Jinks Creek Shellfish Survey Report
Sunset Beach, NC

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TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 METHODOLOGY 4
3.0 RESULTS & DISCUSSION 5
3.1 Oyster Resources 5
3.2 Clam Resources 6
3.3 Mussel Resources 6
3.4 Water Quality 7
4.0 SUMMARY 8
5.0 REFERENCES 9

LIST OF FIGURES

Figure 1. Jinks Creek Location 1
Figure 2. Southern Jinks Creek 1966 (Originally printed in Cleary & Marden, 1999) 2
Figure 3. Southern Jinks Creek 1974 (Originally printed in Cleary & Marden, 1999) 2
Figure 4. Jinks Creek Shellfish Survey Site Plan 3

LIST OF TABLES

Table 1. Potential Oyster Impacts Based on Species Size & Density 5
Table 2. Potential Clam Impacts Based on Species Size & Density 6
Table 3. Potential Mussel Impacts Based on Density 7
Table 4. Water Quality Measurements 7

APPENDICES

Appendix A – Planview Summary Results
Appendix B – Survey Summary by Transect
Appendix C – Site Photos
Appendix D – Field Data Collection Forms

1.0 INTRODUCTION

Moffatt & Nichol conducted a shellfish survey of Jinks Creek in support of a navigation dredging project sponsored by the Town of Sunset Beach. Jinks Creek serves as a connecting navigation channel for two (2) residential canals and additional residential lots on the east end of Sunset Beach. With the current shoaling condition of Tubbs Inlet, Jinks Creek provides the only navigable access to the Atlantic Intracoastal Waterway (AIWW) for the east end of Sunset Beach. The two (2) residential canals connecting with Jinks Creek entail the Feeder Canal and the Bay Area as shown in Figure 1. Figure 1 also shows the location of Jinks Creek in relation to the AIWW and Tubbs Inlet, which provides a tidal connection to the Atlantic Ocean.

Figure 1. Jinks Creek Location

The creation of both the Feeder Canal and Bay Area occurred through man-made dredging operations during the early 1970's (Cleary & Marden, 1999). Figures 2 & 3 show aerial photographs of the southern portion of Jinks Creek near the Feeder Canal and Bay Area. The images show the pre- and post-project conditions of southern Jinks Creek for the referenced circa 1970 dredging event. However, there are no records of any previous dredging events occurring in Jinks Creek north of the residential canal systems.

The NC Division of Marine Fisheries (DMF) and the National Marine Fisheries Service (NMFS) requried the shellfish survey to help evaluate the potenital for impacts as a result from the navigation dredging project. The survey concentrated on identifiying clam and oyster species of all development levels within the project area.

The survey results should help the resource agencies quantify the shellfish presence and evaluate their productivitiy potential.

The DMF has designated the boundary of Jinks Creek as primary nursery area (PNA) due to the adjacents habitats potential to support shellfish and juvenile fish species. Based on local observations, significant shellfish resources could also be expected within the waters of Jinks Creek. Therefore, any action that may alter or impact the area's ability to support shellfish must be reviewed by the resource agencies prior to implementation. The survey results may aslo help identify if avoidance or minimization measures may help decrease the impact potential for any shellfish found within the dredging footprint.

Figure 2. Southern Jinks Creek 1966 (Originally printed in Cleary & Marden, 1999)

Figure 3. Southern Jinks Creek 1974 (Originally printed in Cleary & Marden, 1999)

The shellfish survey included sampling approximately 1,182 sites over 55 transects in an approximate 42-acre area covering the general undisturbed section of Jinks Creek. The survey followed a protocol provided by DMF for conducting the assessment, which stipulated the density of sample sites required. The protocol requires a minimum of 25 sample sites per acre with no less than 10 samples for any specific project. The survey limits and acreage were identified through consultation with DMF and the NMFS with additional review provided by the North Carolina Division of Coastal Management (DCM), and the US Army Corps of Engineers (USACE). After determining the survey limits, a desktop GIS application assisted to divide the site into transects with

randomly spaced sample sites. Figure 4 shows an overview of survey limits in Jinks Creek along with the identified transects and sampling locations.

Figure 4. Jinks Creek Shellfish Survey Site Plan

2.0 METHODOLOGY

Moffatt & Nichol staff conducted the shellfish survey on July 18th-20th, September 5th-8th (excluding September 6th), and October 2nd-5th, 2017. Weather conditions remained favorable throughout most of the sampling period, but heavy rains prevented the survey efforts planned for October 4th. Generally, the shellfish sampling occurred in approximate 4-hour windows balanced around the most accessible predicted low tide event of each day. Scheduling the work around low tide maximized the exposed ground cover within the intertidal region and helped expedite the survey efforts.

The survey methodology required a visual count or estimate of the shellfish present at each sampling location. The sampling plan randomly distributed the sites along each transect, but generally provided an average of 22 sites per transect. The maximum number of samples assigned to an individual transect equaled 32 sites and the minimum number of sites equaled 11. The survey intent strived to provide a depth stratified layout by distributing the sample sites across the transect in random variation.

In the field, the survey team navigated to within an approximate 3-foot radius of each pre-estalished sample site to observe and docuent the shellfish presence. In the subtidal locations, the survey team used a clam rake to sample an approximate 1-meter square area and document the shellfish presence. Along most of the intertidal and supratidal areas, the survey team conducted a visual count of any identified live shellfish within the 1-meter square sample site. When shellfish presence covered greater than 50% of the 1-meter square site, the survey team extrapolated the full shellfish presence from visual counts of either ½ or ¼ of the sample area. When the shellfish presence provided greater than 90% coverage of the 1-meter square site, the survey team extrapolated the overall shellfish presence from visual counts of approximately ¼ of the site.

Along with the shellfish presence, the survey noted the depth and general bottom type (e.g. mud, sandy mud, muddy sand, sand, shell hash) for each sampling site. The survey also provided general water quality parameters such as dissolved oxygen, pH, salinity, and temperature observed during the survey period. The data gathering included the referenced information to help identify if any anomalies existed during the sampling period that might affect the shellfish presence or absence.

- Survey date
- Surveyor's names
- Water quality (DO, pH, salinity, and temperature)
- Site elevation (MLW)
- Sediment type
- Water depth
- Presence/absence of shellfish
- Number of shellfish
- Category of size

3.0 RESULTS & DISCUSSION

The survey results discuss multiple aspects of the findings related to the different type of shellfish identified during the work. The survey focused on identifying the presence of clam and oyster resources; however, the results also noted additional environmental resources as observed in the field.

3.1 Oyster Resources

The survey results indicate the proposed navigation project will most likely not be able to avoid potential impacts to the oyster resources present in Jinks Creek. Appendix A shows a summary of the survey results in planview. As shown in the planview summary, the oyster resources located in the northern most 1,400 ft of Jinks Creek extended throughout the channel cross-section. Generally, the survey identified oyster colonies ranging up to 100 species within multiple sample sites established in the creek's subtidal region. The survey also identified larger oyster clusters within the intertidal regions adjacent to the shoreline. The work would most likely not create any direct impacts to the resources established along the shoreline, but could be expected to impact resources in the subtidal region.

Based on the survey results, Jinks Creek supports approximately 1,195 oyster species per acre between the AIWW confluence and the Feeder Canal entrance. These results include the spat, sublegal, and legal size categories sampled during the survey efforts. The following list shows a summary of oyster species identified from the 1,182 sites and 55 transects in the approximate 42-acre Jinks Creek survey area. For reference, Appendix B shows the summary results of the shellfish sampled by transect during the survey effort.

- 6,388 Spat Classification (152 / acre)
- 34,186 Sublegal Classification (812 / acre)
- 9,730 Legal Classification (231 / acre).
  Total – 50,304 (1,195 / acre)

Based on the calculated density of oyster potentially within Jinks Creek, the navigation project may create impacts to approximately 12,810 oyster based on the proposed dredge footprint. The navigation project may disturb an estimated 10.72 acres within Jinks Creek between the AIWW confluence and the Feeder Canal system. Therefore, with an estimated potential of 1,195 oyster per acre, the total impact could reach approximately 12,810 oyster species. Table 1 provides a summary of the estimated impacts feasible for the spat, sublegal and legal categories of oyster.

Table 1. Potential Oyster Impacts Based on Species Size & Density

Size Category	Shellfish Survey Results	Potential Impacts (10.72 Ac. Dredge Area)
Spat	152 / Acre	1,629
Sublegal	812 / Acre	8,705
Legal	231 / Acre	2,476
Total	**1,195 / Acre**	**12,810**

The calculated impacts account for previously proposed minimization efforts supported within the northern section of Jinks Creek. The minimization efforts include reducing the proposed navigation channel to a 40-ft width along the initial 1,200 ft from the AIWW confluence. As referenced above, the oyster resources in the central portion of Jinks Creek extend an additional 200-ft (1,400-ft total) from the limits of the minimized channel. However, the channel approaches an S-curve alignment beyond the 1,200 ft range and a wider channel seemed more appropriate for boater safety. The proposed channel widens to a 50-ft width through the S-curve alignment.

