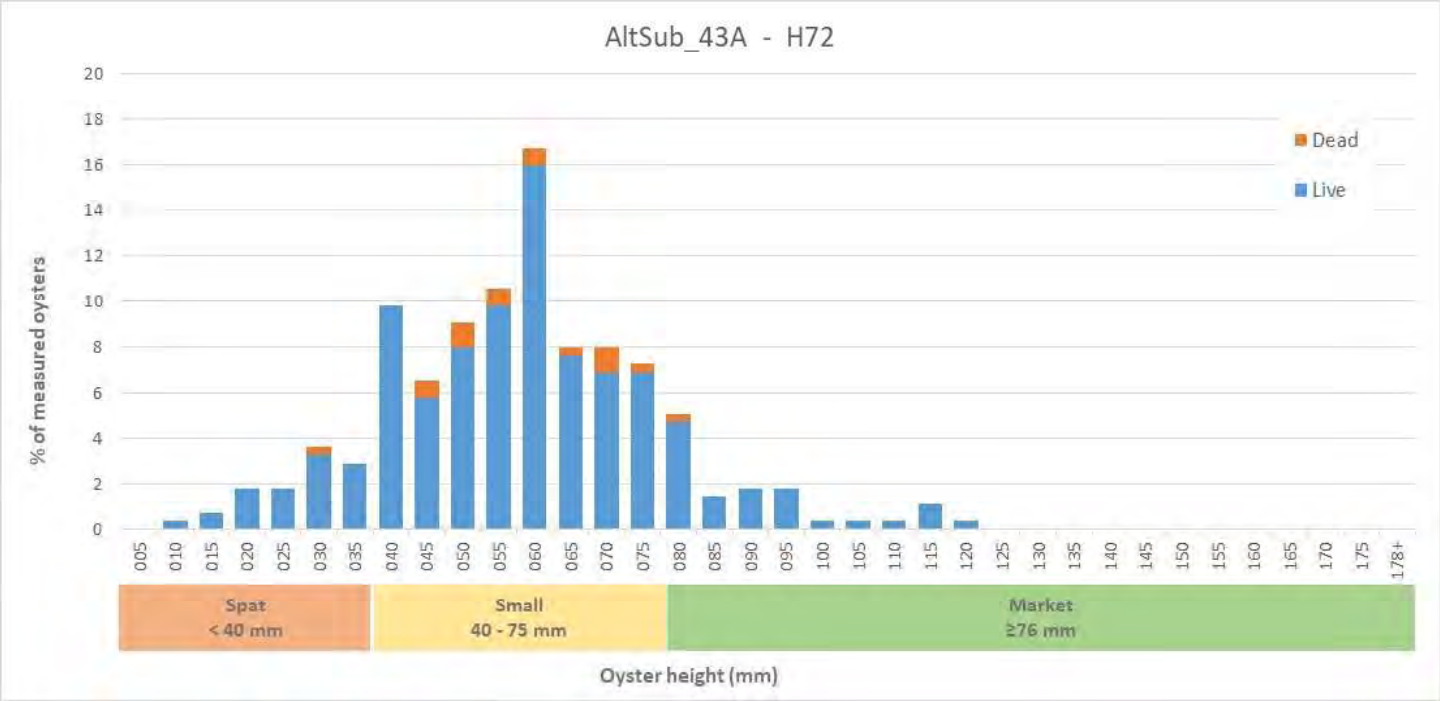
Reef Information	**Report reef ID**	**H72**
	Geodatabase Site_ID	AltSub_43A
	Tributary	Harris Creek
	Reef area (acres)	1.02
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Mixed Shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Patent Tong
	Sample date	3/20/2019
	# samples taken	7
	# live oysters measured	259
	# live oysters counted	838
	# dead oysters counted	31
	% of oysters that were dead	4%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	74.36
	Standard error of live density (#/m^2)	12.22
	Number of samples meeting minimum threshold density (m^2)	7
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	6
	Percent of samples meeting target density (%)	86%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	6
	Reef area meeting minimum threshold biomass (%)	86%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	2
	Reef area meeting target biomass (%)	29%
	Average live biomass across reef (g dry weight per m^2)	44.17
	Standard error of live biomass	7.64
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	9.85
	Standard error of shell volume	1.13
	Average brown shell across all samples (%)	80%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.003
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H72 AltSub_43A

Percent of Measured Oysters in the Market, Small, and Spat Categories



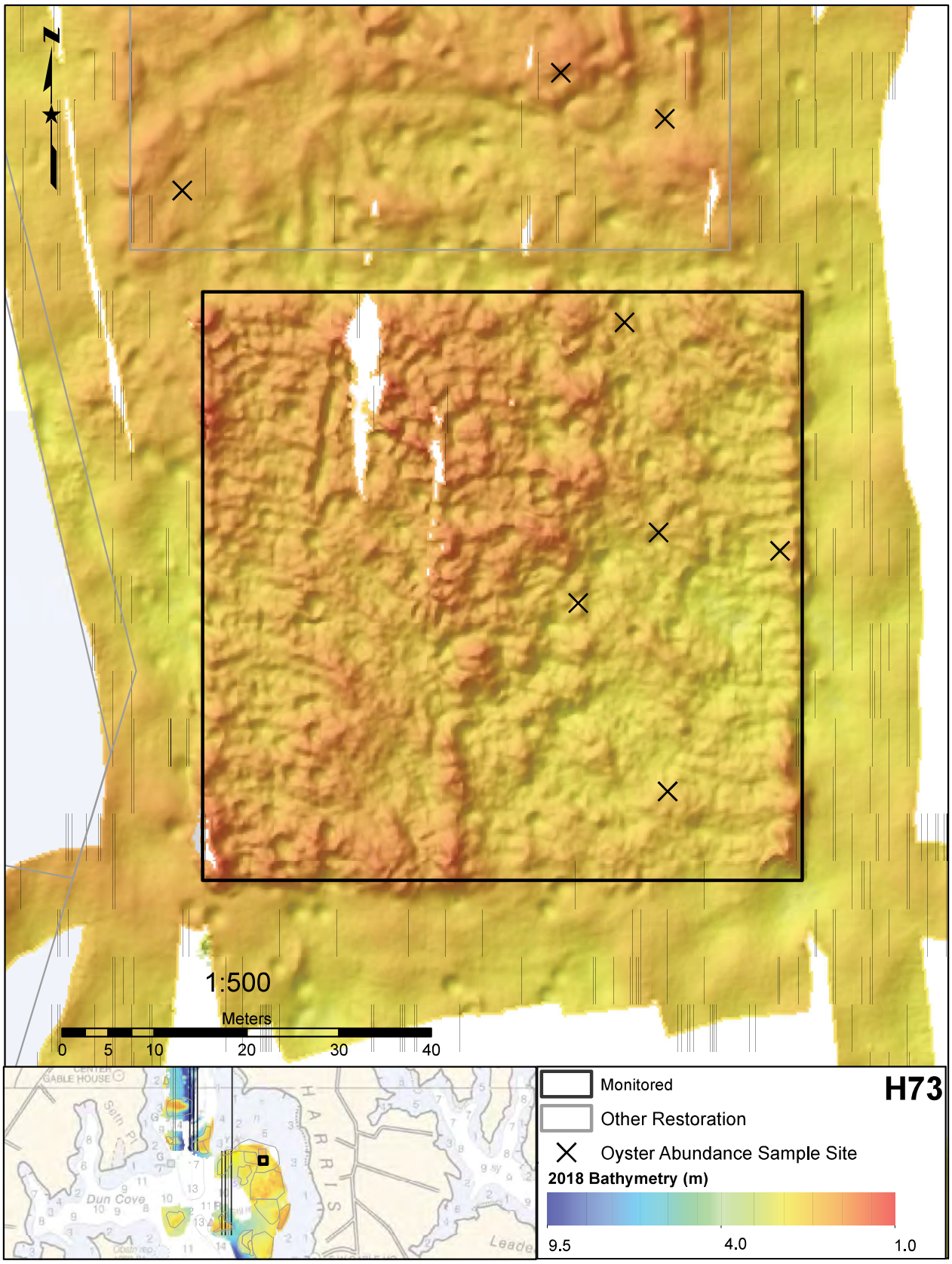
Shell Height of Oysters Measured on Reef



Reef H72 AltSub_43A

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

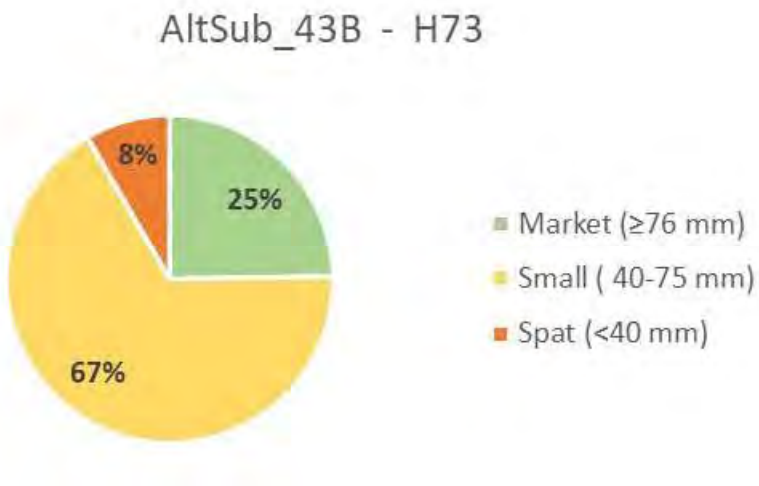


Reef H73 AltSub_43B

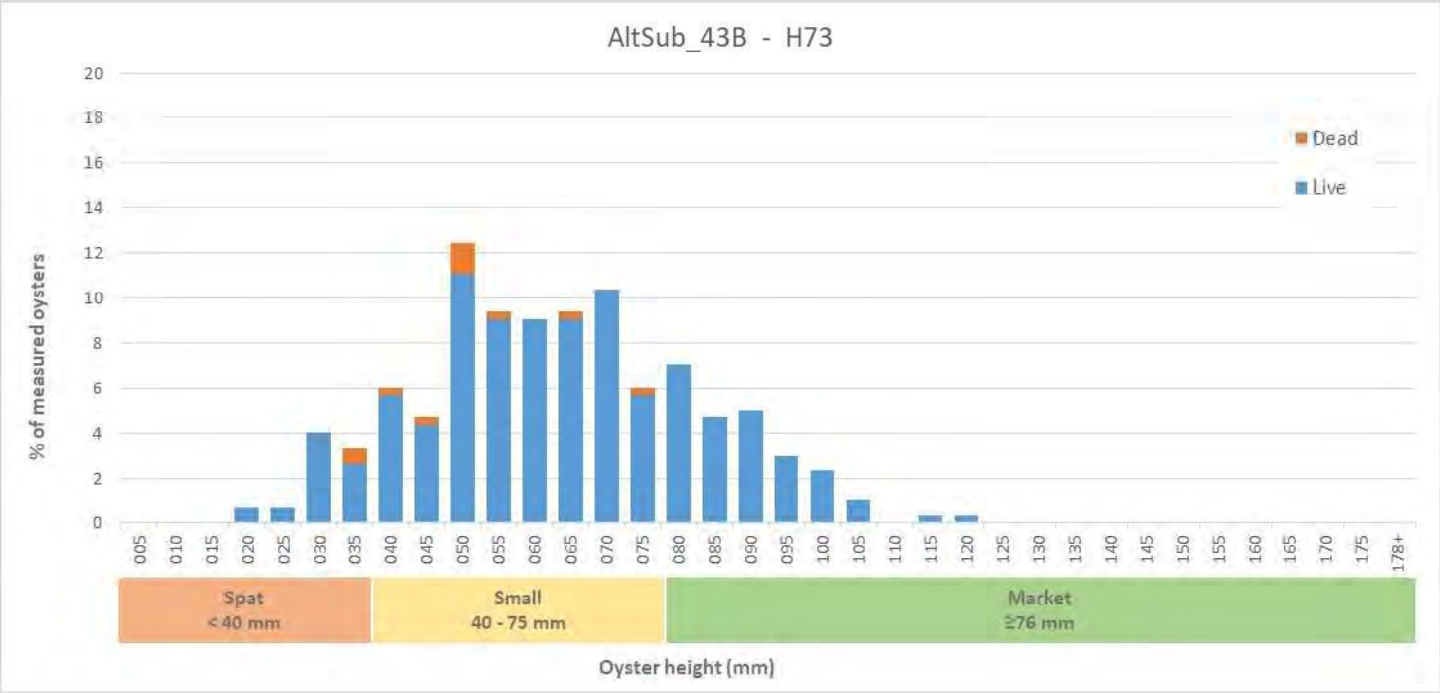
Reef Information	**Report reef ID**	**H73**
	Geodatabase Site_ID	AltSub_43B
	Tributary	Harris Creek
	Reef area (acres)	1.02
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/30/2018
	# samples taken	5
	# live oysters measured	287
	# live oysters counted	545
	# dead oysters counted	50
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	218.00
	Standard error of live density (#/m^2)	30.05
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	160.40
	Standard error of live density on stone	24.48
	Average live density on shell--all shell types (#/m^2)	57.60
	Standard error of live density on shell-aall shell types	12.29
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	137.48
	Standard error of live biomass	16.25
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	2.60
	Standard error of shell volume	0.51
	Average brown shell across all samples (%)	90%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.008
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H73 AltSub_43B

Percent of Measured Oysters in the Market, Small, and Spat Categories



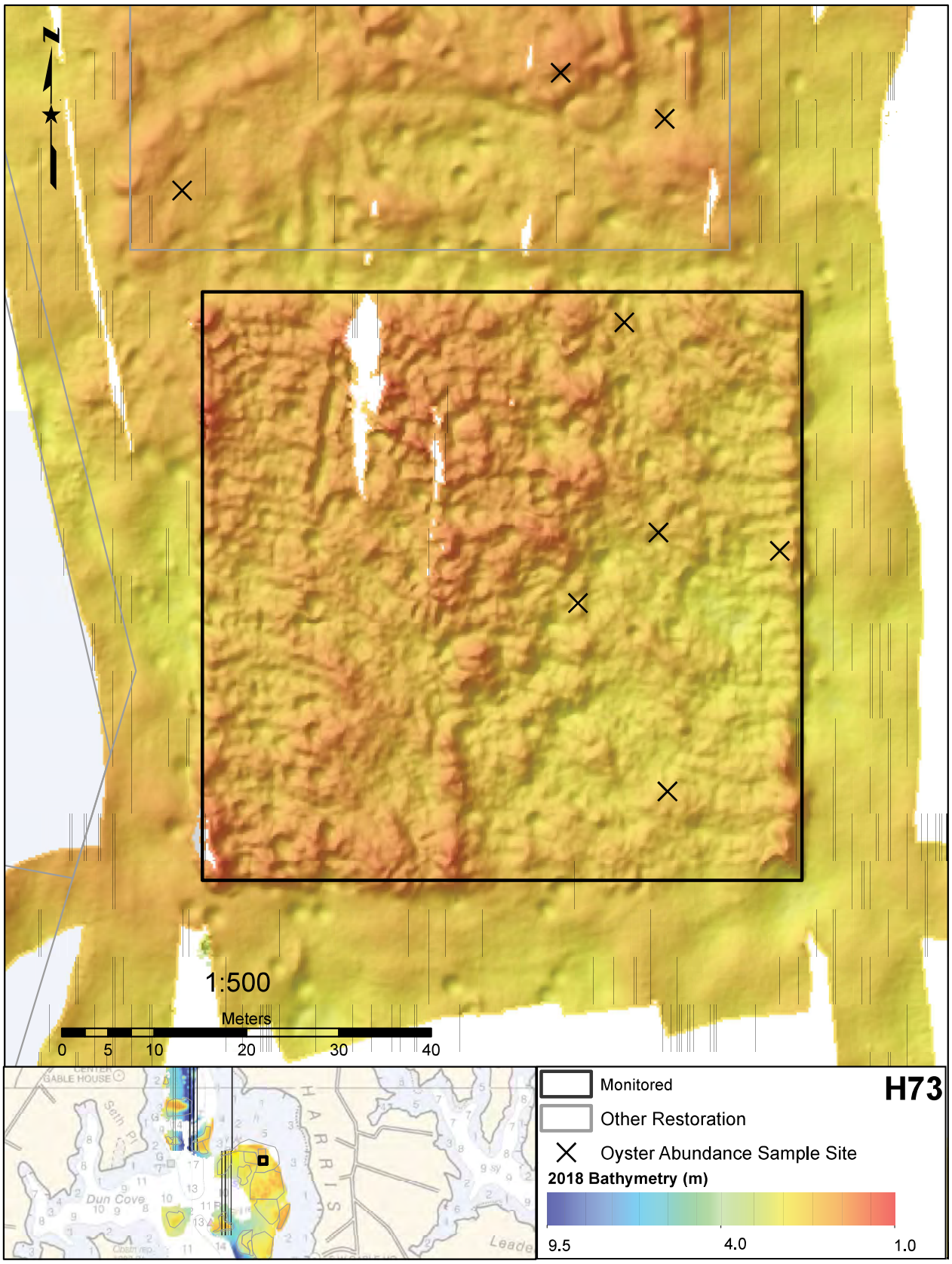
Shell Height of Oysters Measured on Reef



Reef H73 AltSub_43B

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

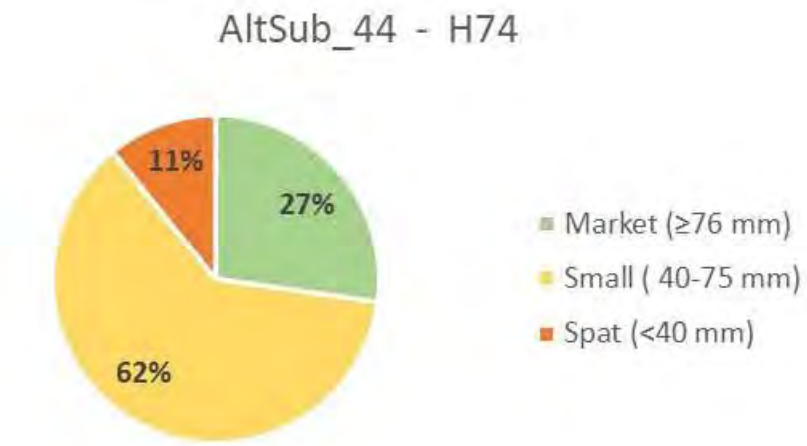


Reef H74 AltSub_44

Reef Information	**Report reef ID**	**H74**
	Geodatabase Site_ID	AltSub_44
	Tributary	Harris Creek
	Reef area (acres)	1.48
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone base with mixed shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	10/4/2018
	# samples taken	4
	# live oysters measured	323
	# live oysters counted	710
	# dead oysters counted	33
	% of oysters that were dead	4%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	355.00
	Standard error of live density (#/m^2)	65.29
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	122.00
	Standard error of live density on stone	56.93
	Average live density on shell--all shell types (#/m^2)	180.50
	Standard error of live density on shell-aall shell types	49.20
	Average live density on clam shell (#/m^2)	50.50
	Standard error of live density on clam shell	18.21
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	237.50
	Standard error of live biomass	49.84
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	73.50
	Standard error of shell volume	16.27
	Average brown shell across all samples (%)	96%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.015
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H74 AltSub_44

Percent of Measured Oysters in the Market, Small, and Spat Categories

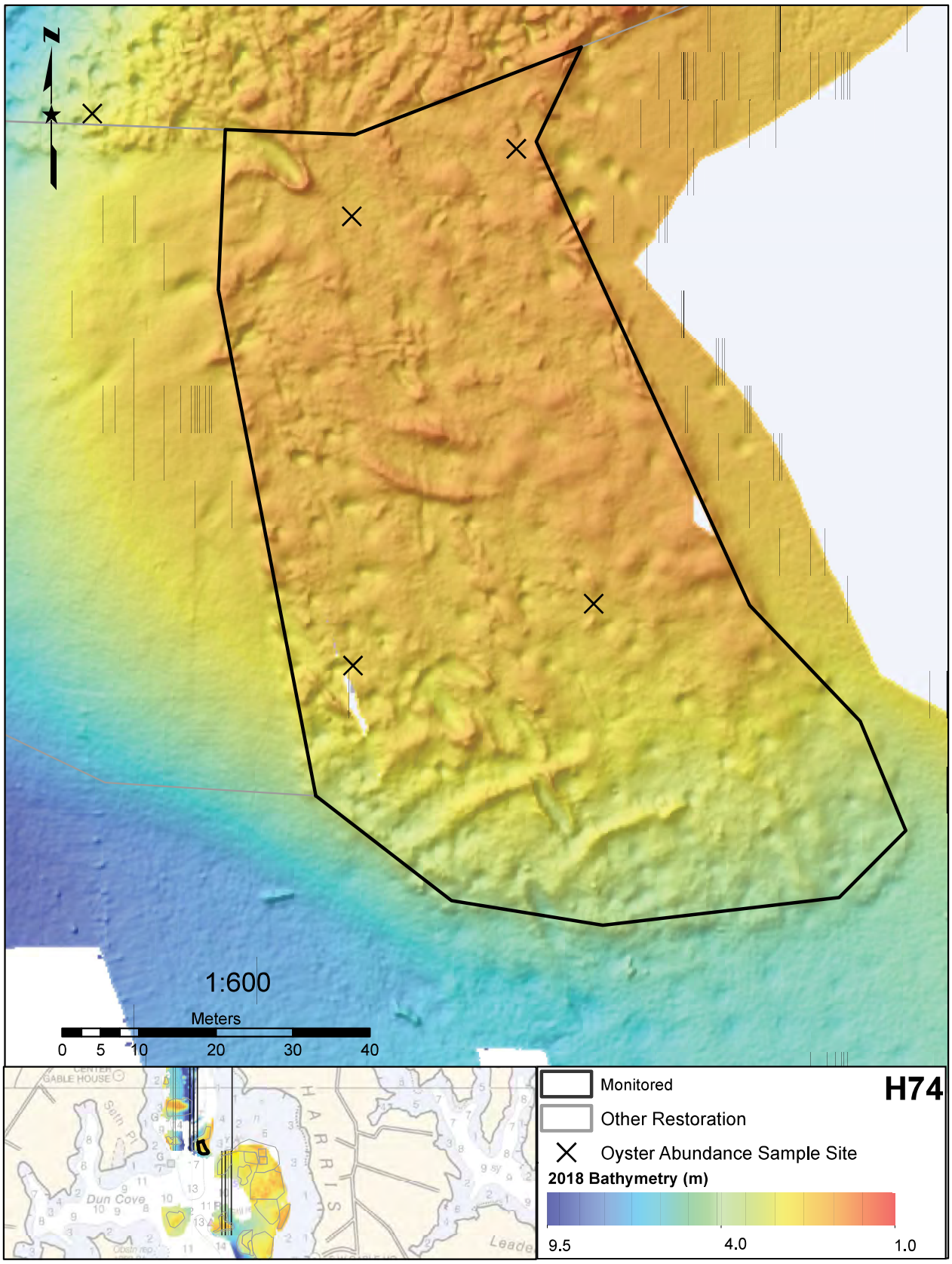


Shell Height of Oysters Measured on Reef

Reef H74 AltSub_44

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

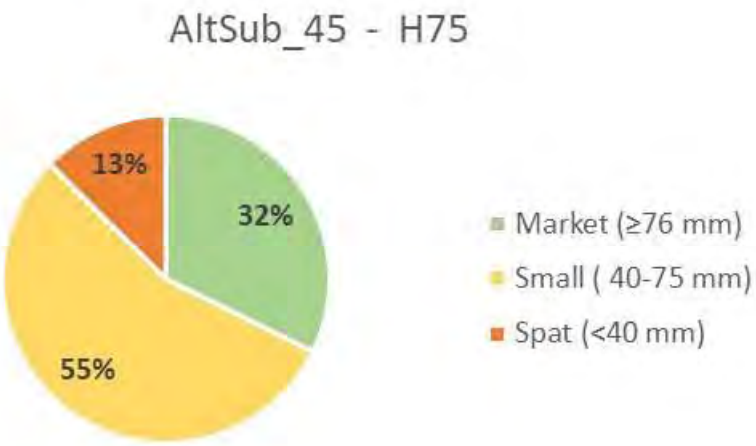


Reef H75 AltSub_45

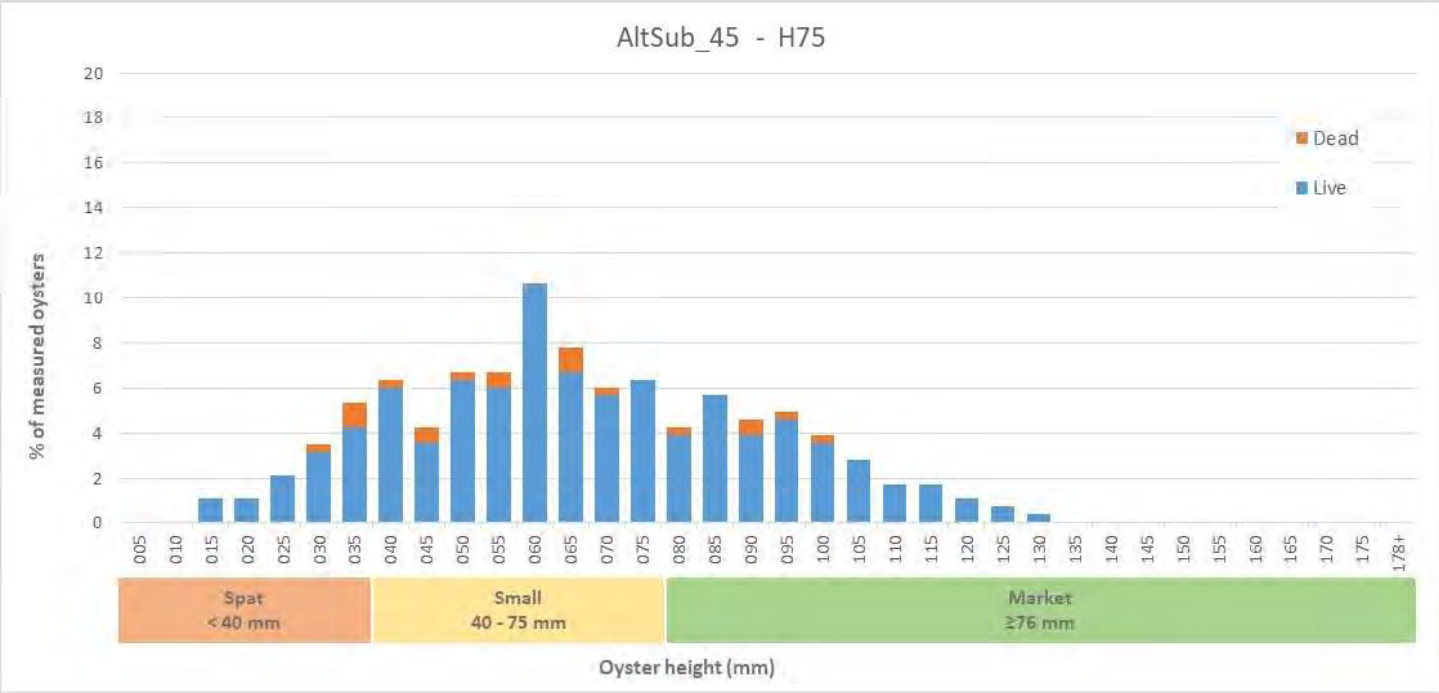
Reef Information	**Report reef ID**	**H75**
	Geodatabase Site_ID	AltSub_45
	Tributary	Harris Creek
	Reef area (acres)	2.13
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	10/4/2018
	# samples taken	4
	# live oysters measured	263
	# live oysters counted	682
	# dead oysters counted	30
	% of oysters that were dead	4%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	341.00
	Standard error of live density (#/m^2)	44.52
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	274.00
	Standard error of live density on stone	29.50
	Average live density on shell--all shell types (#/m^2)	61.00
	Standard error of live density on shell-aall shell types	27.14
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	245.71
	Standard error of live biomass	35.06
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	3.25
	Standard error of shell volume	0.48
	Average brown shell across all samples (%)	94%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.032
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H75 AltSub_45

Percent of Measured Oysters in the Market, Small, and Spat Categories



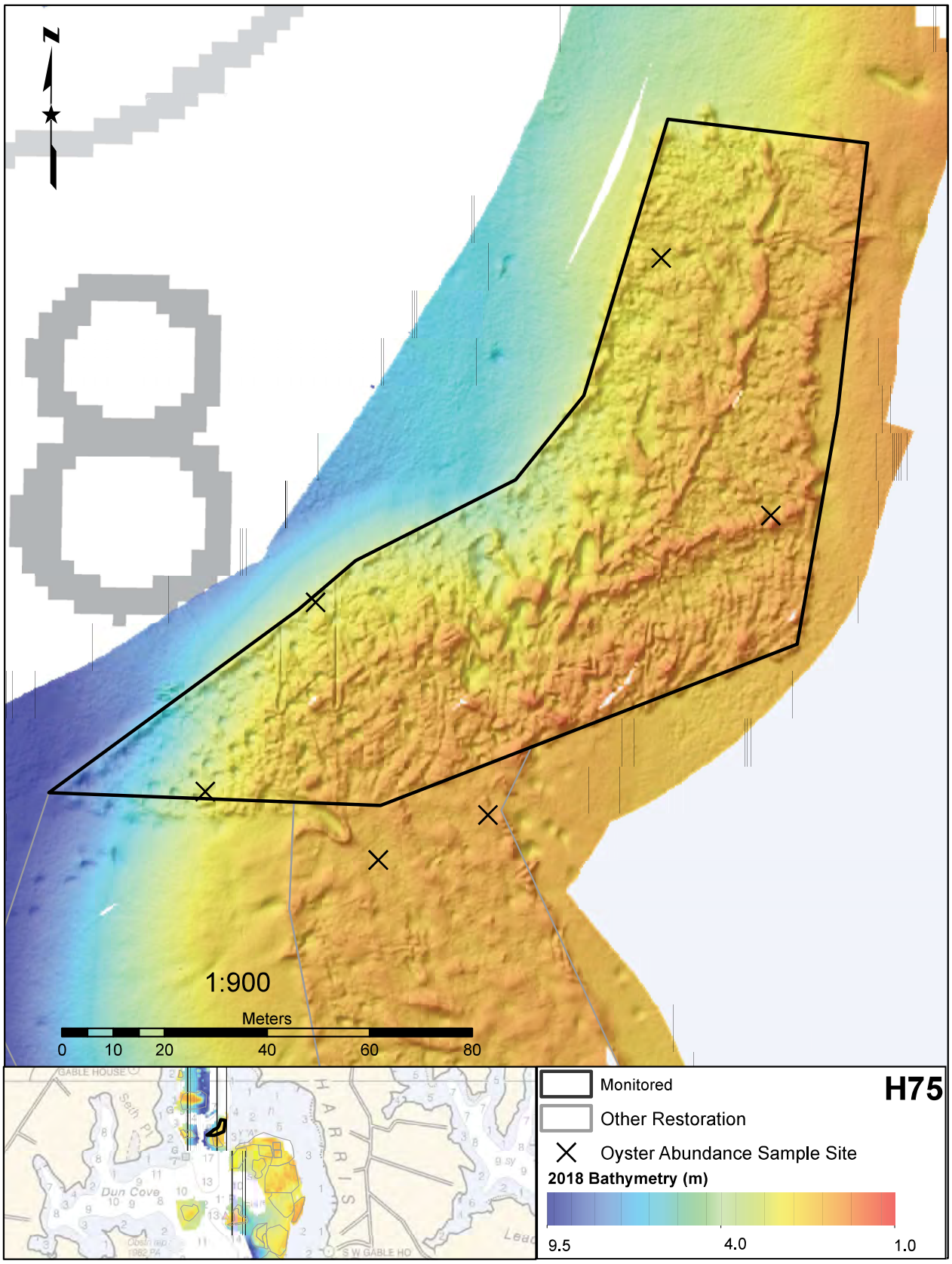
Shell Height of Oysters Measured on Reef



Reef H75 AltSub_45

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

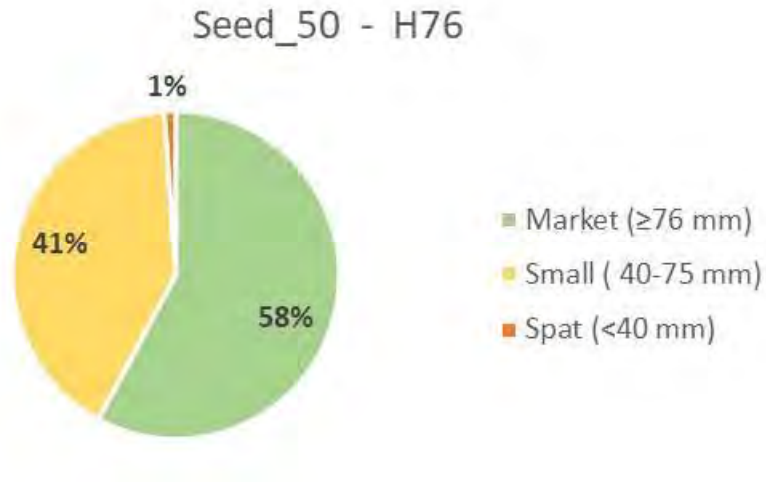


Reef H76 Seed_50

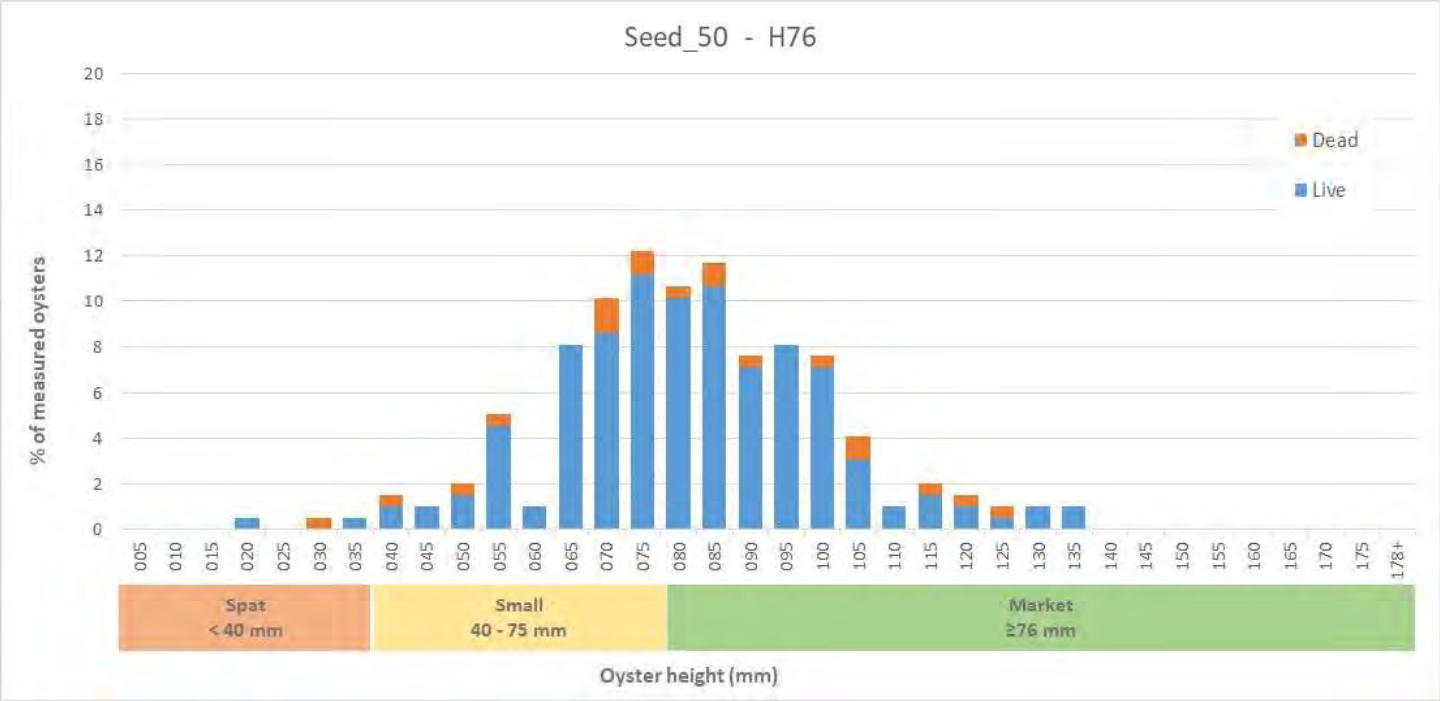
Reef Information	**Report reef ID**	**H76**
	Geodatabase Site_ID	Seed_50
	Tributary	Harris Creek
	Reef area (acres)	3.65
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2015
	Second year class replanting	2016
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Patent Tong
	Sample date	3/13/2019
	# samples taken	11
	# live oysters measured	178
	# live oysters counted	261
	# dead oysters counted	21
	% of oysters that were dead	7%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	No
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	14.74
	Standard error of live density (#/m^2)	5.13
	Number of samples meeting minimum threshold density (m^2)	3
	Percent of samples meeting minimum threshold density (%)	27%
	Number of samples meeting target density (m^2)	1
	Percent of samples meeting target density (%)	9%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	No
	Number of samples meeting minimum threshold biomass	3
	Reef area meeting minimum threshold biomass (%)	27%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	1
	Reef area meeting target biomass (%)	9%
	Average live biomass across reef (g dry weight per m^2)	15.81
	Standard error of live biomass	5.51
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	6.68
	Standard error of shell volume	2.08
	Average brown shell across all samples (%)	58%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	-0.018
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H76 Seed_50

Percent of Measured Oysters in the Market, Small, and Spat Categories



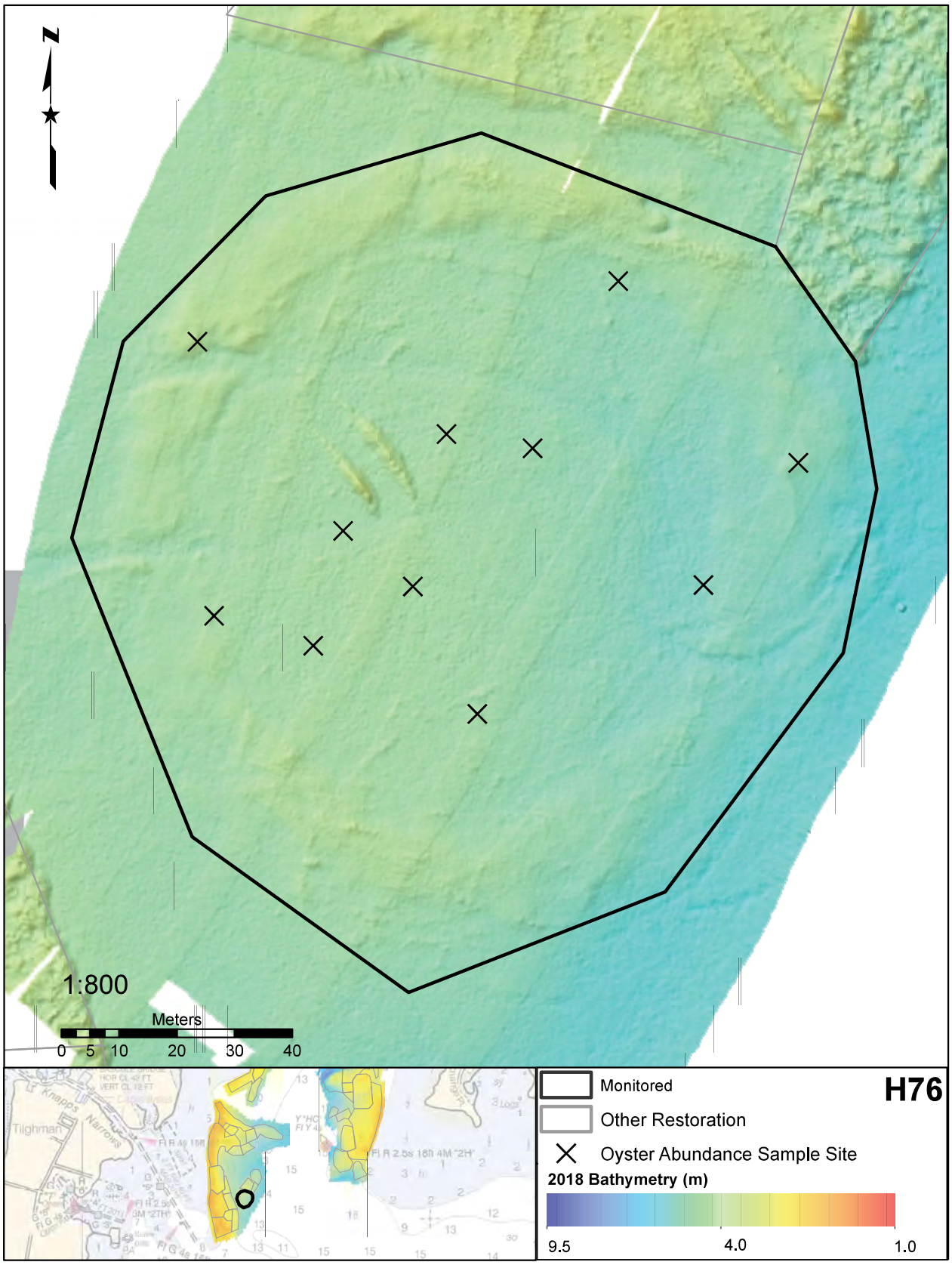
Shell Height of Oysters Measured on Reef



Reef H76 Seed_50

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

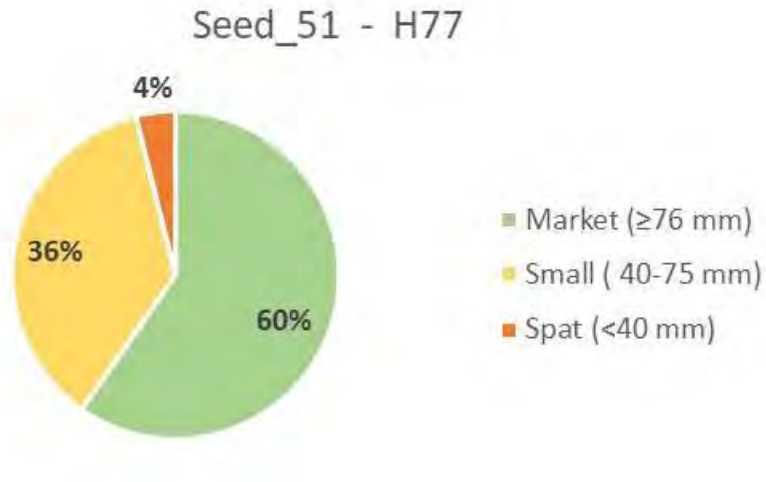


Reef H77 Seed_51

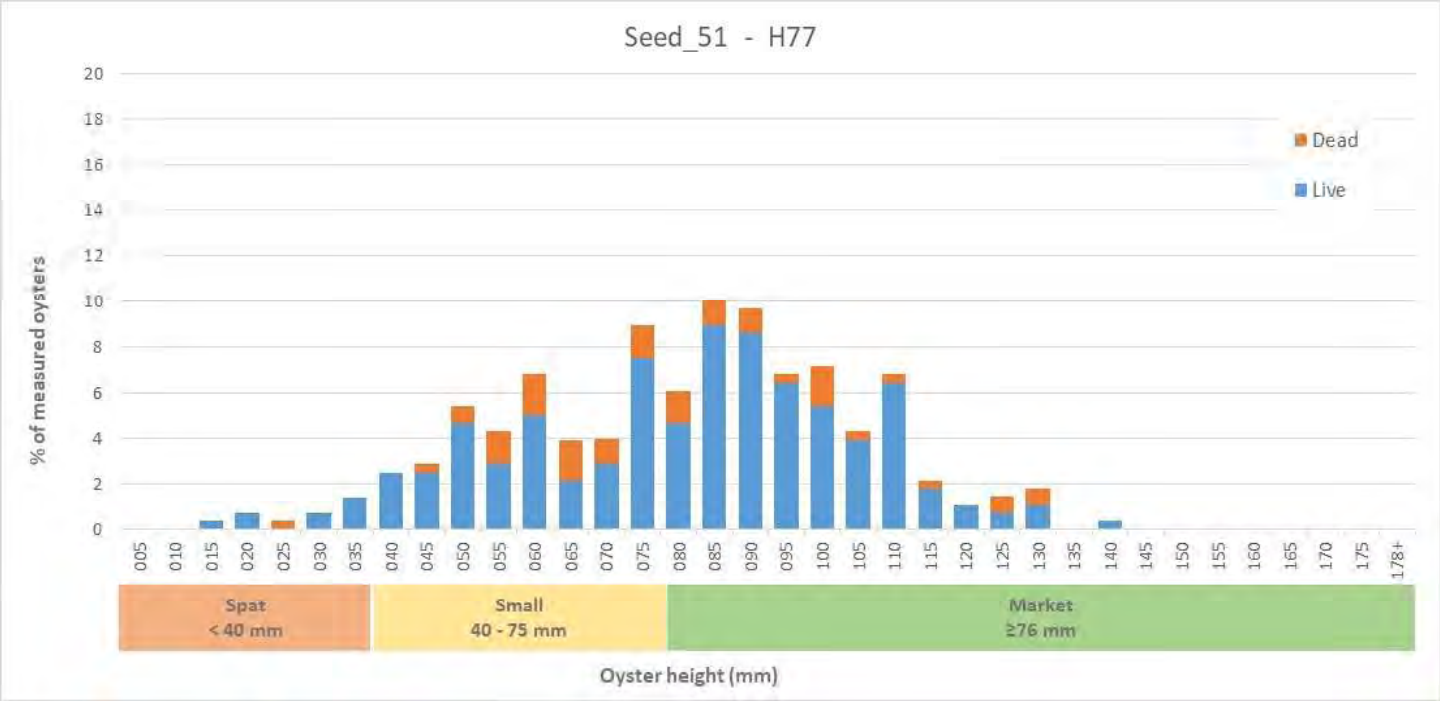
Reef Information	**Report reef ID**	**H77**
	Geodatabase Site_ID	Seed_51
	Tributary	Harris Creek
	Reef area (acres)	2.32
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Patent Tong
	Sample date	3/11/2019
	# samples taken	9
	# live oysters measured	231
	# live oysters counted	400
	# dead oysters counted	48
	% of oysters that were dead	11%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	27.61
	Standard error of live density (#/m^2)	5.60
	Number of samples meeting minimum threshold density (m^2)	7
	Percent of samples meeting minimum threshold density (%)	78%
	Number of samples meeting target density (m^2)	0
	Percent of samples meeting target density (%)	0%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	8
	Reef area meeting minimum threshold biomass (%)	89%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	33%
	Average live biomass across reef (g dry weight per m^2)	32.33
	Standard error of live biomass	7.27
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	12.42
	Standard error of shell volume	1.93
	Average brown shell across all samples (%)	79%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	-0.011
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H77 Seed_51