This northern area of Jinks Creek includes the most environmentally sensitive habitat observed during the survey efforts, where oyster habitat generally consisted throughout the channel profile. Beyond this northern area, the oyster resources appeared to colonize along the shoreline beyond the dredging limits. For reference, Appendix A shows the proposed dredging footprint along with the identified oyster resources throughout Jinks Creek. Additional minimization or relocation efforts may also help reduce the impact potential. However, complete avoidance appears unlikely due to the identified locations and stratifications of the oyster resource.

3.2 Clam Resources

The survey also identified several clam species within the northern section of Jinks Creek. The results indicate a concentration of clams within the northern most portion of Jinks Creek with a diminishing presence extending throughout the proposed work area. The results show the majority of the clam species exist north of the S-curve in Jinks Creek, or Transect 28 as shown in Appendix A. The area in north Jinks Creek, where the survey identified the clam resources, appeared to contain a substrate of fine grained or clayey material and organics mixed together. South of this area, the sediment transitions to a coarser grain size material typical of an open beach and less conducive for clam habitat. However, the survey identified at least two (2) clam resources along the southern most transect in the study area. Therefore, the subaqueous terrain within Jinks Creek south of the S-curve most likely provides some degree of suitable habitat for clam resources. In total, the survey identified 1,288 clam resources within the Jinks Creek survey area for an average density of 31 clams per acre. Appendix B provides a list of the clam species sampled along each of the 55 transects, with a summary shown below.

- Large Clam – 1,008 (24 / acre)
- Small Clam – 280 (7 / acre)
  Total – 1,288 (31/ acre)

Based on the proposed dredge alignment, the navigation project will most likely create impacts to the clam resource within Jinks Creek. Similar to the identified oyster resources, minimization or relocation efforts will be unlikely to alleviate all potential impacts to the clam resources. The survey identified clams buried within the subaqueous substrate of Jinks Creek and relocation efforts could not ensure complete removal of the resource. Table 2 shows the project may affect approximately 328 clams inclusive of the small and large sized species. The calculated potential impacts account for the overall resource density observed within the survey area and do not consider the potential for relocation efforts.

Table 2. Potential Clam Impacts Based on Species Size & Density

Size Category	Shellfish Survey Results	Potential Impacts (10.72 Ac. Dredge Area)
Small	24 /Acre	257
Large	7 / Acre	71
Total	**31 /Acre**	**328**

3.3 Mussel Resources

Although efforts did not concentrate on identifying mussel resources, the survey located approximately 836 species within the Jinks Creek sample area. This translates to an average value of approximately 20 mussel species per acre. The survey efforts generally located the mussel species within the northern survey area, between Transect 1 and Transect 25. The survey located approximately 740 (89%) species within this northern area of Jinks Creek. The remaining 96 (11%) species occurred in the southern portion of Jinks Creek between Transect 30 and Transect 41.

The survey identified the mussel resources generally integrated along the channel's edge with the colonized oyster species. Based on the density observed during the survey efforts, the project may affect approximately 213 species during the construction event. Although the species generally resides within the intertidal zone, the

survey cannot conclude the shoreline provides the only utilized habitat for the resource. Therefore, the survey results include the impact potential for the mussel resource based on the observed density throughout Jinks Creek. Table 3 shows the results of the potential impacts calculated for the mussel resource.

Table 3. Potential Mussel Impacts Based on Density

Shellfish Survey Results	Potential Impacts (10.72 Ac. Dredge Area)
20 /Acre	213

3.4 Water Quality

The water quality data collected during the survey efforts matched well with anticipated results for similar water bodies. Therefore, the Jinks Creek system should not contain any anomalous features that may impair the presense or recruitment of shellfish. The DMF includes Jinks Creek in the Stream Classification Schedule for the Lumber River Basin as SA, HWQ (commercial shellfishing, High Quality Waters) (DMF, 2018). Results of the water quality collected during the sampling events met all applicable state water quality standards for SA waters. Table 4 shows the reported water quality data, including water temperature, salinity, dissolved oxygen (DO), and pH.

Table 4. Water Quality Measurements

Date / Time	Temp. ˚F	Salinity	DO (mg/L)	pH
NC Standard[1]	-	-	≥ 5.0 mg/L	6.8 to 8.5
07/18/17 09:15	79.54	35.95	3.95	5.7
07/18/17 11:15	83.59	30.55	5.81	6.25
07/19/17 10:00	81.23	35.91	6.19	6.88
07/19/17 12:15	84.52	36.47	7.93	7.27
07/20/17 10:00	80.96	36.42	4.66	7.19
09/05/17 15:30	85.14	35.9	10.22	7.04
09/07/17 13:00	80.83	28.46	6.74	6.96
09/08/17 13:30	80.42	31.96	9.92	7.47
10/02/17 09:30	72.16	32.43	7.29	6.91
10/02/17 13:30	75.78	34.69	9.87	6.98
10/03/17 10:00	72.36	33.69	7.44	7.2
10/03/17 14:00	75.34	34.79	10.16	7.22
10/05/17 13:00	76.24	35.25	8.96	7.01
10/05/17 15:00	76.73	24.85	10.21	7.3

1. NC water quality standards provided by DEQ (2018).

4.0 SUMMARY

The shellfish survey helped to identify numerous resources within Jinks Creek, including oyster, clam, and mussel. The survey covered approximately 42.11 acres in support of a navigation project proposed to dredge Jinks Creek. In accordance with the recommendations provided by the NC Division of Marine Fisheries (DMF), the survey included 1,182 sample sites across 55 transects spaced through Jinks Creek. The recommended protocol required a minimum of 25 sample locations for every acre within the project area. The primary focus of the survey concentrated on identifying the risk for potential impacts to occur to the existing Jinks Creek oyster habitat. The survey also identified other environmental resources such as clam and mussel species.

The survey found Jinks Creek supports on the order of 1,200 oysters per acre ranging from spat (152), sublegal (812), and legal (231) size classifications. The majority of the oyster resources fall along the shoreline in the intertidal region. However, the survey identified several oyster resources within the subtidal region of northern Jinks Creek. Generally, the oyster identified within the deeper regions of the creek occurred within the northern 1,400 ft of Jinks Creek. In this area of northern Jinks Creek, the resource density most likely prohibits the navigation project from avoiding all potential impacts. Minimization efforts can help reduce the potential for impacts; however, the survey results show the oyster resources may be too diverse to avoid.

Within the remaining portion of Jinks Creek, outside of the northern 1,400 ft, oyster species generally coagulate along the shoreline and should not face any direct impacts from the navigation project. The oyster resources in south Jinks Creek exist a sufficient distance from the proposed dredging footprint so direct impacts would remain unlikely. However, the creek substrate through the southern portion of the work area seems capable of sustaining oyster habitat. Based on these findings, the proposed navigation project could affect an estimated 12,810 oyster by dredging the 10.7-acre footprint currently proposed. Reviewing the overall densities for each oyster size category, the potential impacts could affect approximately 1,629 spat species, 8,705 sublegal and 2,476 legal species.

The shellfish survey also identified approximately 1,288 clam resources, including 1,008 small species and 280 large classifications across the complete 42.11-acre survey site. The clam resources extended further south within the subtidal region of Jinks Creek compared to the oyster species identified. The survey identified clam resources through the complete survey area; however, the placement density became significantly lower in southern Jinks Creek compared to the northern region. Relocation efforts would minimize the potential for adverse impacts to the clam resources. However, with the low water visibility and the clams tendency to bury within the sediment, complete removal of all clam resources seems unlikely.

The survey identified several mussel resources in addition to the clam and oyster species. The mussel species generally existed underneath oyster clumps located along the shoreline or channel banks. Direct impacts to the mussel species appears unlikely due to their presence along the shoreline. The proposed navigation project strives to avoid the shoreline region and generally follows the existing thalweg of Jinks Creek. However, the survey results recognize the project may potentially affect approximately 213 mussel resources during the construction process.

The survey results provide a foundation for evaluating potential impacts feasible for the shellfish resources in Jinks Creek. Review of the findings by NMFS and DMF, along with other project stakeholders should foster discussion on the path forward to provide suitable minimization or avoidance efforts to complete the navigation project. In addition, agency review and consultation should also help facilitate any necessary mitigation requirements to offset the direct impacts feasible from the dredging event.

5.0 REFERENCES

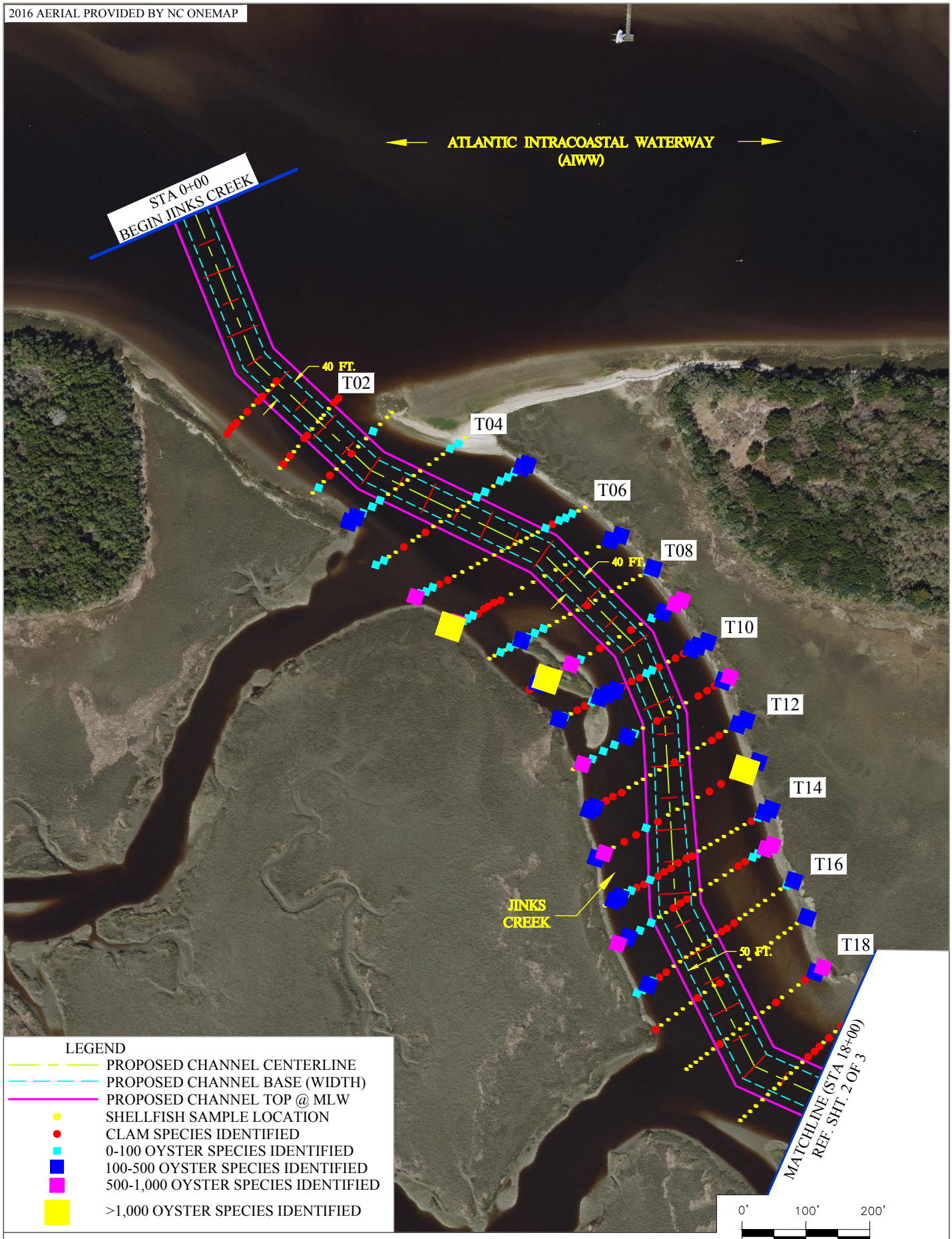
Cleary, W. J. and Marden, T. P. 1999. Shifting Shorelines: A Pictorial Atlas of North Carolina Inlets. North Carolina Sea Grant. Raleigh, North Carolina.

DMF (2018). Habitat protection, strategic habitat areas. URL. http://portal.ncdenr.org/web/mf/habitat/SHAs Accessed February 15, 2018.

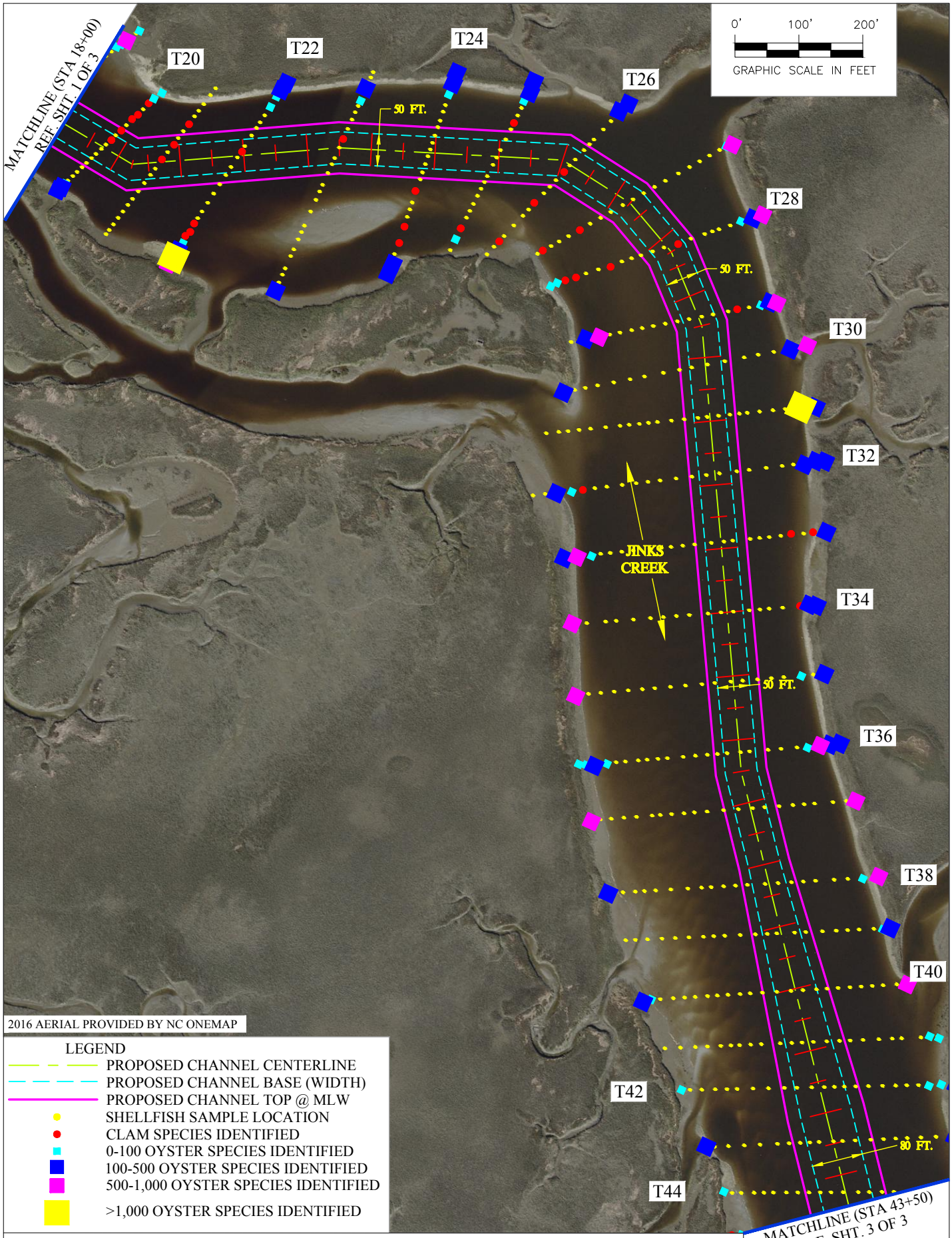
NCDEQ (2018). NC surface water classifications. URL. https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265. Accessed February 15, 2018