Percent of Measured Oysters in the Market, Small, and Spat Categories



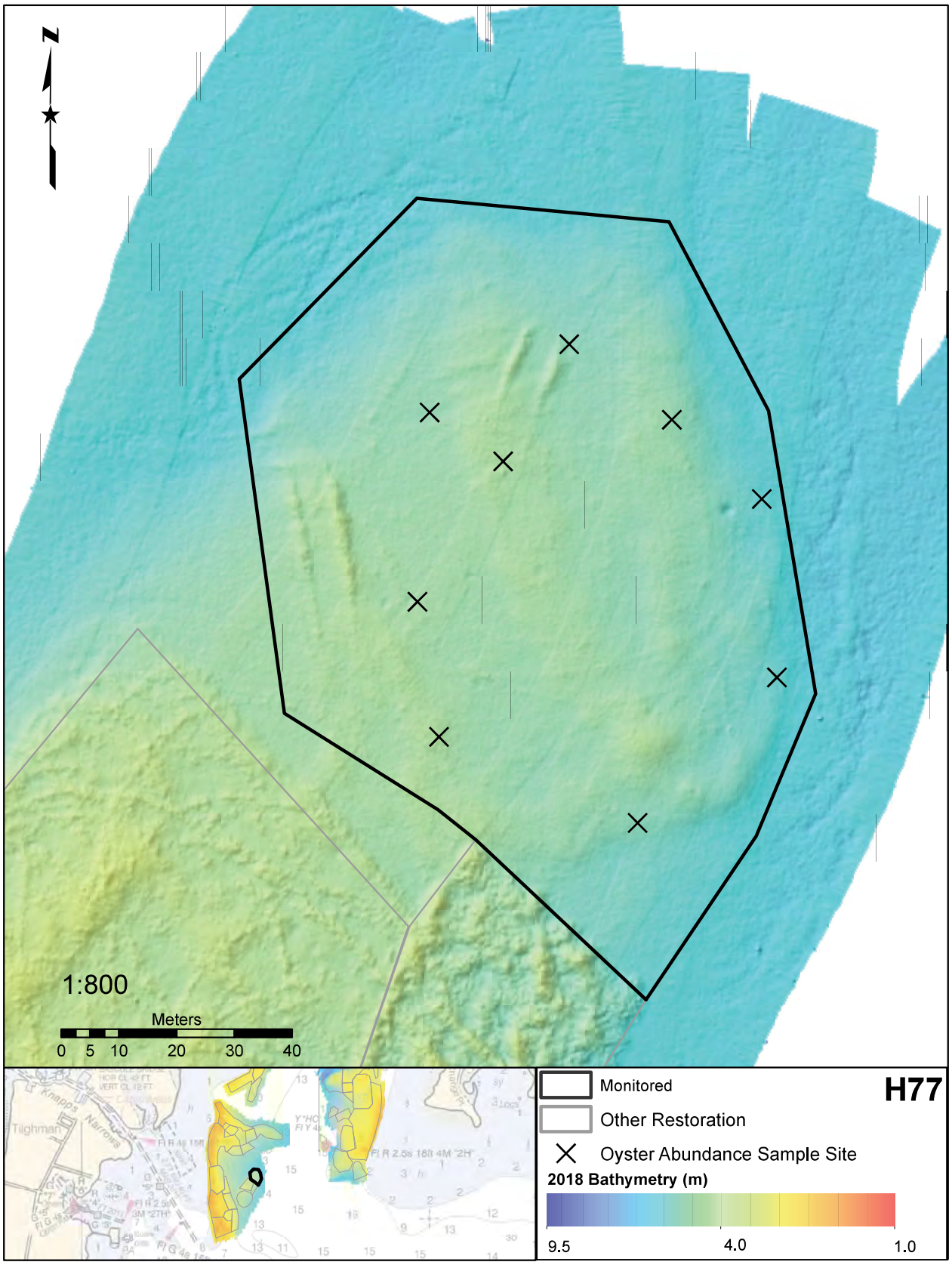
Shell Height of Oysters Measured on Reef



Reef H77 Seed_51

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

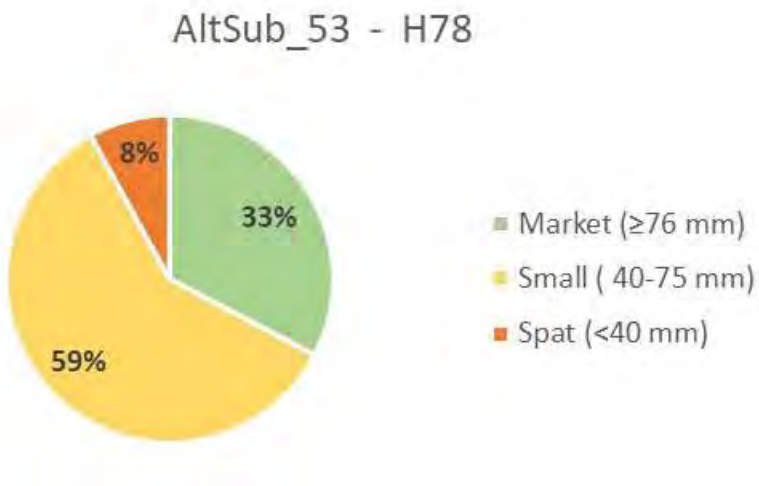


Reef H78 AltSub_53

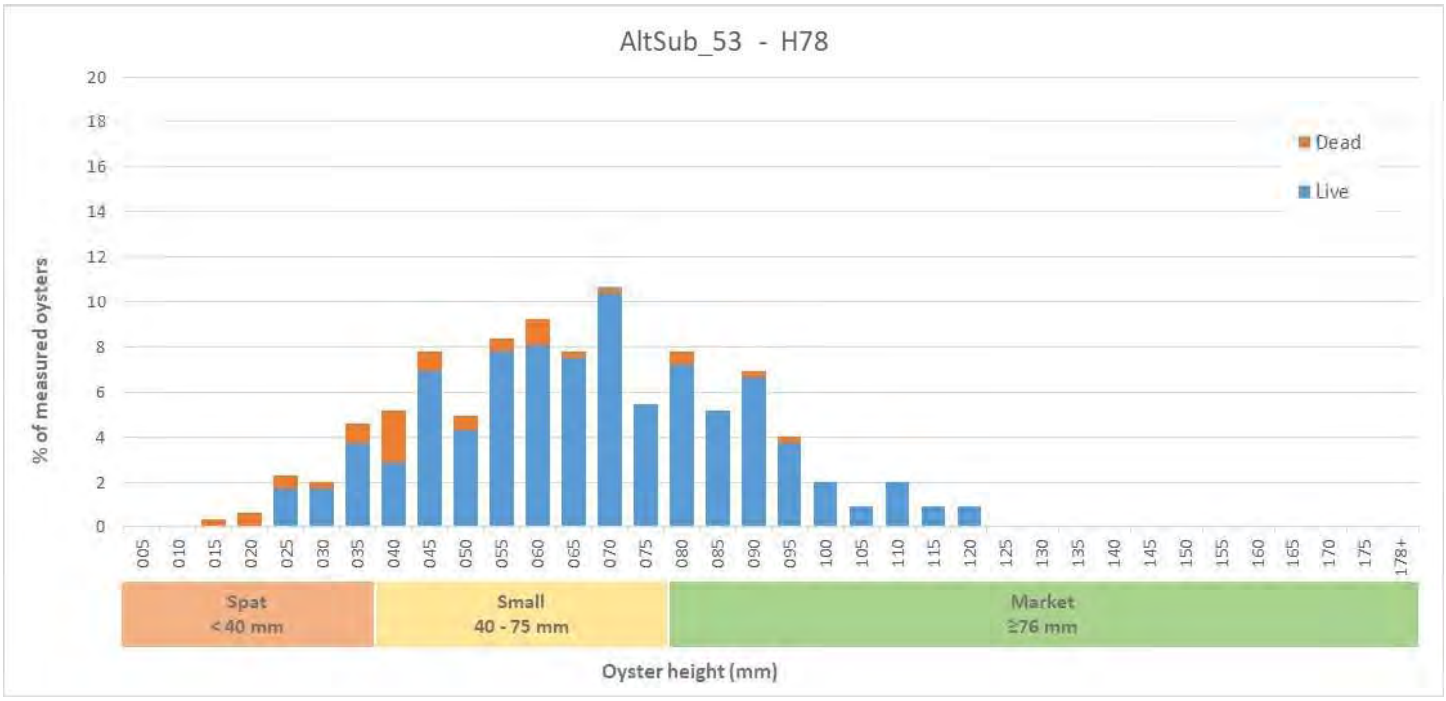
Reef Information	**Report reef ID**	**H78**
	Geodatabase Site_ID	AltSub_53
	Tributary	Harris Creek
	Reef area (acres)	0.96
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/17/2018
	# samples taken	5
	# live oysters measured	312
	# live oysters counted	1168
	# dead oysters counted	101
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	467.20
	Standard error of live density (#/m^2)	88.07
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	399.60
	Standard error of live density on stone	63.42
	Average live density on shell--all shell types (#/m^2)	67.60
	Standard error of live density on shell-aall shell types	26.18
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	324.33
	Standard error of live biomass	47.58
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	3.00
	Standard error of shell volume	0.71
	Average brown shell across all samples (%)	91%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.045
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H78 AltSub_53

Percent of Measured Oysters in the Market, Small, and Spat Categories



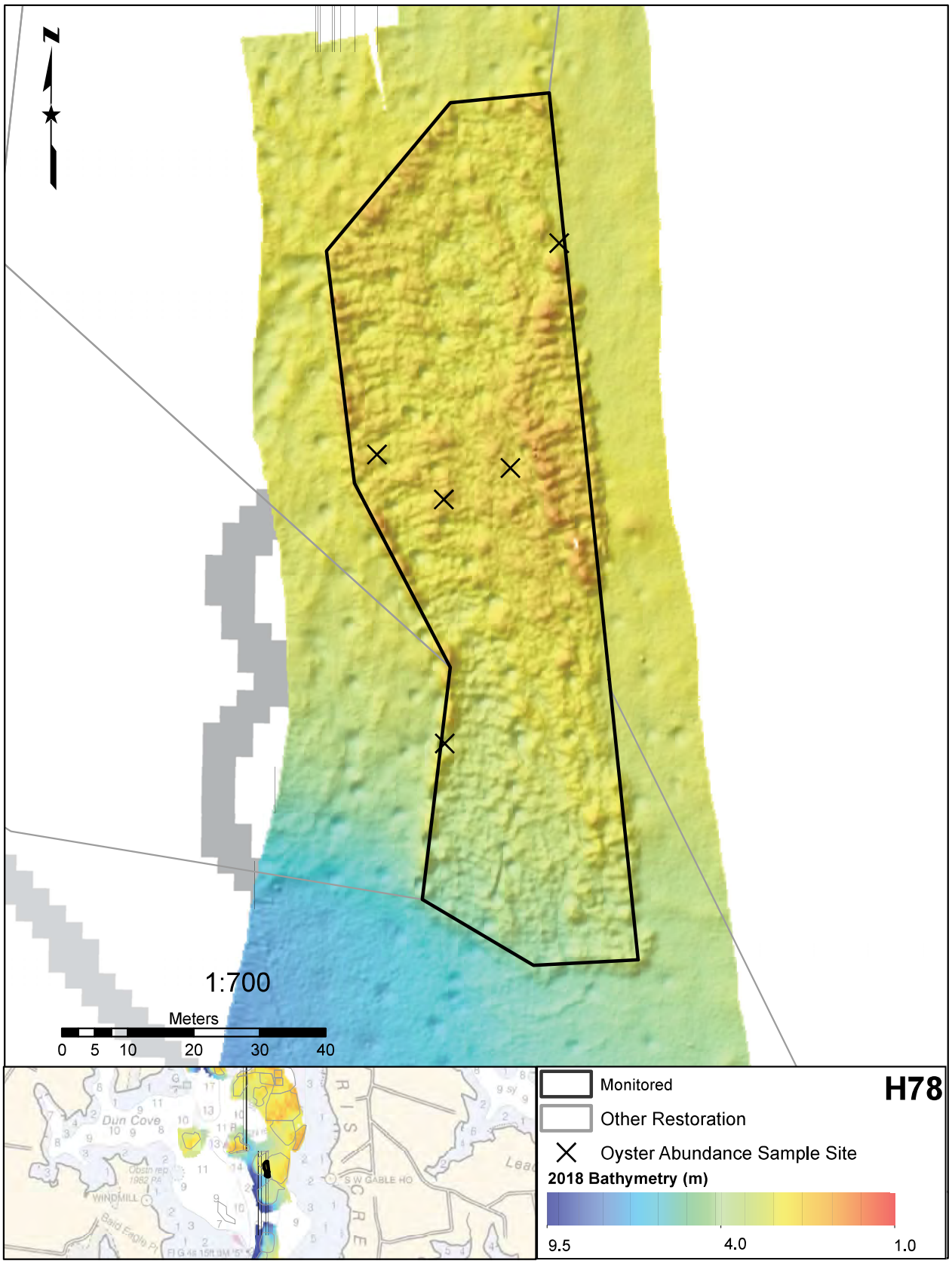
Shell Height of Oysters Measured on Reef



Reef H78 AltSub_53

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

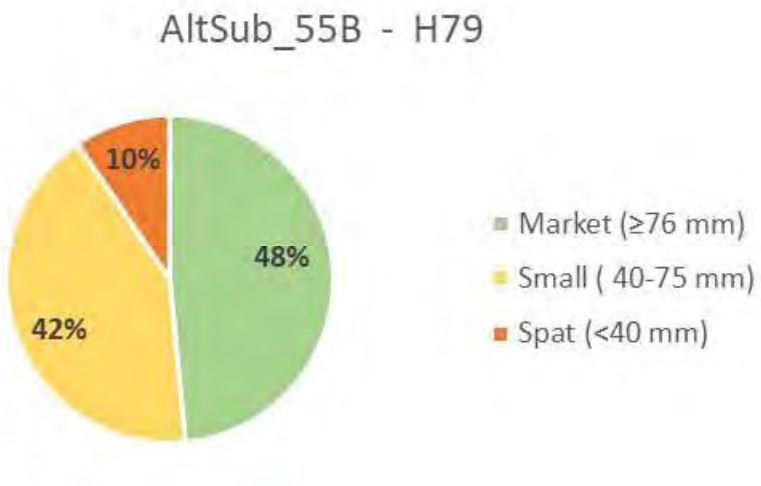


Reef H79 AltSub_55B

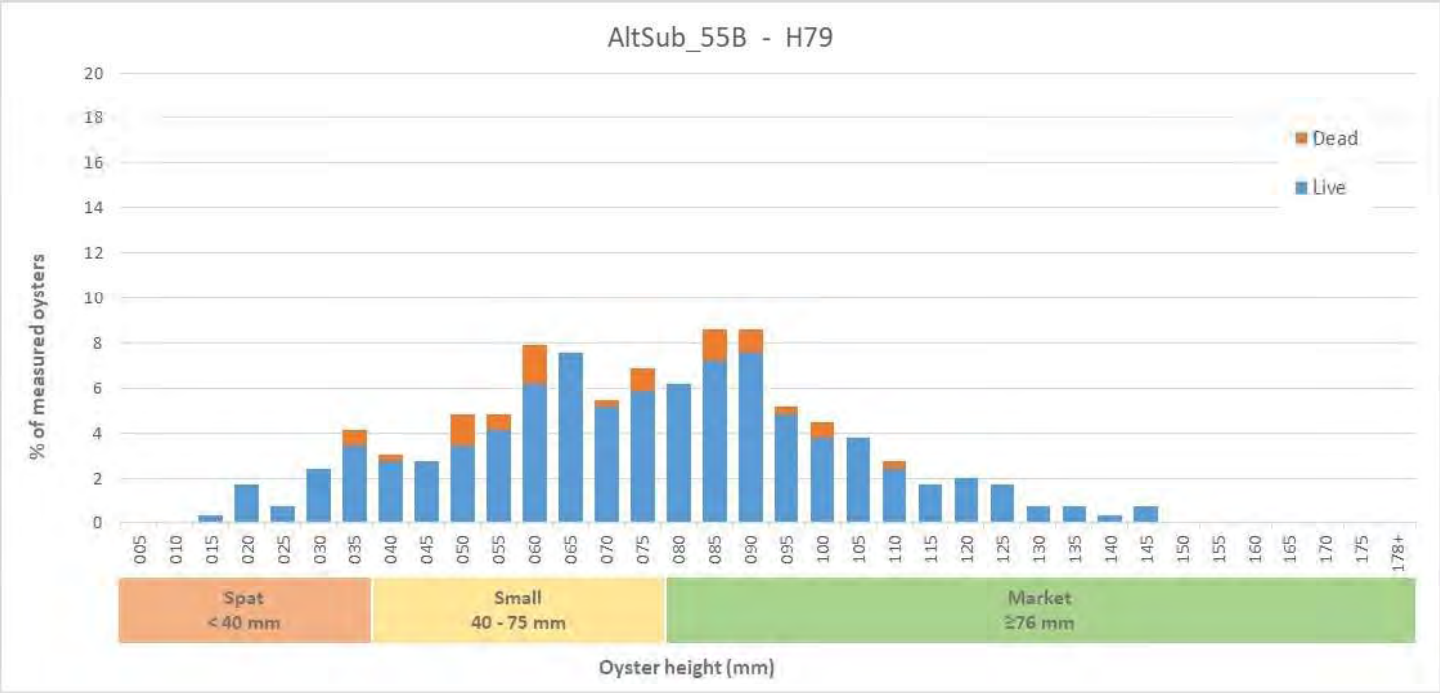
Reef Information	Report reef ID	H79
	Geodatabase Site_ID	AltSub_55B
	Tributary	Harris Creek
	Reef area (acres)	2.24
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/14/2018
	# samples taken	4
	# live oysters measured	262
	# live oysters counted	621
	# dead oysters counted	47
	% of oysters that were dead	7%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	310.50
	Standard error of live density (#/m^2)	105.37
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	170.00
	Standard error of live density on stone	78.77
	Average live density on shell--all shell types (#/m^2)	136.50
	Standard error of live density on shell-aall shell types	56.08
	Average live density on clam shell (#/m^2)	0.50
	Standard error of live density on clam shell	0.50
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	258.69
	Standard error of live biomass	77.48
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	17.25
	Standard error of shell volume	9.89
	Average brown shell across all samples (%)	88%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.035
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H79 AltSub_55B

Percent of Measured Oysters in the Market, Small, and Spat Categories



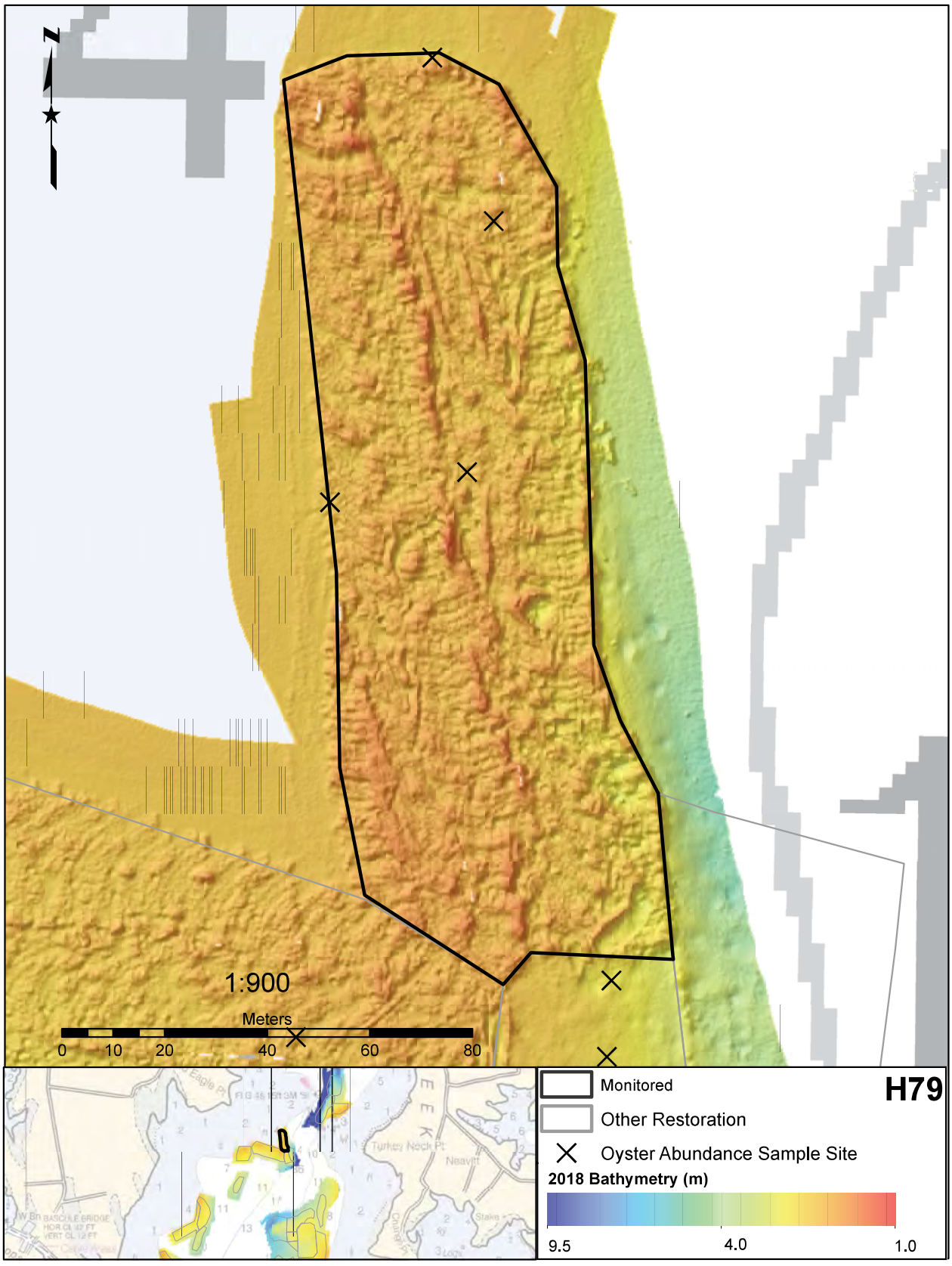
Shell Height of Oysters Measured on Reef



Reef H79 AltSub_55B

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

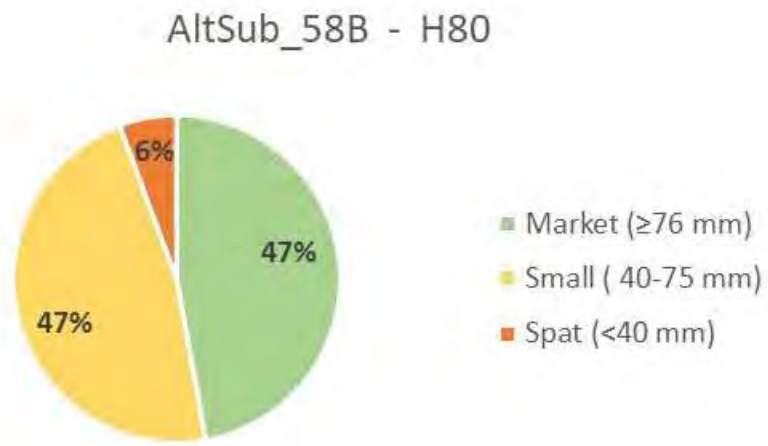


Reef H80 AltSub_58B

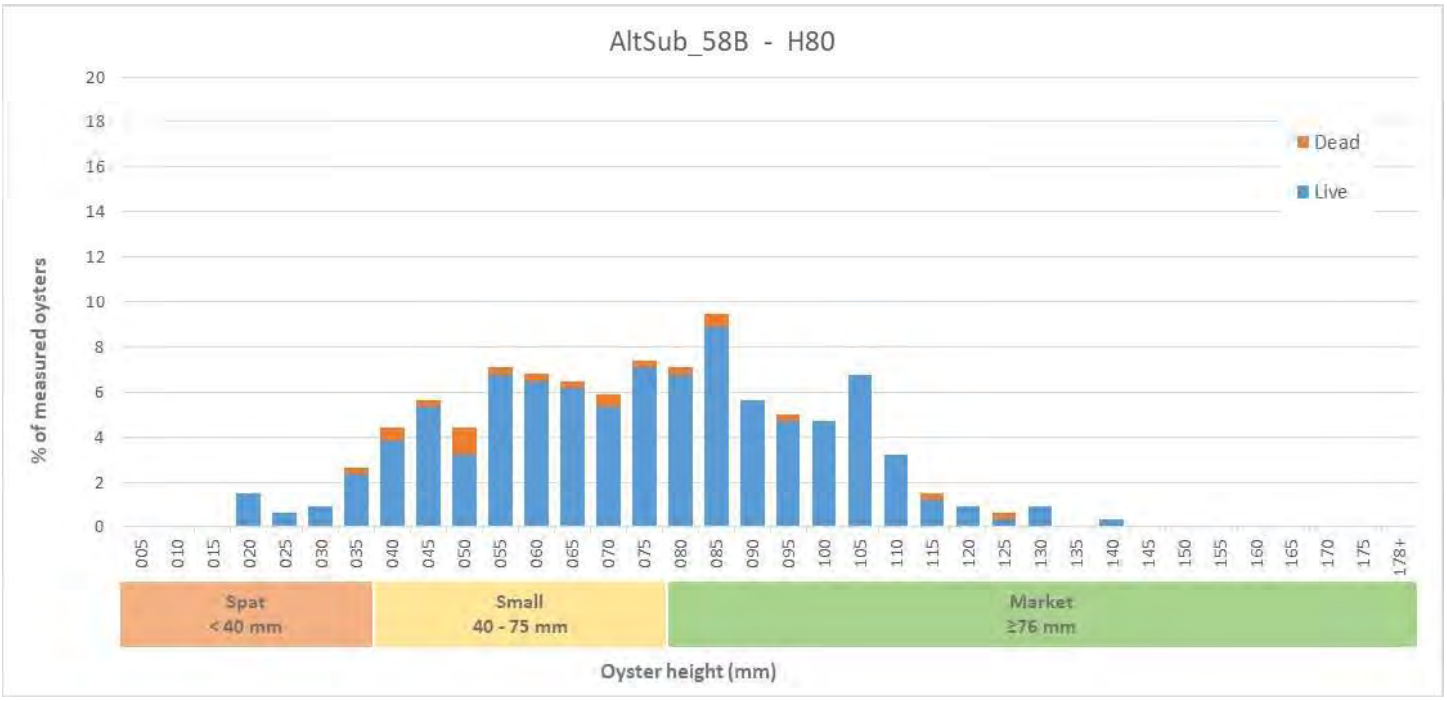
Reef Information	**Report reef ID**	**H80**
	Geodatabase Site_ID	AltSub_58B
	Tributary	Harris Creek
	Reef area (acres)	2.28
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/17/2018
	# samples taken	4
	# live oysters measured	318
	# live oysters counted	539
	# dead oysters counted	32
	% of oysters that were dead	6%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	269.50
	Standard error of live density (#/m^2)	37.14
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	119.00
	Standard error of live density on stone	37.55
	Average live density on shell--all shell types (#/m^2)	150.50
	Standard error of live density on shell-aall shell types	68.30
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	226.61
	Standard error of live biomass	29.89
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	16.75
	Standard error of shell volume	11.95
	Average brown shell across all samples (%)	84%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.029
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H80 AltSub_58B

Percent of Measured Oysters in the Market, Small, and Spat Categories



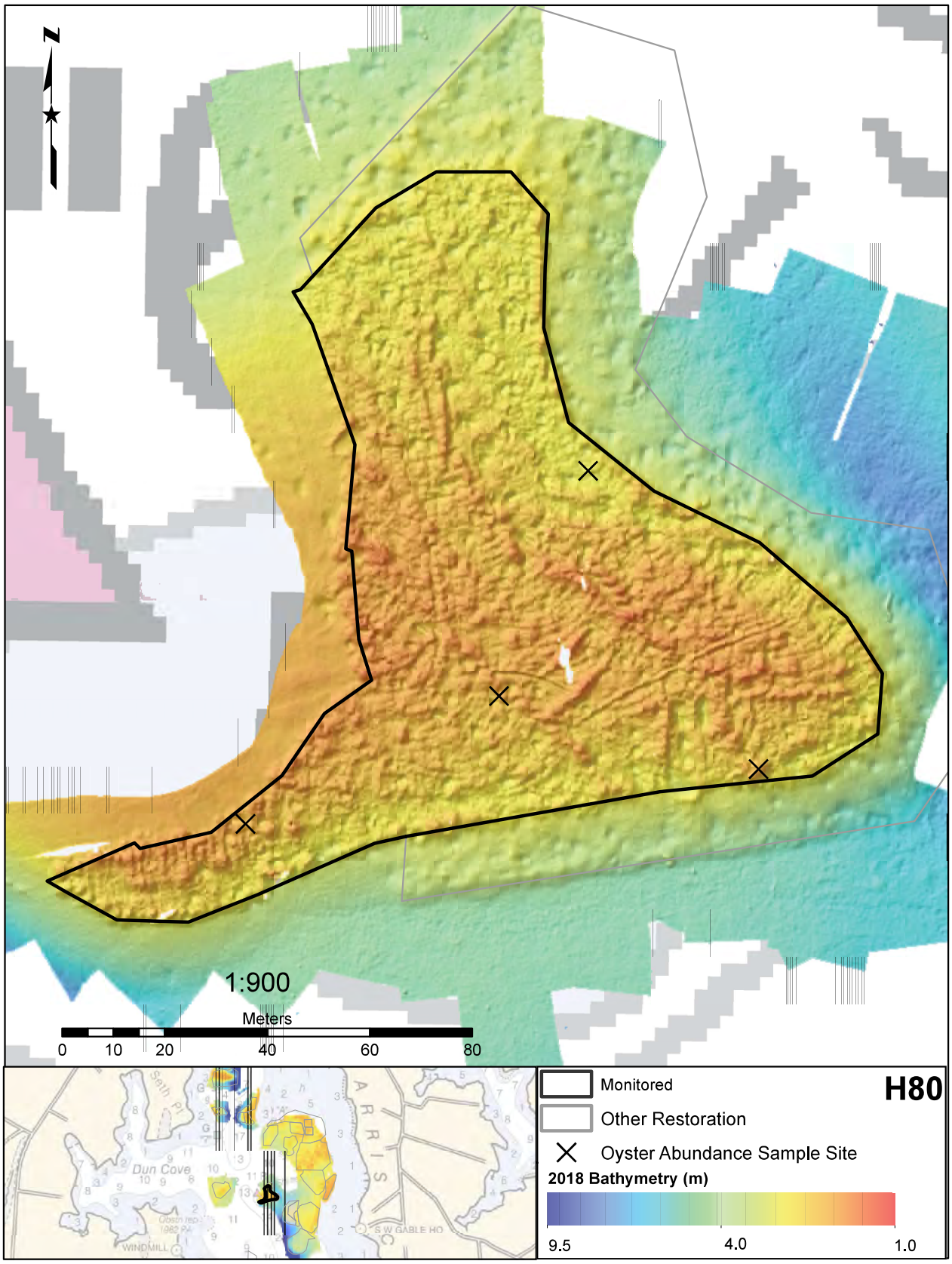
Shell Height of Oysters Measured on Reef



Reef H80 AltSub_58B

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

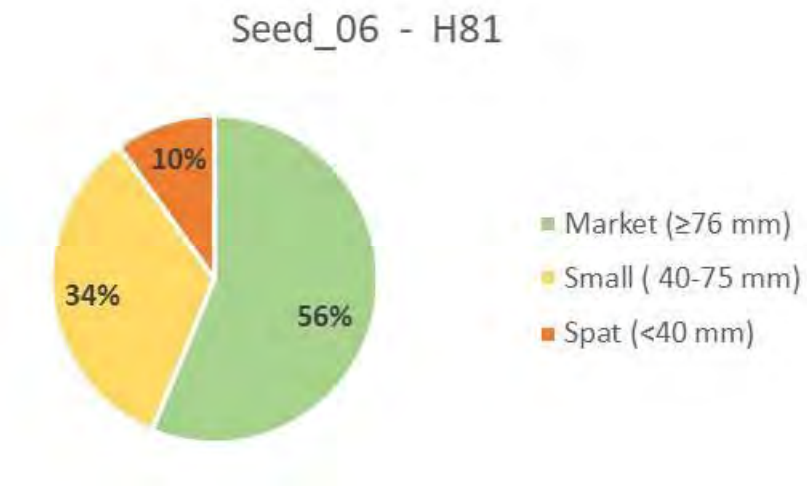


Reef H81 Seed_06

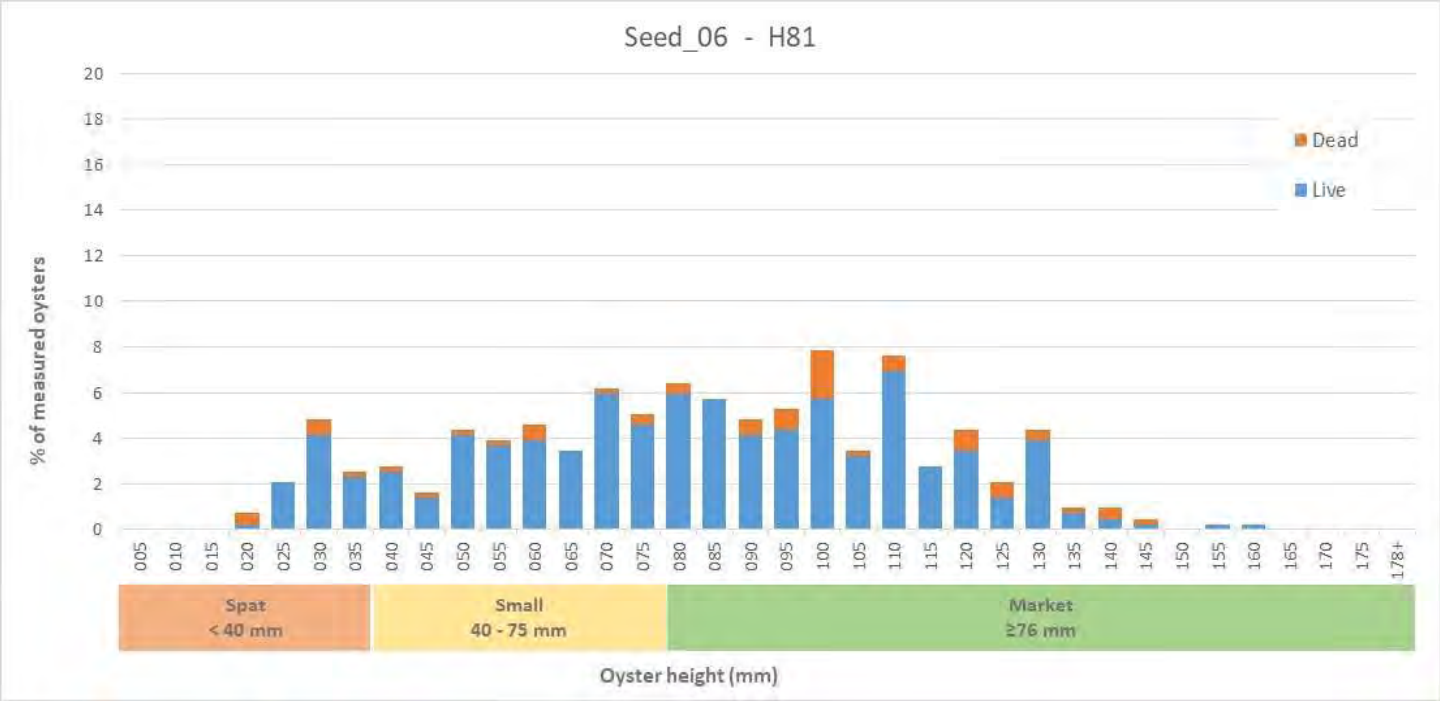
Reef Information	Report reef ID	H81
	Geodatabase Site_ID	Seed_06
	Tributary	Harris Creek
	Reef area (acres)	1.27
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2016
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Patent Tong
	Sample date	3/20/2019
	# samples taken	11
	# live oysters measured	382
	# live oysters counted	705
	# dead oysters counted	58
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	39.81
	Standard error of live density (#/m^2)	8.16
	Number of samples meeting minimum threshold density (m^2)	10
	Percent of samples meeting minimum threshold density (%)	91%
	Number of samples meeting target density (m^2)	2
	Percent of samples meeting target density (%)	18%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	10
	Reef area meeting minimum threshold biomass (%)	91%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	27%
	Average live biomass across reef (g dry weight per m^2)	44.09
	Standard error of live biomass	8.08
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	12.82
	Standard error of shell volume	1.68
	Average brown shell across all samples (%)	76%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.02
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H81 Seed_06

Percent of Measured Oysters in the Market, Small, and Spat Categories



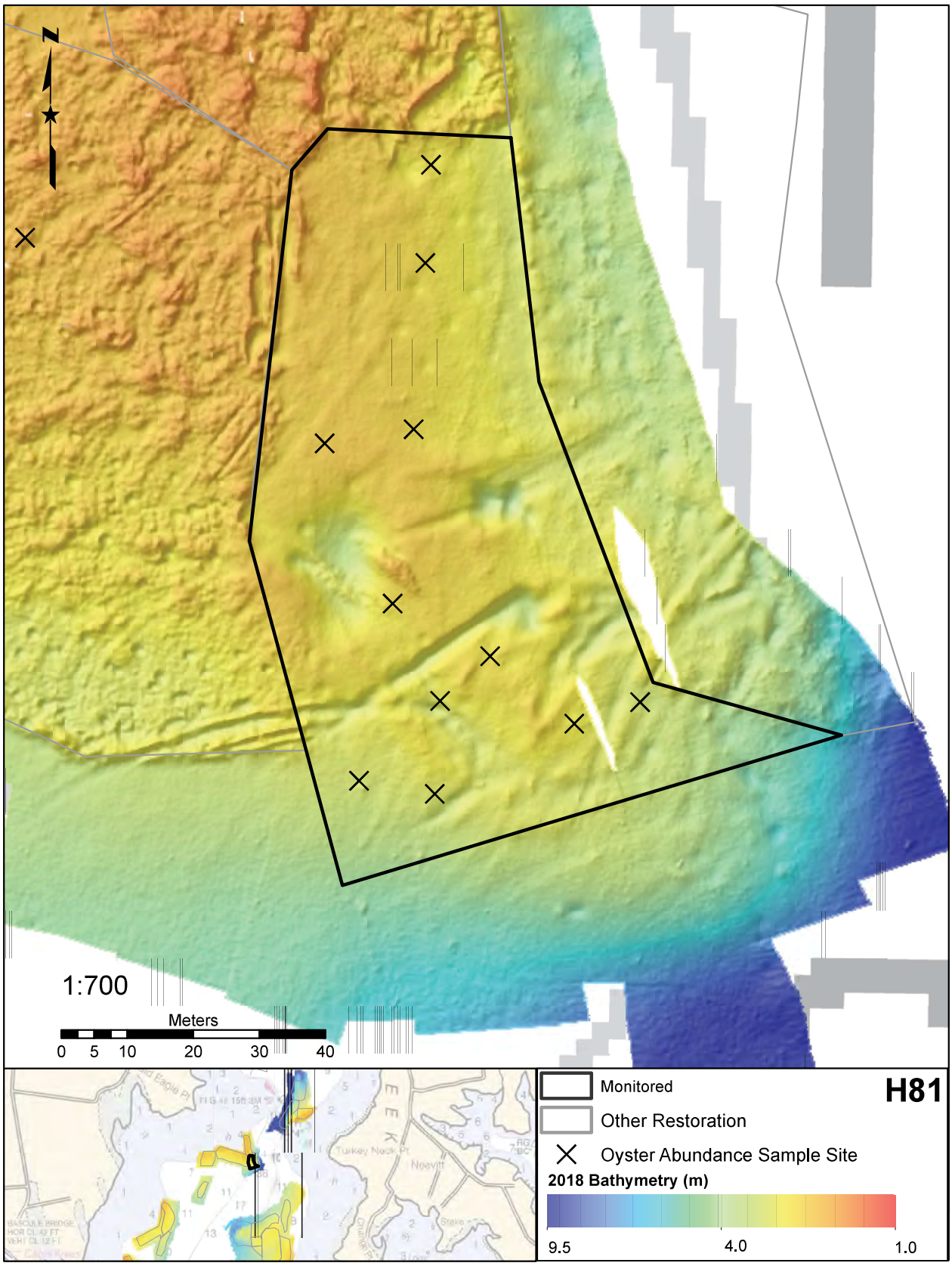
Shell Height of Oysters Measured on Reef



Reef H81 Seed_06

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

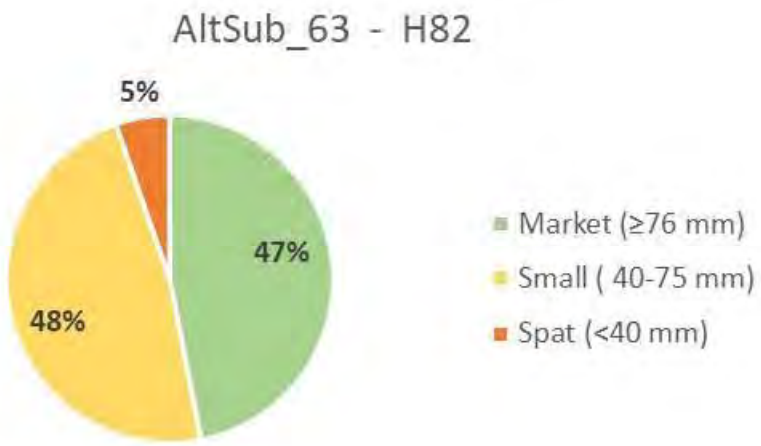


Reef H82 AltSub_63

Reef Information	**Report reef ID**	**H82**
	Geodatabase Site_ID	AltSub_63
	Tributary	Harris Creek
	Reef area (acres)	1.24
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	9/27/2018
	# samples taken	4
	# live oysters measured	245
	# live oysters counted	588
	# dead oysters counted	43
	% of oysters that were dead	7%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	294.00
	Standard error of live density (#/m^2)	45.66
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	222.50
	Standard error of live density on stone	29.35
	Average live density on shell--all shell types (#/m^2)	70.50
	Standard error of live density on shell-aall shell types	18.03
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	248.49
	Standard error of live biomass	32.96
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	1.75
	Standard error of shell volume	0.48
	Average brown shell across all samples (%)	76%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.071
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H82 AltSub_63