Appendix A

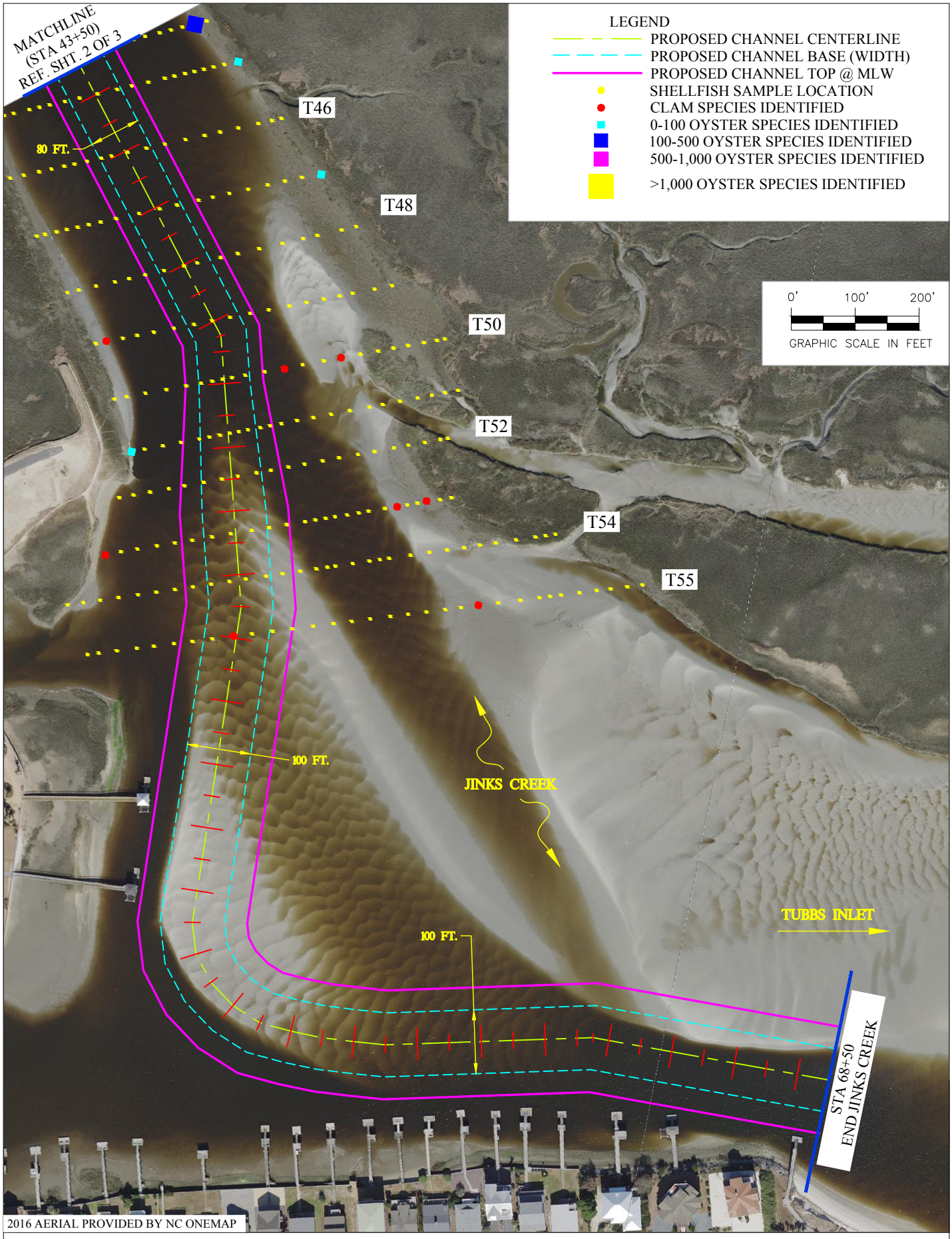
Planview Summary Results



TOWN OF SUNSET BEACH
NAVIGATION PROJECT
JINKS CREEK SHELLFISH SURVEY
PLAN VIEW



TOWN OF SUNSET BEACH
NAVIGATION PROJECT
JINKS CREEK SHELLFISH SURVEY
PLAN VIEW



TOWN OF SUNSET BEACH
NAVIGATION PROJECT
JINKS CREEK SHELLFISH SURVEY
PLAN VIEW

Appendix B

Survey Summary by Transect

Transect	# of Sites Sampled	Acreage	Shellfish Located							
			Mussel	Clam			Oyster			
				Large	Small	Total	Spat/Recruit	Sublegal	Legal	Total
1	11		0	44	0	44	0	0	0	0
2	13		0	44	4	48	0	0	0	0
3	13		0	8	0	8	8	52	80	140
4	17		0	4	0	4	120	272	172	564
5	22		0	40	8	48	56	300	80	436
6	26		0	44	0	44	100	348	256	704
7	17		0	92	8	100	256	3272	60	3588
8	25		0	12	0	12	0	290	544	834
9	16		480	124	24	148	892	3084	80	4056
10	21		0	92	24	116	472	1600	20	2092
11	17		96	64	28	92	216	1240	180	1636
12	23		0	44	0	44	0	60	680	740
13	16		8	48	24	72	480	2584	80	3144
14	27		0	92	28	120	160	1472	4	1636
15	22		0	32	8	40	320	1832	20	2172
16	26		0	32	0	32	16	148	256	420
17	20		0	8	4	12	40	160	8	208
18	22		28	8	4	12	48	800	116	964
19	27		0	24	4	28	175	844	126	1145
20	22		0	8	16	24	44	160	408	612
21	22		0	4	16	20	0	0	0	0
22	25		104	12	8	20	288	2208	128	2624
23	28		0	0	4	4	48	496	16	560
24	23		0	36	24	60	0	288	468	756
25	22		24	12	8	20	132	600	0	732
26	22		0	8	8	16	180	480	52	712
27	21		0	8	0	8	0	532	40	572
28	21		0	16	4	20	0	52	680	732
29	20		0	4	0	4	480	1700	104	2284
30	16		8	0	0	0	260	752	292	1304
31	24		0	0	0	0	160	1220	140	1520
32	23		0	4	0	4	0	244	848	1092
33	23		0	4	4	8	100	936	120	1156
34	19		4	4	4	8	80	1200	80	1360
35	19		16	0	0	0	72	620	32	724
36	24		0	0	0	0	128	500	1108	1736
37	22		40	8	0	8	400	1060	300	1760
38	21		24	0	0	0	80	1060	792	1932
39	22		0	0	0	0	160	288	104	552
40	24		0	0	0	0	128	300	876	1304
41	23		4	0	0	0	21	20	52	93
42	23		0	0	0	0	32	160	12	204
43	20		0	0	0	0	160	700	60	920
44	23		0	0	0	0	76	200	180	456
45	21		0	8	0	8	0	48	40	88
46	19		0	0	0	0	0	0	0	0
47	19		0	0	0	0	0	4	0	4
48	17		0	0	0	0	0	0	0	0
49	18		0	0	4	4	0	0	0	0
50	22		0	4	4	8	0	0	0	0
51	24		0	0	0	0	0	0	36	36
52	21		0	0	0	0	0	0	0	0
53	25		0	8	4	12	0	0	0	0
54	31		0	0	0	0	0	0	0	0
55	32		0	4	4	8	0	0	0	0
TOTAL	**1,182**	**42.11**	**836**	**1,008**	**280**	**1,288**	**6,388**	**34,186**	**9,730**	**50,304**
Density / Acre			**20**	**24**	**7**	**31**	**152**	**812**	**231**	**1,195**

Appendix C

Site Pictures

Photo Appendix

Photo 1: *Oysters along the edge of Jinks Creek.*

Photo 2: *Typical oyster patch found.*

Photos 3 and 4: *High tide conditions when oysters are not visible.*

Photos 5 and 6: *Typical rake samples, one with shell, the other with mucky substrate.*