Percent of Measured Oysters in the Market, Small, and Spat Categories

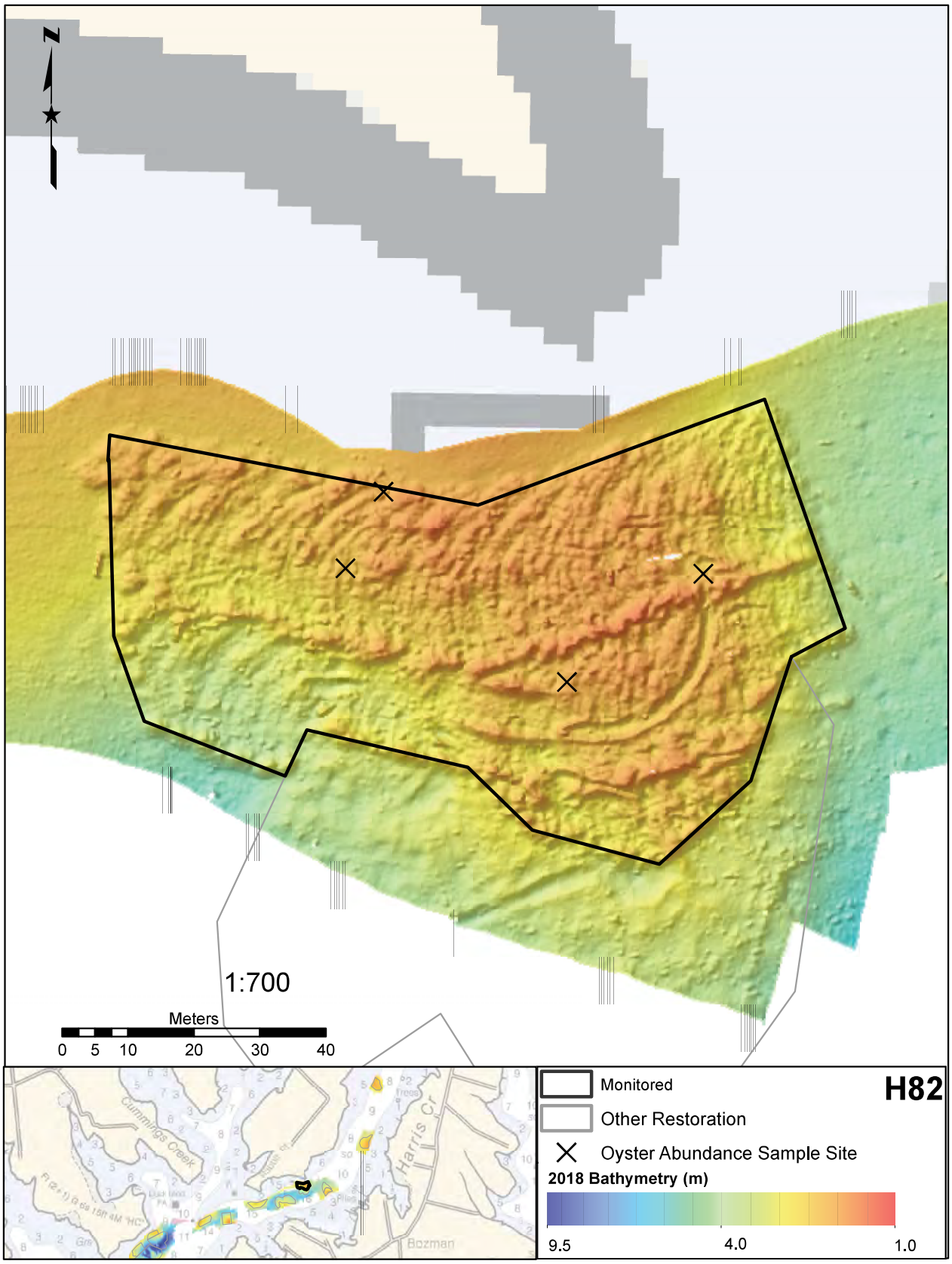


Shell Height of Oysters Measured on Reef

Reef H82 AltSub_63

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

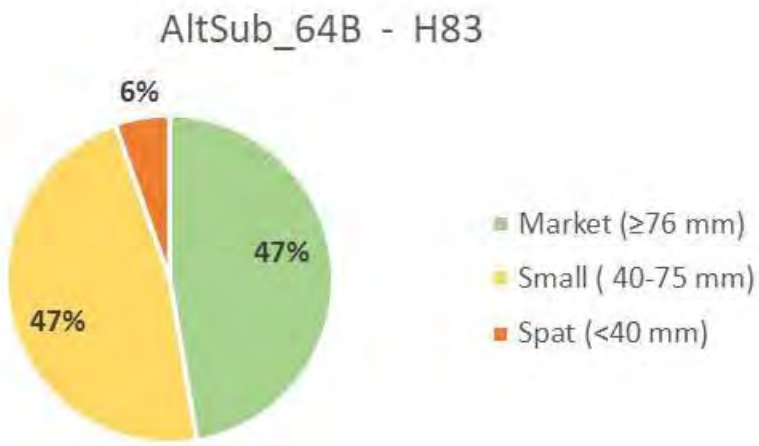


Reef H83 AltSub_64B

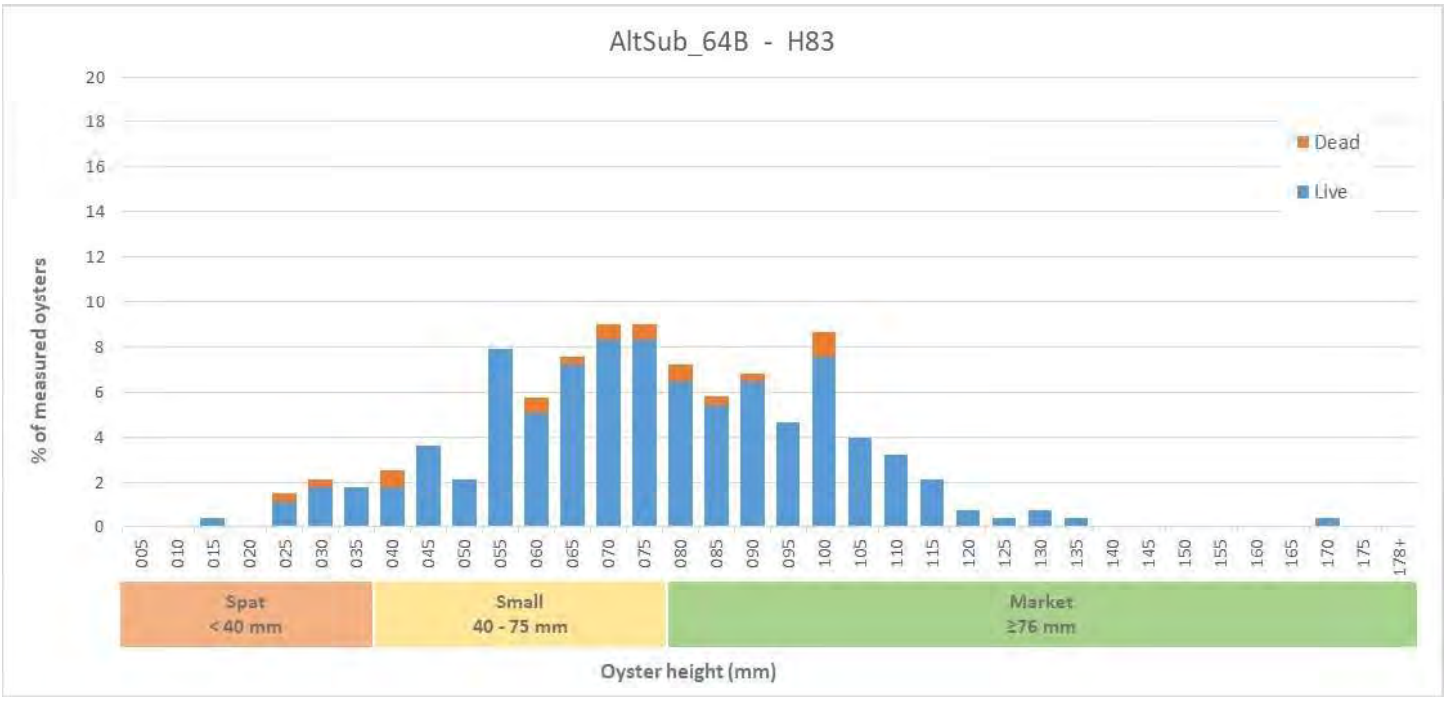
Reef Information	**Report reef ID**	**H83**
	Geodatabase Site_ID	AltSub_64B
	Tributary	Harris Creek
	Reef area (acres)	0.95
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	12/6/2018
	# samples taken	4
	# live oysters measured	259
	# live oysters counted	446
	# dead oysters counted	22
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	223.00
	Standard error of live density (#/m^2)	19.54
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	136.50
	Standard error of live density on stone	30.06
	Average live density on shell--all shell types (#/m^2)	85.00
	Standard error of live density on shell-aall shell types	13.48
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	194.37
	Standard error of live biomass	15.39
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	4.25
	Standard error of shell volume	1.31
	Average brown shell across all samples (%)	93%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.048
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H83 AltSub_64B

Percent of Measured Oysters in the Market, Small, and Spat Categories



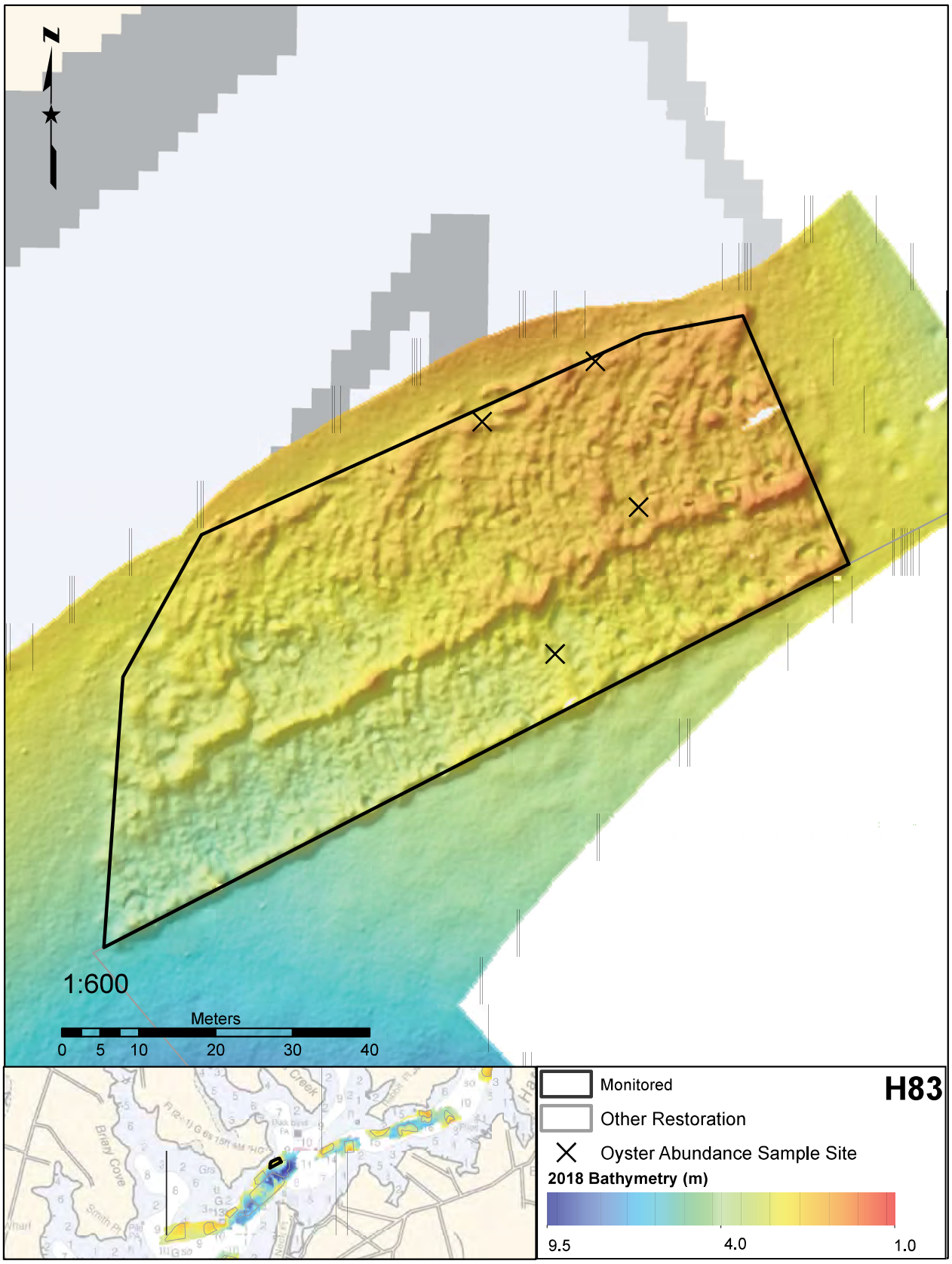
Shell Height of Oysters Measured on Reef



Reef H83 AltSub_64B

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

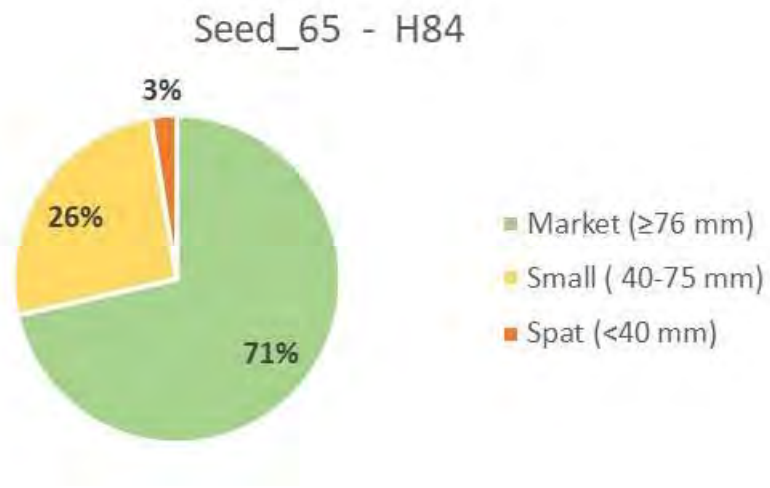


Reef H84 Seed_65

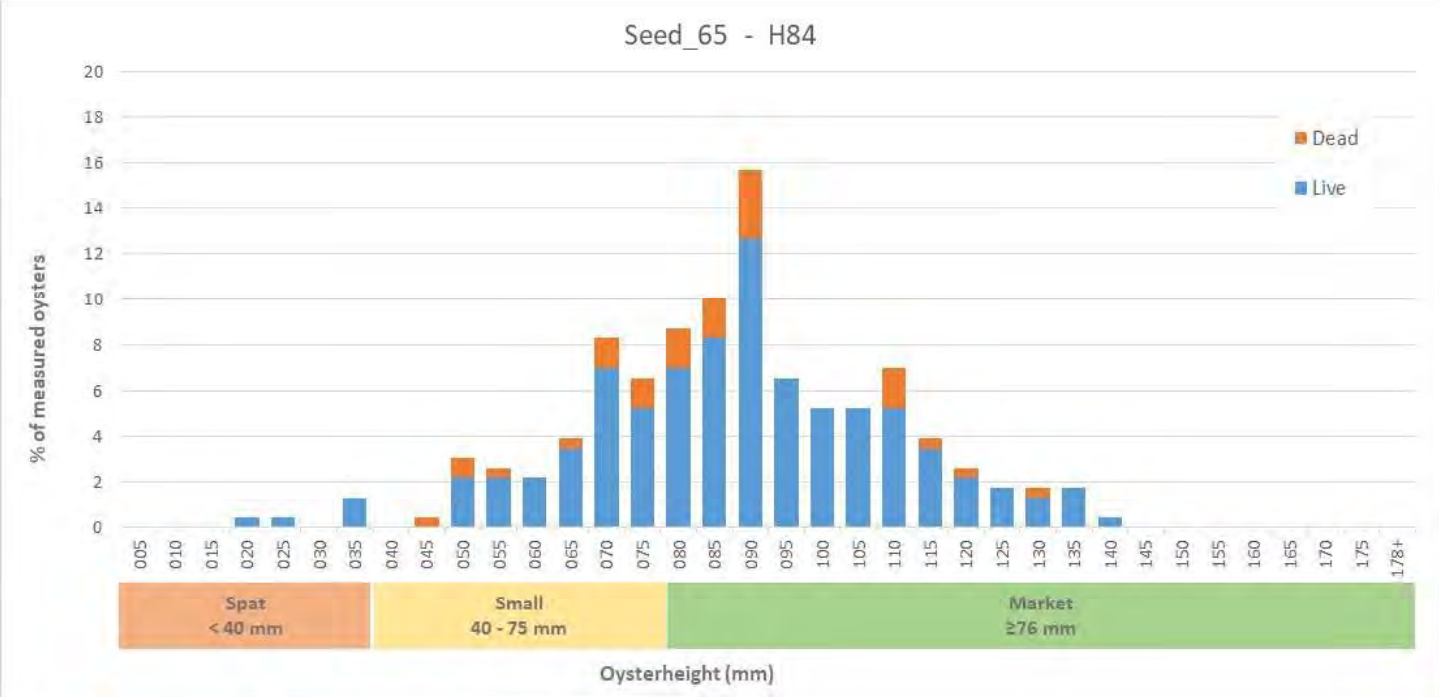
Reef Information	**Report reef ID**	**H84**
	Geodatabase Site_ID	Seed_65
	Tributary	Harris Creek
	Reef area (acres)	1.4
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Patent Tong
	Sample date	3/13/2019
	# samples taken	11
	# live oysters measured	196
	# live oysters counted	305
	# dead oysters counted	33
	% of oysters that were dead	10%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	17.22
	Standard error of live density (#/m^2)	5.66
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	45%
	Number of samples meeting target density (m^2)	1
	Percent of samples meeting target density (%)	9%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	45%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	1
	Reef area meeting target biomass (%)	9%
	Average live biomass across reef (g dry weight per m^2)	21.99
	Standard error of live biomass	7.54
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	5.43
	Standard error of shell volume	1.81
	Average brown shell across all samples (%)	65%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.007
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H84 Seed_65

Percent of Measured Oysters in the Market, Small, and Spat Categories



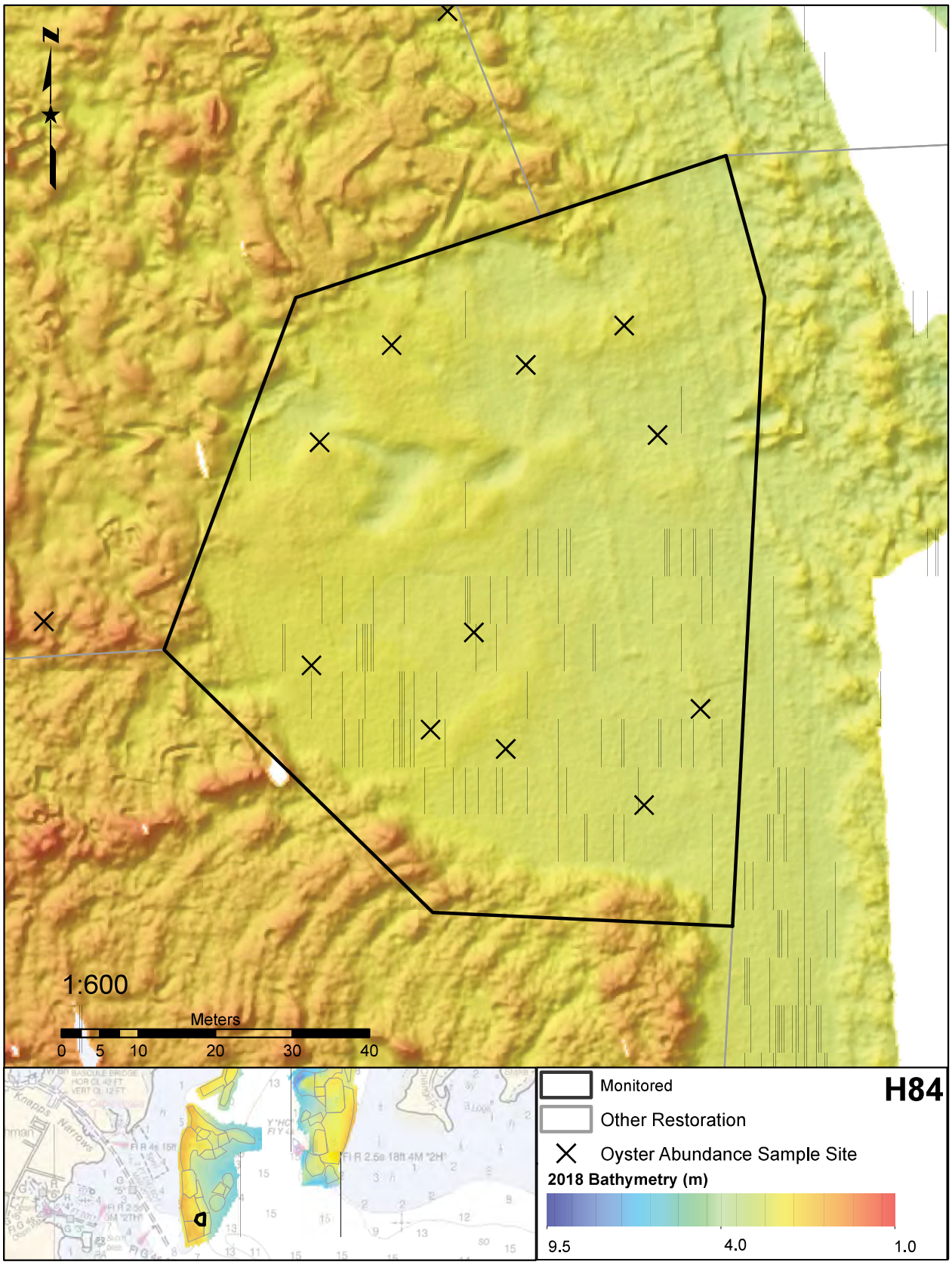
Shell Height of Oysters Measured on Reef



Reef H84 Seed_65

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.



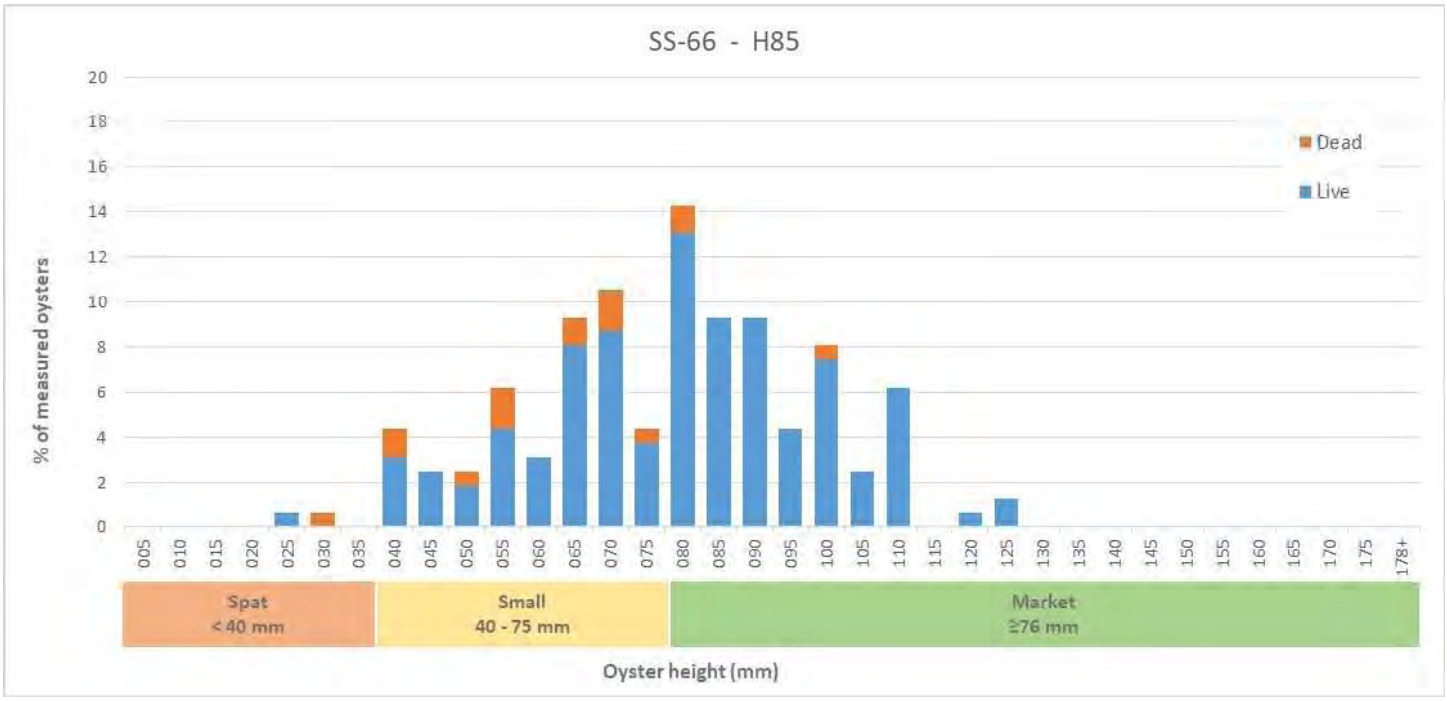
Reef H85 SS_66

Reef Information	**Report reef ID**	**H85**
	Geodatabase Site_ID	SS_66
	Tributary	Harris Creek
	Reef area (acres)	4.00
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	2/27/2019
	# samples taken	5
	# live oysters measured	145
	# live oysters counted	187
	# dead oysters counted	16
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	74.80
	Standard error of live density (#/m^2)	23.61
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	3
	Percent of samples meeting target density (%)	60%
	Average live density on stone (#/m^2)	28.80
	Standard error of live density on stone	12.32
	Average live density on shell--all shell types (#/m^2)	46.00
	Standard error of live density on shell-aall shell types	17.89
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	60%
	Average live biomass across reef (g dry weight per m^2)	69.81
	Standard error of live biomass	23.55
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	7.84
	Standard error of shell volume	4.82
	Average brown shell across all samples (%)	86%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.007
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H85 SS_66

Percent of Measured Oysters in the Market, Small, and Spat Categories

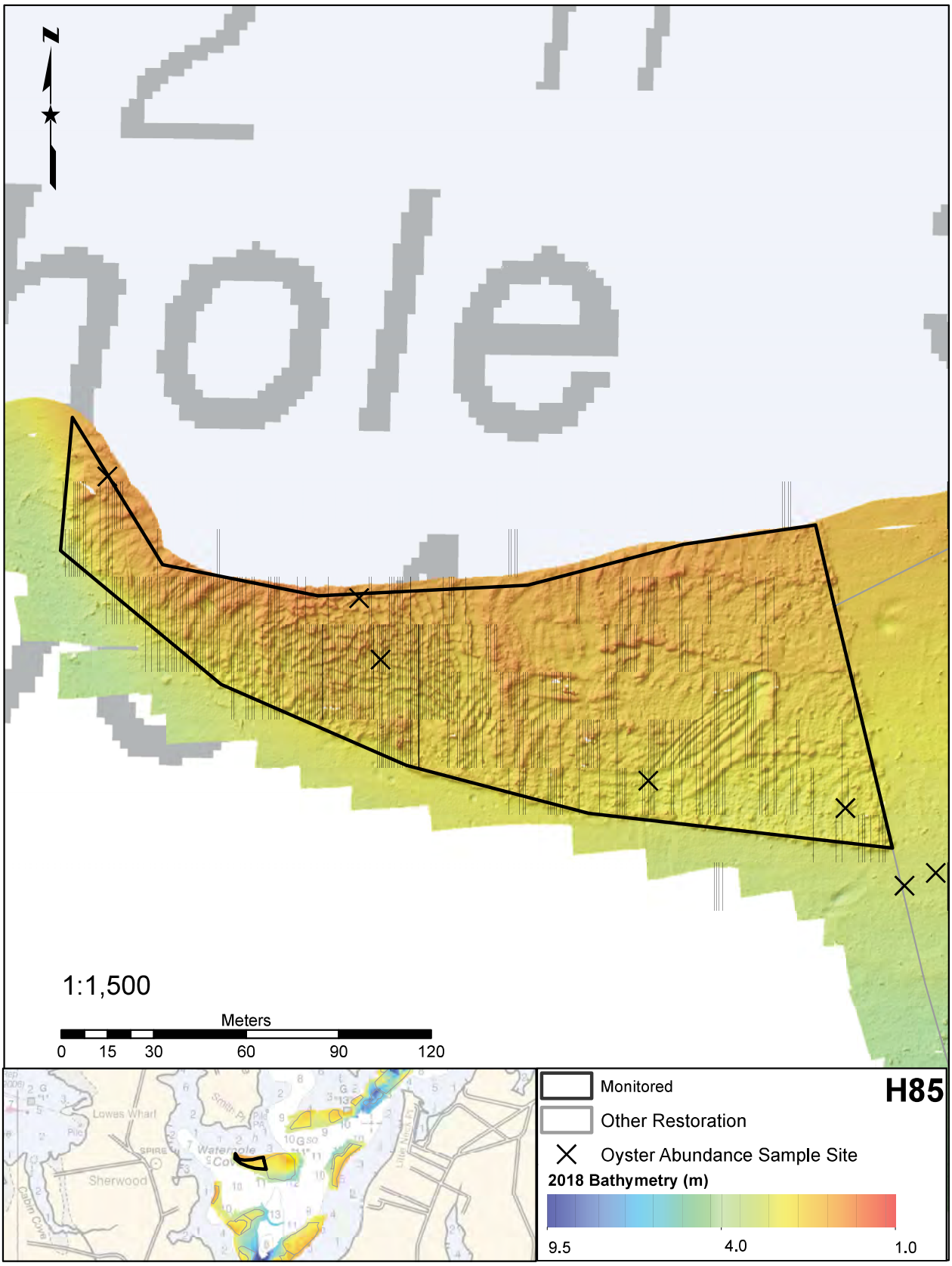
Shell Height of Oysters Measured on Reef



Reef H85 SS_66

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

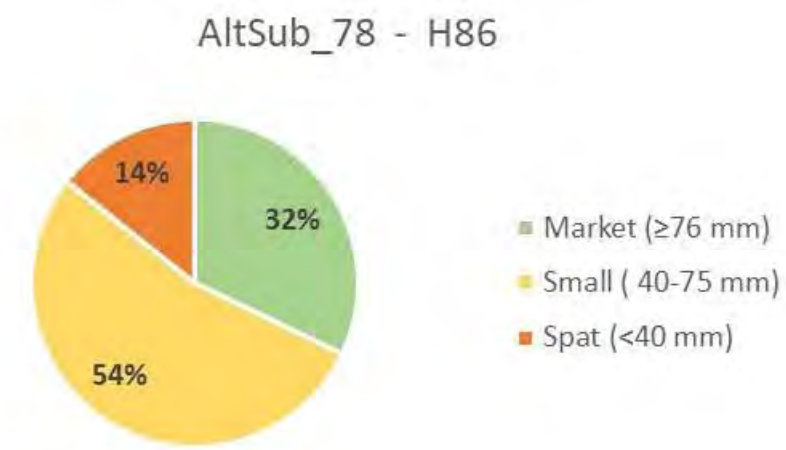


Reef H86 AltSub_67

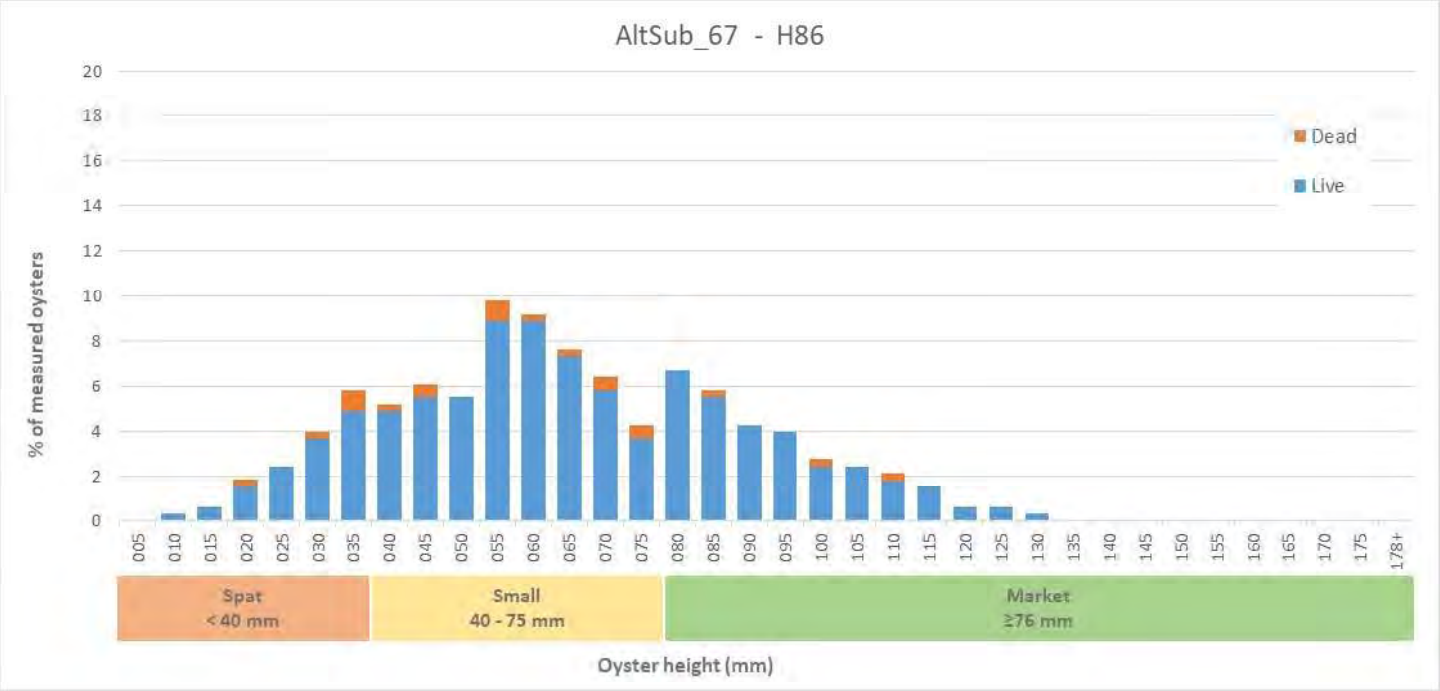
Reef Information	**Report reef ID**	**H86**
	Geodatabase Site_ID	AltSub_67
	Tributary	Harris Creek
	Reef area (acres)	1.15
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	12/13/2018
	# samples taken	5
	# live oysters measured	307
	# live oysters counted	770
	# dead oysters counted	42
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	308.00
	Standard error of live density (#/m^2)	25.35
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	246.40
	Standard error of live density on stone	21.28
	Average live density on shell--all shell types (#/m^2)	60.40
	Standard error of live density on shell-aall shell types	4.87
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	205.84
	Standard error of live biomass	16.45
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	2.80
	Standard error of shell volume	0.20
	Average brown shell across all samples (%)	92%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.024
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H86 AltSub_67

Percent of Measured Oysters in the Market, Small, and Spat Categories



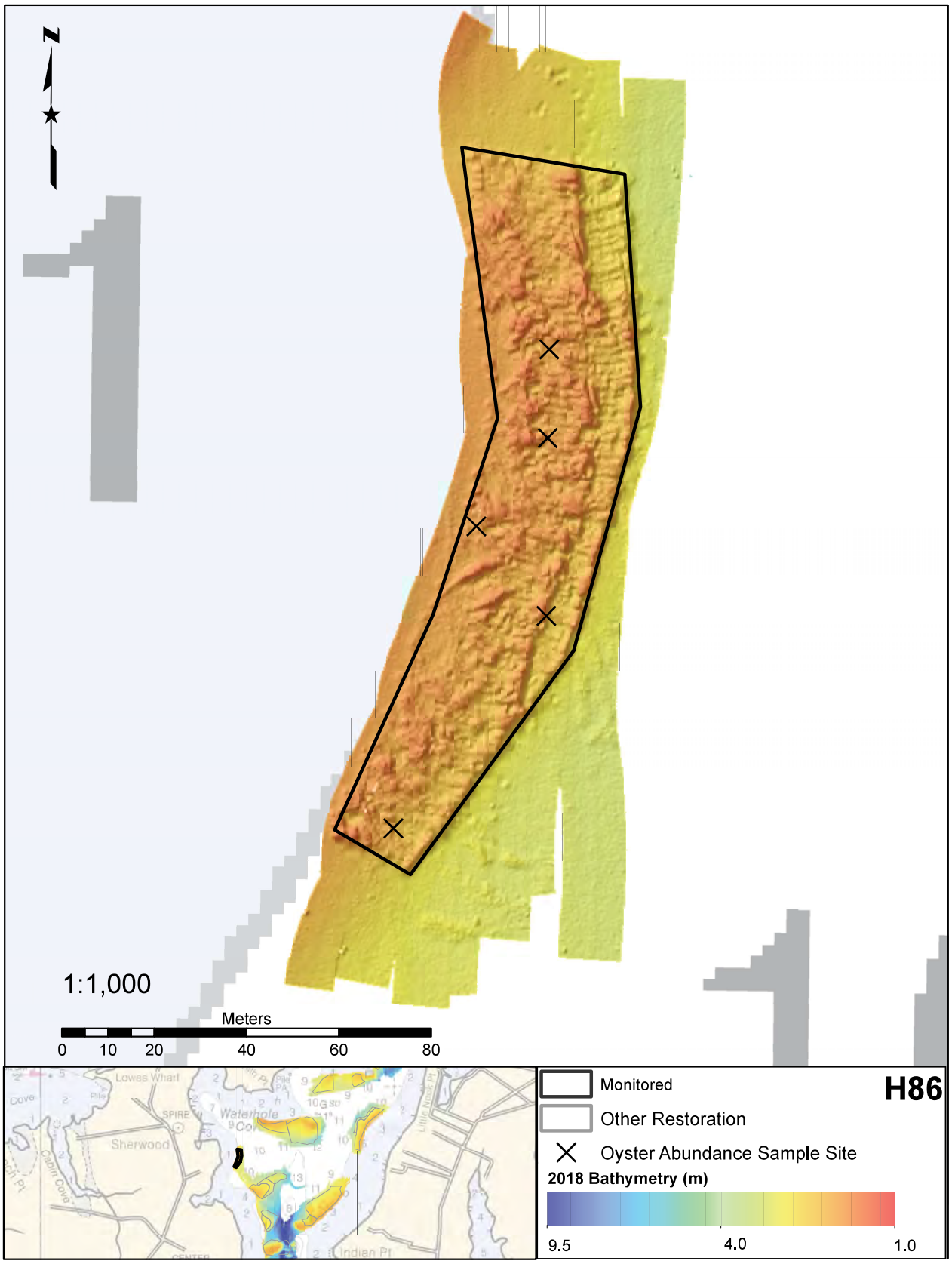
Shell Height of Oysters Measured on Reef



Reef H86 AltSub_67

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

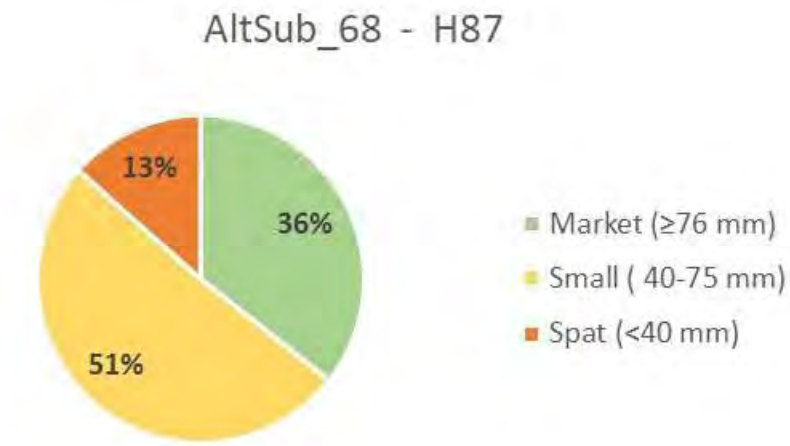


Reef H87 AltSub_68

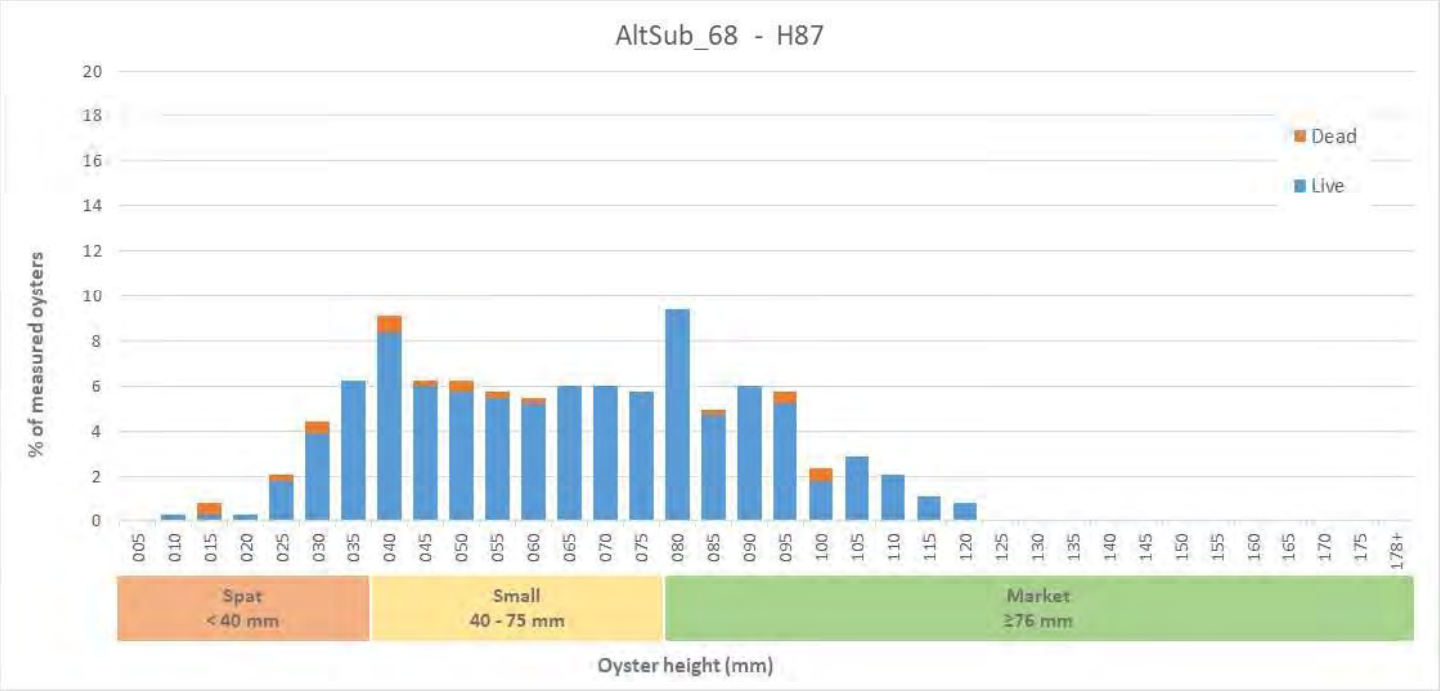
Reef Information	**Report reef ID**	**H87**
	Geodatabase Site_ID	AltSub_68
	Tributary	Harris Creek
	Reef area (acres)	5.51
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	2016
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	10/3/2018
	# samples taken	4
	# live oysters measured	365
	# live oysters counted	810
	# dead oysters counted	17
	% of oysters that were dead	2%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	405.00
	Standard error of live density (#/m^2)	90.14
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	196.50
	Standard error of live density on stone	47.15
	Average live density on shell--all shell types (#/m^2)	207.00
	Standard error of live density on shell-aall shell types	78.05
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	267.99
	Standard error of live biomass	44.19
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	23.75
	Standard error of shell volume	9.34
	Average brown shell across all samples (%)	100%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.031
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H87 AltSub_68

Percent of Measured Oysters in the Market, Small, and Spat Categories



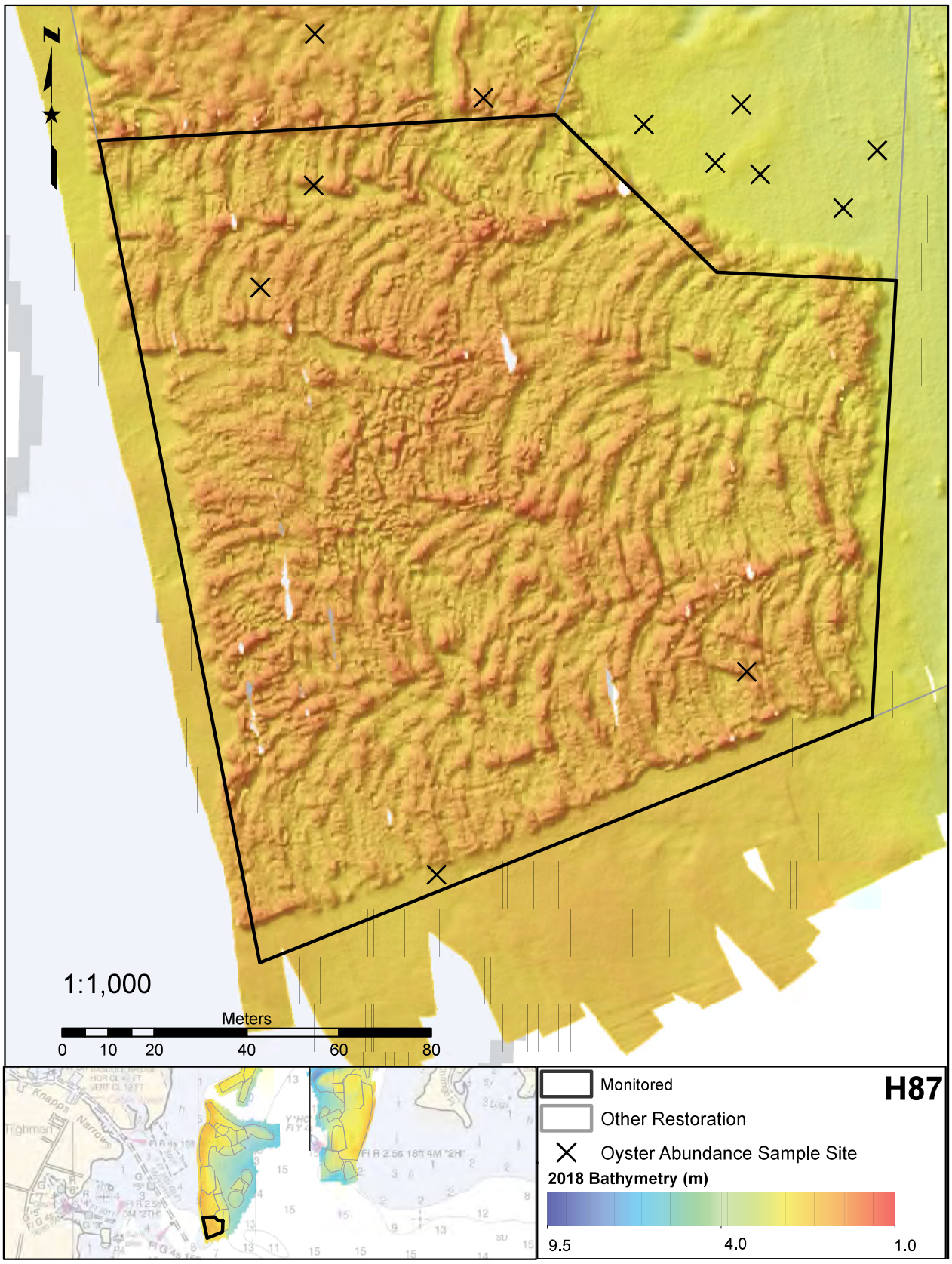
Shell Height of Oysters Measured on Reef



Reef H87 AltSub_68

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

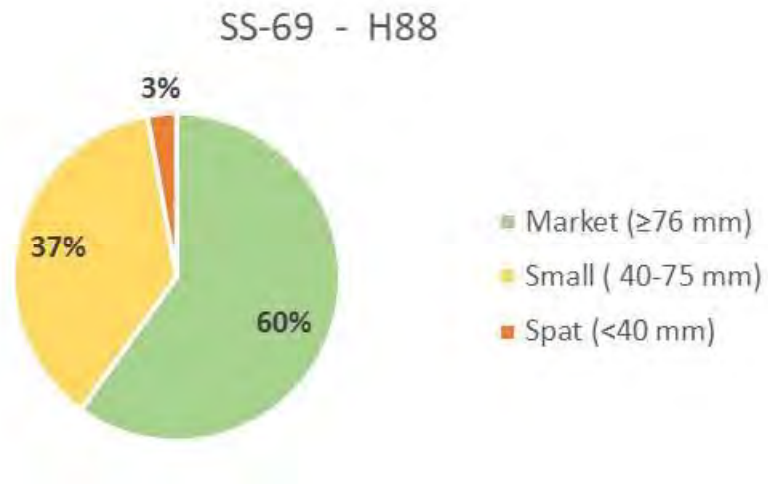


Reef H88 SS_69

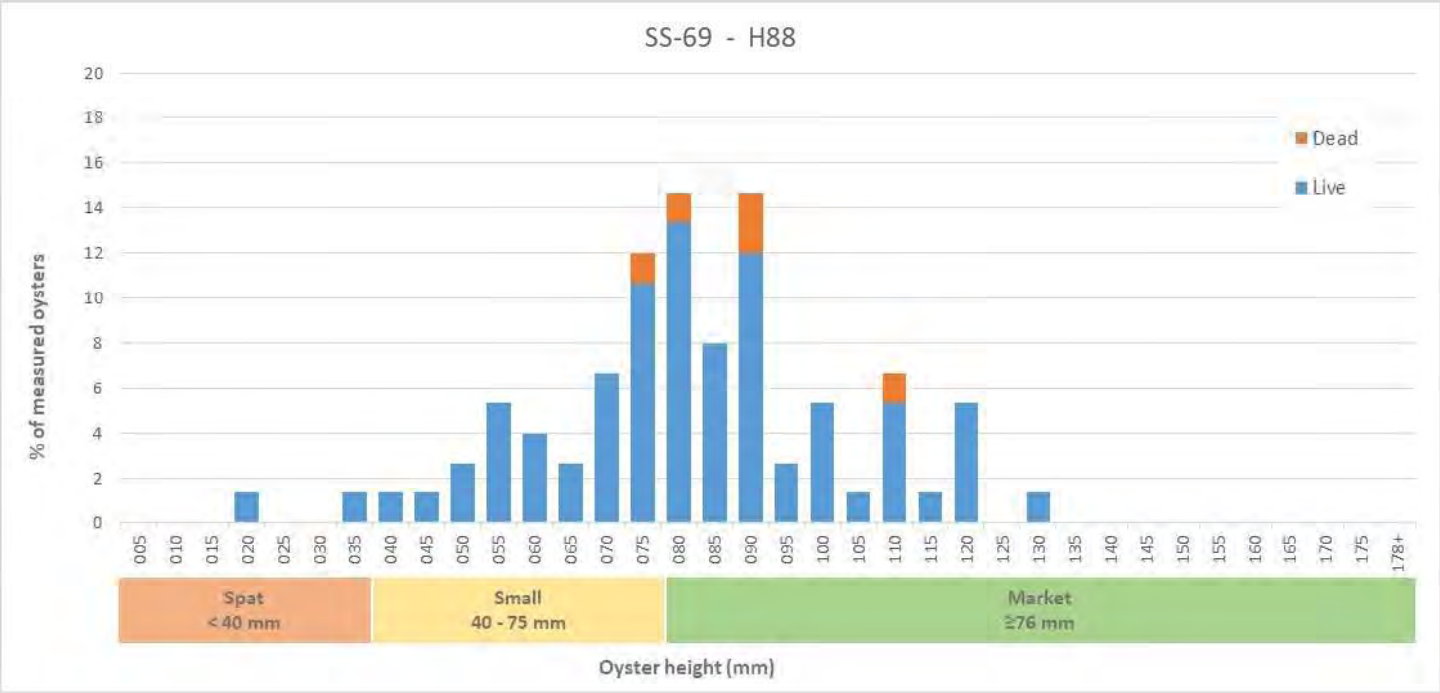
Reef Information	**Report reef ID**	**H88**
	Geodatabase Site_ID	SS_69
	Tributary	Harris Creek
	Reef area (acres)	0.47
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	2/27/2019
	# samples taken	4
	# live oysters measured	70
	# live oysters counted	135
	# dead oysters counted	20
	% of oysters that were dead	13%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	67.50
	Standard error of live density (#/m^2)	8.06
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	50.00
	Standard error of live density on stone	13.37
	Average live density on shell--all shell types (#/m^2)	17.50
	Standard error of live density on shell-aall shell types	8.06
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	75%
	Average live biomass across reef (g dry weight per m^2)	69.81
	Standard error of live biomass	15.00
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	1.43
	Standard error of shell volume	0.87
	Average brown shell across all samples (%)	98%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	TBD in 2021
Reef Height	Is reef height stable/increasing?	TBD in 2022
	3 years post restoration (cm)	
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H88 SS_69

Percent of Measured Oysters in the Market, Small, and Spat Categories



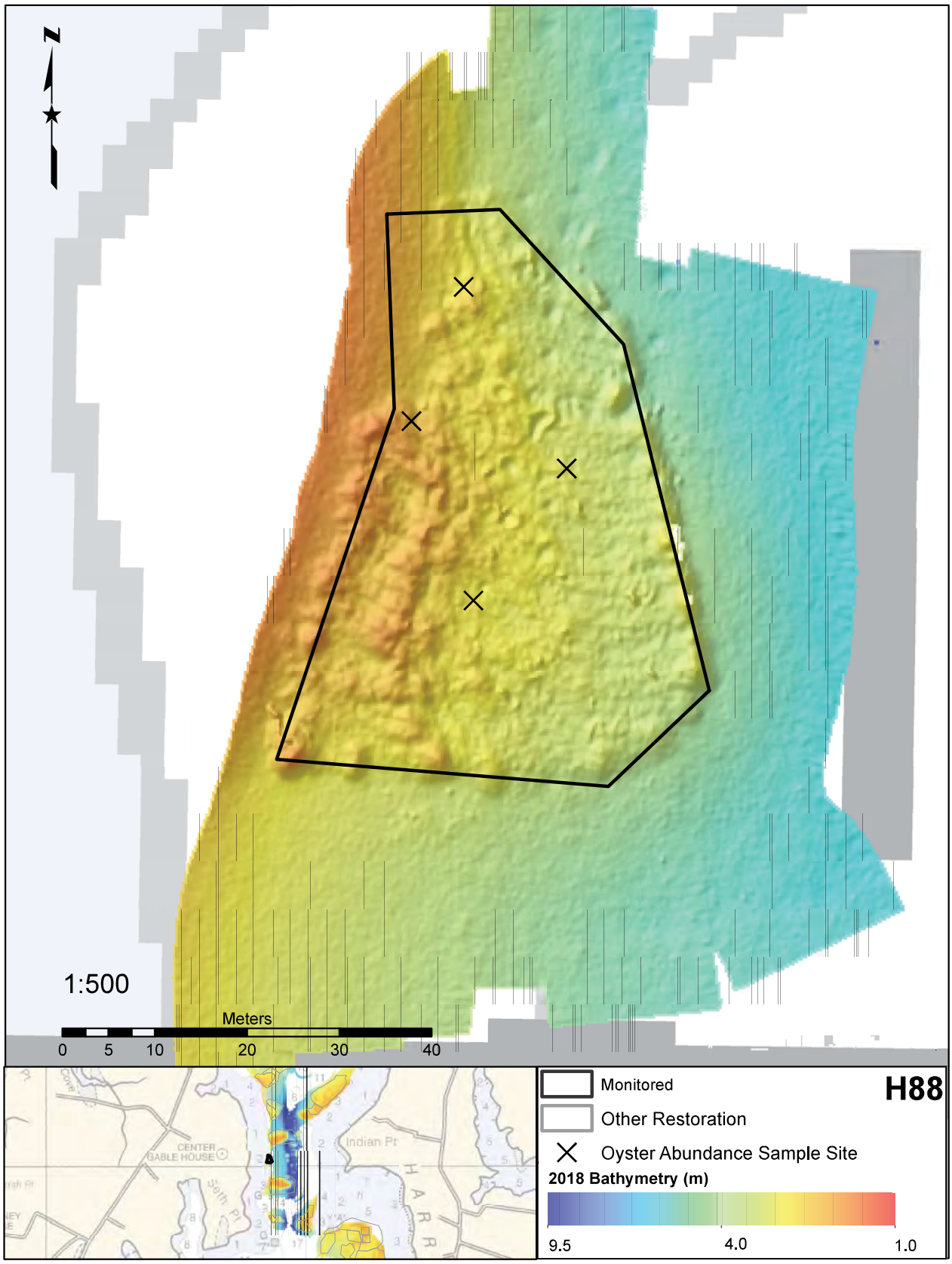
Shell Height of Oysters Measured on Reef



Reef H88 SS_69

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

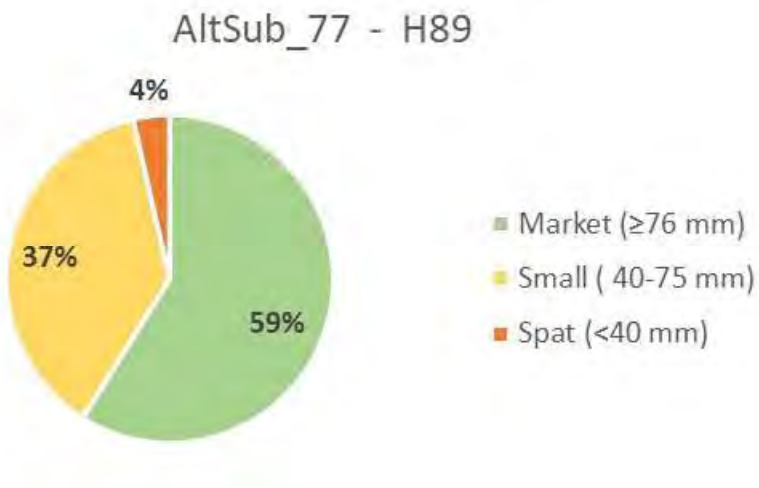


Reef H89 AltSub_77

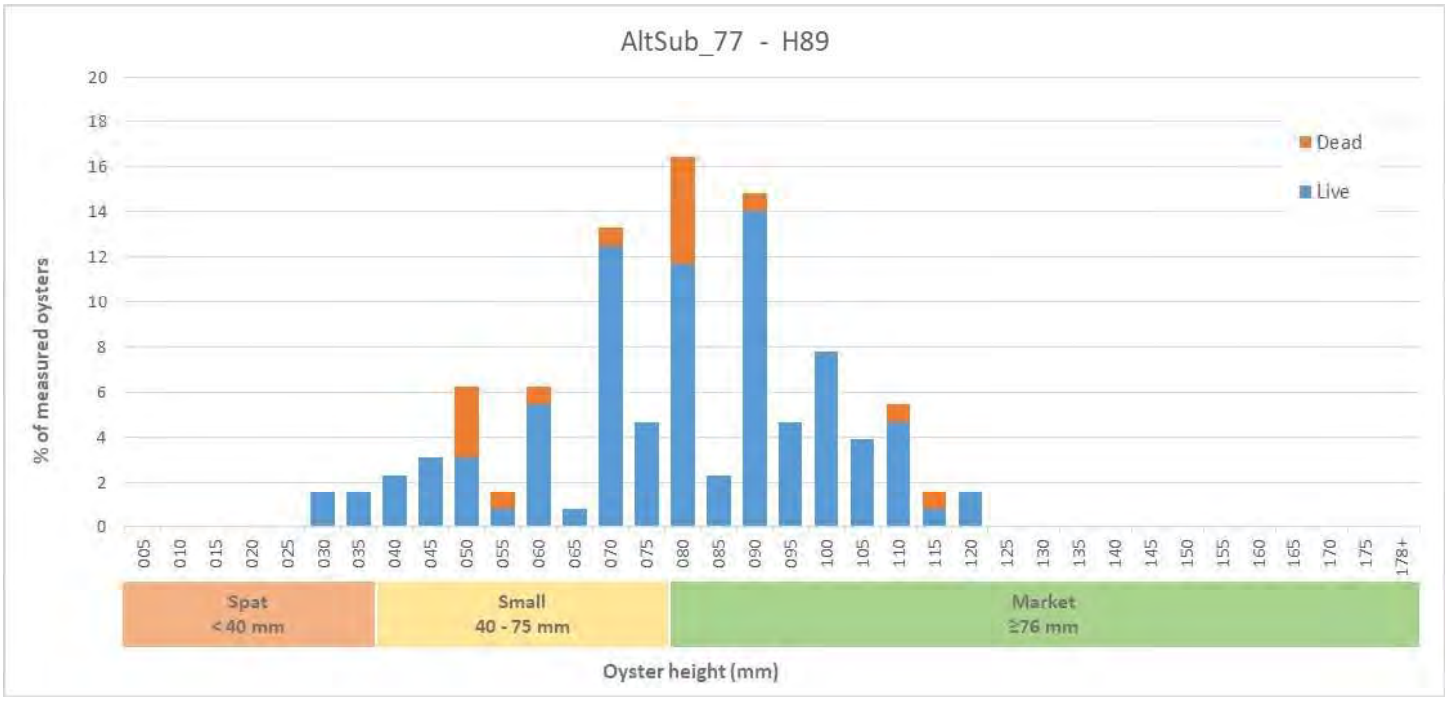
Reef Information	**Report reef ID**	**H89**
	Geodatabase Site_ID	AltSub_77
	Tributary	Harris Creek
	Reef area (acres)	6.62
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone base with fossil shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	2/27/2019
	# samples taken	3
	# live oysters measured	112
	# live oysters counted	259
	# dead oysters counted	37
	% of oysters that were dead	13%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	172.67
	Standard error of live density (#/m^2)	28.50
	Number of samples meeting minimum threshold density (m^2)	3
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	3
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	109.33
	Standard error of live density on stone	22.93
	Average live density on shell--all shell types (#/m^2)	50.67
	Standard error of live density on shell-aall shell types	8.67
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	3
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	168.19
	Standard error of live biomass	37.81
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	13.00
	Standard error of shell volume	4.80
	Average brown shell across all samples (%)	88%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.005
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H89 AltSub_77

Percent of Measured Oysters in the Market, Small, and Spat Categories



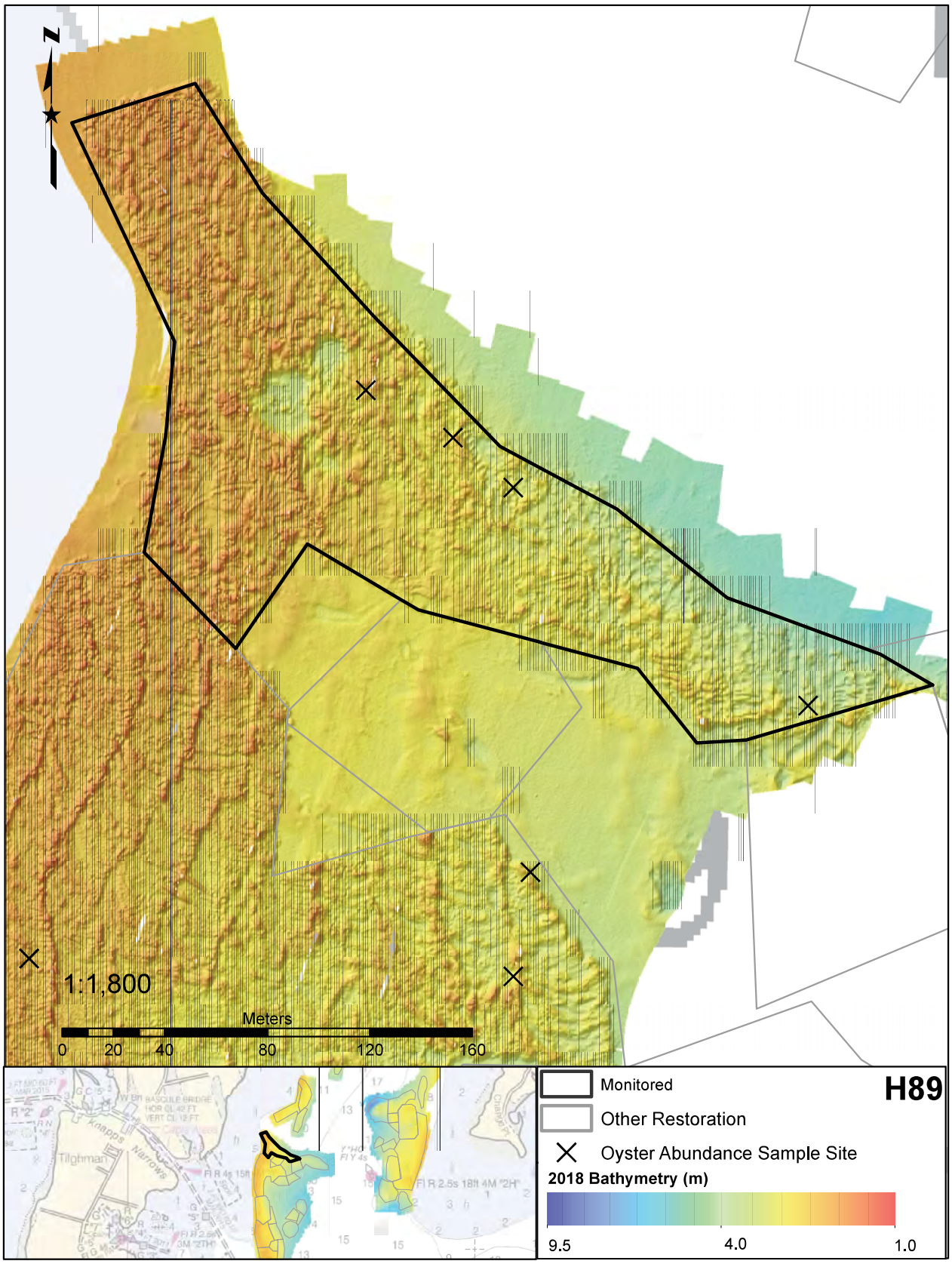
Shell Height of Oysters Measured on Reef



Reef H89 AltSub_77

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

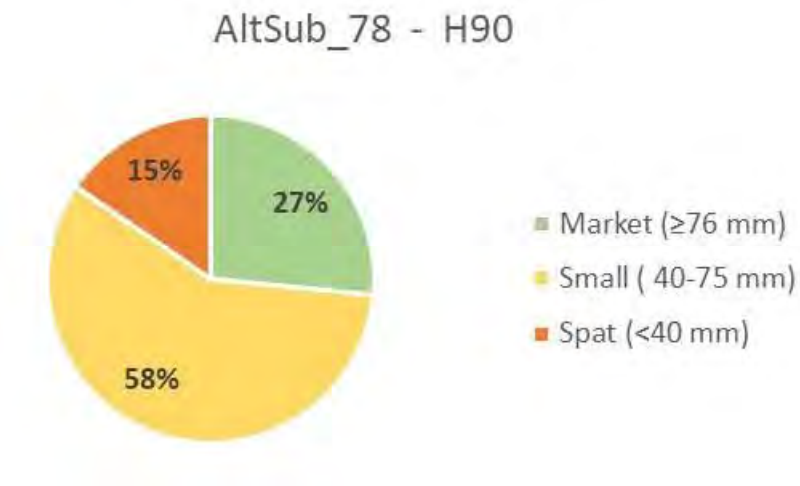


Reef H90 AltSub_78

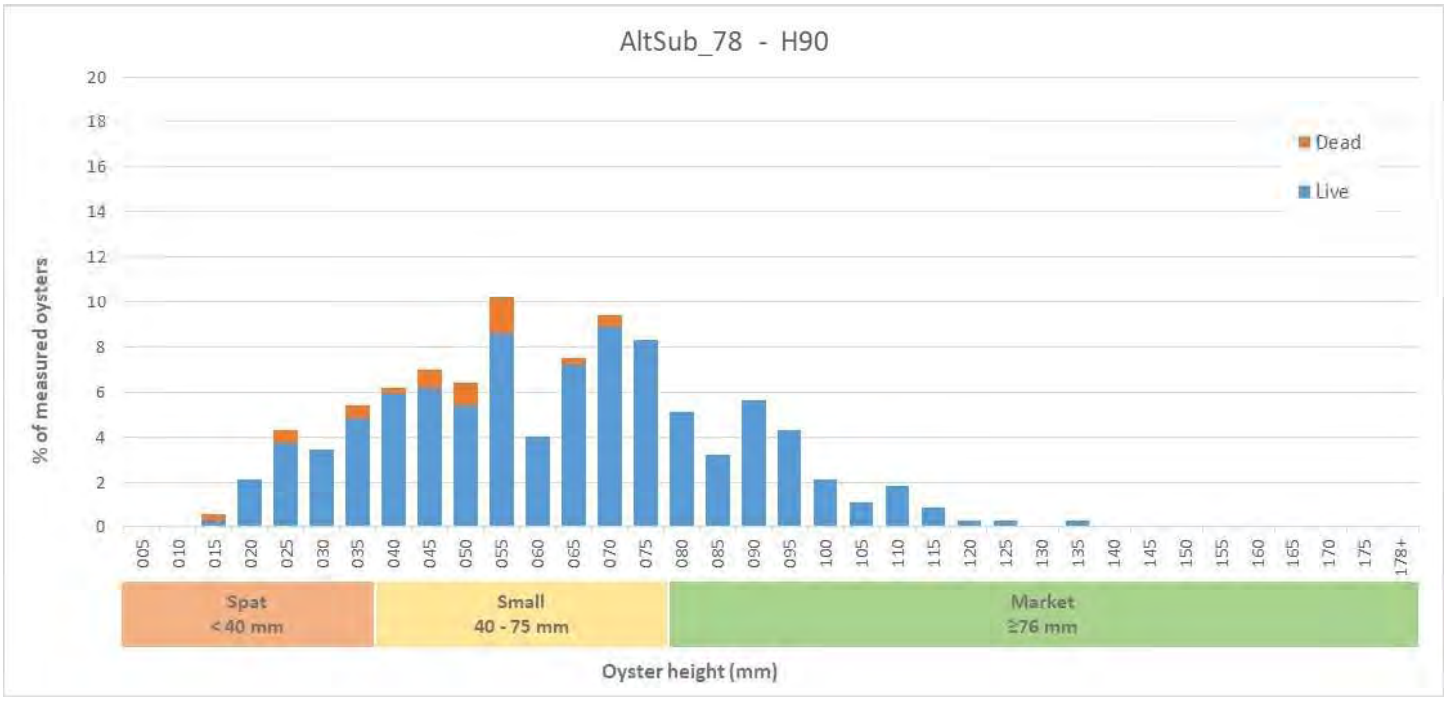
Reef Information	**Report reef ID**	**H90**
	Geodatabase Site_ID	AltSub_78
	Tributary	Harris Creek
	Reef area (acres)	12.27
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	2016
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	10/23/2018
	# samples taken	4
	# live oysters measured	350
	# live oysters counted	674
	# dead oysters counted	37
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	337.00
	Standard error of live density (#/m^2)	62.24
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	102.00
	Standard error of live density on stone	29.68
	Average live density on shell--all shell types (#/m^2)	234.50
	Standard error of live density on shell-aall shell types	62.59
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	220.91
	Standard error of live biomass	39.86
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	26.00
	Standard error of shell volume	7.02
	Average brown shell across all samples (%)	94%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.012
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H90 AltSub_78

Percent of Measured Oysters in the Market, Small, and Spat Categories



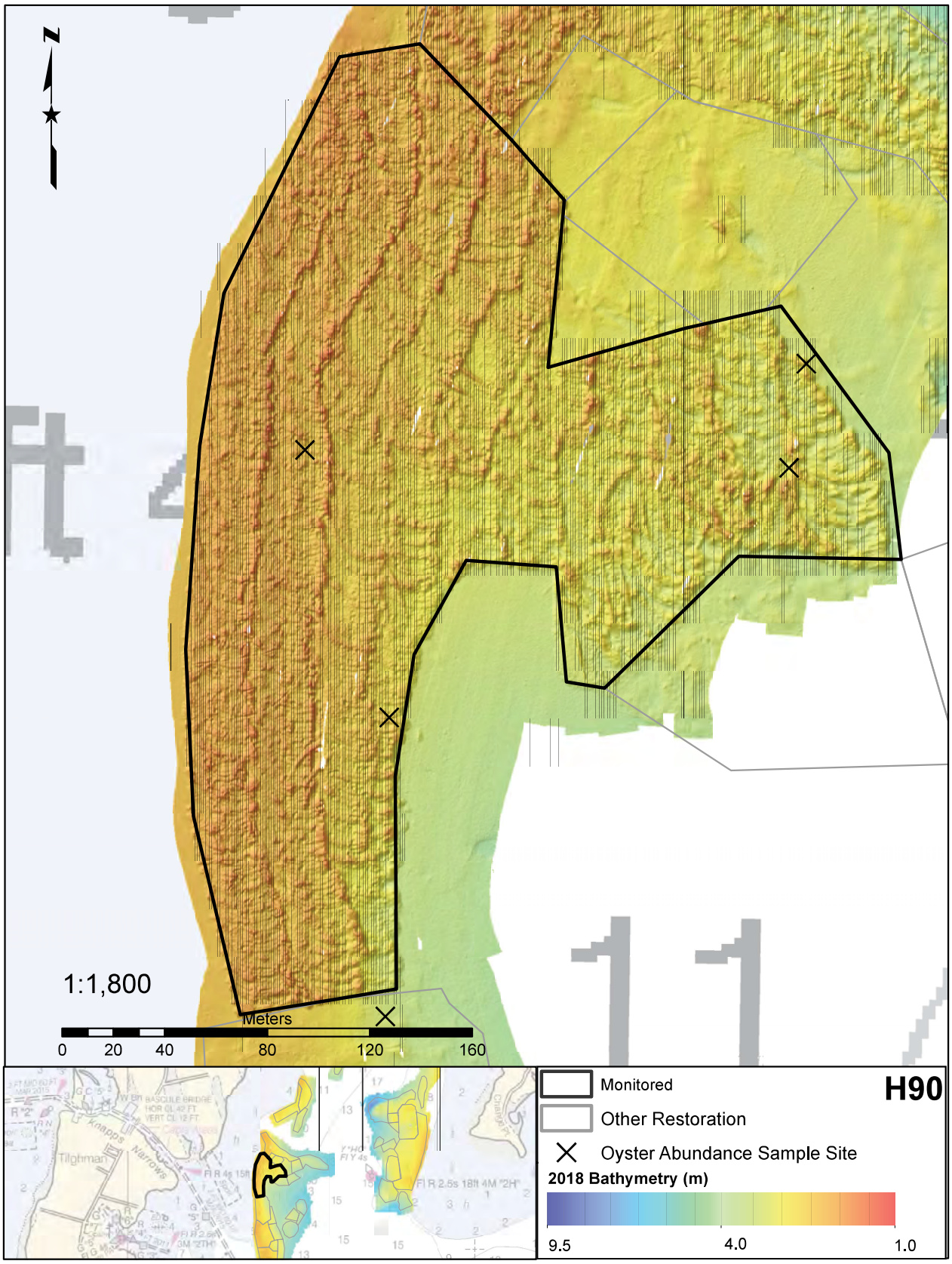
Shell Height of Oysters Measured on Reef



Reef H90 AltSub_78

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

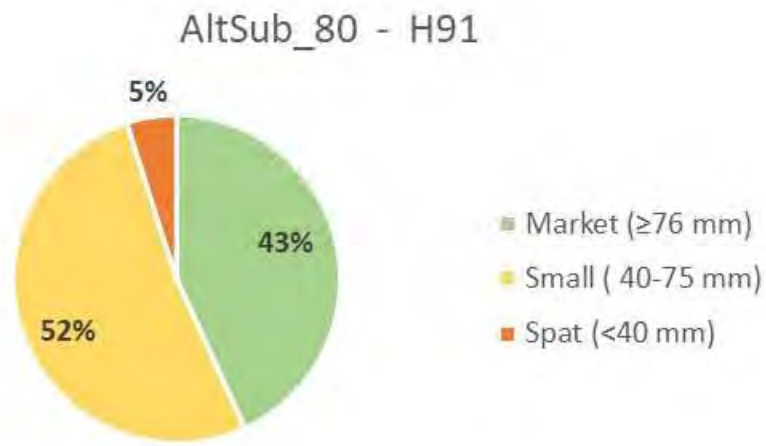


Reef H91 AltSub_80

Reef Information	**Report reef ID**	**H91**
	Geodatabase Site_ID	AltSub_80
	Tributary	Harris Creek
	Reef area (acres)	2.45
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone base with fossil shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	1/8/2019
	# samples taken	5
	# live oysters measured	265
	# live oysters counted	308
	# dead oysters counted	8
	% of oysters that were dead	3%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	123.20
	Standard error of live density (#/m^2)	14.65
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	12.40
	Standard error of live density on stone	6.91
	Average live density on shell--all shell types (#/m^2)	22.00
	Standard error of live density on shell-aall shell types	5.87
	Average live density on clam shell (#/m^2)	24.80
	Standard error of live density on clam shell	20.88
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	97.65
	Standard error of live biomass	8.26
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	82.80
	Standard error of shell volume	17.70
	Average brown shell across all samples (%)	82%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.032
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H91 AltSub_80

Percent of Measured Oysters in the Market, Small, and Spat Categories

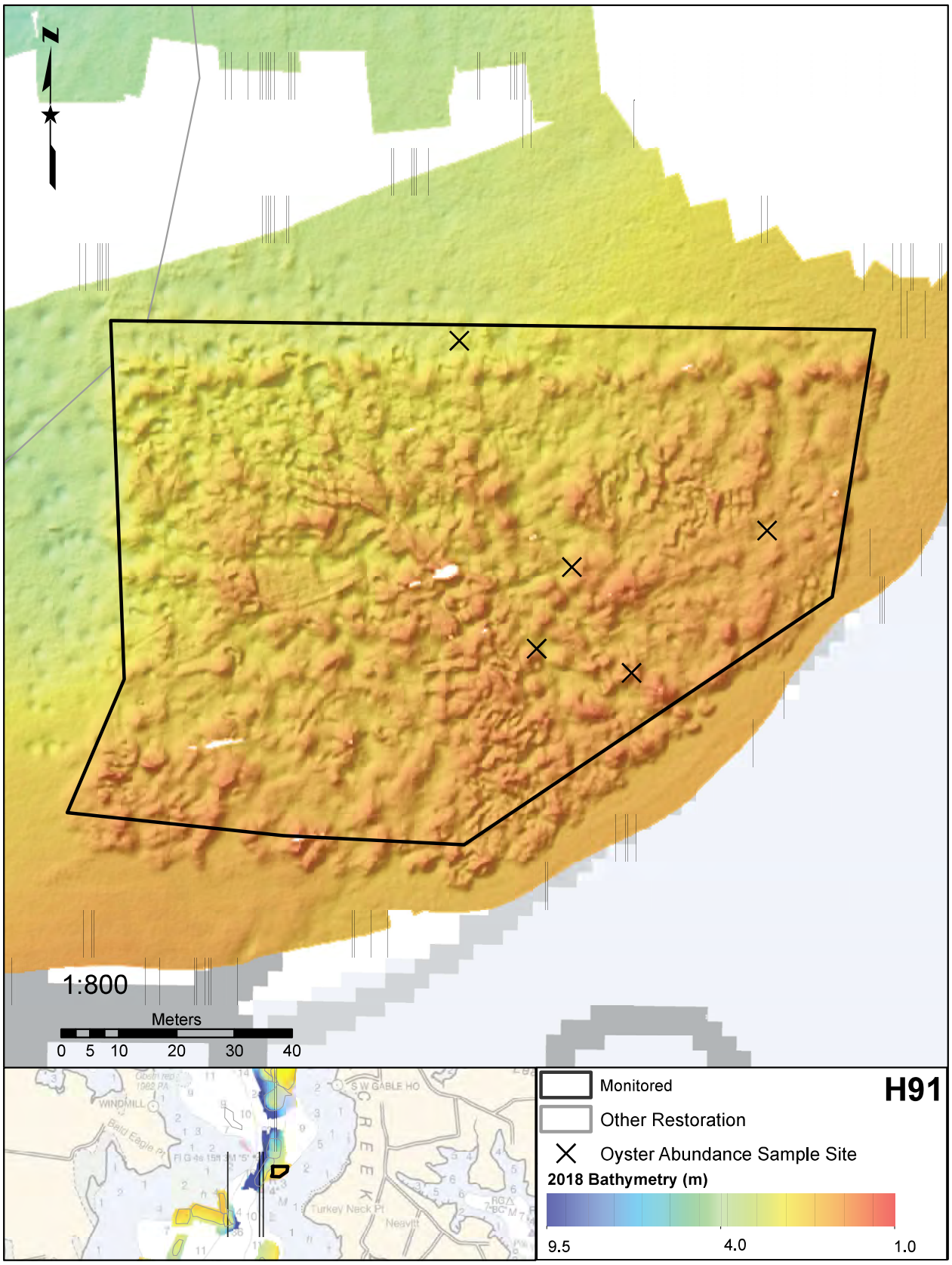


Shell Height of Oysters Measured on Reef

Reef H91 AltSub_80

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

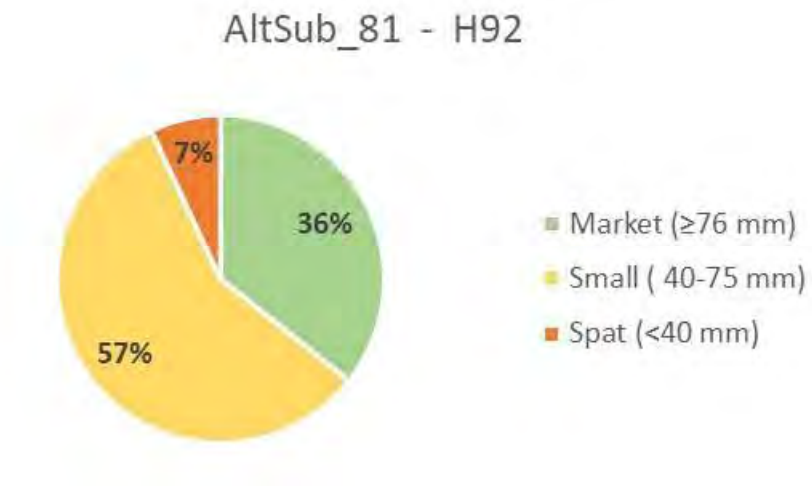


Reef H92 AltSub_81

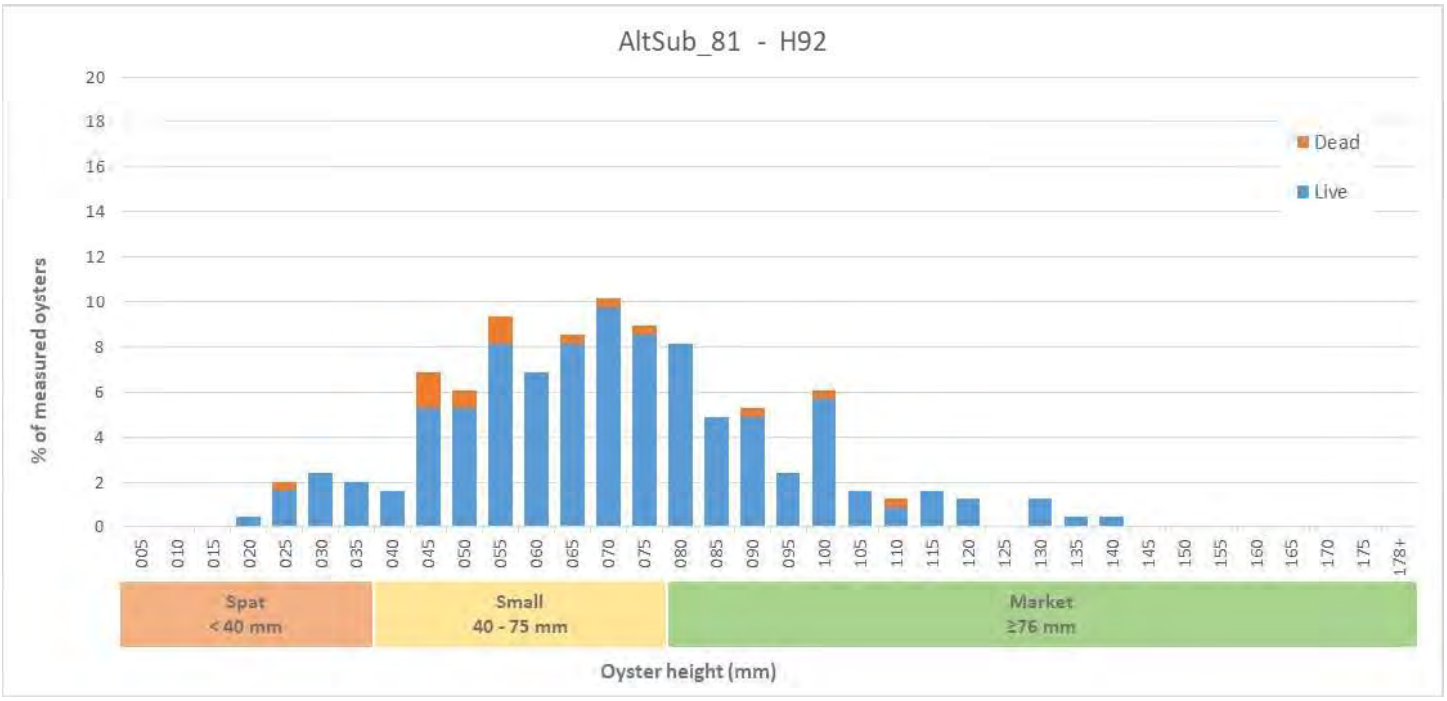
Reef Information	**Report reef ID**	**H92**
	Geodatabase Site_ID	AltSub_81
	Tributary	Harris Creek
	Reef area (acres)	2.77
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	11/19/2018
	# samples taken	4
	# live oysters measured	230
	# live oysters counted	665
	# dead oysters counted	37
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	332.50
	Standard error of live density (#/m^2)	32.88
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	271.50
	Standard error of live density on stone	16.96
	Average live density on shell--all shell types (#/m^2)	61.00
	Standard error of live density on shell-aall shell types	21.49
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	259.76
	Standard error of live biomass	31.23
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	2.75
	Standard error of shell volume	0.48
	Average brown shell across all samples (%)	90%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	TBD in 2021
Reef Height	Is reef height stable/increasing?	TBD in 2022
	3 years post restoration (cm)	
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H92 AltSub_81

Percent of Measured Oysters in the Market, Small, and Spat Categories



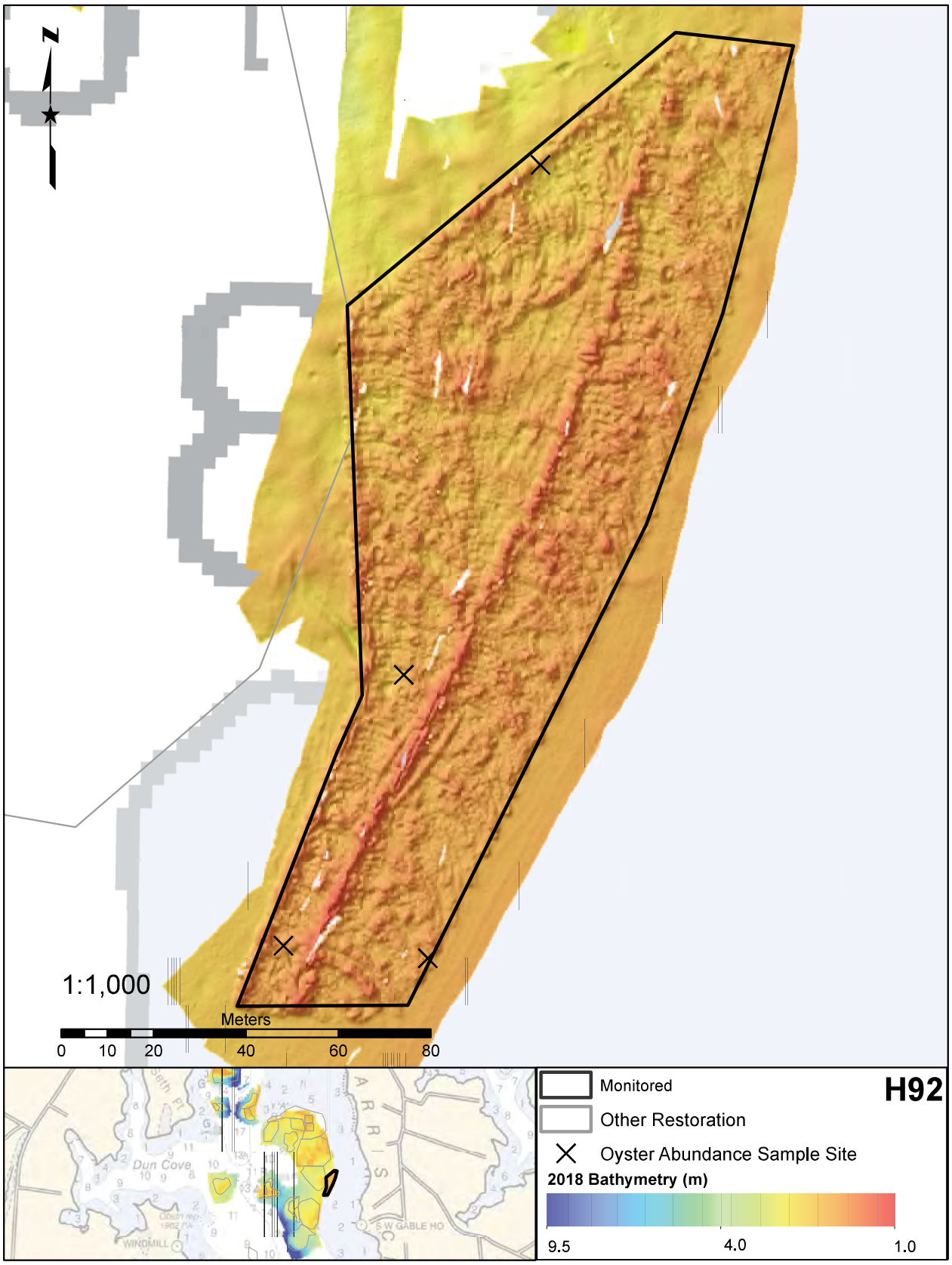
Shell Height of Oysters Measured on Reef