Photos 7 and 8: *Typical sand-mud intertidal areas near Transect T-55.*

Photo 9: *Northern end of Jinks Creek, looking east.*

Photo 10: *Tributary to Jinks Creek near Transect 25 (S-Curve).*

Photo 11: *Oyster shell near Transect T14 in northern Jinks Creek.*

Photo 12: *Oyster shell near Transect T10 in northern Jinks Creek.*

Appendix D

Field Data Collection Forms

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-18-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	26.41	**Sample Site Location**			**DO & pH:**	60.11%, 3.95 mg/L	5.7	**Temp (°C):**	28.66	**DO & pH:**	89.7%, 5.81 mg/L	6.25
Salinity (ppt):	35.95	State Plane NAD83; Feet			**Tide Level:**	Low (9:15 a.m.)		**Salinity (ppt):**	30.55	**Tide Level:**	2 hours past low (11:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-1	1-01	48,553.13	2,150,794.41	1.74		2"	0.05	3 clams	12 clams		Shell, sand	
	1-02	48,561.80	2,150,798.56	1.27		3'	0.91	0	0		Shell, sand	
	1-03	48,573.27	2,150,804.06	0.27		5'	1.52	0	0		Shell, sand	
	1-04	48,583.88	2,150,809.14	-0.75		4' 7"	1.40	2 clams	8 clams		Shell, sand	
	1-05	48,595.63	2,150,814.77	-1.92		4'	1.22	1 clam	4 clams		Shell, sand	
	1-06	48,607.69	2,150,820.55	-2.93		2.5'	0.76	0	0		Shell, sand	
	1-07	48,617.19	2,150,825.10	-3.60		8"	0.20	2 clams	8 clams		Shell, sand	
	1-08	48,625.57	2,150,829.12	-4.08		3"	0.08	0	0		Shell, sand	
	1-09	48,637.04	2,150,834.61	-4.63		0"	0.00	1 clam	4 clams		Shell, sand	
	1-10	48,647.12	2,150,839.44	-4.41		0"	0.00	1 clam	4 clams		Shell, sand	
	1-11	48,654.90	2,150,843.17	-3.85	9:15 a.m.	0"	0.00	1 clam (L)	4 clams (L)		Shell, sand	
T-2	2-1	48,527.38	2,150,890.49	1.21		0"	0.00	0			Shell, sand	
	2-2	48,543.07	2,150,897.28	-0.13		2"	0.05	1 clam (S)	4 clams (S)		Shell, sand	
	2-3	48,558.71	2,150,903.30	-1.92		4"	0.10	1 clam (L)	4 clams (L)		Shell, sand	
	2-4	48,568.79	2,150,907.20	-3.13		7"	0.18	0	0		Shell, sand	
	2-5	48,583.29	2,150,912.10	-4.15		15"	0.38	0	0		Shell, sand	
	2-6	48,589.02	2,150,914.38	-4.12		26"	0.66	0	0		Sand	
	2-7	48,601.54	2,150,919.36	-3.99		34"	0.86	6 clams	24 clams		Sand	
	2-8	48,614.48	2,150,924.50	-3.28		42"	1.07	1 clam	4 clams		Sand	
	2-9	48,621.49	2,150,927.28	-2.72		4'	1.22	0	0		Sand	
	2-10	48,627.72	2,150,929.76	-2.27		4'3"	1.30	0	0		Sand	
	2-11	48,639.59	2,150,934.47	-1.42		4'	1.22	0	0		Sand	
	2-12	48,651.99	2,150,939.40	-0.77		3'5"	1.04	0	0		Sand	
	2-13	48,660.28	2,150,942.70	-0.44		6"	0.15	0	0		Shell, sand	
	2-14	-	-	-		3"	0.08	1 clam	4 clams		Shell, sand	Extra point
	2-15	-	-	-		0"	0.00	2 clams	8 clams		Shell, sand	Extra point
T-3	3-1	48,506.60	2,150,951.57	1.16		0"	0.00	0			Sand, muck	
	3-2	48,517.27	2,150,956.85	0.46		0"	0.00	24 oysters	96 oysters	56 C3, 40 C2	Sand, shell	
	3-3	48,528.55	2,150,962.43	-1.05		0"	0.00	0	0		Sand	
	3-4	48,540.66	2,150,968.42	-2.71		22"	0.56	1 clam	4 clams		Sand, muck	
	3-5	48,553.81	2,150,974.93	-3.66		3'5"	1.04	0	0		Mucky	
	3-6	48,567.60	2,150,981.75	-3.40		3'9"	1.14	0	0		Mucky	
	3-7	48,583.67	2,150,989.70	-3.11		3'	0.91	1 clam	4 clams		Mucky	
	3-8	48,597.44	2,150,996.51	-2.75		2'5"	0.74	0	0		Mucky	
	3-9	48,613.11	2,151,004.26	-1.83		2'5"	0.74	0	0		Mucky	
	3-10	48,627.51	2,151,011.38	-0.51		8"	0.20	11 oysters	44 oysters	24 C3, 12 C2, 8 C1	Mucky	
	3-11	48,641.51	2,151,018.30	0.00		0"	0.00	0	0		Mucky	
	3-12	48,655.08	2,151,025.01	0.64		0"	0.00	0	0		Mucky	
	3-13	48,665.00	2,151,029.92	1.19		0"	0.00	0	0		Mucky	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-18-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	26.41	**Sample Site Location**			**DO & pH:**	60.11%, 3.95 mg/L	5.7	**Temp (°C):**	28.66	**DO & pH:**	89.7%, 5.81 mg/L	6.25
Salinity (ppt):	35.95	State Plane NAD83; Feet			**Tide Level:**	Low (9:15 a.m.)		**Salinity (ppt):**	30.55	**Tide Level:**	2 hours past low (11:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-4	4-01	48,481.60	2,151,021.59	1.47		0"	0.00	43 oysters	172 oysters	28 C3, 80 C2, 64 C1	Mucky, sand	
	4-02	48,491.32	2,151,028.57	0.32		0"	0.00	36 oysters	144 oysters	112 C3, 32 C2	Mucky, sand	
	4-03	48,501.61	2,151,035.95	-1.26		27"	0.69	8 oysters	32 oysters	All C3	Mucky, sand	
	4-04	48,515.02	2,151,045.56	-2.79		3'1"	0.94	9 oysters	36 oysters	All C2	Mucky, sand	
	4-05	48,528.22	2,151,055.03	-2.78		3'5"	1.04	2 oysters	8 oysters	All C2	Mucky, sand	
	4-06	48,541.26	2,151,064.38	-2.69		2'10"	0.86	0	0		Mucky, sand	
	4-07	48,552.66	2,151,072.55	-2.64		2'6"	0.76	0	0		Mucky, sand	
	4-08	48,562.87	2,151,079.87	-2.59		2'7"	0.79	0	0		Mucky, sand	
	4-09	48,571.93	2,151,086.37	-2.52		2'9"	0.84	0	0		Mucky, sand	
	4-10	48,581.73	2,151,093.40	-2.30		2'8"	0.81	0	0		Mucky, sand	
	4-11	48,591.82	2,151,100.63	-2.09		30"	0.76	0	0		Mucky, sand	
	4-12	48,605.84	2,151,110.69	-2.09		30"	0.76	0	0		Mucky, sand	
	4-13	48,617.20	2,151,118.83	-1.53		29"	0.74	0	0		Mucky, sand	
	4-14	48,627.57	2,151,126.27	-0.33		27"	0.69	0	0		Mucky, sand	
	4-15	48,637.87	2,151,133.65	0.74		17"	0.43	1 clam 18 oysters	4 clams 72 oysters	52 C2, 20 C1	Mucky, sand	
	4-16	48,650.37	2,151,142.62	1.37		0"	0.00	25 oysters	100 oysters	64 C2, 36 C1	Mucky, sand	
	4-17	48,662.64	2,151,151.42	-		0"	0.00	0			Mucky, sand	
T-5	5-01	48,430.04	2,151,081.35	-		1'7"	0.48	3 oysters	12 oysters	All C2	Mucky, sand	
	5-02	48,439.84	2,151,088.93	-0.72		1'4"	0.41	8 oysters	32 oysters	All C2	Mucky, sand	
	5-03	48,449.13	2,151,096.12	-1.09		1'5"	0.43	0	0		Mucky, sand	
	5-04	48,459.07	2,151,103.81	-1.55		1'8"	0.51	0	0		Mucky, sand	
	5-05	48,471.63	2,151,113.53	-1.96		2'1"	0.64	2 clams (1 small)	8 clams	4 clams (S) 4 clams (L)	Muck	
	5-06	48,484.42	2,151,123.43	-2.18		2'8"	0.81	0	0		Muck	
	5-07	48,493.50	2,151,130.46	-2.19		2'5"	0.74	0	0		Muck	
	5-08	48,503.11	2,151,137.90	-2.15		2'9"	0.84	1 clam	4 clams		Muck	
	5-09	48,515.39	2,151,147.40	-2.05		2'7"	0.79	0	0		Muck	
	5-10	48,526.44	2,151,155.95	-1.94		2'7"	0.79	0	0		Muck	
	5-11	48,539.06	2,151,165.72	-2.01		2'9"	0.84	0	0		Muck	
	5-12	48,550.95	2,151,174.92	-2.21		3'	0.91	0	0		Muck	
	5-13	48,560.28	2,151,182.14	-2.29		3'	0.91	0	0		Muck	
	5-14	48,568.65	2,151,188.62	-2.40		3'1"	0.94	0	0		Muck	
	5-15	48,580.03	2,151,197.43	-2.51		3'3"	0.99	2 oysters	8 oysters	All C2	Muck	
	5-16	48,591.80	2,151,206.53	-2.57		3'3"	0.99	2 oysters	8 oysters	All C2	Muck	
	5-17	48,604.87	2,151,216.65	-2.54		3'2"	0.97	0	0		Muck	
	5-18	48,614.71	2,151,224.27	-2.38		3'4"	1.02	2 clams (1 small) 11 oysters	8 clams 44 oysters	All C2 4 clams (S) 4 clams (L)	Muck	
	5-19	48,625.45	2,151,232.58	-1.78		3'1"	0.94	6 clams	24 clams		Muck	
	5-20	48,635.66	2,151,240.48	-		17"	0.43	1 clam 1 oyster	4 clams 4 oysters	All C3	Muck	
	5-21	48,646.08	2,151,248.54	-		1"	0.03	55 oysters	220 oysters	76 C3, 92 C2, 44 C1	Muck	
	5-22	48,654.43	2,151,255.01	-		0"	0.00	29 oysters	116 oysters	104 C2, 12 C1	Sand, muck	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-18-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	26.41	**Sample Site Location**			**DO & pH:**	60.11%, 3.95 mg/L	5.7	**Temp (°C):**	28.66	**DO & pH:**	89.7%, 5.81 mg/L	6.25
Salinity (ppt):	35.95	State Plane NAD83; Feet			**Tide Level:**	Low (9:15 a.m.)		**Salinity (ppt):**	30.55	**Tide Level:**	2 hours past low (11:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-6	6-1	48,402.12	2,151,154.48	-		3"	0.08	127 oysters	508 oysters	152 C3, 256 C2, 100 C1	Mucky, sand	
	6-2	48,408.43	2,151,160.59	-1.13		1'9"	0.53	1 clam 12 oysters	4 clams 48 oysters	All C2	Mucky, sand	
	6-3	48,415.48	2,151,167.41	-1.31		2'6"	0.76	1 clam 2 oysters	4 clams 8 oysters	All C2	Mucky, sand	
	6-4	48,423.22	2,151,174.89	-1.67		2'5"	0.74	1 clam 1 oyster	4 clams 4 oysters	All C2	Mucky, anoxic	
	6-5	48,432.48	2,151,183.85	-2.55		4'4"	1.32	2 clams	8 clams		Mucky, anoxic	
	6-6	48,443.07	2,151,194.10	-3.55		4'3"	1.30	2 clams	8 clams		Mucky, anoxic	
	6-7	48,452.11	2,151,202.84	-3.24		3'3"	0.99	0	0		Mucky, anoxic	
	6-8	48,462.04	2,151,212.44	-2.72		2'7"	0.79	0	0		Mucky, anoxic	
	6-9	48,473.07	2,151,223.11	-2.41		3'	0.91	0	0		Mucky, anoxic	
	6-10	48,482.09	2,151,231.84	-2.08		2'9"	0.84	0	0		Mucky, anoxic	
	6-11	48,491.38	2,151,240.82	-1.86		3'2"	0.97	0	0		Mucky, anoxic	
	6-12	48,502.62	2,151,251.69	-1.57		3'7"	1.09	0	0		Mucky, anoxic	
	6-13	48,512.11	2,151,260.87	-1.38		3'8"	1.12	0	0		Mucky, anoxic	
	6-14	48,520.50	2,151,268.99	-1.44		4'4"	1.32	0	0		Mucky, anoxic	
	6-15	48,529.13	2,151,277.34	-1.87		4'4"	1.32	0	0		Mucky, anoxic	
	6-16	48,536.41	2,151,284.37	-2.36		4'5"	1.35	0	0		Mucky, anoxic	
	6-17	48,543.90	2,151,291.62	-2.89		4'5"	1.35	0	0		Mucky, anoxic	
	6-18	48,550.73	2,151,298.22	-3.33		4'6"	1.37	0	0		Mucky, anoxic	
	6-19	48,558.24	2,151,305.49	-3.45		4'7"	1.40	0	0		Mucky, anoxic	
	6-20	48,567.08	2,151,314.04	-3.19		4'9"	1.45	1 oyster	4 oysters		Sand	
	6-21	48,576.33	2,151,322.99	-2.47		4'2"	1.27	3 clams	12 clams		Sand	
	6-22	48,584.49	2,151,330.88	-1.71		2'6"	0.76	8 oysters	32 oysters	All C2	Sand	
	6-23	48,593.74	2,151,339.83	-0.88		19"	0.48	1 clam 25 oysters	4 clams 100 oysters	All C3	Sand	
	6-24	48,602.11	2,151,347.93	-0.40		26"	0.66	1 oyster	4 oysters	All C3	Mucky, sand, shell	
	6-25	48,609.63	2,151,355.20	-		0"	0.00	Dead shell	N/A		Mucky, sand, shell	
	6-26	48,618.25	2,151,363.54	-		0"	0.00	Dead shell	N/A		Mucky, sand, shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Brandon Grant, Rebeckah Hollowell						**Date: 9**-8-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	26.9	**Sample Site Location**			**DO & pH:**	9.92 mg/L; 150%	7.47	**Temp (°C):**		**DO & pH:**	
Salinity (ppt):	31.96	State Plane NAD83; Feet			**Tide Level:**	2 hours prior (1:30 p.m.)		**Salinity (ppt):**		**Tide Level:**	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-7	7-01	48,375.04	2,151,221.71		2:37 p.m.	0.03	0.01	1 clam (large) 30 C1, 500 C2, 15 C3	4 clams (large) 120 C1, 2,000 C2, 60 C3	Muck, shell	Edge of marsh
	7-02	48,383.94	2,151,230.14	0.86	2:46 p.m.	1.64	0.50	20 C1, 200 C2	80 C1, 800 C2	Muck, shell	
	7-03	48,396.40	2,151,241.95	-0.01	2:49 p.m.	2.62	0.80	10 C2	40 C2	Muck, shell	
	7-04	48,410.00	2,151,254.84	-0.85	2:51 p.m.	3.61	1.10	2 clams (large) 2 C2	8 clams (large) 8 C2	Muck, shell	
	7-05	48,423.51	2,151,267.65	-0.65	2:52 p.m.	4.92	1.50	1 clam (small)	4 clams (small)	Muck, shell	
	7-06	48,439.19	2,151,282.51	-0.21	2:54 p.m.	4.26	1.30	0	0	Muck, shell	
	7-07	48,453.05	2,151,295.66	-0.23	2:55 p.m.	3.28	1.00	7 clams (large)	28 clams (large)	Muck	
	7-08	48,467.69	2,151,309.53	-0.41	2:57 p.m.	3.28	1.00	0	0	Muck, shell	
	7-09	48,481.55	2,151,322.67	-0.71	3:00 p.m.	2.62	0.80	0	0	Muck, shell	
	7-10	48,496.23	2,151,336.58	-1.20	3:01 p.m.	2.30	0.70	0	0	Muck, shell	
	7-11	48,510.55	2,151,350.16	-2.51	3:02 p.m.	1.97	0.60	2 clams (large)	8 clams (large)	Muck, shell	
	7-12	48,522.99	2,151,361.95	-3.73	3:04 p.m.	3.28	1.00	5 clams (large), 1 clam (small)	20 clams (large), 4 clams (small)	Muck, shell	
	7-13	48,537.28	2,151,375.50	-4.11	3:06 p.m.	4.59	1.40	4 clams (large)	16 clams (large)	Muck, shell	
	7-14	48,550.80	2,151,388.31	-3.03	3:08 p.m.	5.25	1.60	0	0	Pluff mud	
	7-15	48,566.11	2,151,402.82	-1.26	3:09 p.m.	5.90	1.80	2 clams (large)	8 clams (large)	Pluff mud	
	7-16	48,581.09	2,151,417.03	0.09							Too deep
	7-17	48,593.94	2,151,429.20								Too deep
	7-18	-	-	-							Too deep
	7-19	-	-	-							Too deep
	7-20	-	-	-							Too deep
	7-21	-	-	-	2:31 p.m.					Pluff mud	Too deep
	7-22	-	-	-	2:29 p.m.					Pluff mud	Too deep
	7-23	-	-	-	2:27 p.m.	5.90	1.80			Muck, shell	Too deep
	7-24	-	-	-	2:25 p.m.	0.98	0.30	0	0	Muck, shell	
	7-25	-	-	-	2:23 p.m.	0.33	0.10	6 C1, 40 C2	24 C1, 160 C2	Muck, shell	
	7-26	-	-	-	2:17 p.m.	0.16	0.05	8 C1, 66 C2	32 C1, 264 C2	Muck, shell	*Storm surge, tides were higher longer Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-08	8-1	48,346.63	2,151,295.19	0.97		0"	0.00	0	0		Muck	
	8-2	48,353.21	2,151,301.34	0.61		0"	0.00	0	0		Muck	
	8-3	48,360.34	2,151,308.00	0.06		3"	0.08	8 oysters	32 oysters	8 C3, 24 C2	Muck, shell	
	8-4	48,366.85	2,151,314.08	-0.44		9"	0.23	0	0		Muck, shell	
	8-5	48,373.31	2,151,320.11	-0.66		12"	0.30	1 oyster	4 oysters	All C2	Muck, shell	
	8-6	48,381.18	2,151,327.46	-0.08		0"	0.00	15 oysters	60 oysters	44 C3, 16 C2	Muck, shell	
	8-7	48,389.03	2,151,334.80	0.52		0"	0.00	35 oysters	140 oysters	100 C3, 40 C2	Muck, shell	
	8-8	48,397.35	2,151,342.56	0.54		0"	0.00	22 oysters	88 oysters	64 C3, 24 C2	Muck, shell	
	8-9	48,405.90	2,151,350.55	0.27		0"	0.00	20 oysters	80 oysters	36 C3, 44 C2	Muck, shell	
	8-10	48,415.31	2,151,359.34	0.31		0"	0.00	22 oysters	88 oysters	20 C3, 68 C2	Muck, shell	