Reef H92 AltSub_81

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

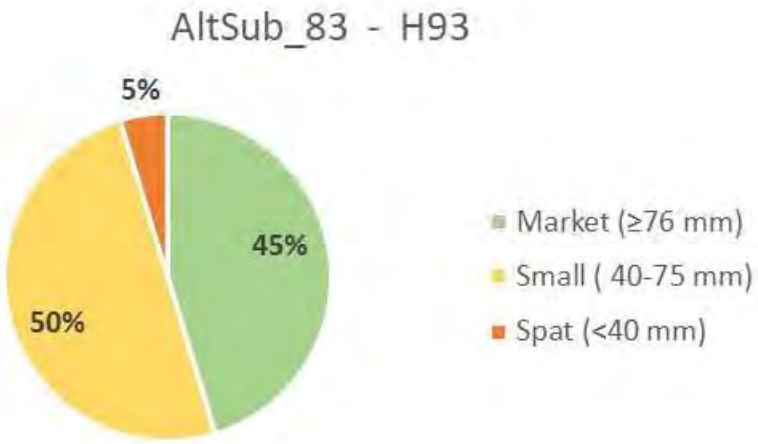


Reef H93 AltSub_83

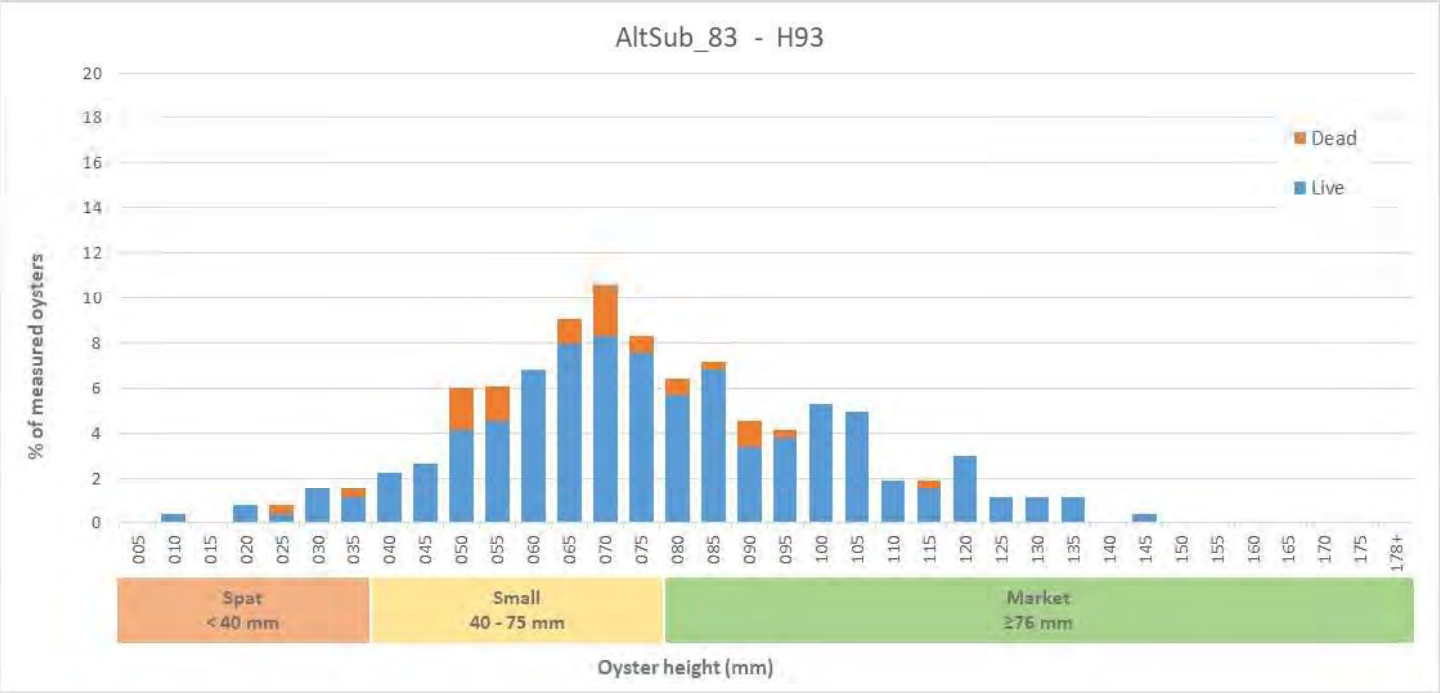
Reef Information	**Report reef ID**	**H93**
	Geodatabase Site_ID	AltSub_83
	Tributary	Harris Creek
	Reef area (acres)	1.69
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	12/19/2018
	# samples taken	4
	# live oysters measured	234
	# live oysters counted	331
	# dead oysters counted	36
	% of oysters that were dead	10%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	165.50
	Standard error of live density (#/m^2)	36.43
	Number of samples meeting minimum threshold density (m^2)	4
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	93.50
	Standard error of live density on stone	19.00
	Average live density on shell--all shell types (#/m^2)	71.00
	Standard error of live density on shell-aall shell types	20.68
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	4
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	149.13
	Standard error of live biomass	31.99
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	12.50
	Standard error of shell volume	4.70
	Average brown shell across all samples (%)	84%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.031
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H93 AltSub_83

Percent of Measured Oysters in the Market, Small, and Spat Categories



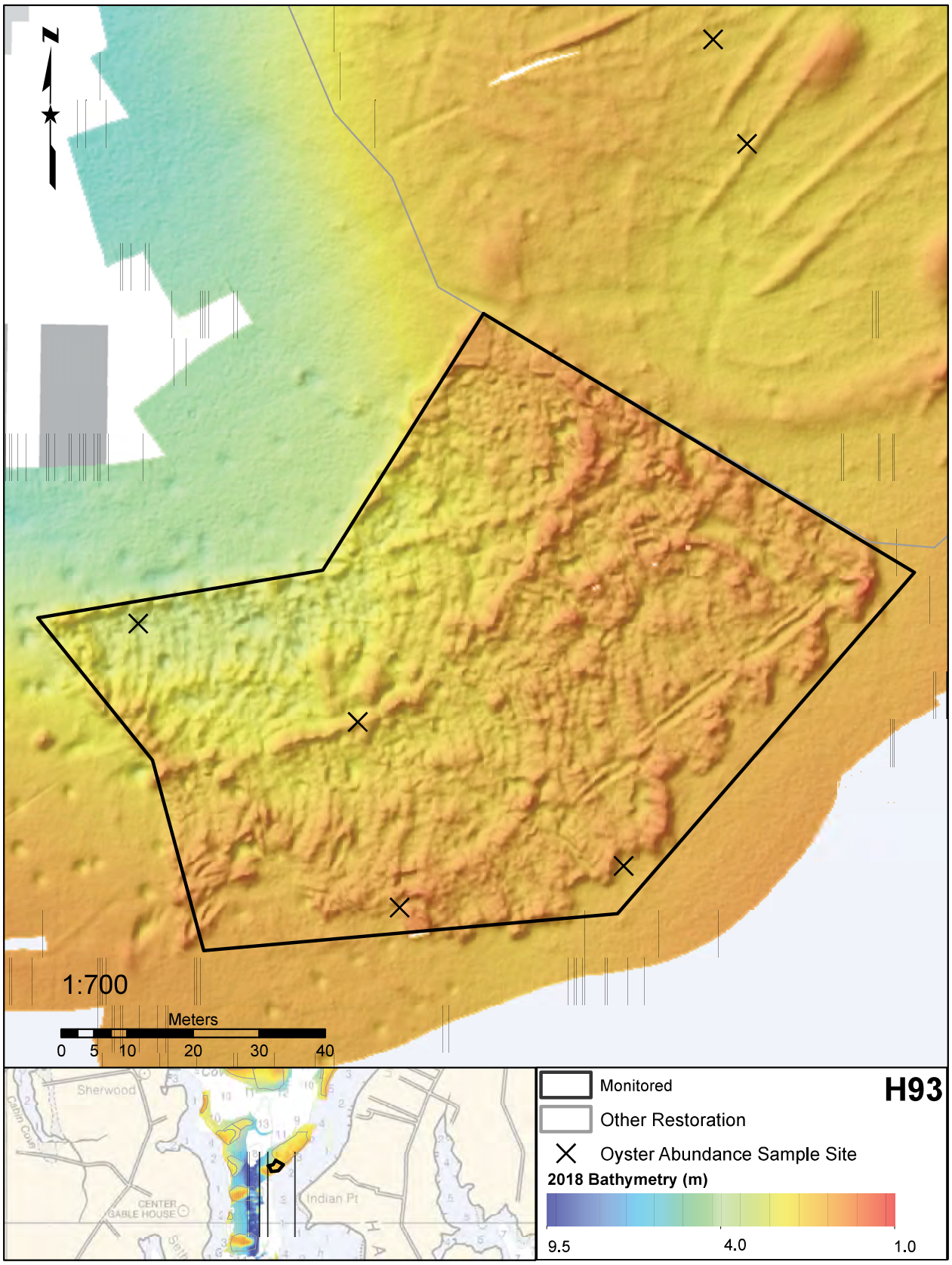
Shell Height of Oysters Measured on Reef



Reef H93 AltSub_83

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

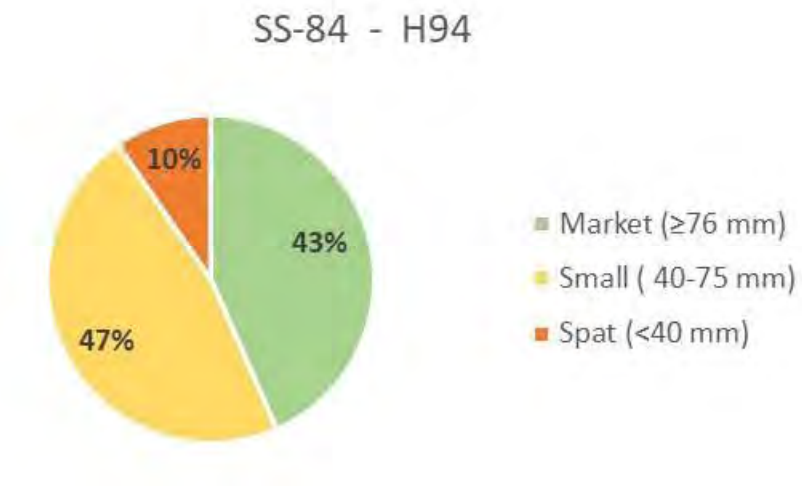


Reef H94 SS_84

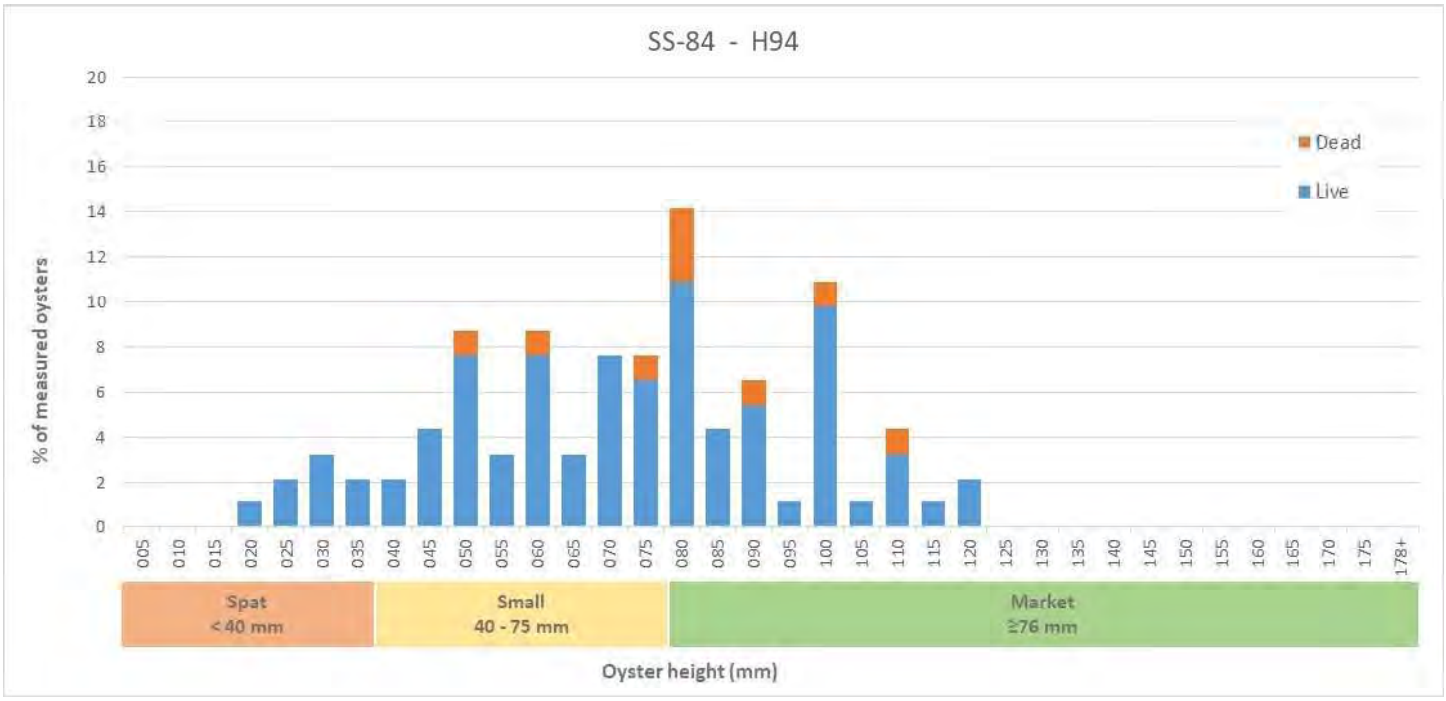
Reef Information	**Report reef ID**	**H94**
	Geodatabase Site_ID	SS_84
	Tributary	Harris Creek
	Reef area (acres)	1.13
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	2/28/2019
	# samples taken	5
	# live oysters measured	83
	# live oysters counted	197
	# dead oysters counted	9
	% of oysters that were dead	4%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	78.80
	Standard error of live density (#/m^2)	14.88
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	80%
	Average live density on stone (#/m^2)	51.60
	Standard error of live density on stone	15.12
	Average live density on shell--all shell types (#/m^2)	27.20
	Standard error of live density on shell-aall shell types	3.01
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	80%
	Average live biomass across reef (g dry weight per m^2)	61.61
	Standard error of live biomass	11.07
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	1.20
	Standard error of shell volume	0.25
	Average brown shell across all samples (%)	98%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.083
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef H94 SS_84

Percent of Measured Oysters in the Market, Small, and Spat Categories



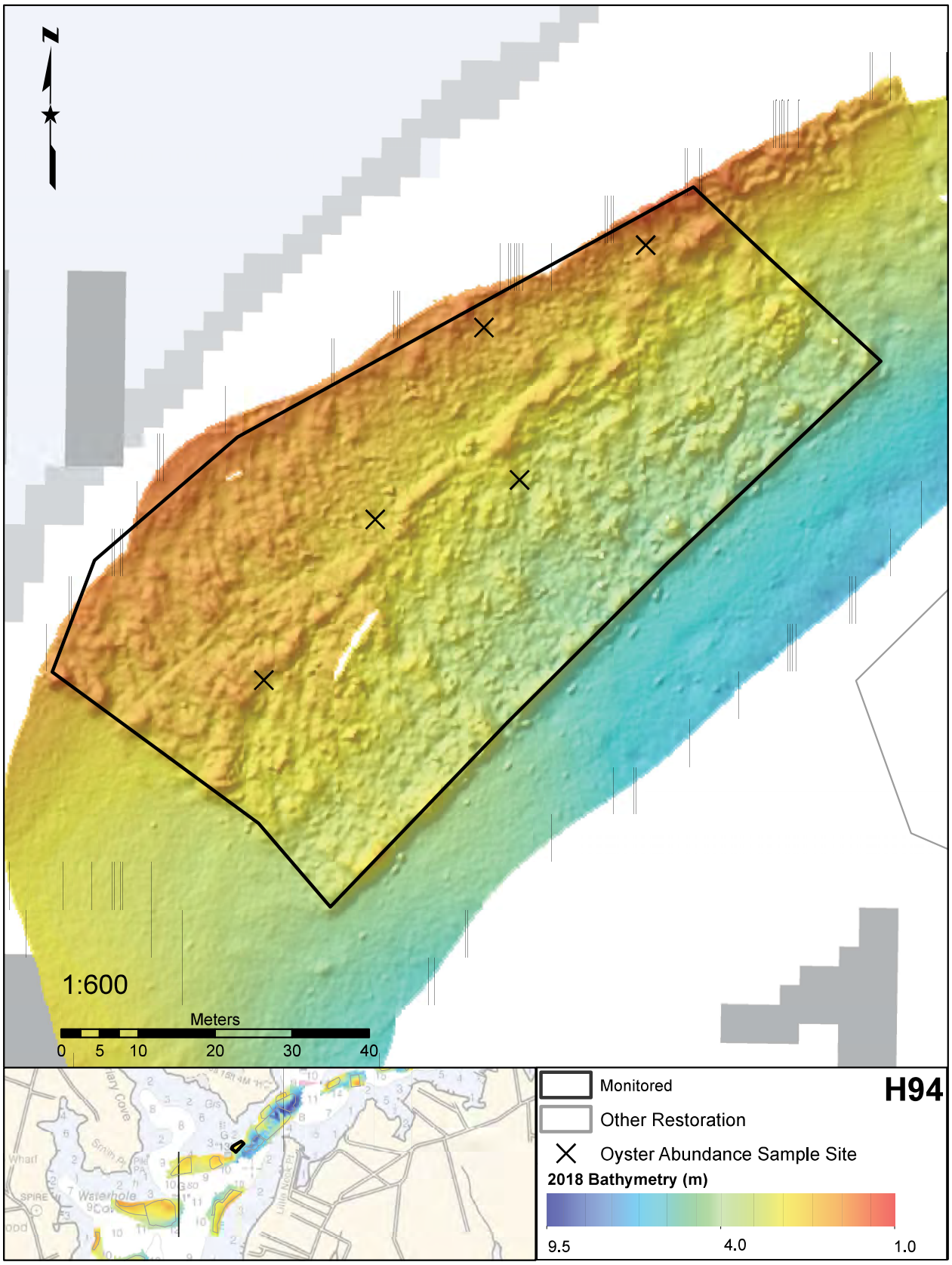
Shell Height of Oysters Measured on Reef



Reef H94 SS_84

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

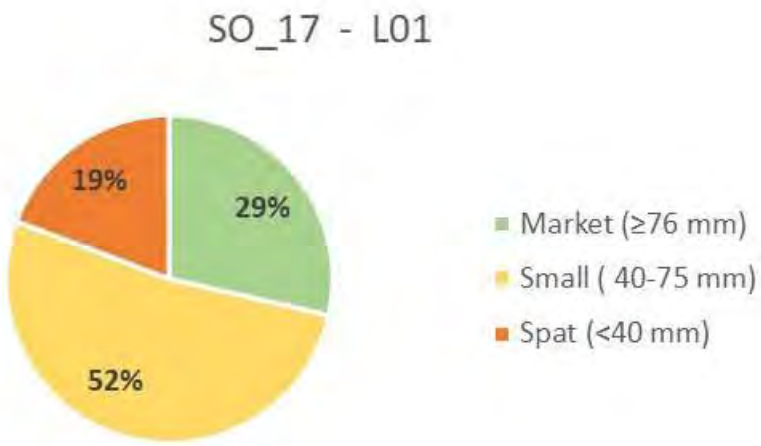


Reef L01 SO_17

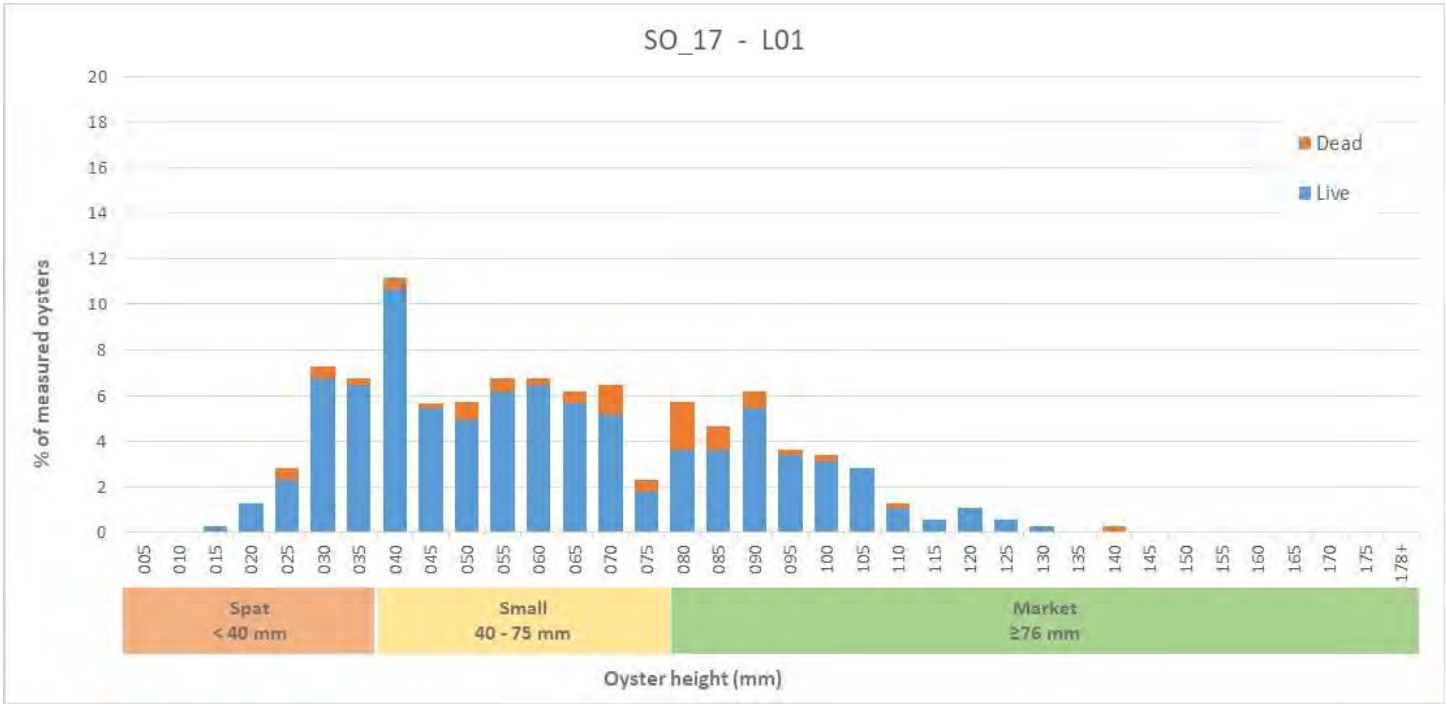
Reef Information	**Report reef ID**	**L01**
	Geodatabase Site_ID	SO_17
	Tributary	Little Choptank
	Reef area (acres)	1.61
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2018
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Patent Tong
	Sample date	4/4/2019
	# samples taken	12
	# live oysters measured	343
	# live oysters counted	1102
	# dead oysters counted	72
	% of oysters that were dead	6%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	57.04
	Standard error of live density (#/m^2)	11.09
	Number of samples meeting minimum threshold density (m^2)	10
	Percent of samples meeting minimum threshold density (%)	83%
	Number of samples meeting target density (m^2)	6
	Percent of samples meeting target density (%)	50%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	9
	Reef area meeting minimum threshold biomass (%)	75%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	42%
	Average live biomass across reef (g dry weight per m^2)	43.33
	Standard error of live biomass	10.57
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2019
	Average shell volume across entire reef (liters per m^2)	13.92
	Standard error of shell volume	2.92
	Average brown shell across all samples (%)	85%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L01 SO_17

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

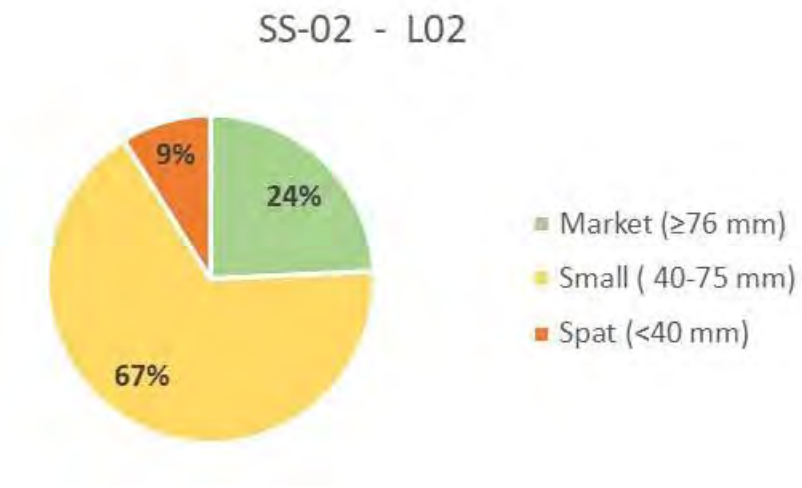


Reef L02 SS_02

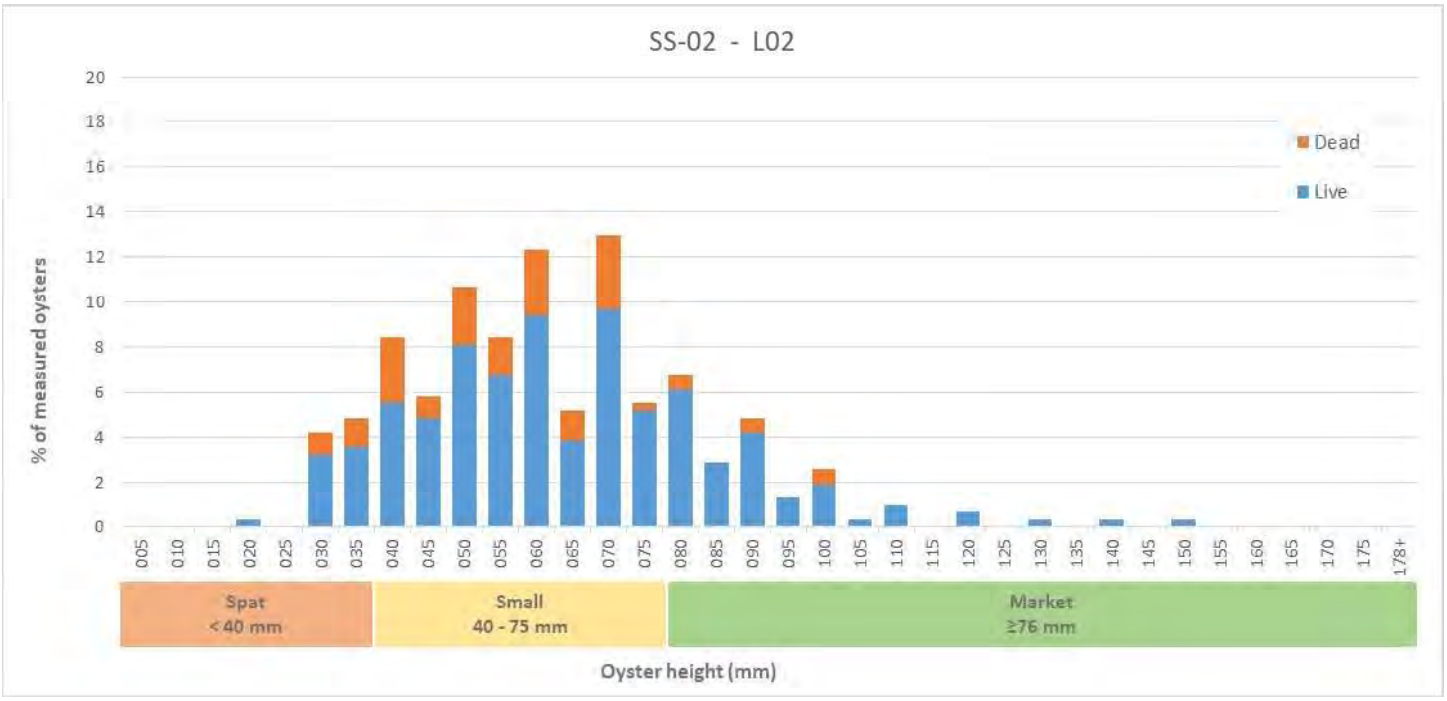
Reef Information	**Report reef ID**	**L02**
	Geodatabase Site_ID	SS_02
	Tributary	Little Choptank
	Reef area (acres)	2.81
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Fossil Shell
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/8/2019
	# samples taken	5
	# live oysters measured	247
	# live oysters counted	529
	# dead oysters counted	62
	% of oysters that were dead	10%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	211.60
	Standard error of live density (#/m^2)	38.20
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	0.00
	Standard error of live density on stone	0.00
	Average live density on shell--all shell types (#/m^2)	145.60
	Standard error of live density on shell-aall shell types	57.43
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	146.16
	Standard error of live biomass	37.07
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2019
	Average shell volume across entire reef (liters per m^2)	42.00
	Standard error of shell volume	9.86
	Average brown shell across all samples (%)	79%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L02 SS_02

Percent of Measured Oysters in the Market, Small, and Spat Categories



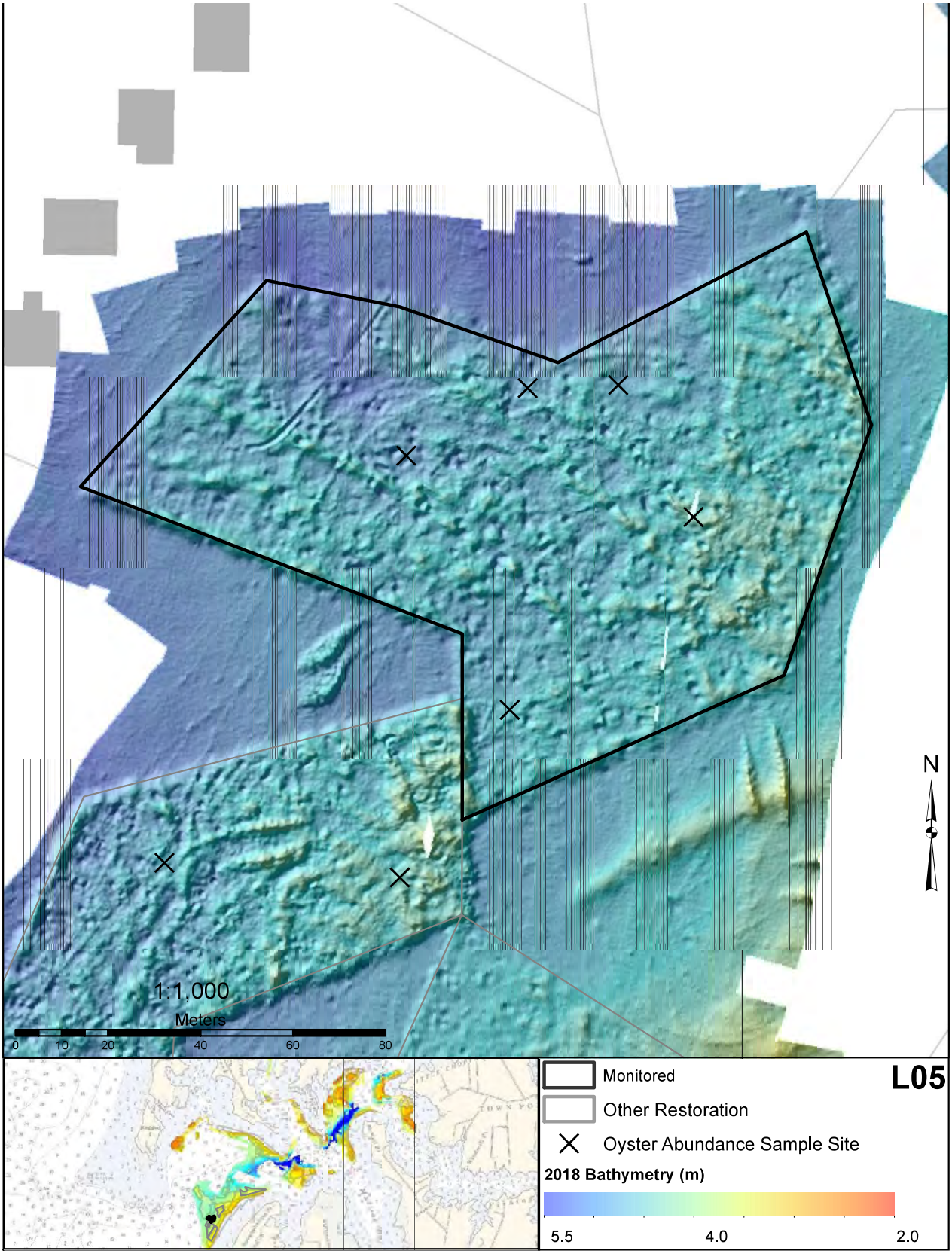
Shell Height of Oysters Measured on Reef



Reef L02 SS_02

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

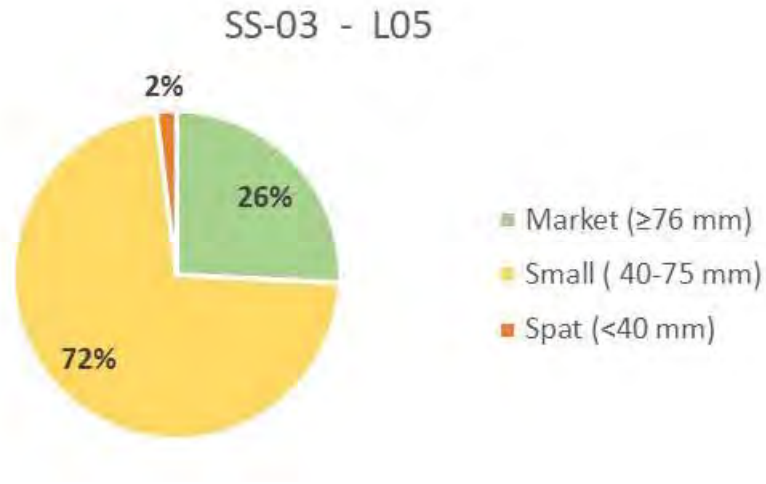


Reef L05 SS_03

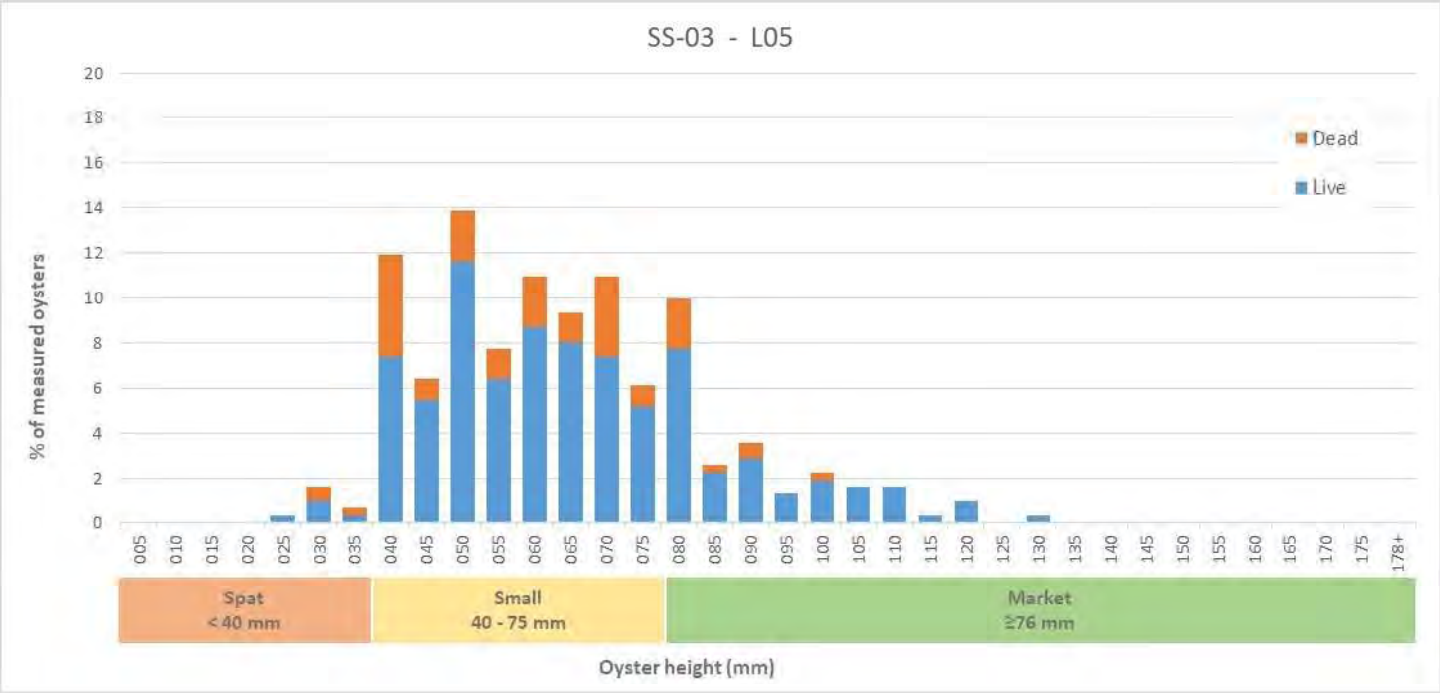
Reef Information	**Report reef ID**	**L05**
	Geodatabase Site_ID	SS_03
	Tributary	Little Choptank
	Reef area (acres)	1.93
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone base with fossil shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/8/2019
	# samples taken	5
	# live oysters measured	250
	# live oysters counted	436
	# dead oysters counted	63
	% of oysters that were dead	13%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	174.40
	Standard error of live density (#/m^2)	30.73
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	0.40
	Standard error of live density on stone	0.40
	Average live density on shell--all shell types (#/m^2)	105.60
	Standard error of live density on shell-aall shell types	30.36
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	120.31
	Standard error of live biomass	24.35
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	42.80
	Standard error of shell volume	8.62
	Average brown shell across all samples (%)	82%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L05 SS_03

Percent of Measured Oysters in the Market, Small, and Spat Categories



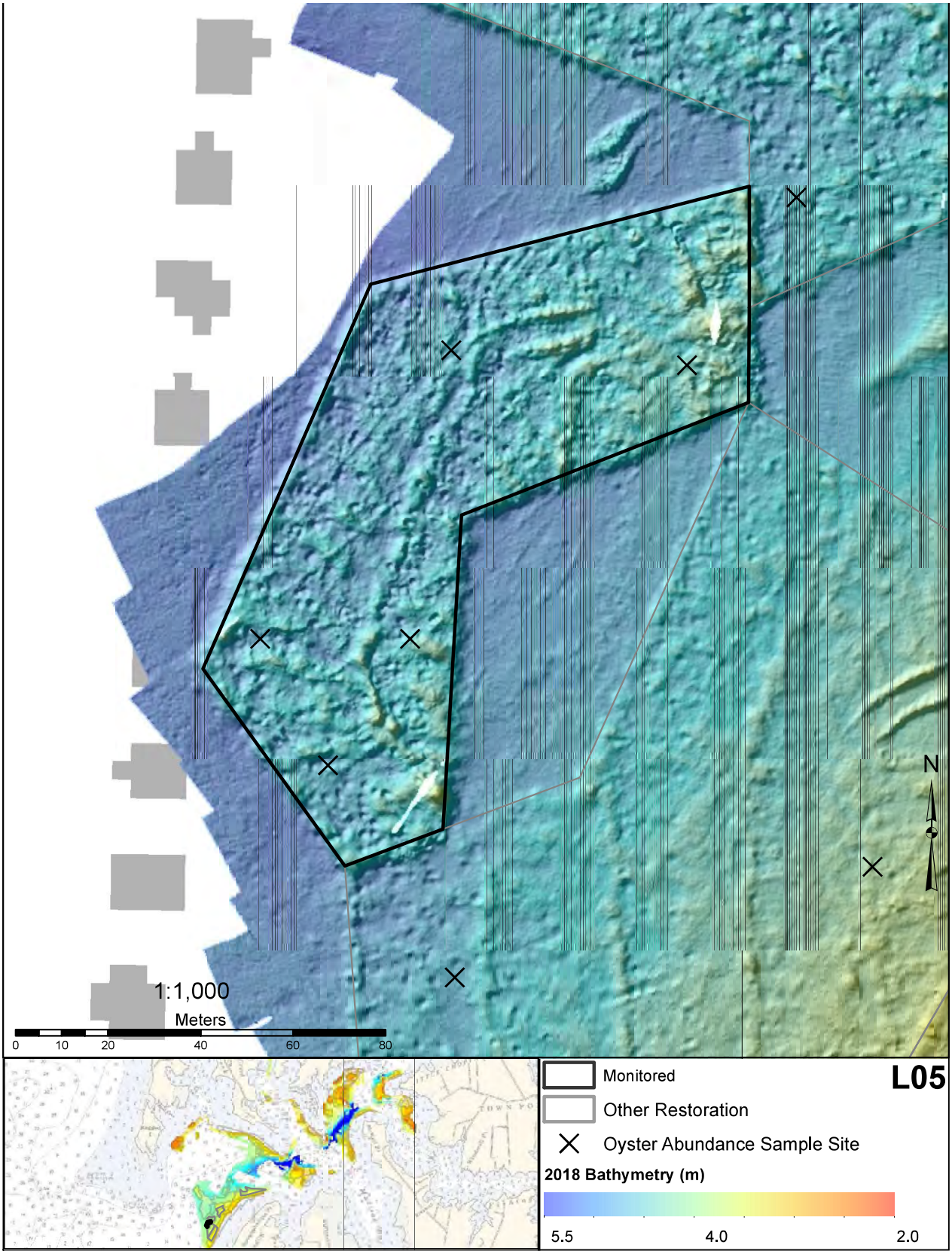
Shell Height of Oysters Measured on Reef



Reef L05 SS_03

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

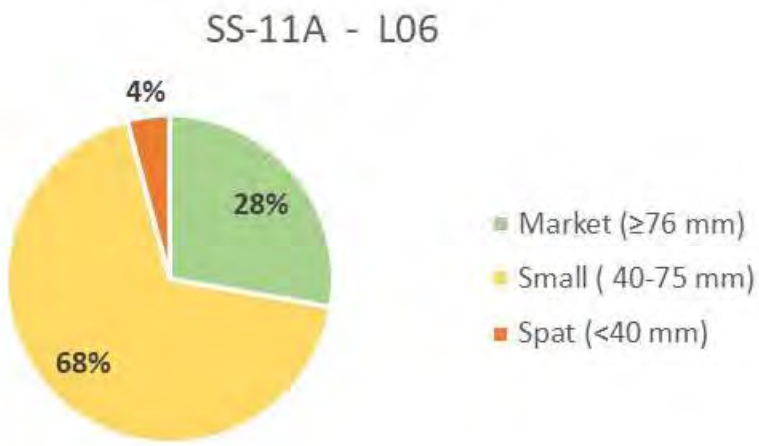


Reef L06 SS_11A

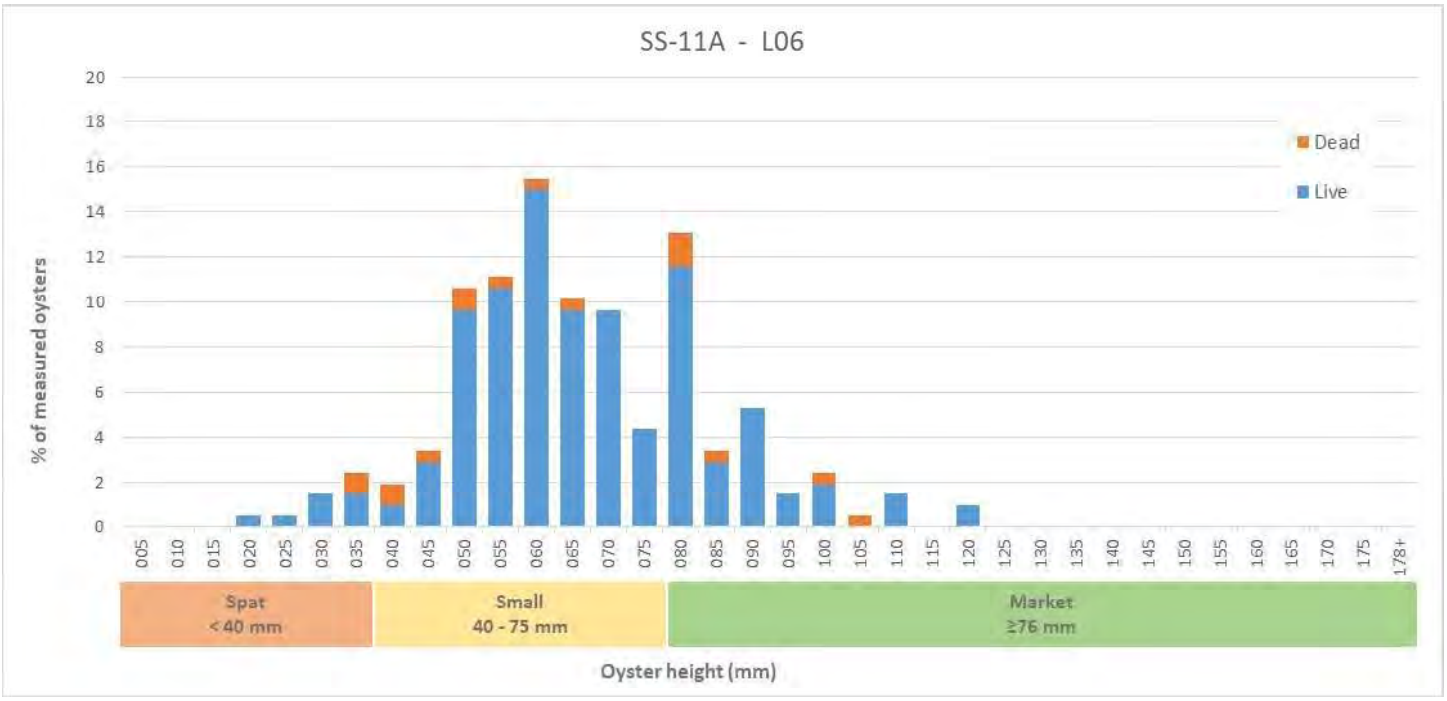
Reef Information	**Report reef ID**	**L06**
	Geodatabase Site_ID	SS_11A
	Tributary	Little Choptank
	Reef area (acres)	5.01
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	9
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/3/2019
	# samples taken	5
	# live oysters measured	191
	# live oysters counted	287
	# dead oysters counted	24
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	114.80
	Standard error of live density (#/m^2)	17.58
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	80%
	Average live density on stone (#/m^2)	53.60
	Standard error of live density on stone	21.98
	Average live density on shell--all shell types (#/m^2)	61.20
	Standard error of live density on shell-aall shell types	15.00
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	80%
	Average live biomass across reef (g dry weight per m^2)	79.12
	Standard error of live biomass	13.05
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	6.40
	Standard error of shell volume	2.93
	Average brown shell across all samples (%)	93%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.03
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L06 SS_I IA

Percent of Measured Oysters in the Market, Small, and Spat Categories



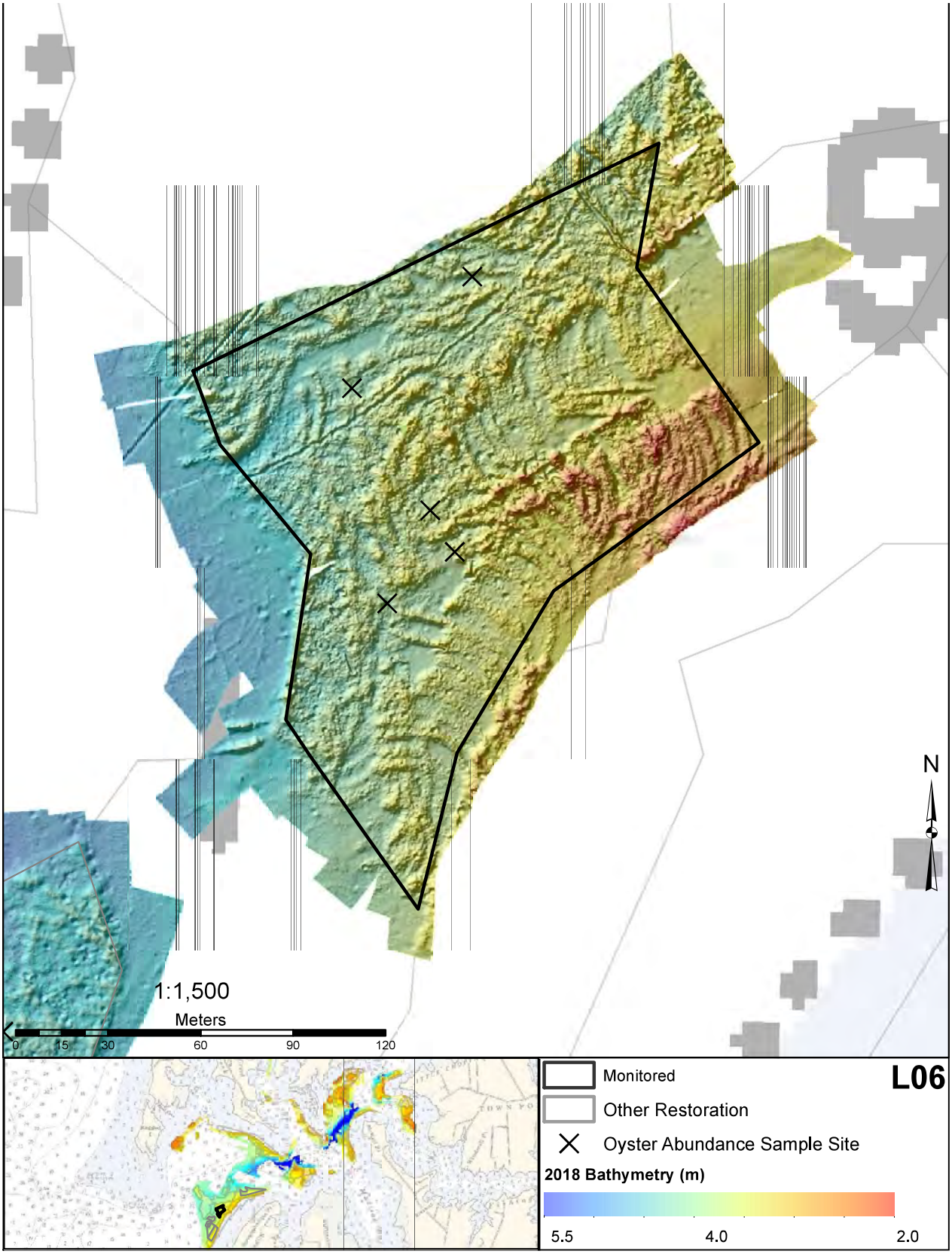
Shell Height of Oysters Measured on Reef



Reef L06 SS_I IA

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

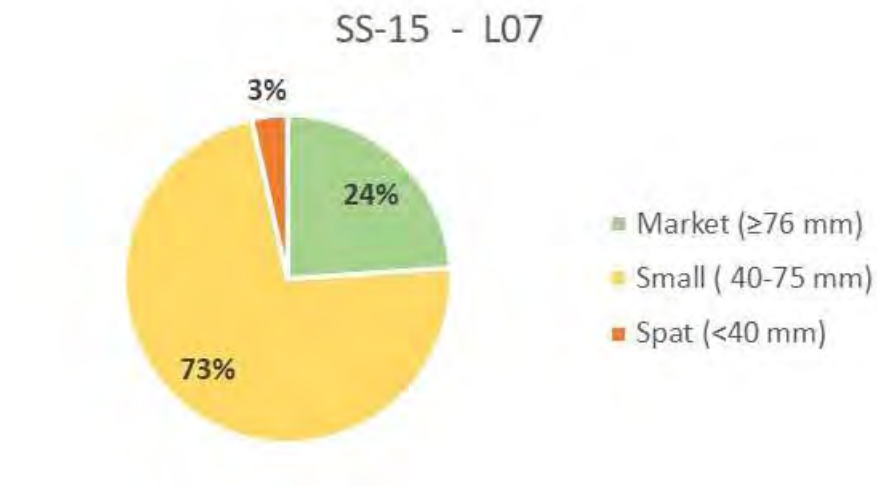


Reef L07 SS_15

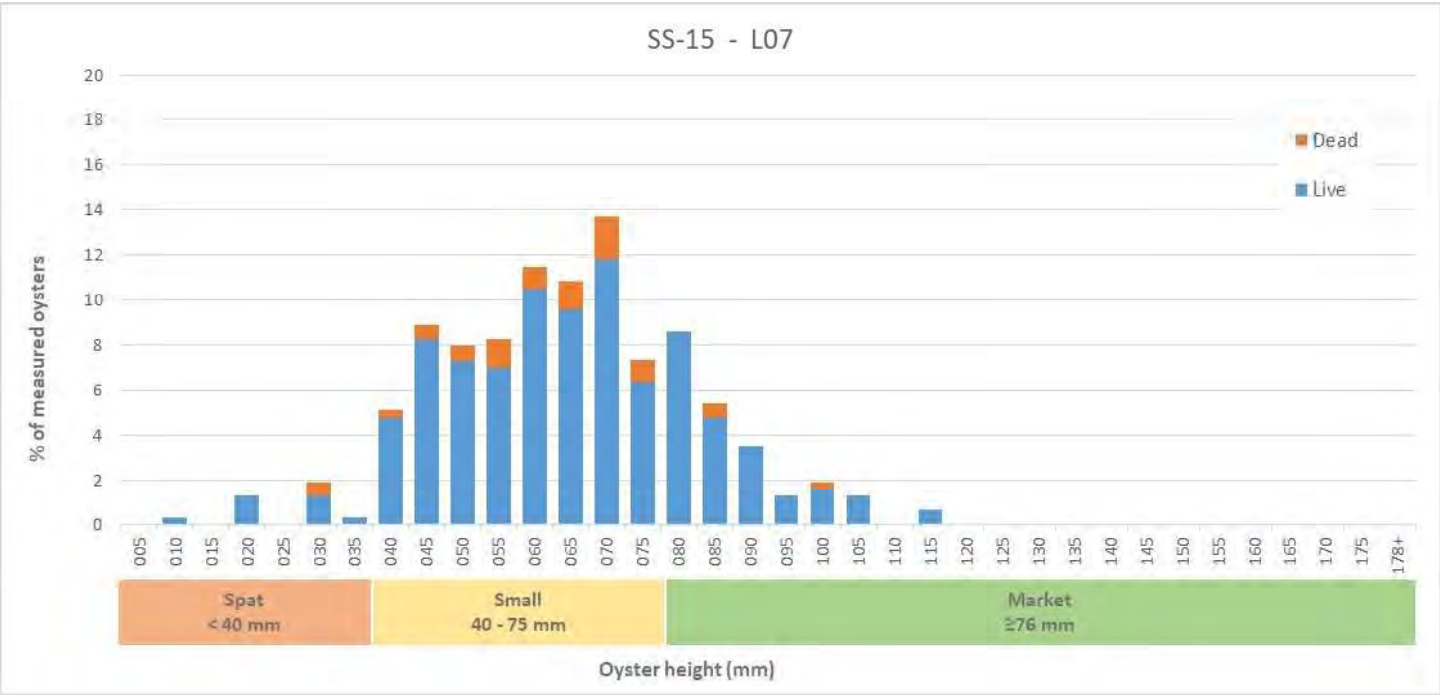
Reef Information	**Report reef ID**	**L07**
	Geodatabase Site_ID	SS_15
	Tributary	Little Choptank
	Reef area (acres)	10.93
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Fossil Shell
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/5/2019
	# samples taken	6
	# live oysters measured	284
	# live oysters counted	438
	# dead oysters counted	30
	% of oysters that were dead	6%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	146.00
	Standard error of live density (#/m^2)	19.30
	Number of samples meeting minimum threshold density (m^2)	6
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	6
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	0.33
	Standard error of live density on stone	0.33
	Average live density on shell--all shell types (#/m^2)	71.67
	Standard error of live density on shell-aall shell types	17.70
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	6
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	83%
	Average live biomass across reef (g dry weight per m^2)	95.48
	Standard error of live biomass	14.13
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	34.00
	Standard error of shell volume	4.73
	Average brown shell across all samples (%)	78%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L07 SS_15

Percent of Measured Oysters in the Market, Small, and Spat Categories



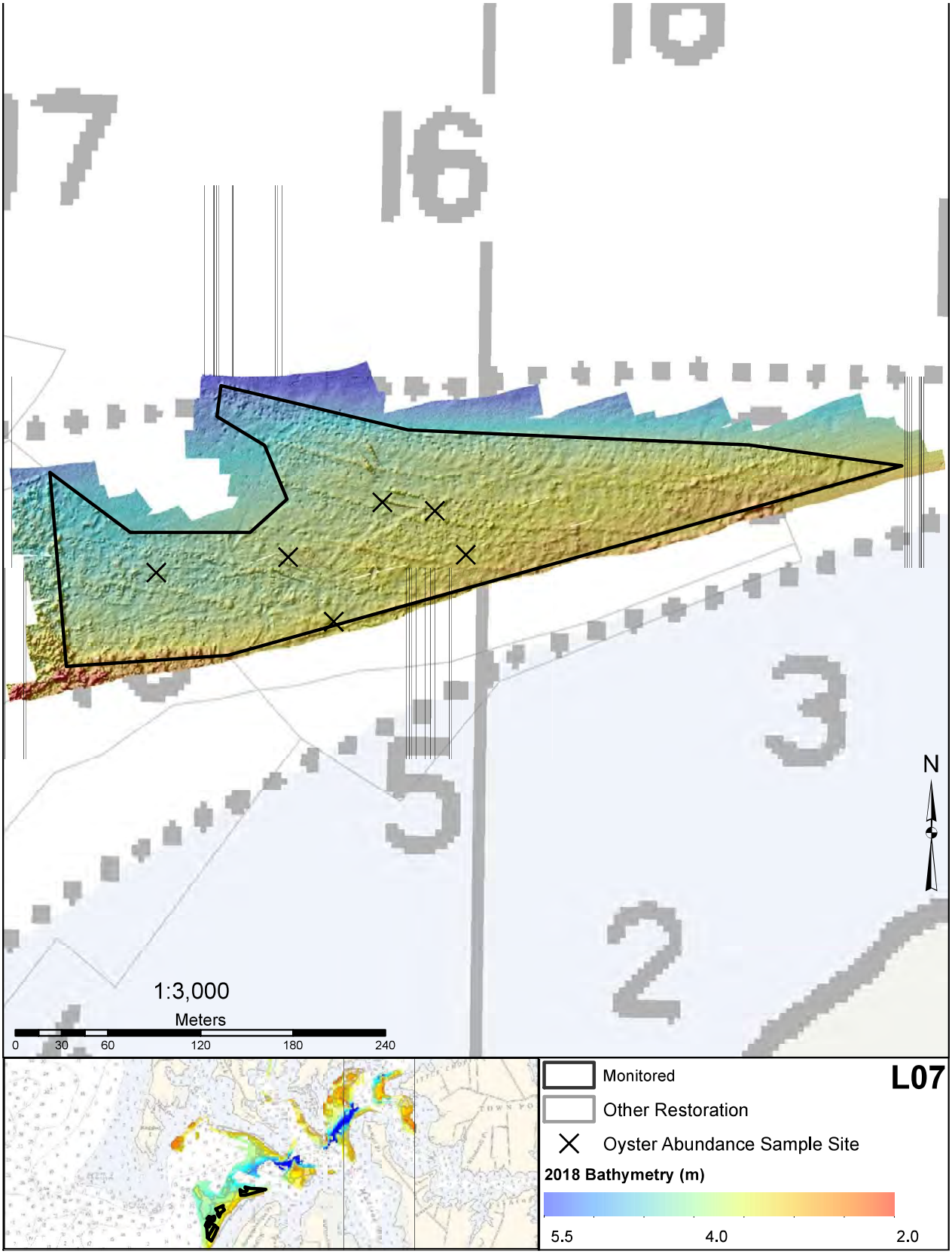
Shell Height of Oysters Measured on Reef



Reef L07 SS_15

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

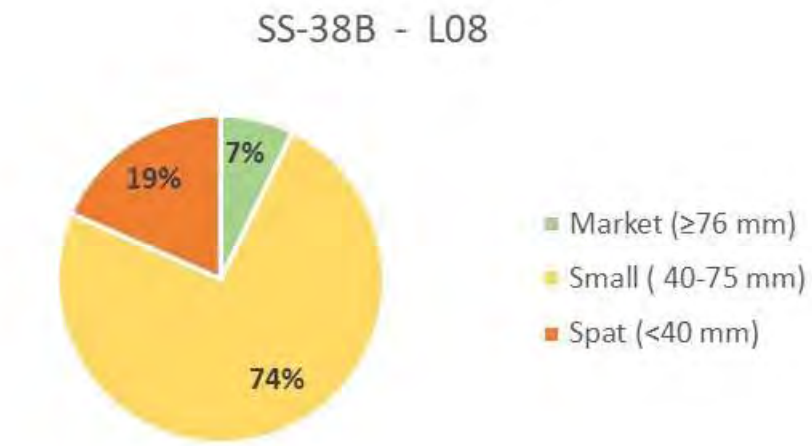


Reef L08 SS_38B

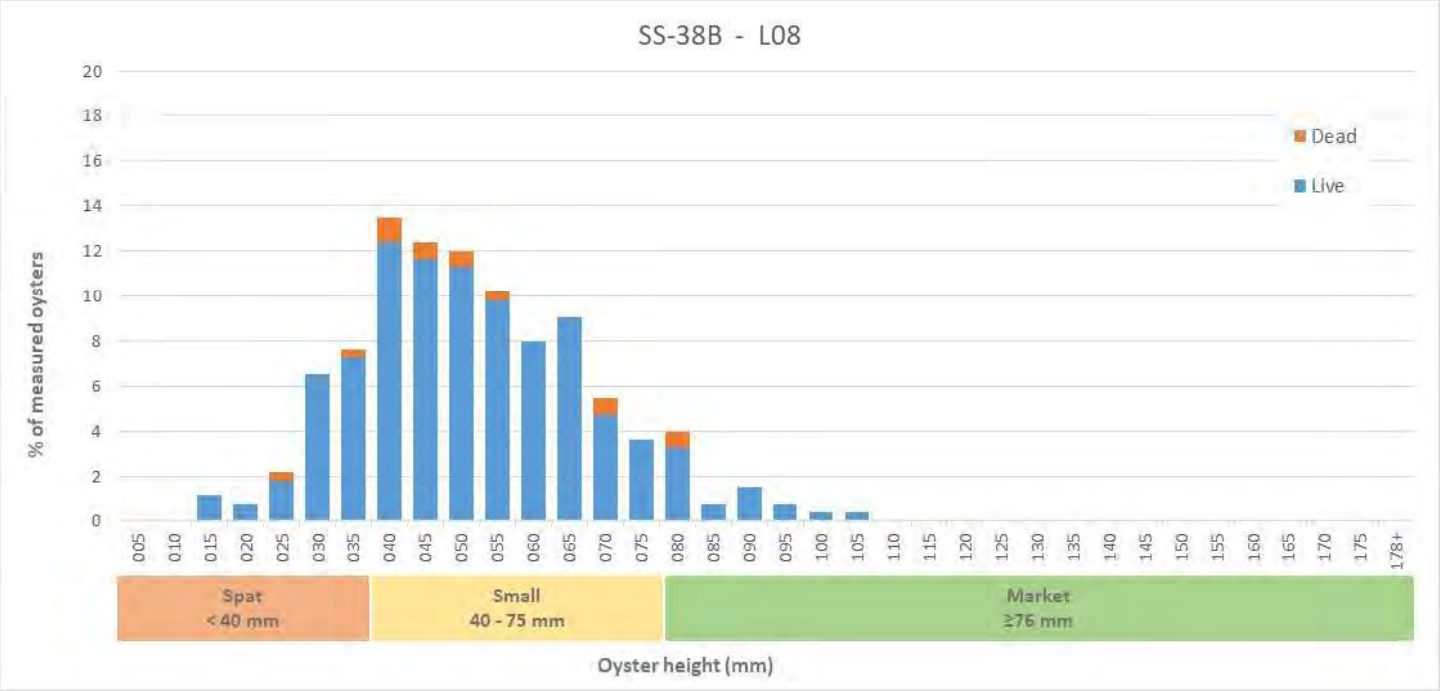
Reef Information	**Report reef ID**	**L08**
	Geodatabase Site_ID	SS_38B
	Tributary	Little Choptank
	Reef area (acres)	7.36
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Fossil Shell
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/1/2019
	# samples taken	5
	# live oysters measured	261
	# live oysters counted	453
	# dead oysters counted	14
	% of oysters that were dead	3%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	181.20
	Standard error of live density (#/m^2)	45.78
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	80%
	Average live density on stone (#/m^2)	0.80
	Standard error of live density on stone	0.49
	Average live density on shell--all shell types (#/m^2)	74.40
	Standard error of live density on shell-aall shell types	15.64
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	60%
	Average live biomass across reef (g dry weight per m^2)	82.03
	Standard error of live biomass	21.47
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	19.00
	Standard error of shell volume	4.92
	Average brown shell across all samples (%)	96%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.05
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L08 SS_38B

Percent of Measured Oysters in the Market, Small, and Spat Categories



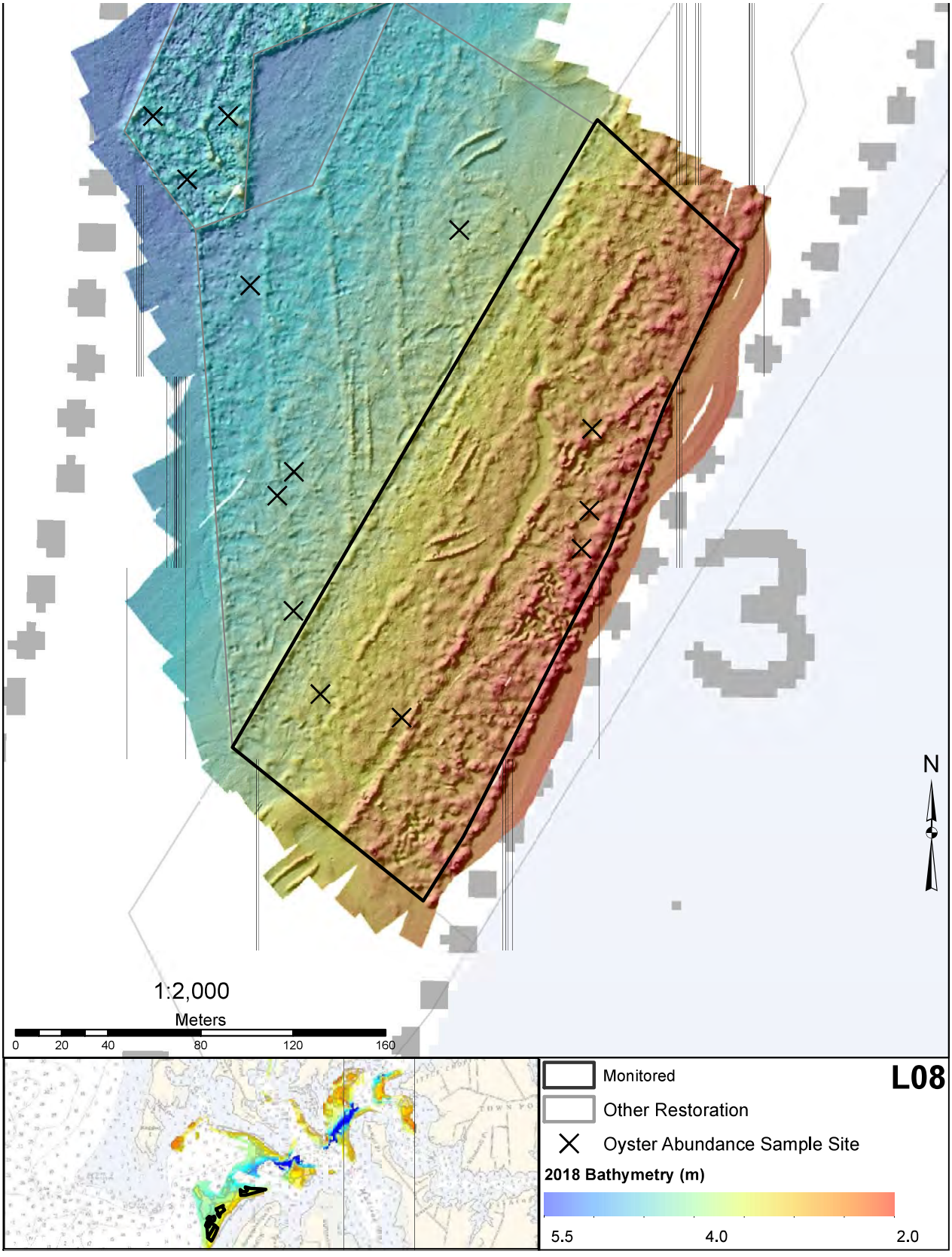
Shell Height of Oysters Measured on Reef



Reef L08 SS_38B

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

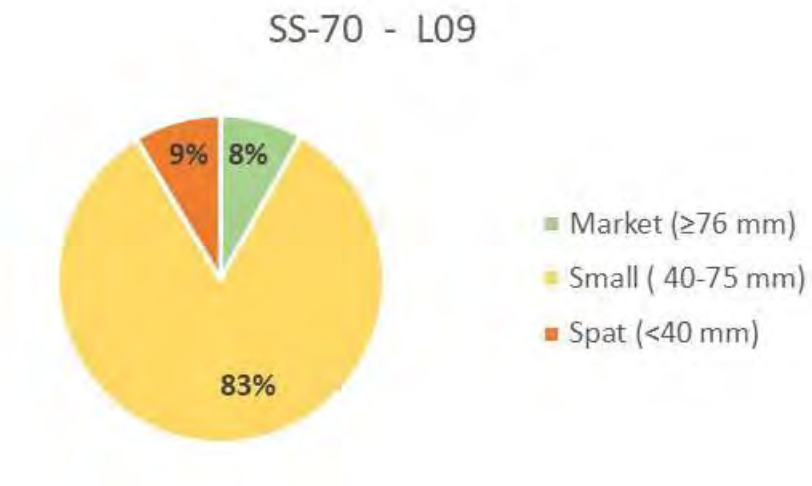


Reef L09 SS_70

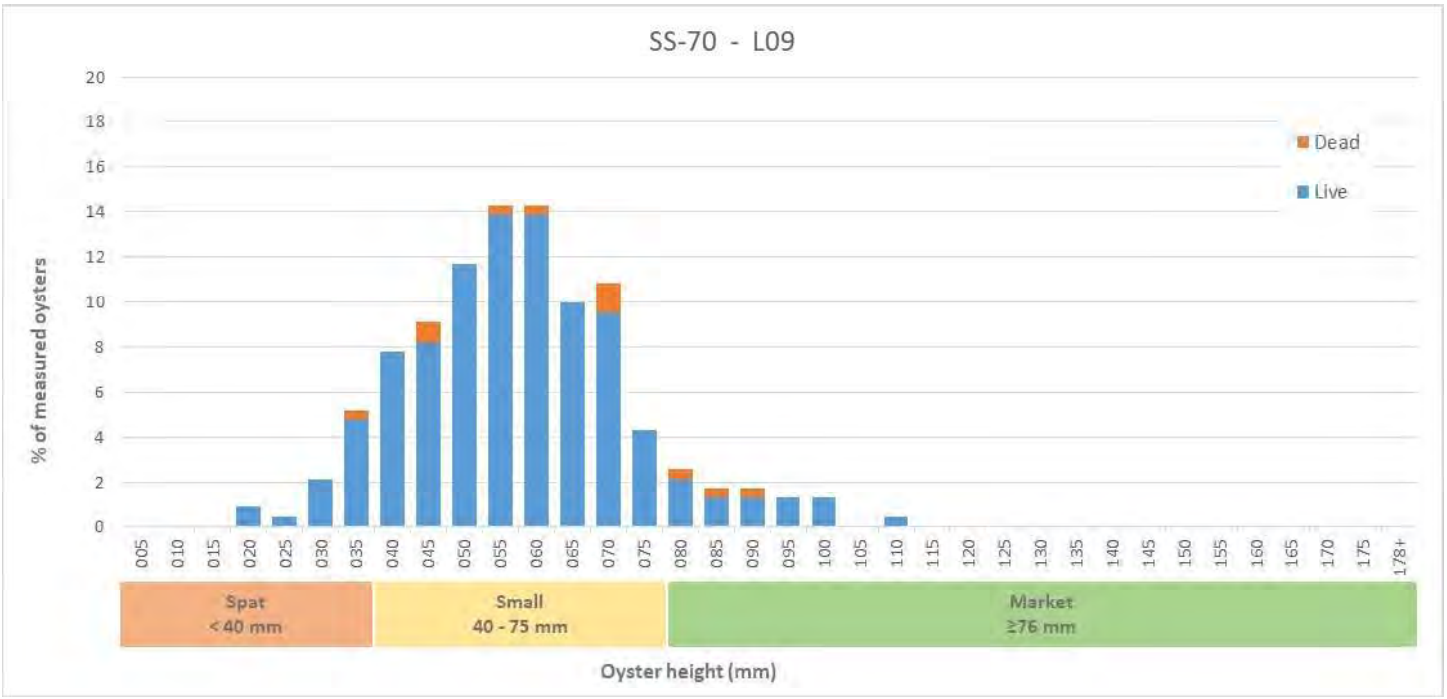
Reef Information	**Report reef ID**	**L09**
	Geodatabase Site_ID	SS_70
	Tributary	Little Choptank
	Reef area (acres)	6.08
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Fossil Shell
	Average planned reef height*	6
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	3 Year Cohort
	Sample method	Diver
	Sample date	3/1/2019
	# samples taken	5
	# live oysters measured	220
	# live oysters counted	268
	# dead oysters counted	11
	% of oysters that were dead	4%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	107.20
	Standard error of live density (#/m^2)	28.72
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	4
	Percent of samples meeting target density (%)	80%
	Average live density on stone (#/m^2)	0.00
	Standard error of live density on stone	0.00
	Average live density on shell--all shell types (#/m^2)	63.60
	Standard error of live density on shell-aall shell types	17.12
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	60%
	Average live biomass across reef (g dry weight per m^2)	55.25
	Standard error of live biomass	12.23
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	22.40
	Standard error of shell volume	3.87
	Average brown shell across all samples (%)	83%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	-0.03
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L09 SS_70

Percent of Measured Oysters in the Market, Small, and Spat Categories



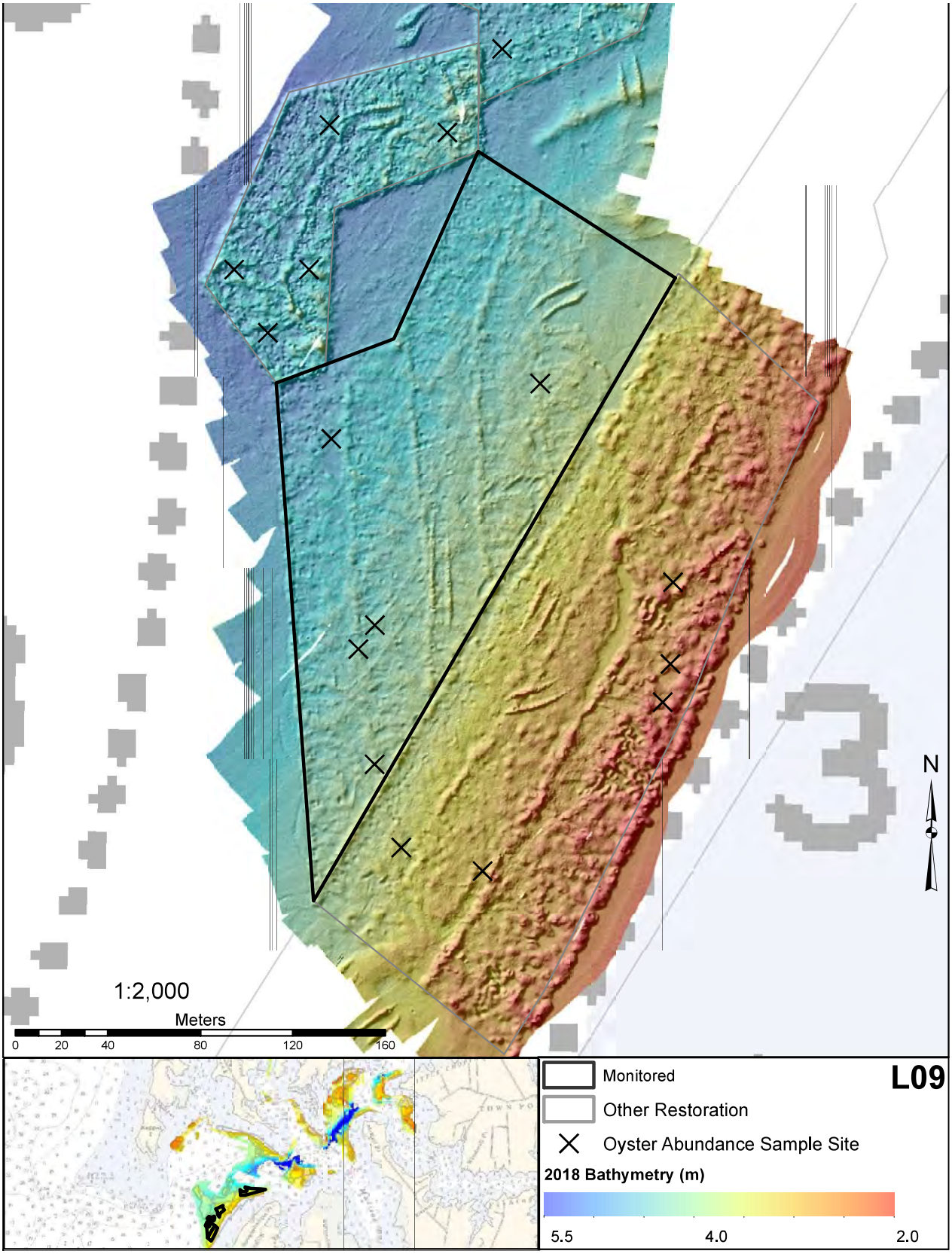
Shell Height of Oysters Measured on Reef



Reef L09 SS_70

Fall 2018 Hillshaded Bathymetry Surface Derived from Multibeam Sonar

For interpretations of features in sonar imagery, see Appendix A: Methods.

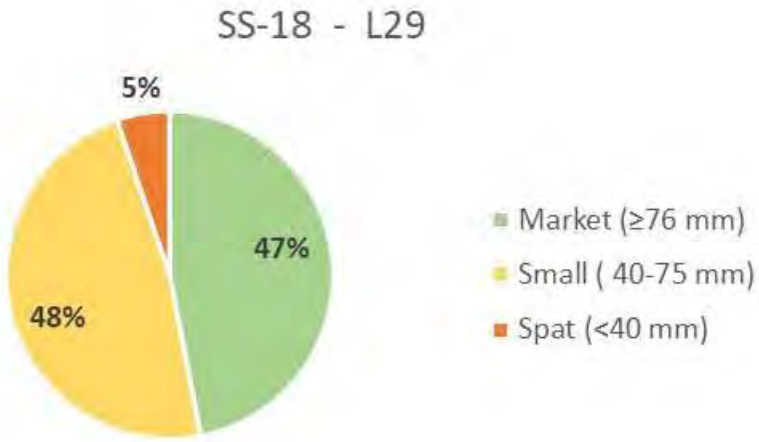


Reef L29 SS_18

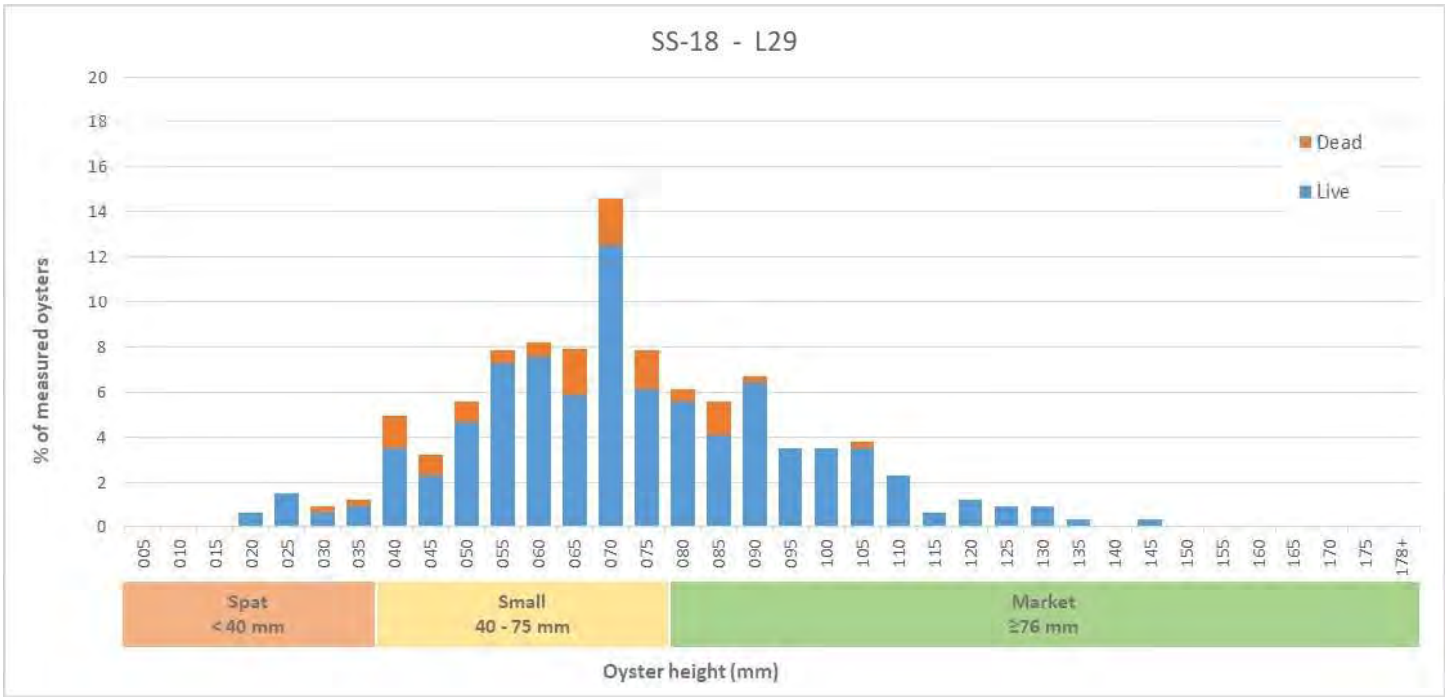
Reef Information	**Report reef ID**	**L29**
	Geodatabase Site_ID	SS_18
	Tributary	Little Choptank
	Reef area (acres)	2.72
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone base with fossil shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2016
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Diver
	Sample date	3/5/2019
	# samples taken	5
	# live oysters measured	296
	# live oysters counted	669
	# dead oysters counted	46
	% of oysters that were dead	6%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	267.60
	Standard error of live density (#/m^2)	40.11
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	35.20
	Standard error of live density on stone	19.52
	Average live density on shell--all shell types (#/m^2)	62.80
	Standard error of live density on shell-aall shell types	17.14
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	100%
	Average live biomass across reef (g dry weight per m^2)	221.13
	Standard error of live biomass	35.90
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2020
	Average shell volume across entire reef (liters per m^2)	39.10
	Standard error of shell volume	9.59
	Average brown shell across all samples (%)	70%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L29 SS_18

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

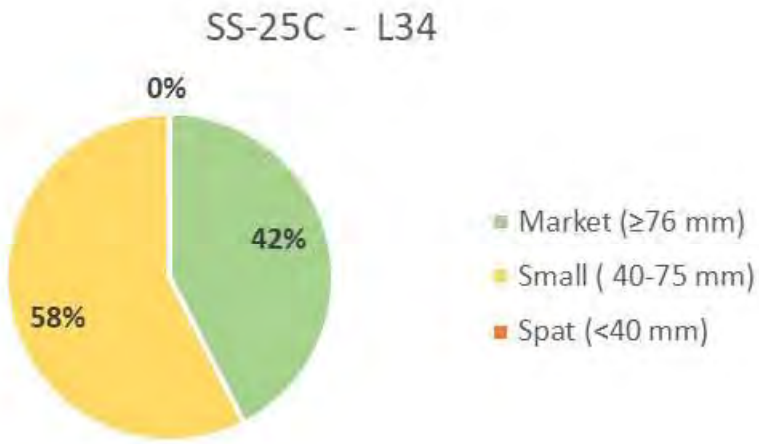


Reef L34 SS_25C

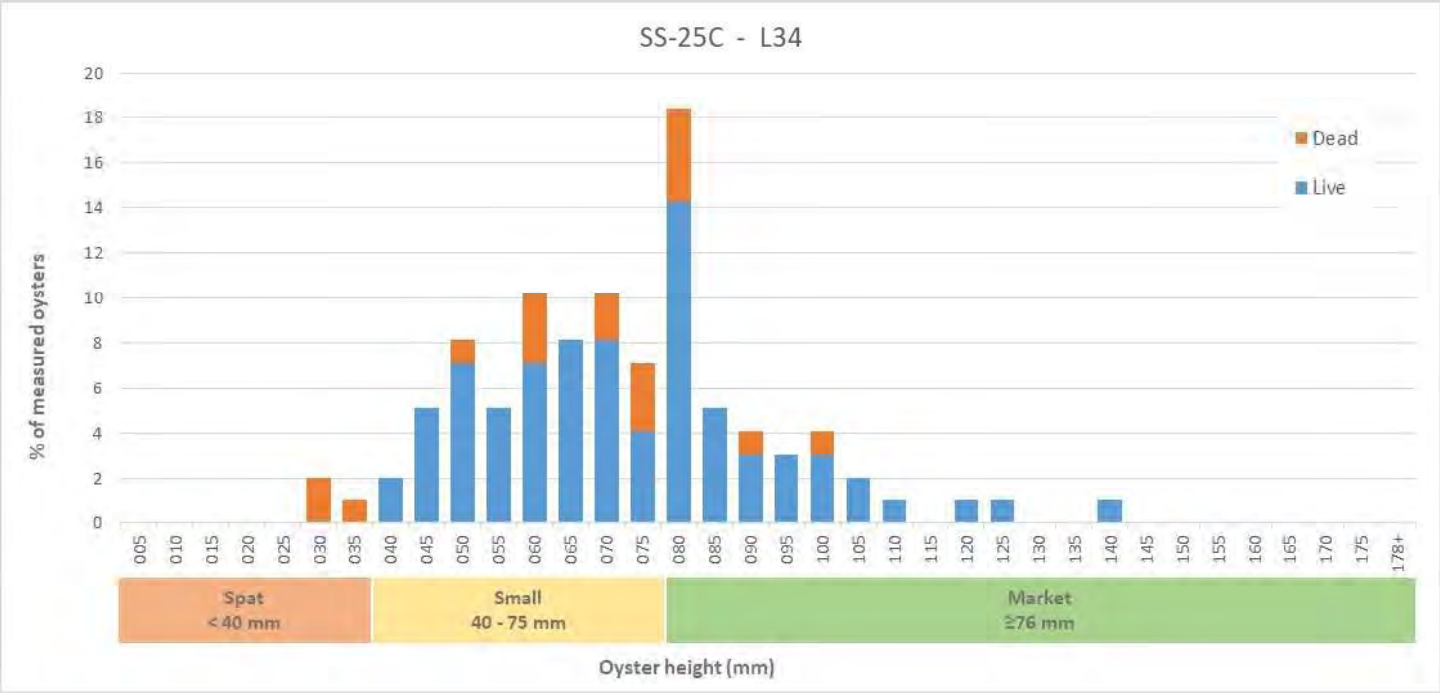
Reef Information	**Report reef ID**	**L34**
	Geodatabase Site_ID	SS_25C
	Tributary	Little Choptank
	Reef area (acres)	4.19
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2016
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Diver
	Sample date	3/3/2019
	# samples taken	5
	# live oysters measured	80
	# live oysters counted	257
	# dead oysters counted	29
	% of oysters that were dead	10%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	102.80
	Standard error of live density (#/m^2)	16.78
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	5
	Percent of samples meeting target density (%)	100%
	Average live density on stone (#/m^2)	78.00
	Standard error of live density on stone	11.75
	Average live density on shell--all shell types (#/m^2)	24.80
	Standard error of live density on shell-aall shell types	6.15
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	5
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	60%
	Average live biomass across reef (g dry weight per m^2)	85.36
	Standard error of live biomass	16.90
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	3.40
	Standard error of shell volume	1.28
	Average brown shell across all samples (%)	97%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L34 SS_25C

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef



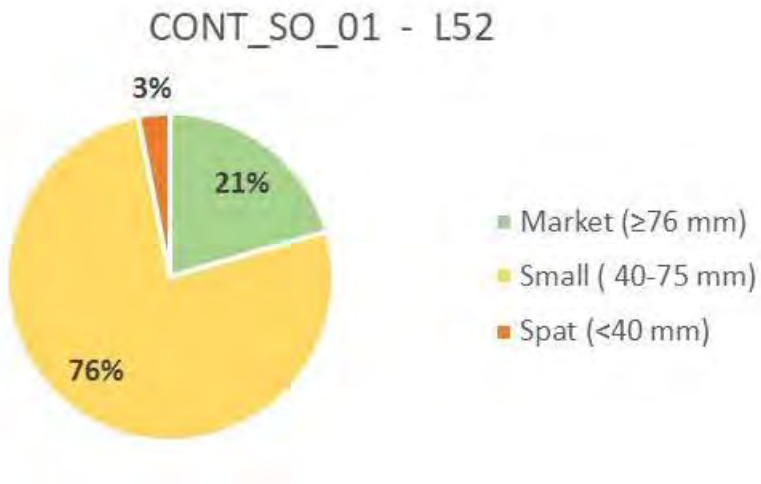
Reef L52 CONT_SO_01

Reef Information	Report reef ID	L52
	Geodatabase Site_ID	CONT_SO_01
	Tributary	Little Choptank
	Reef area (acres)	2.93
Restoration Treatment	Restoration treatment	None (control site)
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	4/4/2019
	# samples taken	12
	# live oysters measured	322
	# live oysters counted	643
	# dead oysters counted	35
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	33.28
	Standard error of live density (#/m^2)	5.85
	Number of samples meeting minimum threshold density (m^2)	10
	Percent of samples meeting minimum threshold density (%)	83%
	Number of samples meeting target density (m^2)	3
	Percent of samples meeting target density (%)	25%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	9
	Reef area meeting minimum threshold biomass (%)	75%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	1
	Reef area meeting target biomass (%)	8%
	Average live biomass across reef (g dry weight per m^2)	26.42
	Standard error of live biomass	5.1
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2020
	Average shell volume across entire reef (liters per m^2)	12.60
	Standard error of shell volume	1.57
	Average brown shell across all samples (%)	73%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD

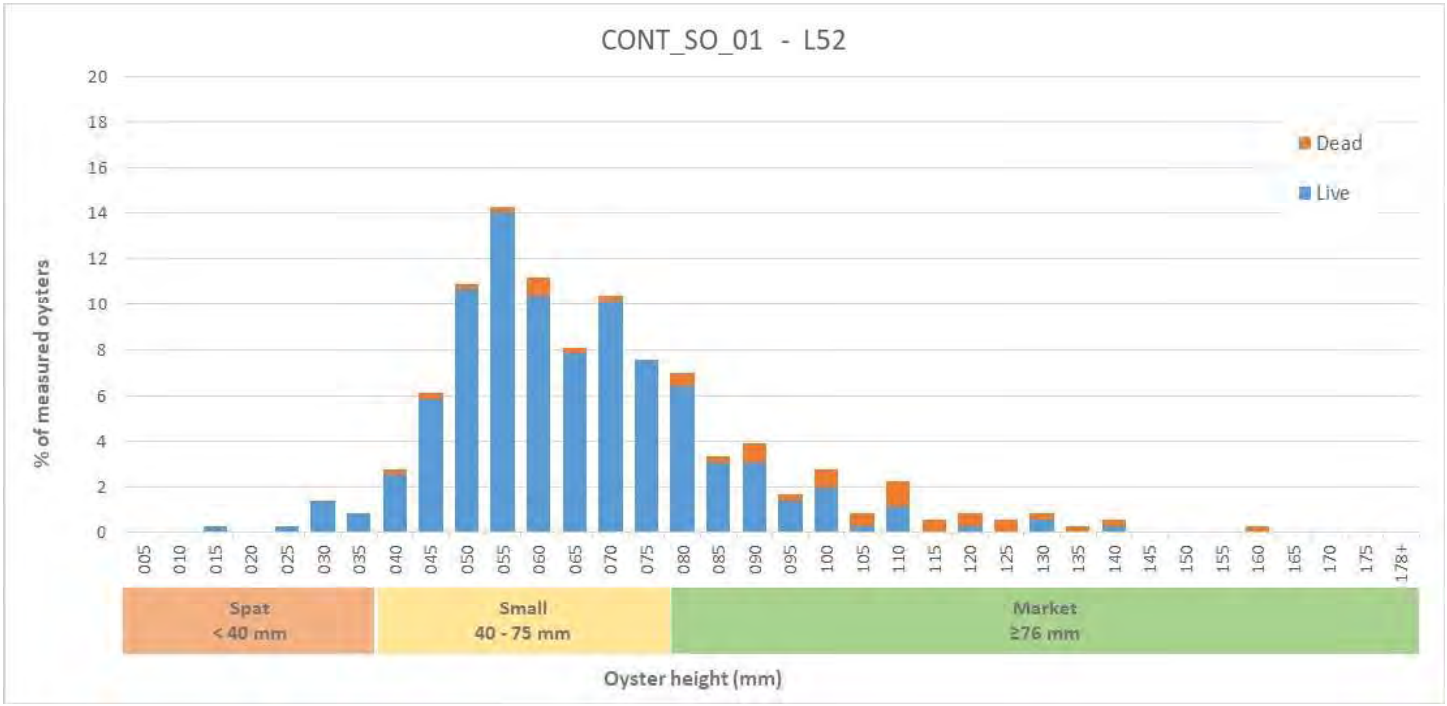
*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.