	8-11	48,424.71	2,151,368.12	0.14		0"	0.00	0	0		Muck, shell	
	8-12	48,434.59	2,151,377.35	-0.18		0"	0.00	0	0		Muck, shell	
	8-13	48,443.76	2,151,385.91	-0.41		0"	0.00	0	0		Muck, shell	
	8-14	48,451.83	2,151,393.45	-0.69		3"	0.08	0	0		Muck, shell	
	8-15	48,461.72	2,151,402.69	-1.06		16"	0.41	0	0		Muck, shell	
	8-16	48,473.39	2,151,413.59	-1.98		26"	0.66	3 clams	12 clams		Muck, shell	
	8-17	48,484.88	2,151,424.32	-3.58		3'2"	0.97	0	0		Muck, shell	
	8-18	48,495.19	2,151,433.95	-4.83		3'9"	1.14	0	0		Mucky	
	8-19	48,506.04	2,151,444.09	-4.88		4'	1.22	0	0		Mucky	
	8-20	48,515.93	2,151,453.33	-3.98		4'2"	1.27	0	0		Mucky	
	8-21	48,524.45	2,151,461.28	-2.73		4'4"	1.32	0	0		Mucky	
	8-22	48,533.86	2,151,470.08	-1.11		5'	1.52	0	0		Mucky	
	8-23	48,543.45	2,151,479.03	0.22		5'3"	1.60	0	0		Mucky	
	8-24	48,552.23	2,151,487.23	0.92		2'9"	0.84	4 oysters	16 oysters	4 C3, 12 C2	Mucky	
	8-25	48,560.06	2,151,494.54	-		0"	0.00	79 oysters	316 oysters	268 C3, 48 C2	Mucky	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Brandon Grant, Rebeckah Hollowell						**Date: 9**-7-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	27.13	**Sample Site Location**			**DO & pH:**	6.74 mg/L; 99.5%	6.96	**Temp (°C):**		**DO & pH:**	
Salinity (ppt):	28.46	State Plane NAD83; Feet			**Tide Level:**	2 hours prior (1:00 p.m.)		**Salinity (ppt):**		**Tide Level:**	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-9	9-1	48,320.75	2,151,369.31	0.37	4:44 p.m.	0.00	0.00	12 clams (large)	48 clams (large)	Muck	
	9-2	48,332.58	2,151,379.84	0.27	4:47 p.m.	1.64	0.50	1 clam (small) 3 C1, 13 C2	4 clams (small) 12 C1, 52 C2	Muck, shell	
	9-3	48,344.98	2,151,390.89	0.71	4:48 p.m.	0.00	0.00	120 mussels 35 C1, 290 C2, 20 C3	480 mussels 140 C1, 1,160 C2, 80 C3	Muck, shell	
	9-4	48,361.65	2,151,405.73	-							Top of island, in the marsh
	9-5	48,377.41	2,151,419.78	-	4:54 p.m.	0.33	0.10	60 C1, 150 C2	240 C1, 600 C2	Muck, shell	
	9-6	48,390.84	2,151,431.75	0.41	4:57 p.m.	1.31	0.40	1 C2	4 C2	Muck, shell	
	9-7	48,402.95	2,151,442.53	-0.55	4:58 p.m.	1.31	0.40	0	0	Muck, shell	
	9-8	48,415.74	2,151,453.92	-1.37	4:59 p.m.	1.80	0.55	5 clams (large)	20 clams (large)	Muck, shell	
	9-9	48,427.45	2,151,464.36	-2.45	5:01 p.m.	3.61	1.10	0	0	Muck	
	9-10	48,442.18	2,151,477.47	-3.54	5:02 p.m.	4.92	1.50	0	0	Muck	
	9-11	48,457.98	2,151,491.55	-4.70	3:22 p.m.	5.58	1.70	3 clams (large)	12 clams (large)	Muck	Finished this transect on 9/8/17
	9-12	48,471.42	2,151,503.52	-4.87							Too deep
	9-13	48,486.23	2,151,516.72	-3.21	3:42 p.m.	4.92	1.50	1 clam (large) 6 C2	4 clams (large) 24 C2	Muck, shell	
	9-14	48,501.48	2,151,530.30	-0.89	3:40 p.m.	2.30	0.70	3 clams (large), 1 clam (small) 2 C2	12 clams (large), 4 clams (small) 8 C2	Muck, shell	
	9-15	48,517.06	2,151,544.18	1.11	3:35 p.m.	0.33	0.10	45 C1, 130 C2	180 C1, 520 C2	Muck, shell	
	9-16	48,526.45	2,151,552.55	-	3:30 p.m.	0.00	0.00	1 clam (small) 80 C1, 180 C2	4 clams (small) 320 C1, 720 C2	Muck, shell	
T-10	10-01	48,290.41	2,151,429.99	0.07							In the marsh
	10-02	48,296.69	2,151,435.98	-0.15	4:40 p.m.	0.00	0.00	15 C1, 45 C2	60 C1, 180 C2	Muck, shell	
	10-03	48,304.25	2,151,443.20	-0.32	4:39 p.m.	1.64	0.50	1 clam (small) 3 C1, 1 C2	4 clams (small) 12 C1, 4 C2	Muck, shell	
	10-04	48,312.66	2,151,451.23	-0.33	4:37 p.m.	2.30	0.70	0	0	Muck, shell	
	10-05	48,322.46	2,151,460.60	-0.07	4:36 p.m.	2.62	0.80	4 clams (large)	16 clams (large)	Muck, shell	
	10-06	48,332.22	2,151,469.92	-	4:34 p.m.	2.62	0.80	1 clam (large)	4 clams (large)	Muck, shell	
	10-07	48,341.32	2,151,478.60	-	4:32 p.m.	1.64	0.50	4 C2	16 C2	Muck, shell	
	10-08	48,350.83	2,151,487.69	-0.17	4:29 p.m.	0.00	0.00	1 clam (large) 35 C1, 75 C2, 5 C3	4 clams (large) 140 C1, 300 C2, 20 C3	Muck, shell	
	10-09	48,361.07	2,151,497.47	-1.31	4:26 p.m.	0.00	0.00	25 C1, 85 C2	100 C1, 340 C2	Muck, shell	
	10-10	48,370.18	2,151,506.17	-1.61	4:25 p.m.	0.33	0.10	12 C1, 46 C2	48 C1, 184 C2	Muck, shell	
	10-11	48,381.46	2,151,516.95	-2.32	4:24 p.m.	0.66	0.20	2 clams (large)	8 clams (large)	Muck, shell	
	10-12	48,391.88	2,151,526.90	-2.86	4:21 p.m.	1.97	0.60	1 clam (large), 1 clam (small)	4 clams (large), 4 clams (small)	Muck, shell	Whip coral found
	10-13	48,400.38	2,151,535.01	-3.17	4:19 p.m.	2.62	0.80	4 clams (large), 1 clam (small)	16 clams (large), 4 clams (small)	Muck, shell	
	10-14	48,408.60	2,151,542.87	-3.30	4:18 p.m.	3.28	1.00	3 C2	12 C2	Muck, shell	
	10-15	48,417.48	2,151,551.35	-3.30	4:16 p.m.	4.26	1.30	2 clams (large) 8 C2	8 clams (large) 32 C2	Muck	
	10-16	48,429.22	2,151,562.56	-3.09	4:13 p.m.	4.26	1.30	1 clam (large)	4 clams (large)	Muck	
	10-17	48,438.06	2,151,571.00	-2.92	4:12 p.m.	3.61	1.10	0	0	Muck	
	10-18	48,448.93	2,151,581.39	-1.82	4:11 p.m.	3.61	1.10	1 clam (large)	4 clams (large)	Pluff mud	
	10-19	48,458.29	2,151,590.33	-0.21	4:07 p.m.	3.61	1.10	5 clams (large), 1 clam (small)	20 clams (large), 4 clams (small)	Pluff mud	
	10-20	48,467.13	2,151,598.77	1.05	4:05 p.m.	0.98	0.30	1 clam (large), 2 clams (small) 3 C1, 23 C2	4 clams (large), 8 clams (small) 12 C1, 92 C2	Muck, shell	
	10-21	48,478.90	2,151,610.01	-	4:03 p.m.	0.00	0.00	1 clam (large) 15 C1, 85 C2	4 clams (large) 60 C1, 340 C2	Muck, shell	
	10-22				4:01 p.m.	0.00	0.00	10 C1, 25 C2	40 C1, 100 C2	Muck, shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Brandon Grant, Rebeckah Hollowell						**Date: 9**-7-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	27.13	**Sample Site Location**			**DO & pH:**	6.74 mg/L; 99.5%	6.96	**Temp (°C):**		**DO & pH:**	
Salinity (ppt):	28.46	State Plane NAD83; Feet			**Tide Level:**	2 hours prior (1:00 p.m.)		**Salinity (ppt):**		**Tide Level:**	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-11	11-01	48,222.67	2,151,473.41	-	2:48 p.m.	0.00	0.00	0	0	Muck	
	11-02	48,235.95	2,151,485.08	0.56	2:43 p.m.	0.00	0.00	25 C1, 130 C2, 8 C3	100 C1, 520 C2, 32 C3	Muck, shell	
	11-03	48,248.86	2,151,496.43	-0.14	2:42 p.m.	1.31	0.40	1 clam (small) 1 C2	4 clams (small) 4 C2	Muck, shell	
	11-04	48,265.15	2,151,510.74	-0.22	2:41 p.m.	1.31	0.40	1 clam (large) 6 C2	4 clams (large) 24 C2	Muck, shell	
	11-05	48,279.33	2,151,523.20	-1.06	2:38 p.m.	1.31	0.40	2 clams (large) 1 C1, 9 C2	8 clams (large) 4 C1, 36 C2	Muck, shell	