Reef L52 CONT_SO_01

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef



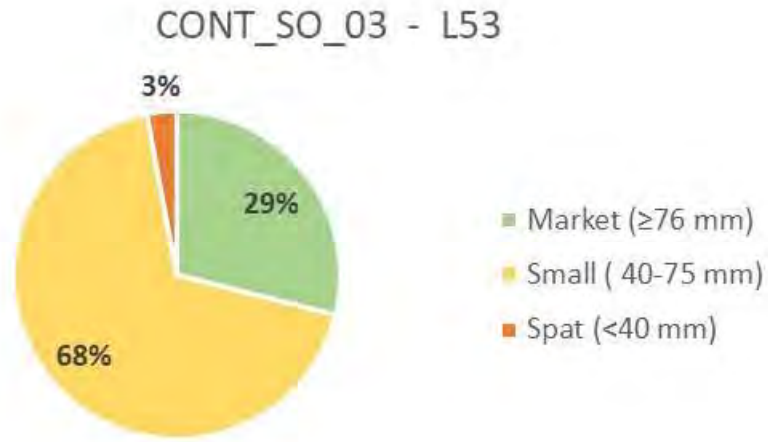
Reef L53 CONT_SO_03

Reef Information	**Report reef ID**	**L53**
	Geodatabase Site_ID	CONT_SO_03
	Tributary	Little Choptank
	Reef area (acres)	2.32
Restoration Treatment	Restoration treatment	None (control site)
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	4/4/2019
	# samples taken	12
	# live oysters measured	377
	# live oysters counted	1173
	# dead oysters counted	56
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	60.71
	Standard error of live density (#/m^2)	6.82
	Number of samples meeting minimum threshold density (m^2)	12
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	8
	Percent of samples meeting target density (%)	67%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	11
	Reef area meeting minimum threshold biomass (%)	92%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	7
	Reef area meeting target biomass (%)	58%
	Average live biomass across reef (g dry weight per m^2)	52.02
	Standard error of live biomass	6.4
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2020
	Average shell volume across entire reef (liters per m^2)	14.75
	Standard error of shell volume	1.21
	Average brown shell across all samples (%)	85%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD

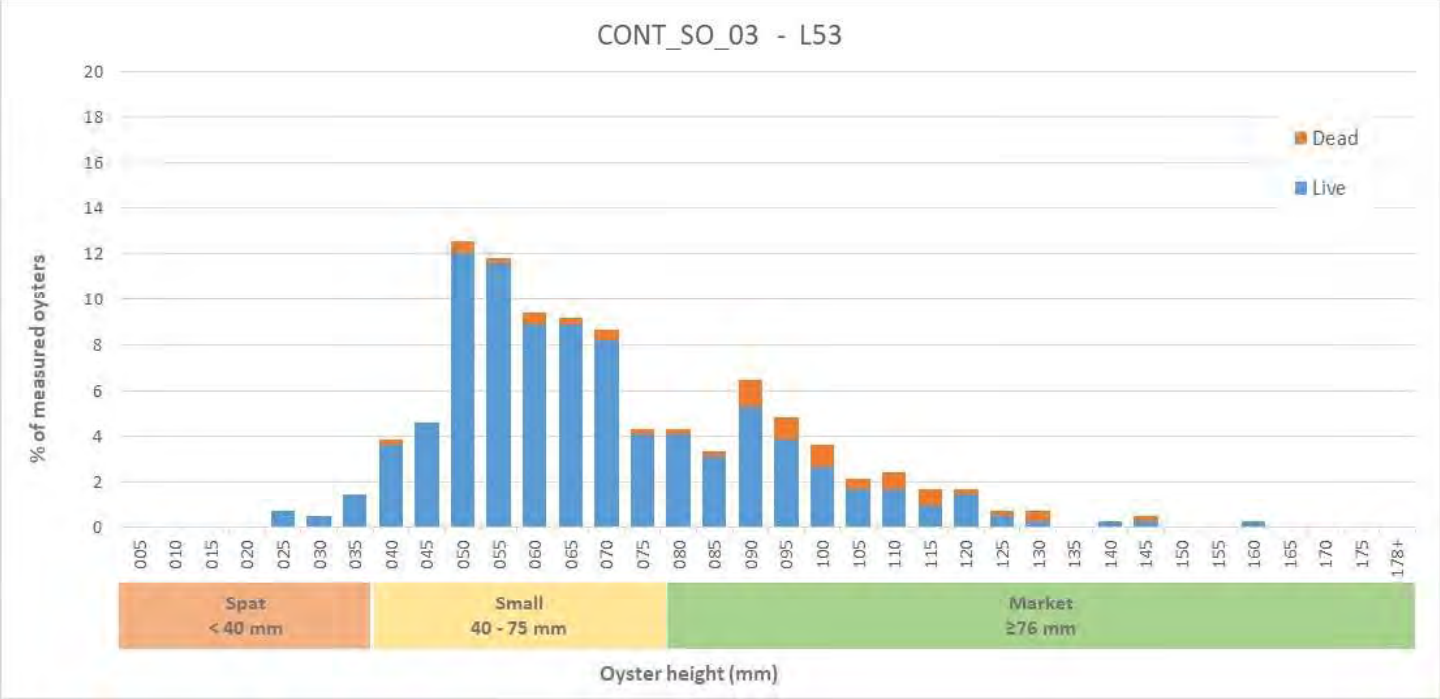
*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.

Reef L53 CONT_SO_03

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

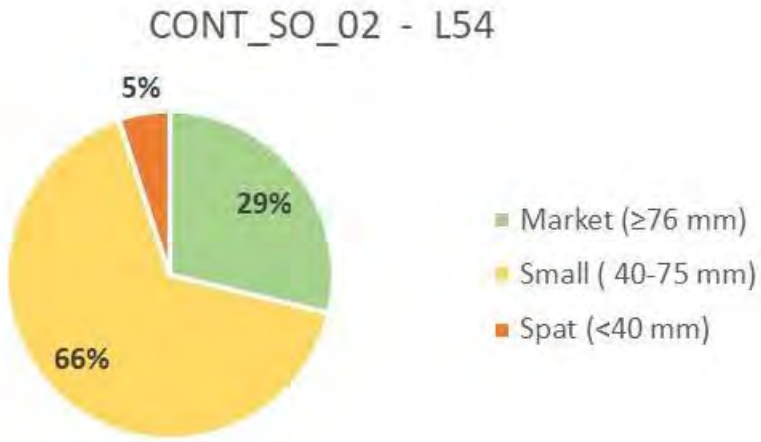


Reef L54 CONT_SO_02

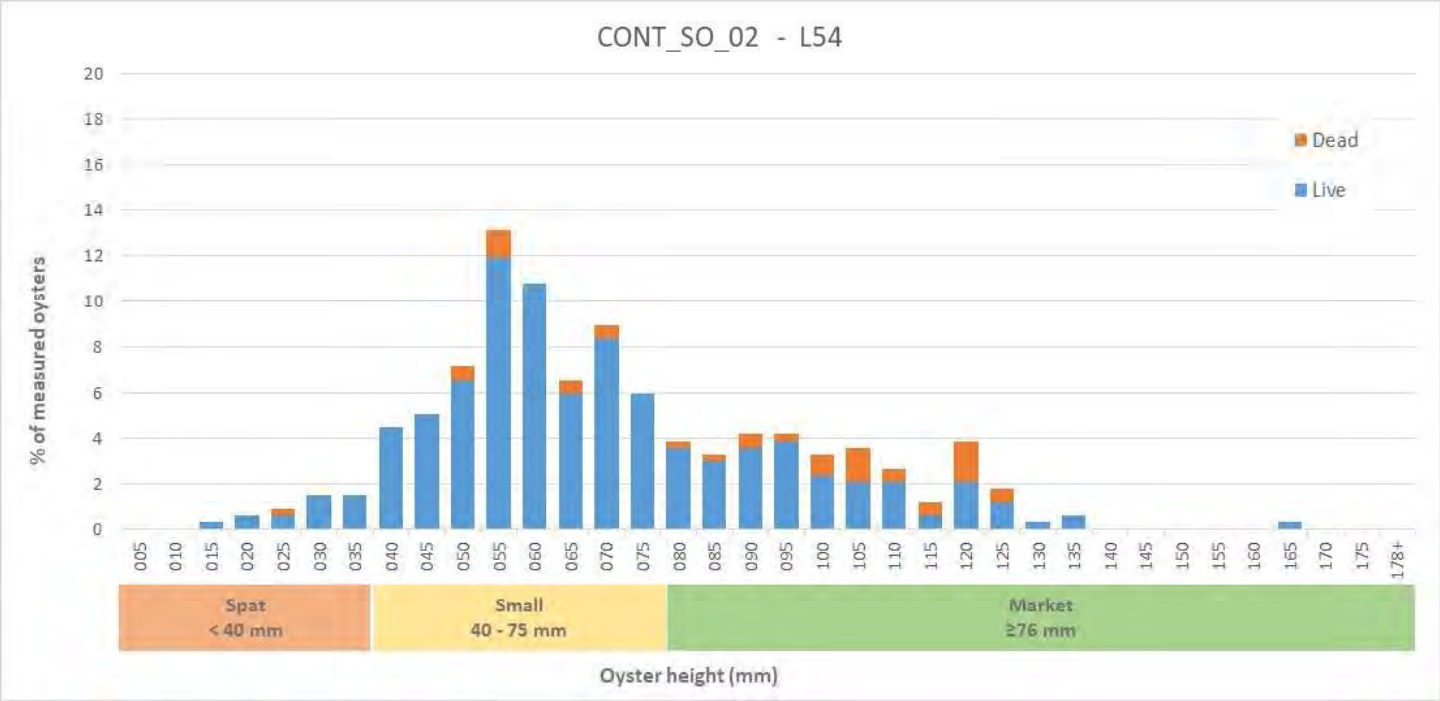
Reef Information	**Report reef ID**	**L54**
	Geodatabase Site_ID	CONT_SO_02
	Tributary	Little Choptank
	Reef area (acres)	2.5
Restoration Treatment	Restoration treatment	None (control site)
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	4/4/2019
	# samples taken	12
	# live oysters measured	299
	# live oysters counted	999
	# dead oysters counted	55
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	51.71
	Standard error of live density (#/m^2)	10.55
	Number of samples meeting minimum threshold density (m^2)	9
	Percent of samples meeting minimum threshold density (%)	75%
	Number of samples meeting target density (m^2)	6
	Percent of samples meeting target density (%)	50%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	9
	Reef area meeting minimum threshold biomass (%)	75%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	5
	Reef area meeting target biomass (%)	42%
	Average live biomass across reef (g dry weight per m^2)	43.66
	Standard error of live biomass	8.64
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2020
	Average shell volume across entire reef (liters per m^2)	14.13
	Standard error of shell volume	1.92
	Average brown shell across all samples (%)	77%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef L54 CONT_SO_02

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

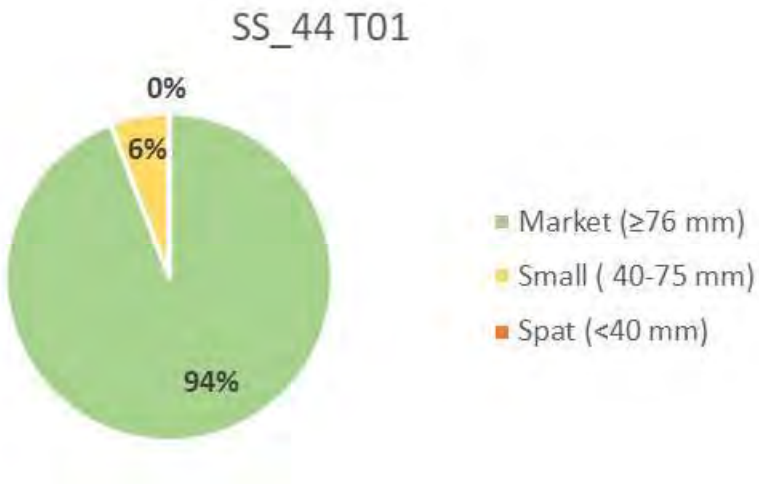


Reef T01 SS_44

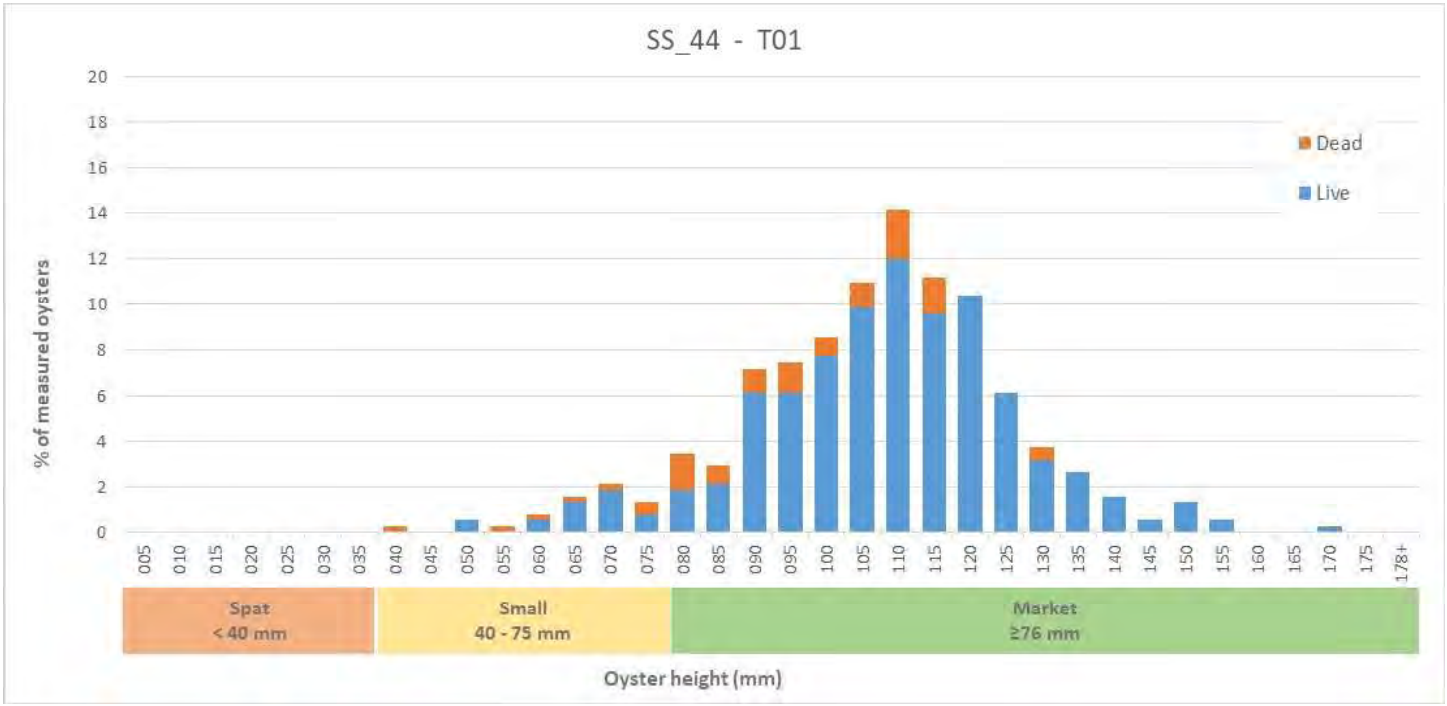
Reef Information	Report reef ID	T01
	Geodatabase Site_ID	SS_44
	Tributary	Tred Avon
	Reef area (acres)	1.78
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Mixed Shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Patent Tong
	Sample date	3/28/2019
	# samples taken	12
	# live oysters measured	327
	# live oysters counted	654
	# dead oysters counted	73
	% of oysters that were dead	10%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	33.85
	Standard error of live density (#/m^2)	6.86
	Number of samples meeting minimum threshold density (m^2)	10
	Percent of samples meeting minimum threshold density (%)	83%
	Number of samples meeting target density (m^2)	2
	Percent of samples meeting target density (%)	17%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	10
	Reef area meeting minimum threshold biomass (%)	83%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	6
	Reef area meeting target biomass (%)	50%
	Average live biomass across reef (g dry weight per m^2)	58.45
	Standard error of live biomass	11.6
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2019
	Average shell volume across entire reef (liters per m^2)	15.53
	Standard error of shell volume	1.60
	Average brown shell across all samples (%)	54%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.02
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T01 SS_44

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

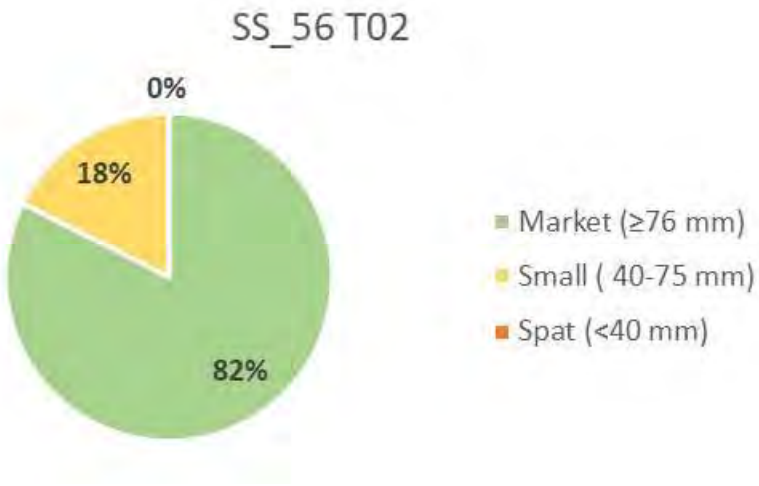


Reef T02 SS_56

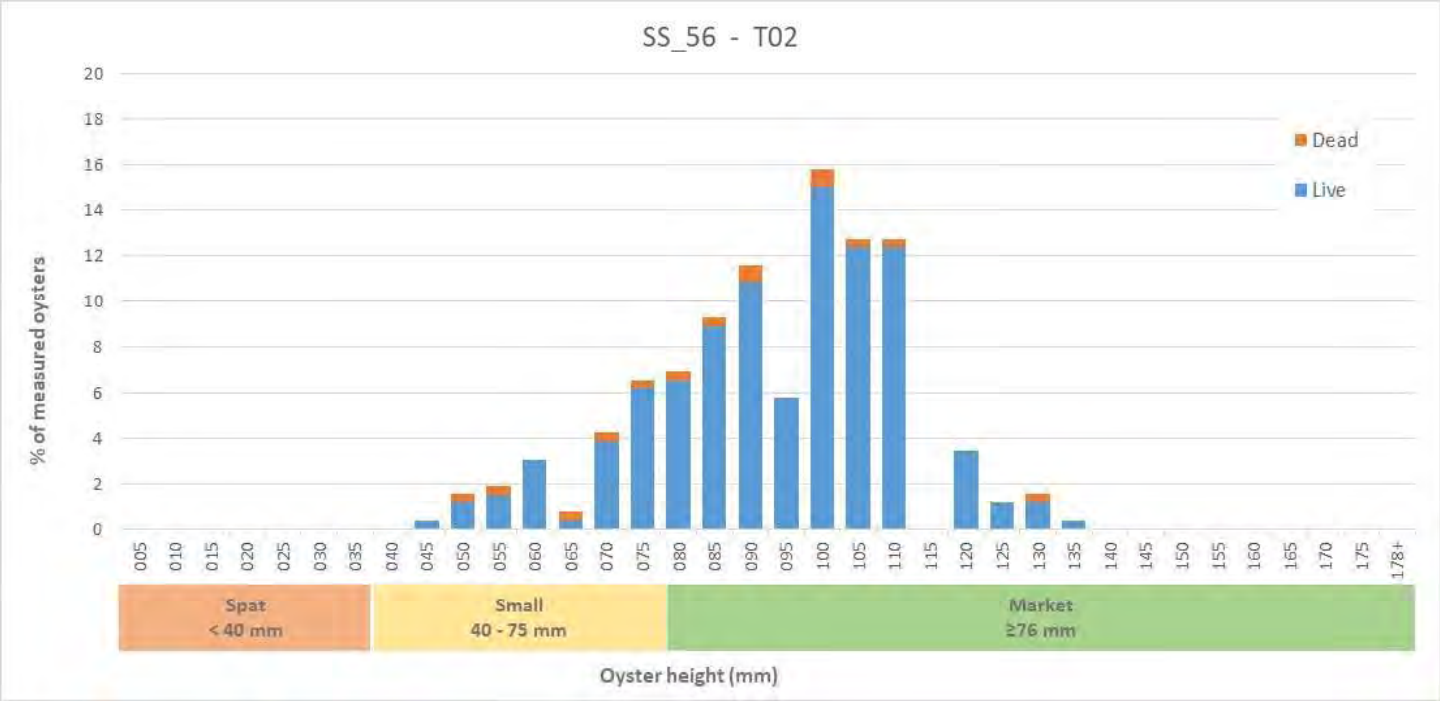
Reef Information	Report reef ID	T02
	Geodatabase Site_ID	SS_56
	Tributary	Tred Avon
	Reef area (acres)	0.8
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Mixed Shell
	Average planned reef height*	12
	Year planted with spat (initial planting)	2015
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Patent Tong
	Sample date	3/19/2019
	# samples taken	12
	# live oysters measured	245
	# live oysters counted	267
	# dead oysters counted	14
	% of oysters that were dead	5%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	13.82
	Standard error of live density (#/m^2)	2.36
	Number of samples meeting minimum threshold density (m^2)	5
	Percent of samples meeting minimum threshold density (%)	42%
	Number of samples meeting target density (m^2)	0
	Percent of samples meeting target density (%)	0%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	6
	Reef area meeting minimum threshold biomass (%)	50%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	0
	Reef area meeting target biomass (%)	0%
	Average live biomass across reef (g dry weight per m^2)	17.49
	Standard error of live biomass	2.92
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2019
	Average shell volume across entire reef (liters per m^2)	8.64
	Standard error of shell volume	0.89
	Average brown shell across all samples (%)	58%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T02 SS_56

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

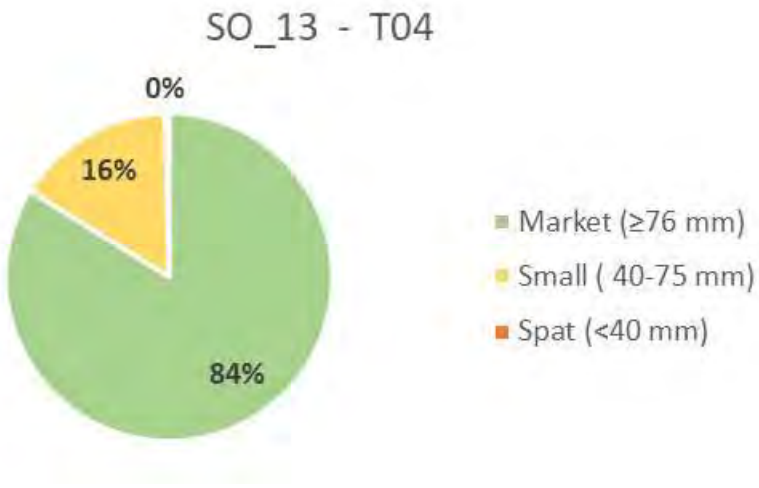


Reef T04 SO_13

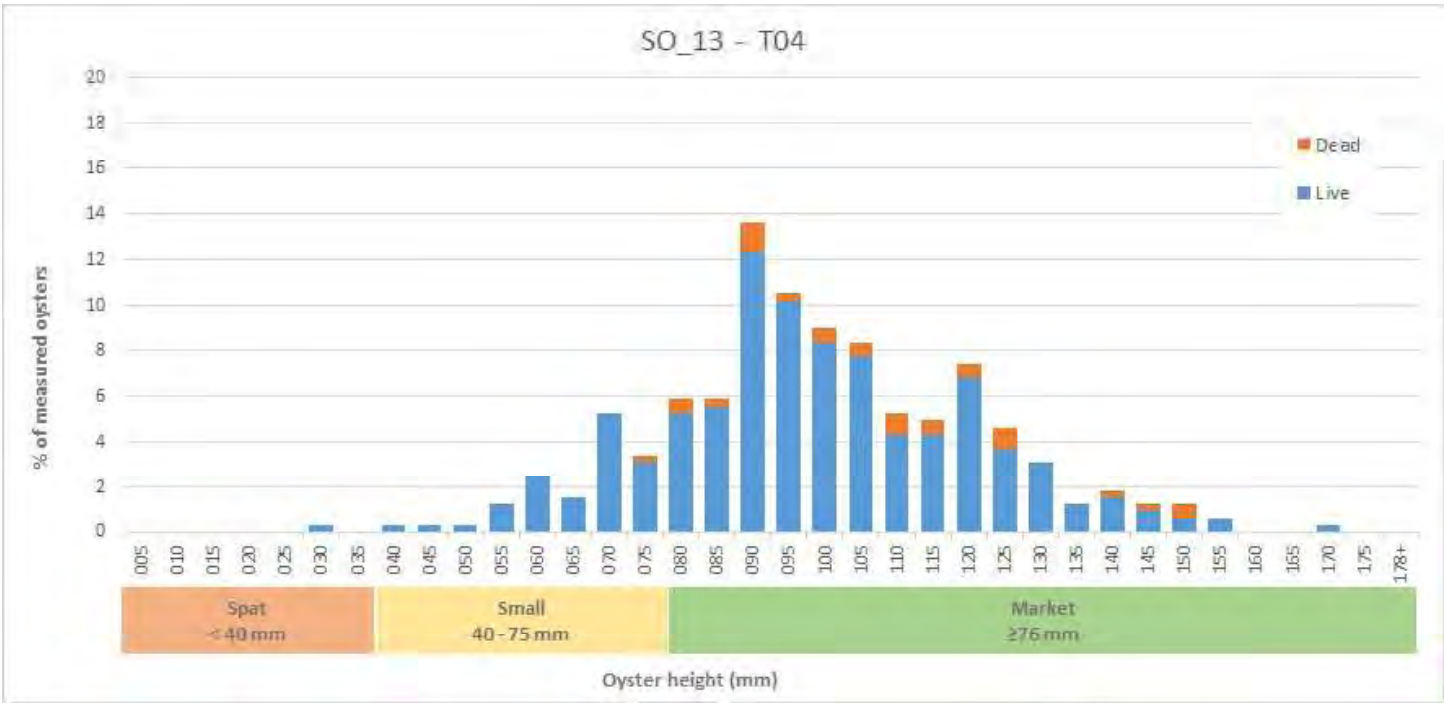
Reef Information	Report reef ID	T04
	Geodatabase Site_ID	SO_13
	Tributary	Tred Avon
	Reef area (acres)	5.94
Restoration Treatment	Restoration treatment	Seed Only
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	2016
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Patent Tong
	Sample date	3/28/2019
	# samples taken	12
	# live oysters measured	297
	# live oysters counted	445
	# dead oysters counted	39
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	23.03
	Standard error of live density (#/m^2)	3.71
	Number of samples meeting minimum threshold density (m^2)	7
	Percent of samples meeting minimum threshold density (%)	58%
	Number of samples meeting target density (m^2)	0
	Percent of samples meeting target density (%)	0%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	11
	Reef area meeting minimum threshold biomass (%)	92%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	3
	Reef area meeting target biomass (%)	25%
	Average live biomass across reef (g dry weight per m^2)	32.89
	Standard error of live biomass	4.62
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2020
	Average shell volume across entire reef (liters per m^2)	16.67
	Standard error of shell volume	1.34
	Average brown shell across all samples (%)	95%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	Yes
Reef Height	Is reef height stable/increasing?	Yes
	3 years post restoration (cm)	0.02
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T04 SO_13

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef



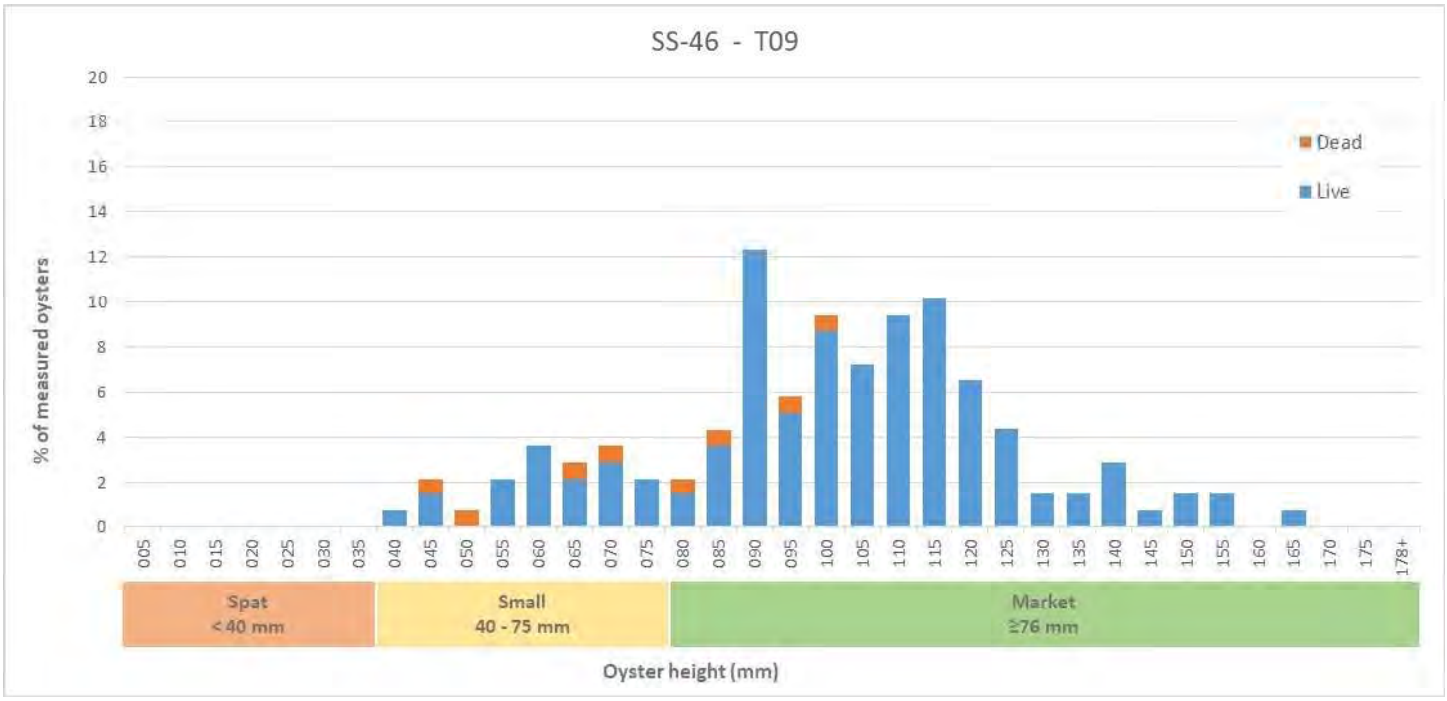
Reef T09 SS_46

Reef Information	Report reef ID	T09
	Geodatabase Site_ID	SS_46
	Tributary	Tred Avon
	Reef area (acres)	3.30
Restoration Treatment	Restoration treatment	Substrate & Seed
	Substrate type added	Stone
	Average planned reef height*	12
	Year planted with spat (initial planting)	2016
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Sentinel
	Sample method	Diver
	Sample date	3/19/2019
	# samples taken	6
	# live oysters measured	130
	# live oysters counted	327
	# dead oysters counted	8
	% of oysters that were dead	2%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	Yes
	Fall 2018: Did reef meet target density?	Yes
	Average live density across reef (#/m^2)	109.00
	Standard error of live density (#/m^2)	70.49
	Number of samples meeting minimum threshold density (m^2)	6
	Percent of samples meeting minimum threshold density (%)	100%
	Number of samples meeting target density (m^2)	2
	Percent of samples meeting target density (%)	33%
	Average live density on stone (#/m^2)	48.67
	Standard error of live density on stone	39.03
	Average live density on shell--all shell types (#/m^2)	60.33
	Standard error of live density on shell-aall shell types	32.14
	Average live density on clam shell (#/m^2)	0.00
	Standard error of live density on clam shell	0.00
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	Yes
	Number of samples meeting minimum threshold biomass	6
	Reef area meeting minimum threshold biomass (%)	100%
	Fall 2018: Did reef meet target oyster biomass?	Yes
	Number of samples meeting target biomass	4
	Reef area meeting target biomass (%)	67%
	Average live biomass across reef (g dry weight per m^2)	153.37
	Standard error of live biomass	99.23
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	13.37
	Standard error of shell volume	7.95
	Average brown shell across all samples (%)	95%
	Total volume change (liters per m^2)	-
	% Change in total volume from 2015	-
	Surface shell volume change (liters per m^2)	-
	% change in surface shell volume change	-
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2018
	3 years post restoration (cm)	TBD
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T09 SS_46

Percent of Measured Oysters in the Market, Small, and Spat Categories

Shell Height of Oysters Measured on Reef



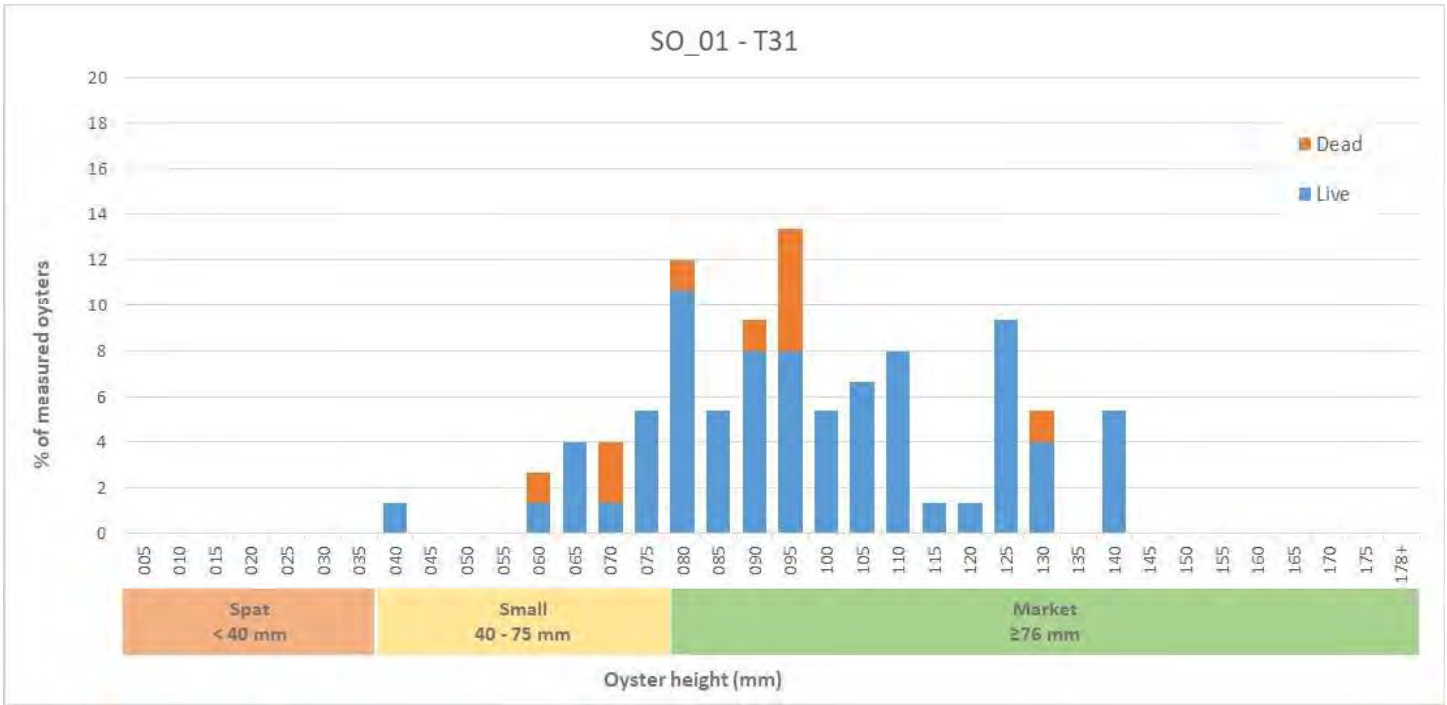
Reef T31 SO_01

Reef Information	**Report reef ID**	**T31**
	Geodatabase Site_ID	SO_01
	Tributary	Tred Avon
	Reef area (acres)	2.1
Restoration Treatment	Restoration treatment	None
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	3/28/2019
	# samples taken	12
	# live oysters measured	65
	# live oysters counted	124
	# dead oysters counted	11
	% of oysters that were dead	8%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	No
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	6.42
	Standard error of live density (#/m^2)	4.73
	Number of samples meeting minimum threshold density (m^2)	1
	Percent of samples meeting minimum threshold density (%)	8%
	Number of samples meeting target density (m^2)	1
	Percent of samples meeting target density (%)	8%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	No
	Number of samples meeting minimum threshold biomass	2
	Reef area meeting minimum threshold biomass (%)	17%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	1
	Reef area meeting target biomass (%)	8%
	Average live biomass across reef (g dry weight per m^2)	8.14
	Standard error of live biomass	5.05
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	5.30
	Standard error of shell volume	1.87
	Average brown shell across all samples (%)	56.82
	Total volume change (liters per m^2)	N/A
	% Change in total volume from 2015	N/A
	Surface shell volume change (liters per m^2)	N/A
	% change in surface shell volume change	N/A
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2019
	3 years post restoration (cm)	TBD in 2021
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T31 SO_01

Percent of Measured Oysters in the Market, Small, and Spat Categories

Shell Height of Oysters Measured on Reef



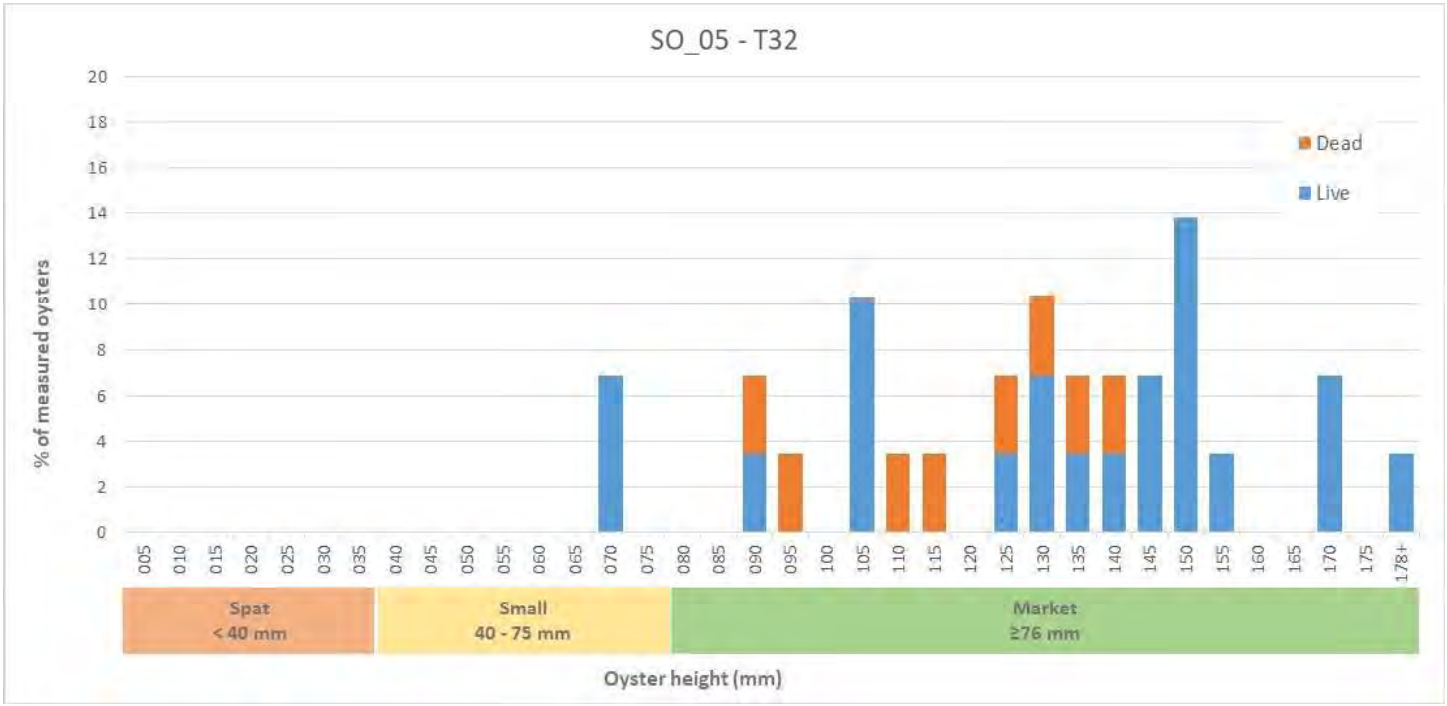
Reef T32 SO_05

Reef Information	**Report reef ID**	**T32**
	Geodatabase Site_ID	SO_05
	Tributary	Tred Avon
	Reef area (acres)	1.85
Restoration Treatment	Restoration treatment	None
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	3/28/2019
	# samples taken	12
	# live oysters measured	21
	# live oysters counted	21
	# dead oysters counted	8
	% of oysters that were dead	28%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	No
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	1.09
	Standard error of live density (#/m^2)	0.45
	Number of samples meeting minimum threshold density (m^2)	0
	Percent of samples meeting minimum threshold density (%)	0%
	Number of samples meeting target density (m^2)	0
	Percent of samples meeting target density (%)	0%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	No
	Number of samples meeting minimum threshold biomass	0
	Reef area meeting minimum threshold biomass (%)	0%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	0
	Reef area meeting target biomass (%)	0%
	Average live biomass across reef (g dry weight per m^2)	2.82
	Standard error of live biomass	0.96
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	6.74
	Standard error of shell volume	0.79
	Average brown shell across all samples (%)	13.55
	Total volume change (liters per m^2)	N/A
	% Change in total volume from 2015	N/A
	Surface shell volume change (liters per m^2)	N/A
	% change in surface shell volume change	N/A
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2019
	3 years post restoration (cm)	TBD in 2022
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T32 SO_05

Percent of Measured Oysters in the Market, Small, and Spat Categories

Shell Height of Oysters Measured on Reef

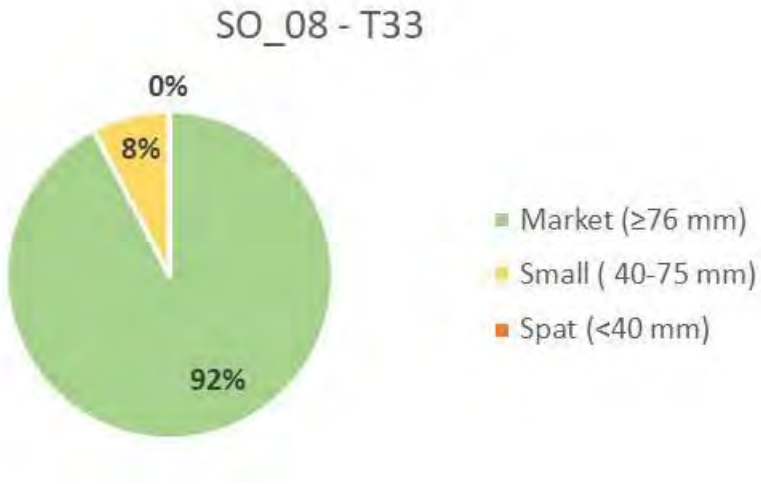


Reef T33 SO_08

Reef Information	Report reef ID	T33
	Geodatabase Site_ID	SO_08
	Tributary	Tred Avon
	Reef area (acres)	2.03
Restoration Treatment	Restoration treatment	None
	Substrate type added	None
	Average planned reef height*	N/A
	Year planted with spat (initial planting)	N/A
	Second year class replanting	N/A
Monitoring Information	Monitoring type	Reference
	Sample method	Patent Tong
	Sample date	3/28/2019
	# samples taken	12
	# live oysters measured	13
	# live oysters counted	13
	# dead oysters counted	3
	% of oysters that were dead	19%
Oyster Density	Fall 2018: Did reef meet minimum threshold density?	No
	Fall 2018: Did reef meet target density?	No
	Average live density across reef (#/m^2)	0.67
	Standard error of live density (#/m^2)	0.36
	Number of samples meeting minimum threshold density (m^2)	0
	Percent of samples meeting minimum threshold density (%)	0%
	Number of samples meeting target density (m^2)	0
	Percent of samples meeting target density (%)	0%
	Average live density on stone (#/m^2)	N/A
	Standard error of live density on stone	N/A
	Average live density on shell--all shell types (#/m^2)	N/A
	Standard error of live density on shell-aall shell types	N/A
	Average live density on clam shell (#/m^2)	N/A
	Standard error of live density on clam shell	N/A
	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m^2)	N/A
Oyster Biomass	Fall 2018: Did reef meet minimum threshold oyster biomass?	No
	Number of samples meeting minimum threshold biomass	0
	Reef area meeting minimum threshold biomass (%)	0%
	Fall 2018: Did reef meet target oyster biomass?	No
	Number of samples meeting target biomass	0
	Reef area meeting target biomass (%)	0%
	Average live biomass across reef (g dry weight per m^2)	1.68
	Standard error of live biomass	1.05
	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m^2)	N/A
Shell Volume	Is the shell budget stable/ increasing?	TBD in 2021
	Average shell volume across entire reef (liters per m^2)	5.01
	Standard error of shell volume	0.80
	Average brown shell across all samples (%)	20.40
	Total volume change (liters per m^2)	N/A
	% Change in total volume from 2015	N/A
	Surface shell volume change (liters per m^2)	N/A
	% change in surface shell volume change	N/A
Multiple Year Classes	Are multiple year classes present?	Yes
Reef Footprint	Is reef footprint stable/increasing?	No data in 2018
Reef Height	Is reef height stable/increasing?	No data in 2019
	3 years post restoration (cm)	TBD in 2023
	*Average planned reef height: The amount of reef-building material placed into a reef was calculated by multiplying the desired average reef height (ex: 6"; 12") by the reef area. The actual height of the reef varied across the reef.	

Reef T33 SO_08

Percent of Measured Oysters in the Market, Small, and Spat Categories



Shell Height of Oysters Measured on Reef

Appendix C: Tables of 2018 Monitoring Information For 3-year-old reefs, 6-year-old reefs, and reference reefs (Tables 10-17)

Tables 10 and 11 below show the restoration treatment and sampling information for each reef.

Detailed monitoring results, by tributary and by Oyster Metrics criteria, are in Tables 12-17 below. All information for each reef, by reef, including sonar images and graphics of oyster shell height distributions, is in Appendix B: Reef Pages. Information on sentinel reefs (monitored annually) is in Appendix D.

Table 10: Restoration treatment, sampling information, and oyster count data for Harris Creek reefs.

Report Reef ID	Sample Method	Is the shell budget stable/ increasing?	Average shell volume across entire reef (liters per m^2)	Standard error of shell volume	Average brown shell across all samples (%)	Total volume change (liters per m^2)	% change in total volume from 2015	Surface shell volume change (liters per m2)	% change in surface shell volume change	Are multiple year classes present?	Is reef footprint stable/ increasing?	Is reef height stable/ increasing?	Difference between postconstruction reef height and reefs height 3 years post restoration (cm)
L02	Diver	TBD in 2019	42.00	9.86	79%	-	-	-	-	Yes	Yes	Yes	0
L05	Diver	TBD in 2021	42.80	8.62	82%	-	-	-	-	Yes	Yes	Yes	0
L06	Diver	TBD in 2021	6.40	2.93	93%	-	-	-	-	Yes	Yes	Yes	0.03
L07	Diver	TBD in 2021	34.00	4.73	78%	-	-	-	-	Yes	Yes	Yes	0
L08	Diver	TBD in 2021	19.00	4.92	96%	-	-	-	-	Yes	Yes	Yes	0.05
L09	Diver	TBD in 2021	22.40	3.87	83%	-	-	-	-	Yes	Yes	Yes	-0.03
L52	Patent Tong	TBD in 2020	12.60	1.57	73%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L53	Patent Tong	TBD in 2020	14.75	1.21	85%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L54	Patent Tong	TBD in 2020	14.13	1.92	77%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD

Table 11: Restoration treatment and sampling information for Little Choptank River reefs.

Report reef ID	Reef area (acres)	Restoration treatment	Substrate type added	Average planned reef height*	Year planted with spat (initial planting)	Second year class replanting	Monitoring type	Sample method	Sample date	# samples taken	# live oysters measured	# live oysters counted	# dead oysters counted	% of oysters that were dead
L02	2.81	Substrate & Seed	Fossil Shell	6	2015	N/A	3 Year Cohort	Diver	3/8/2019	5	247	529	62	10%
L05	1.93	Substrate & Seed	Stone base with fossil shell	12	2015	N/A	3 Year Cohort	Diver	3/8/2019	5	250	436	63	13%
L06	5.01	Substrate & Seed	Stone	9	2015	N/A	3 Year Cohort	Diver	3/3/2019	5	191	287	24	8%
L07	10.93	Substrate & Seed	Fossil Shell	6	2015	N/A	3 Year Cohort	Diver	3/5/2019	6	284	438	30	6%
L08	7.36	Substrate & Seed	Fossil Shell	6	2015	N/A	3 Year Cohort	Diver	3/1/2019	5	261	453	14	3%
L09	6.08	Substrate & Seed	Fossil Shell	6	2015	N/A	3 Year Cohort	Diver	3/1/2019	5	220	268	11	4%
L52	2.93	None (control site)	None	N/A	N/A	N/A	Reference	Patent Tong	4/4/2019	12	322	643	35	5%
L53	2.32	None (control site)	None	N/A	N/A	N/A	Reference	Patent Tong	4/4/2019	12	377	1173	56	5%
L54	2.5	None (control site)	None	N/A	N/A	N/A	Reference	Patent Tong	4/4/2019	12	299	999	55	5%

Table 12: Oyster density monitoring results for Harris Creek in 2018.

Report reef ID	Sample method	Fall 2018: Did reef meet minimum threshold density?	Fall 2018: Did reef meet target density?	Average live density across reef (#/m²)	Standard error of live density (#/m²)	Number of samples meeting minimum threshold density (m²)	Percent of samples meeting minimum threshold density (%)	Number of samples meeting target density (m²)	Percent of samples meeting target density (%)	Average live density on stone (#/m²)	Standard error of live density on stone	Average live density on shell--all shell types (#/m²)	Standard error of live density on shell--all shell types	Average live density on clam shell (#/m²)	Standard error of live density on clam shell	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m²)
H01	Patent Tong	Yes	No	30.62	3.47	10	100%	1	10%	N/A	N/A	N/A	N/A	N/A	N/A	55.81
H02	Patent Tong	Yes	No	36.73	9.04	6	86%	2	29%	N/A	N/A	N/A	N/A	N/A	N/A	47.76
H03	Patent Tong	Yes	No	13.04	3.58	6	38%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	32.86
H04	Patent Tong	Yes	No	25.07	4.99	8	73%	1	9%	N/A	N/A	N/A	N/A	N/A	N/A	38.96
H05	Patent Tong	Yes	No	43.57	7.16	12	86%	4	29%	N/A	N/A	N/A	N/A	N/A	N/A	47.15
H06	Patent Tong	Yes	No	39.89	7.57	8	89%	2	22%	N/A	N/A	N/A	N/A	N/A	N/A	47.11
H07	Patent Tong	Yes	Yes	42.95	6.74	10	77%	6	46%	N/A	N/A	N/A	N/A	N/A	N/A	29.95
H08	Patent Tong	Yes	Yes	40.73	10.21	11	79%	5	36%	N/A	N/A	N/A	N/A	N/A	N/A	24.11
H09	Patent Tong	Yes	No	31.17	6.01	12	75%	4	25%	N/A	N/A	N/A	N/A	N/A	N/A	32.18
H10	Patent Tong	Yes	Yes	96.69	10.78	14	93%	13	87%	N/A	N/A	N/A	N/A	N/A	N/A	58.1
H11	Patent Tong	Yes	Yes	57.10	11.15	10	77%	7	54%	N/A	N/A	N/A	N/A	N/A	N/A	20.39
H12	Patent Tong	Yes	No	34.29	5.28	11	79%	3	21%	N/A	N/A	N/A	N/A	N/A	N/A	16.53
H13	Patent Tong	Yes	Yes	44.78	7.03	10	100%	4	40%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H14	Patent Tong	Yes	No	25.53	6.09	6	67%	1	11%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H15	Patent Tong	Yes	No	18.94	5.08	5	63%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H16	Patent Tong	Yes	No	12.87	3.41	4	57%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H17	Patent Tong	No	No	9.88	3.76	2	20%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H18	Diver	Yes	Yes	208.50	37.28	4	100%	4	100%	60.50	23.26	147.00	59.13	0.00	0.00	N/A
H61	Diver	Yes	Yes	136.40	34.01	5	100%	5	100%	23.20	8.69	76.40	38.65	36.80	13.06	N/A
H63	Diver	Yes	Yes	239.50	43.66	4	100%	4	100%	19.50	16.88	145.50	67.60	74.50	21.19	N/A
H64	Diver	Yes	Yes	319.20	14.68	5	100%	5	100%	38.40	20.32	117.60	30.73	162.80	35.10	N/A
H65	Diver	Yes	Yes	290.00	47.38	5	100%	5	100%	0.40	0.40	174.00	50.77	114.80	28.75	N/A
H66	Diver	Yes	Yes	210.50	47.30	4	100%	4	100%	55.50	33.77	105.50	35.60	0.00	0.00	N/A
H67	Diver	Yes	Yes	212.00	37.32	4	100%	4	100%	193.50	37.61	18.00	4.32	0.00	0.00	N/A
H68	Diver	Yes	Yes	95.20	14.68	5	100%	5	100%	58.00	8.58	37.20	11.06	0.00	0.00	N/A
H69	Diver	Yes	Yes	347.20	20.88	5	100%	5	100%	282.00	13.46	60.80	12.63	0.00	0.00	N/A
H70	Diver	Yes	Yes	453.50	17.13	4	100%	4	100%	223.50	42.58	229.00	35.27	0.00	0.00	N/A
H71	Diver	Yes	Yes	163.60	46.65	5	100%	4	100%	116.80	32.56	45.20	14.08	0.00	0.00	N/A
H72	Patent Tong	Yes	Yes	74.36	12.22	7	100%	6	86%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H73	Diver	Yes	Yes	218.00	30.05	5	100%	5	100%	160.40	24.48	57.60	12.29	0.00	0.00	N/A
H74	Diver	Yes	Yes	355.00	65.29	4	100%	4	100%	122.00	56.93	180.50	49.20	50.50	18.21	N/A
H75	Diver	Yes	Yes	341.00	44.52	4	100%	4	100%	274.00	29.50	61.00	27.14	0.00	0.00	N/A
H76	Patent Tong	No	No	14.74	5.13	3	27%	1	9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H77	Patent Tong	Yes	No	27.61	5.60	7	78%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H78	Diver	Yes	Yes	467.20	88.07	5	100%	5	100%	399.60	63.42	67.60	26.18	0.00	0.00	N/A
H79	Diver	Yes	Yes	310.50	105.37	4	100%	4	100%	170.00	78.77	136.50	56.08	0.50	0.50	N/A
H80	Diver	Yes	Yes	269.50	37.14	4	100%	4	100%	119.00	37.55	150.50	68.30	0.00	0.00	N/A
H81	Patent Tong	Yes	No	39.81	8.16	10	91%	2	18%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H82	Diver	Yes	Yes	294.00	45.66	4	100%	4	100%	222.50	29.35	70.50	18.03	0.00	0.00	N/A
H83	Diver	Yes	Yes	223.00	19.54	4	100%	4	100%	136.50	30.06	85.00	13.48	0.00	0.00	N/A
H84	Patent Tong	Yes	No	17.22	5.66	5	45%	1	9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H85	Diver	Yes	Yes	74.80	23.61	5	100%	3	100%	28.80	12.32	46.00	17.89	0.00	0.00	N/A
H86	Diver	Yes	Yes	308.00	25.35	5	100%	5	100%	246.40	21.28	60.40	4.87	0.00	0.00	N/A
H87	Diver	Yes	Yes	405.00	90.14	4	100%	4	100%	196.50	47.15	207.00	78.05	0.00	0.00	N/A
H88	Diver	Yes	Yes	67.50	8.06	4	100%	4	100%	50.00	13.37	17.50	8.06	0.00	0.00	N/A
H89	Diver	Yes	Yes	172.67	28.50	3	100%	3	100%	109.33	22.93	50.67	8.67	0.00	0.00	N/A
H90	Diver	Yes	Yes	337.00	62.24	4	100%	4	100%	102.00	29.68	234.50	62.59	0.00	0.00	N/A
H91	Diver	Yes	Yes	123.20	14.65	5	100%	5	100%	12.40	6.91	22.00	5.87	24.80	20.88	N/A
H92	Diver	Yes	Yes	332.50	32.88	4	100%	4	100%	271.50	16.96	61.00	21.49	0.00	0.00	N/A
H93	Diver	Yes	Yes	165.50	36.43	4	100%	4	100%	93.50	19.00	71.00	20.68	0.00	0.00	N/A
H94	Diver	Yes	Yes	78.80	14.68	5	100%	4	100%	51.60	15.12	27.20	3.01	0.00	0.00	N/A

Table 13: Oyster biomass results for Harris Creek reefs in 2018.

Report reef ID	Sample method	Fall 2018: Did reef meet minimum threshold oyster biomass?	Number of samples meeting minimum threshold biomass	Reef area meeting minimum threshold biomass (%)	Fall 2018: Did reef meet target oyster biomass?	Number of samples meeting target biomass	Reef area meeting target biomass (%)	Average live biomass across reef (g dry weight/m^2)	Standard error of live biomass	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight/m^2)
H01	Patent Tong	Yes	10	100%	No	1	10%	33.07	4.64	66.09
H02	Patent Tong	Yes	6	86%	No	2	29%	37.74	9.29	41.82
H03	Patent Tong	Yes	8	50%	No	1	6%	16.76	3.95	33.42
H04	Patent Tong	Yes	8	73%	No	1	9%	28.26	5.39	37.97
H05	Patent Tong	Yes	12	86%	Yes	6	43%	42.32	6.63	45.75
H06	Patent Tong	Yes	8	89%	No	2	22%	38.01	8.05	41.72
H07	Patent Tong	Yes	11	85%	Yes	8	62%	44.12	6.47	31.72
H08	Patent Tong	Yes	10	71%	Yes	5	36%	36.47	8.38	26.6
H09	Patent Tong	Yes	12	75%	No	2	13%	30.06	5.42	30.01
H10	Patent Tong	Yes	14	93%	Yes	13	87%	86.21	9.57	62.72
H11	Patent Tong	Yes	10	77%	Yes	7	54%	53.62	9.56	22.96
H12	Patent Tong	Yes	11	79%	No	2	14%	35.43	5.14	20.53
H13	Patent Tong	Yes	9	90%	No	1	10%	36.14	4.53	N/A
H14	Patent Tong	Yes	6	67%	No	1	11%	30.25	7.97	N/A
H15	Patent Tong	Yes	5	63%	No	1	13%	22.67	5.81	N/A
H16	Patent Tong	Yes	3	43%	No	0	0%	14.71	3.76	N/A
H17	Patent Tong	No	2	20%	No	0	0%	10.06	4.14	N/A
H18	Diver	Yes	4	100%	Yes	4	100%	181.14	35.55	N/A
H61	Diver	Yes	5	100%	Yes	5	100%	118.01	33.34	N/A
H63	Diver	Yes	4	100%	Yes	4	100%	188.63	29.75	N/A
H64	Diver	Yes	5	100%	Yes	5	100%	260.01	14.71	N/A
H65	Diver	Yes	5	100%	Yes	5	100%	209.96	35.75	N/A
H66	Diver	Yes	4	100%	Yes	4	100%	213.33	54.51	N/A
H67	Diver	Yes	4	100%	Yes	4	100%	295.57	59.10	N/A
H68	Diver	Yes	5	100%	Yes	4	100%	83.36	13.31	N/A
H69	Diver	Yes	5	100%	Yes	5	100%	326.25	21.83	N/A
H70	Diver	Yes	4	100%	Yes	4	100%	438.35	20.79	N/A
H71	Diver	Yes	5	100%	Yes	4	100%	142.37	40.14	N/A
H72	Patent Tong	Yes	6	86%	No	2	29%	44.17	7.64	N/A
H73	Diver	Yes	5	100%	Yes	5	100%	137.48	16.25	N/A
H74	Diver	Yes	4	100%	Yes	4	100%	237.50	49.84	N/A
H75	Diver	Yes	4	100%	Yes	4	100%	245.71	35.06	N/A
H76	Patent Tong	No	3	27%	No	1	9%	15.81	5.51	N/A
H77	Patent Tong	Yes	8	89%	Yes	3	33%	32.33	7.27	N/A
H78	Diver	Yes	5	100%	Yes	5	100%	324.33	47.58	N/A
H79	Diver	Yes	4	100%	Yes	4	100%	258.69	77.48	N/A
H80	Diver	Yes	4	100%	Yes	4	100%	226.61	29.89	N/A
H81	Patent Tong	Yes	10	91%	No	3	27%	44.09	8.08	N/A
H82	Diver	Yes	4	100%	Yes	4	100%	248.49	32.96	N/A
H83	Diver	Yes	4	100%	Yes	4	100%	194.37	15.39	N/A
H84	Patent Tong	Yes	5	45%	No	1	9%	21.99	7.54	N/A
H85	Diver	Yes	5	100%	Yes	3	100%	69.81	23.55	N/A
H86	Diver	Yes	5	100%	Yes	5	100%	205.84	16.45	N/A
H87	Diver	Yes	4	100%	Yes	4	100%	267.99	44.19	N/A
H88	Diver	Yes	4	100%	Yes	3	100%	69.81	15.00	N/A
H89	Diver	Yes	3	100%	Yes	3	100%	168.19	37.81	N/A
H90	Diver	Yes	4	100%	Yes	4	100%	220.91	39.86	N/A
H91	Diver	Yes	5	100%	Yes	5	100%	97.65	8.26	N/A
H92	Diver	Yes	4	100%	Yes	4	100%	259.76	31.23	N/A
H93	Diver	Yes	4	100%	Yes	4	100%	149.13	31.99	N/A
H94	Diver	Yes	5	100%	Yes	4	100%	61.61	11.07	N/A

Table 14: Multiple year classes, shell volume, reef height, and reef footprint results for Harris Creek reefs in 2018.

Report reef ID	Sample method	Is the shell budget stable/ increasing?	Average shell volume across entire reef (liters per m^2)	Standard error of shell volume	Average brown shell across all samples (%)	Total volume change (liters per m^2)	% change in total volume from 2015	Surface shell volume change (liters per m^2)	% change in surface shell volume change	Are multiple year classes present?	Is reef footprint stable/ increasing?	Is reef height stable/ increasing?	Difference between postconstruction reef height and reefs height 3 years post restoration (cm)
H01	Patent Tong	No	9.69	1.22	80%	-4.07	-35%	-3.09	-29%	Yes	Yes	Yes	-0.02
H02	Patent Tong	Yes	10.57	1.47	98%	0.51	5%	3.05	42%	Yes	Yes	Yes	0.048
H03	Patent Tong	No	5.41	1.46	73%	-3.08	-36%	-1.56	-25%	Yes	Yes	Yes	-0.012
H04	Patent Tong	Yes	10.42	1.94	86%	1.04	8%	2.86	42%	Yes	Yes	Yes	0.008
H05	Patent Tong	Yes	13.58	1.67	83%	0.77	2%	3.55	45%	Yes	Yes	Yes	0.004
H06	Patent Tong	No	11.18	1.84	72%	-3.79	-25%	-2.74	-26%	Yes	Yes	Yes	0.013
H07	Patent Tong	Yes	12.31	1.68	51%	2.84	20%	2.41	52%	Yes	Yes	Yes	0.01
H08	Patent Tong	Yes	8.93	1.72	84%	1.04	-20%	1.46	26%	Yes	Yes	Yes	-0.031
H09	Patent Tong	Yes	10.10	1.59	75%	2.28	5%	3.12	81%	Yes	Yes	Yes	0.005
H10	Patent Tong	No	14.16	1.48	78%	-4.26	-23%	0.73	7%	Yes	Yes	Yes	-0.024
H11	Patent Tong	Yes	12.89	1.61	69%	5.17	52%	5.24	125%	Yes	Yes	Yes	0.007
H12	Patent Tong	Yes	10.29	1.36	78%	4.25	70%	4.57	150%	Yes	Yes	Yes	0.036
H13	Patent Tong	Yes	12.67	1.39	76%	1.22	11%	2.46	36%	Yes	No data in 2018	No data in 2019	
H14	Patent Tong	Yes	8.64	1.49	77%	2.97	42%	5.25	267%	Yes	No data in 2018	No data in 2019	
H15	Patent Tong	Yes	6.06	0.90	44%	1.88	14%	1.78	135%	Yes	No data in 2018	No data in 2019	
H16	Patent Tong	Yes	6.12	1.22	36%	2.48	44%	0.87	127%	Yes	No data in 2018	No data in 2019	
H17	Patent Tong	Yes	4.73	1.20	35%	1.11	8%	1.69	481%	Yes	No data in 2018	No data in 2019	
H18	Diver	TBD	18.50	13.23	74%	-29.50	-76%	-26.79	-85%	Yes	Yes	Yes	0.06
H61	Diver	TBD in 2021	87.60	9.36	83%	-	-	-	-	Yes	Yes	Yes	0.023
H63	Diver	TBD in 2021	114.00	6.92	84%	-	-	-	-	Yes	Yes	Yes	-0.001
H64	Diver	TBD in 2021	56.80	5.81	68%	-	-	-	-	Yes	TBD in 2021	TBD in 2022	
H65	Diver	TBD in 2021	98.80	15.21	87%	-	-	-	-	Yes	Yes	Yes	0.032
H66	Diver	TBD in 2021	117.00	8.74	89%	-	-	-	-	Yes	Yes	Yes	0.032
H67	Diver	TBD in 2021	1.75	0.25	55%	-	-	-	-	Yes	TBD in 2021	TBD in 2022	
H68	Diver	TBD in 2021	3.80	1.83	95%	-	-	-	-	Yes	Yes	Yes	0.048
H69	Diver	TBD in 2021	1.20	0.20	90%	-	-	-	-	Yes	Yes	Yes	0.067
H70	Diver	TBD in 2021	37.50	2.72	49%	-	-	-	-	Yes	Yes	Yes	0.06
H71	Diver	TBD in 2021	2.60	0.87	92%	-	-	-	-	Yes	Yes	Yes	0.021
H72	Patent Tong	TBD in 2021	9.85	1.13	80%	-	-	-	-	Yes	Yes	Yes	0.003
H73	Diver	TBD in 2021	2.60	0.51	90%	-	-	-	-	Yes	Yes	Yes	0.008
H74	Diver	TBD in 2021	73.50	16.27	96%	-	-	-	-	Yes	Yes	Yes	0.015
H75	Diver	TBD in 2021	3.25	0.48	94%	-	-	-	-	Yes	Yes	Yes	0.032
H76	Patent Tong	TBD in 2021	6.68	2.08	58%	-	-	-	-	Yes	Yes	Yes	-0.018
H77	Patent Tong	TBD in 2021	12.42	1.93	79%	-	-	-	-	Yes	Yes	Yes	-0.011
H78	Diver	TBD in 2021	3.00	0.71	91%	-	-	-	-	Yes	Yes	Yes	0.045
H79	Diver	TBD in 2021	17.25	9.89	88%	-	-	-	-	Yes	Yes	Yes	0.035
H80	Diver	TBD in 2021	16.75	11.95	84%	-	-	-	-	Yes	Yes	Yes	0.029
H81	Patent Tong	TBD in 2021	12.82	1.68	76%	-	-	-	-	Yes	Yes	Yes	0.02
H82	Diver	TBD in 2021	1.75	0.48	76%	-	-	-	-	Yes	Yes	Yes	0.071
H83	Diver	TBD in 2021	4.25	1.31	93%	-	-	-	-	Yes	Yes	Yes	0.048
H84	Patent Tong	TBD in 2021	5.43	1.81	65%	-	-	-	-	Yes	Yes	Yes	0.007
H85	Diver	TBD in 2021	7.84	4.82	86%	-	-	-	-	Yes	Yes	Yes	0.007
H86	Diver	TBD in 2021	2.80	0.20	92%	-	-	-	-	Yes	Yes	Yes	0.024
H87	Diver	TBD in 2021	23.75	9.34	100%	-	-	-	-	Yes	Yes	Yes	0.031
H88	Diver	TBD in 2021	1.43	0.87	98%	-	-	-	-	Yes	TBD in 2021	TBD in 2022	
H89	Diver	TBD in 2021	13.00	4.80	88%	-	-	-	-	Yes	Yes	Yes	0.005
H90	Diver	TBD in 2021	26.00	7.02	94%	-	-	-	-	Yes	Yes	Yes	0.012
H91	Diver	TBD in 2021	82.80	17.70	82%	-	-	-	-	Yes	Yes	Yes	0.032
H92	Diver	TBD in 2021	2.75	0.48	90%	-	-	-	-	Yes	TBD in 2021	TBD in 2022	
H93	Diver	TBD in 2021	12.50	4.70	84%	-	-	-	-	Yes	Yes	Yes	0.031
H94	Diver	TBD in 2021	1.20	0.25	98%	-	-	-	-	Yes	Yes	Yes	0.083

Table 15: Oyster density monitoring results for Little Choptank reefs in 2018.

Report reef ID	Sample method	Fall 2018: Did reef meet minimum threshold density?	Fall 2018: Did reef meet target density?	Average live density across reef (#/m²)	Standard error of live density (#/m²)	Number of samples meeting minimum threshold density (m²)	Percent of samples meeting minimum threshold density (%)	Number of samples meeting target density (m²)	Percent of samples meeting target density (%)	Average live density on stone (#/m²)	Standard error of live density on stone	Average live density on shell--all shell types (#/m²)	Standard error of live density on shell--all shell types	Average live density on clam shell (#/m²)	Standard error of live density on clam shell	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m²)
L02	Diver	Yes	Yes	211.60	38.20	5	100%	5	100%	0.00	0.00	145.60	57.43	0.00	0.00	N/A
L05	Diver	Yes	Yes	174.40	30.73	5	100%	5	100%	0.40	0.40	105.60	30.36	0.00	0.00	N/A
L06	Diver	Yes	Yes	114.80	17.58	5	100%	4	80%	53.60	21.98	61.20	15.00	0.00	0.00	N/A
L07	Diver	Yes	Yes	146.00	19.30	6	100%	6	100%	0.33	0.33	71.67	17.70	0.00	0.00	N/A
L08	Diver	Yes	Yes	181.20	45.78	5	100%	4	80%	0.80	0.49	74.40	15.64	0.00	0.00	N/A
L09	Diver	Yes	Yes	107.20	28.72	5	100%	4	80%	0.00	0.00	63.60	17.12	0.00	0.00	N/A
L52	Patent Tong	Yes	No	33.28	5.85	10	83%	3	25%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L53	Patent Tong	Yes	Yes	60.71	6.82	12	100%	8	67%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L54	Patent Tong	Yes	Yes	51.71	10.55	9	75%	6	50%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 16: Oyster biomass monitoring results for Little Choptank reefs in 2018.

Report reef ID	Sample method	Fall 2018: Did reef meet minimum threshold density?	Fall 2018: Did reef meet target density?	Average live density across reef (#/m²)	Standard error of live density (#/m²)	Number of samples meeting minimum threshold density (m²)	Percent of samples meeting minimum threshold density (%)	Number of samples meeting target density (m²)	Percent of samples meeting target density (%)	Average live density on stone (#/m²)	Standard error of live density on stone	Average live density on shell--all shell types (#/m²)	Standard error of live density on shell--all shell types	Average live density on clam shell (#/m²)	Standard error of live density on clam shell	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m²)
L02	Diver	Yes	Yes	211.60	38.20	5	100%	5	100%	0.00	0.00	145.60	57.43	0.00	0.00	N/A
L05	Diver	Yes	Yes	174.40	30.73	5	100%	5	100%	0.40	0.40	105.60	30.36	0.00	0.00	N/A
L06	Diver	Yes	Yes	114.80	17.58	5	100%	4	80%	53.60	21.98	61.20	15.00	0.00	0.00	N/A
L07	Diver	Yes	Yes	146.00	19.30	6	100%	6	100%	0.33	0.33	71.67	17.70	0.00	0.00	N/A
L08	Diver	Yes	Yes	181.20	45.78	5	100%	4	80%	0.80	0.49	74.40	15.64	0.00	0.00	N/A
L09	Diver	Yes	Yes	107.20	28.72	5	100%	4	80%	0.00	0.00	63.60	17.12	0.00	0.00	N/A
L52	Patent Tong	Yes	No	33.28	5.85	10	83%	3	25%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L53	Patent Tong	Yes	Yes	60.71	6.82	12	100%	8	67%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L54	Patent Tong	Yes	Yes	51.71	10.55	9	75%	6	50%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 17: Multiple year classes, shell volume, reef height, and reef footprint results for Little Choptank reefs in 2018.

Report reef ID	Sample method	Is the shell budget stable/ increasing?	Average shell volume across entire reef (liters per m²)	Standard error of shell volume	Average brown shell across all samples (%)	Total volume change (liters per m²)	% change in total volume from 2015	Surface shell volume change (liters per m2)	% change in surface shell volume change	Are multiple year classes present?	Is reef footprint stable/ increasing?	Is reef height stable/ increasing?	Difference between postconstruction reef height and reefs height 3 years post restoration (cm)
L02	Diver	TBD in 2019	42.00	9.86	79%	-	-	-	-	Yes	Yes	Yes	0
L05	Diver	TBD in 2021	42.80	8.62	82%	-	-	-	-	Yes	Yes	Yes	0
L06	Diver	TBD in 2021	6.40	2.93	93%	-	-	-	-	Yes	Yes	Yes	0.03
L07	Diver	TBD in 2021	34.00	4.73	78%	-	-	-	-	Yes	Yes	Yes	0
L08	Diver	TBD in 2021	19.00	4.92	96%	-	-	-	-	Yes	Yes	Yes	0.05
L09	Diver	TBD in 2021	22.40	3.87	83%	-	-	-	-	Yes	Yes	Yes	-0.03
L52	Patent Tong	TBD in 2020	12.60	1.57	73%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L53	Patent Tong	TBD in 2020	14.75	1.21	85%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L54	Patent Tong	TBD in 2020	14.13	1.92	77%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD

Appendix D: Sentinel Reef Information and Monitoring Results

A subset of restored reefs in each tributary have been designated as sentinel reefs. These are monitored annually. These reefs are not part of the 2012 or 2015 cohorts. This section contains 2018 monitoring information on these reefs.

Table 18: Restoration treatment and monitoring information for sentinel reefs monitored in 2018.

Report reef ID	Reef area (acres)	Restoration treatment	Substrate type added	Average planned reef height*	Year planted with spat (initial planting)	Second year class replanting	Monitoring type	Sample method	Sample date	# samples taken	# live oysters measured	# live oysters counted	# dead oysters counted	% of oysters that were dead
H13	3.4	Seed Only	None	N/A	2011	2017	Sentinel	Patent Tong	3/27/2019	10	349	721	51	7%
H18	2.35	Substrate & Seed	Stone	12	2013	N/A	Sentinel	Diver	12/12/2018	4	344	417	54	11%
L01	1.61	Seed Only	None	N/A	2018	N/A	Sentinel	Patent Tong	4/4/2019	12	343	1102	72	6%
L29	2.72	Substrate & Seed	Stone base with fossil shell	12	2016	N/A	Sentinel	Diver	3/5/2019	5	296	669	46	6%
L34	4.19	Substrate & Seed	Stone	12	2016	N/A	Sentinel	Diver	3/3/2019	5	80	257	29	10%
T01	1.78	Substrate & Seed	Mixed Shell	12	2015	N/A	Sentinel	Patent Tong	3/28/2019	12	327	654	73	10%
T02	0.8	Substrate & Seed	Mixed Shell	12	2015	N/A	Sentinel	Patent Tong	3/19/2019	12	245	267	14	5%
T04	5.94	Seed Only	None	N/A	2016	N/A	Sentinel	Patent Tong	3/28/2019	12	297	445	39	8%
T09	3.30	Substrate & Seed	Stone	12	2016	N/A	Sentinel	Diver	3/19/2019	6	130	327	8	2%

Table 19: Results by Oyster Metrics criterion for sentinel reefs monitored in 2018.

Report reef ID	Restoration treatment	Substrate type added	Average planned reef height*	Year planted with spat (initial planting)	Second year class replanting	Sample method	Fall 2018: Did reef meet minimum threshold density?	Fall 2018: Did reef meet target density?	Fall 2018: Did reef meet minimum threshold oyster biomass?	Fall 2018: Did reef meet target oyster biomass?	Is the shell budget stable/ increasing?	Are multiple year classes present?	Is reef footprint stable/ increasing?	Is reef height stable/ increasing?
H13	Seed Only	None	N/A	2011	2017	Patent Tong	Yes	Yes	Yes	No	Yes	Yes	No data in 2018	No data in 2018
H18	Substrate & Seed	Stone	12	2013	N/A	Diver	Yes	Yes	Yes	Yes	TBD	Yes	Yes	Yes
L01	Seed Only	None	N/A	2018	N/A	Patent Tong	Yes	Yes	Yes	Yes	TBD in 2019	Yes	No data in 2018	No data in 2018
L29	Substrate & Seed	Stone base with fossil shell	12	2016	N/A	Diver	Yes	Yes	Yes	Yes	TBD in 2020	Yes	No data in 2018	No data in 2018
L34	Substrate & Seed	Stone	12	2016	N/A	Diver	Yes	Yes	Yes	Yes	TBD in 2021	Yes	No data in 2018	No data in 2018
T01	Substrate & Seed	Mixed Shell	12	2015	N/A	Patent Tong	Yes	No	Yes	Yes	TBD in 2019	Yes	Yes	Yes
T02	Substrate & Seed	Mixed Shell	12	2015	N/A	Patent Tong	Yes	No	Yes	No	TBD in 2019	Yes	Yes	Yes
T04	Seed Only	None	N/A	2016	N/A	Patent Tong	Yes	No	Yes	No	TBD in 2020	Yes	Yes	Yes
T09	Substrate & Seed	Stone	12	2016	N/A	Diver	Yes	Yes	Yes	Yes	TBD in 2021	Yes	No data in 2018	No data in 2018

Table 20: Oyster density results for sentinel reefs monitored in 2018.

Report reef ID	Restoration treatment	Year planted with spat (initial planting)	Second year class replanting	Sample method	Fall 2018: Did reef meet minimum threshold density?	Fall 2018: Did reef meet target density?	Average live density across reef (#/m²)	Standard error of live density (#/m²)	Number of samples meeting minimum threshold density (m²)	Percent of samples meeting minimum threshold density (%)	Number of samples meeting target density (m²)	Percent of samples meeting target density (%)	Average live density on stone (#/m²)	Standard error of live density on stone	Avrage live density on shell--all shell types (#/m²)	Standard error of live density on shell--all shell types	Average live density on clam shell (#/m²)	Standard error of live density on clam shell	Average live density across reef at 3 years post restoration (for 6-year-old reefs only) (#/m²)
H13	Seed Only	2011	2017	Patent Tong	Yes	Yes	44.78	7.03	10	100%	4	40%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H18	Substrate & Seed	2013	N/A	Diver	Yes	Yes	208.50	37.28	4	100%	4	100%	60.50	23.26	147.00	59.13	0.00	0.00	N/A
L01	Seed Only	2018	N/A	Patent Tong	Yes	Yes	57.04	11.09	10	83%	6	50%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L29	Substrate & Seed	2016	N/A	Diver	Yes	Yes	267.60	40.11	5	100%	5	100%	35.20	19.52	62.80	17.14	0.00	0.00	N/A
L34	Substrate & Seed	2016	N/A	Diver	Yes	Yes	102.80	16.78	5	100%	5	100%	78.00	11.75	24.80	6.15	0.00	0.00	N/A
T01	Substrate & Seed	2015	N/A	Patent Tong	Yes	No	33.85	6.86	10	83%	2	17%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T02	Substrate & Seed	2015	N/A	Patent Tong	Yes	No	13.82	2.36	5	42%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T04	Seed Only	2016	N/A	Patent Tong	Yes	No	23.03	3.71	7	58%	0	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
T09	Substrate & Seed	2016	N/A	Diver	Yes	Yes	109.00	70.49	6	100%	2	33%	48.67	39.03	60.33	32.14	0.00	0.00	N/A

Table 21: Oyster biomass results for sentinel reefs monitored in 2018.

Report reef ID	Restoration treatment	Year planted with spat (initial planting)	Second year class replanting	Sample Method	Fall 2018: Did reef meet minimum threshold oyster biomass?	Number of samples meeting minimum threshold biomass	Reef area meeting minimum threshold biomass (%)	Fall 2018: Did reef meet target oyster biomass?	Number of samples meeting target biomass	Reef area meeting target biomass (%)	Average live biomass across reef (g dry weight per m²)	Standard error of live biomass	Average live biomass across reef at 3 years post restoration (for 6-year-old reefs only) (g dry weight per m²)
H13	Seed Only	2011	2017	Patent Tong	Yes	9	90%	No	1	10%	36.14	4.53	N/A
H18	Substrate & Seed	2013	N/A	Diver	Yes	4	100%	Yes	4	100%	181.14	35.55	N/A
L01	Seed Only	2018	N/A	Patent Tong	Yes	9	75%	Yes	5	42%	43.33	10.57	N/A
L29	Substrate & Seed	2016	N/A	Diver	Yes	5	100%	Yes	5	100%	221.13	35.90	N/A
L34	Substrate & Seed	2016	N/A	Diver	Yes	5	100%	Yes	3	60%	85.36	16.90	N/A
T01	Substrate & Seed	2015	N/A	Patent Tong	Yes	10	83%	Yes	6	50%	58.45	11.6	N/A
T02	Substrate & Seed	2015	N/A	Patent Tong	Yes	6	50%	No	0	0%	17.49	2.92	N/A
T04	Seed Only	2016	N/A	Patent Tong	Yes	11	92%	No	3	25%	32.89	4.62	N/A
T09	Substrate & Seed	2016	N/A	Diver	Yes	6	100%	Yes	4	67%	153.37	99.23	N/A

Table 22: Multiple year class and structural (shell budget, reef height, reef footprint) results for sentinel reefs monitored in 2018.

Report reef ID	Restoration treatment	Year planted with spat (initial planting)	Second year class replanting	Sample method	Is the shell budget stable/ increasing?	Average shell volume across entire reef (liters per m^2)	Standard error of shell volume	Average brown shell across all samples (%)	Total volume change (liters per m^2)	% change in total volume from 2015	Surface shell volume change (liters per m^2)	% change in surface shell volume change	Are multiple year classes present?	Is reef footprint stable/ increasing?	Is reef height stable/ increasing?	Difference between postconstruction reef height and reefs height 3 years post restoration (cm)
H13	Seed Only	2011	2017	Patent Tong	Yes	12.67	1.39	76%	1.22	11%	2.46	36%	Yes	No data in 2018	No data in 2019	
H18	Substrate & Seed	2013	N/A	Diver	TBD	18.50	13.23	74%	-29.50	-76%	-26.79	-85%	Yes	Yes	Yes	0.06
L01	Seed Only	2018	N/A	Patent Tong	TBD in 2019	13.92	2.92	85%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L29	Substrate & Seed	2016	N/A	Diver	TBD in 2020	39.10	9.59	70%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
L34	Substrate & Seed	2016	N/A	Diver	TBD in 2021	3.40	1.28	97%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD
T01	Substrate & Seed	2015	N/A	Patent Tong	TBD in 2019	15.53	1.60	54%	-	-	-	-	Yes	Yes	Yes	0.02
T02	Substrate & Seed	2015	N/A	Patent Tong	TBD in 2019	8.64	0.89	58%	-	-	-	-	Yes	Yes	Yes	0
T04	Seed Only	2016	N/A	Patent Tong	TBD in 2020	16.67	1.34	95%	-	-	-	-	Yes	Yes	Yes	0.02
T09	Substrate & Seed	2016	N/A	Diver	TBD in 2021	13.37	7.95	95%	-	-	-	-	Yes	No data in 2018	No data in 2018	TBD