	11-06	48,296.66	2,151,538.42	-1.30	2:35 p.m.	1.97	0.60	2 clams (large) 13 C2, 21 C3	8 clams (large) 52 C2, 84 C3	Muck, shell	
	11-07	48,307.26	2,151,547.74	-1.47	2:34 p.m.	2.62	0.80	1 C1, 6 C2, 1 C3	4 C1, 24 C2, 4 C3	Muck, shell	
	11-08	48,318.21	2,151,557.36	-1.75	2:32 p.m.	2.95	0.90	0	0	Muck, shell	
	11-09	48,337.20	2,151,574.04	-2.22	2:30 p.m.	2.95	0.90	1 clam (large)	4 clams (large)	Muck, shell	
	11-10	48,354.43	2,151,589.18	-2.54	2:29 p.m.	3.28	1.00	0	0	Muck, shell	
	11-11	48,367.04	2,151,600.26	-2.27	2:27 p.m.	3.61	1.10	0	0	Muck	
	11-12	48,376.71	2,151,608.75	-2.04	2:26 p.m.	3.61	1.10	0	0	Muck	
	11-13	48,393.98	2,151,623.93	-1.44	2:16 p.m.	2.95	0.90	2 clams (large), 1 clam (small)	8 clams (large), 4 clams (small)	Pluff mud	
	11-14	48,405.22	2,151,633.80	-0.31	2:13 p.m.	4.26	1.30	3 clams (large), 1 clam (small)	12 clams (large), 4 clams (small)	Pluff mud	
	11-15	48,416.20	2,151,643.45	0.96	2:09 p.m.	1.64	0.50	5 clams (large), 3 clams (small)	20 clams (large), 12 clams (small)	Muck, shell	
	11-16	48,427.99	2,151,653.81	-	2:05 p.m.	0.33	0.10	1 clam (small) 12 C1, 80 C2, 7 C3	4 clams (small) 48 C1, 320 C2, 28 C3	Muck, shell	
	11-17	48,436.48	2,151,661.27	-	1:59 p.m.	0.00	0.00	24 mussels 15 C1, 65 C2, 8 C3	96 mussels 60 C1, 260 C2, 32 C3	Muck, shell	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-12	12-1	48,169.99	2,151,517.99	0.68		0"	0.00	45 oysters	180 oysters	168 C3, 12 C2	Muck, shell	
	12-2	48,176.83	2,151,524.09	0.09		2"	0.05	60 oysters	240 oysters	All C3	Muck, shell	
	12-3	48,184.50	2,151,530.94	-0.58		22"	0.56	1 clam	4 clams		Muck, shell	
	12-4	48,192.23	2,151,537.85	-1.16		28"	0.71	1 clam	4 clams		Muck, shell	
	12-5	48,201.59	2,151,546.21	-1.68		26"	0.66	2 clams	8 clams		Sand, shell	
	12-6	48,212.37	2,151,555.83	-2.00		25"	0.64	1 clam	4 clams		Sand, shell	
	12-7	48,222.91	2,151,565.25	-2.14		25"	0.64	0	0		Sand, shell	
	12-8	48,232.96	2,151,574.23	-2.16		25"	0.64	0	0		Sand, shell	
	12-9	48,242.11	2,151,582.39	-2.14		26"	0.66	0	0		Sand, shell	
	12-10	48,251.97	2,151,591.20	-2.13		26"	0.66	0	0		Sand, shell	
	12-11	48,263.96	2,151,601.91	-2.17		26"	0.66	0	0		Sand, shell	
	12-12	48,273.00	2,151,609.98	-2.16		26"	0.66	0	0		Sand, shell	
	12-13	48,284.26	2,151,620.04	-2.06		26"	0.66	1 clam	4 clams		Mucky	
	12-14	48,294.56	2,151,629.23	-1.74		15"	0.38	0	0		Mucky	
	12-15	48,303.00	2,151,636.78	-1.36		13"	0.33	0	0		Mucky	
	12-16	48,315.34	2,151,647.80	-1.02		13"	0.33	0	0		Mucky	
	12-17	48,324.18	2,151,655.69	-0.91		13"	0.33	0	0		Mucky	
	12-18	48,334.48	2,151,664.89	-0.91		17"	0.43	3 clams	12 clams		Mucky	
	12-19	48,343.72	2,151,673.14	-0.89		14"	0.36	2 clams	8 clams		Mucky	
	12-20	48,353.56	2,151,681.93	-0.20		15"	0.38	0	0		Mucky	
	12-21	48,361.39	2,151,688.92	0.62		5"	0.13	0	0		Mucky	
	12-22	48,370.36	2,151,696.94	-		0"	0.00	31 oysters	124 oysters	All C3	Mucky	
	12-23	48,380.77	2,151,706.23	-		0"	0.00	49 oysters	196 oysters	148 C3, 48 C2	Mucky	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Brandon Grant, Rebeckah Hollowell						**Date: 9**-8-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	26.9	**Sample Site Location**			**DO & pH:**	9.92 mg/L; 150%	7.47	**Temp (°C):**		**DO & pH:**	
Salinity (ppt):	31.96	State Plane NAD83; Feet			**Tide Level:**	2 hours prior (1:30 p.m.)		**Salinity (ppt):**		**Tide Level:**	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-13	13-1	48,102.72	2,151,551.49	0.74	3:58 p.m.	0.00	0.00	15 C1, 65 C2	60 C1, 260 C2	Muck, shell	Edge of marsh
	13-2	48,113.89	2,151,561.19	0.32	3:59 p.m.	0.33	0.10	20 C1, 130 C2, 5 C3	80 C1, 520 C2, 20 C3	Muck, shell	
	13-3	48,126.46	2,151,572.10	-0.72	4:06 p.m.	1.97	0.60	0	0	Muck, shell	
	13-4	48,140.38	2,151,584.19	-1.94	4:08 p.m.	2.62	0.80	2 clams (small)	8 clams (small)	Muck, shell	
	13-5	48,157.06	2,151,598.66	-2.65	4:09 p.m.	3.28	1.00	1 clam (large), 3 clams (small)	4 clams (large), 12 clams (small)	Muck, shell	
	13-6	48,171.61	2,151,611.30	-2.44	4:11 p.m.	2.95	0.90	1 C2	4 C2	Muck, shell	
	13-7	48,186.86	2,151,624.53	-2.07	4:13 p.m.	2.30	0.70	2 clams (large), 1 clam (small)	8 clams (large), 4 clams (small)	Muck, shell	
	13-8	48,201.36	2,151,637.12	-1.68	4:14 p.m.	1.64	0.50	0	0	Muck	
	13-9	48,214.28	2,151,648.34	-1.48	4:15 p.m.	0.98	0.30	0	0	Muck	
	13-10	48,226.65	2,151,659.07	-1.26	4:16 p.m.	0.66	0.20	0	0	Muck	
	13-11	48,242.05	2,151,672.44	-0.91	4:17 p.m.	0.66	0.20	0	0	Muck	
	13-12	48,257.64	2,151,685.97	-0.43	4:18 p.m.	1.31	0.40	3 clams (large)	12 clams (large)	Pluff mud	
	13-13	48,273.86	2,151,700.06	-0.60	4:18 p.m.	1.64	0.50	3 clams (large)	12 clams (large)	Pluff mud	
	13-14	48,290.85	2,151,714.80	-0.97	4:19 p.m.	1.31	0.40	3 clams (large)	12 clams (large)	Muck, shell	
	13-15	48,306.43	2,151,728.33	1.01	4:21 p.m.	0.00	0.00	80 C1, 390 C2, 15 C3	320 C1, 1,560 C2, 60 C3	Muck, shell	
	13-16	48,325.52	2,151,744.91	-	4:25 p.m.	0.00	0.00	2 mussels 5 C1, 60 C2	8 mussels 20 C1, 240 C2	Muck, shell	Edge of marsh
T-14	14-01	48,035.67	2,151,587.46		5:13 p.m.	0.00	0.00	10 C1, 60 C2, 1 C3	40 C1, 240 C2, 4 C3	Muck, shell	
	14-02	48,041.30	2,151,592.47		5:02 p.m.	0.33	0.10	15 C1, 105 C2	60 C1, 420 C2	Muck, shell	
	14-03	48,048.17	2,151,598.58	-0.75	5:00 p.m.	1.31	0.40	2 C1, 18 C2	8 C1, 72 C2	Muck, shell	
	14-04	48,055.55	2,151,605.14	-1.08	4:59 p.m.	2.95	0.90	0	0	Muck, shell	
	14-05	48,063.98	2,151,612.64	-1.40	4:57 p.m.	3.94	1.20	1 clam (small) 5 C2	4 clams (small) 20 C2	Muck, shell	
	14-06	48,072.17	2,151,619.93	-1.84	4:56 p.m.	3.61	1.10	1 clam (large)	4 clams (large)	Muck, shell	
	14-07	48,079.30	2,151,626.27	-2.33	4:55 p.m.	3.61	1.10	3 clams (large)	12 clams (large)	Muck, shell	
	14-08	48,088.35	2,151,634.32	-2.55	4:54 p.m.	3.61	1.10	2 C2	8 C2	Muck, shell	
	14-09	48,097.88	2,151,642.80	-2.33	4:52 p.m.	3.28	1.00	3 clams (large), 1 clam (small)	12 clams (large), 4 clams (small)	Muck, shell	
	14-10	48,107.17	2,151,651.07	-2.25	4:50 p.m.	2.95	0.90	1 clam (large), 1 clam (small)	4 clams (large), 4 clams (small)	Muck, shell	
	14-11	48,114.90	2,151,657.95	-2.11	4:49 p.m.	2.95	0.90	4 clams (large), 1 clam (small)	16 clams (large), 4 clams (small)	Muck	
	14-12	48,124.81	2,151,666.76	-1.82	4:47 p.m.	2.30	0.70	4 clams (large), 2 clams (small)	16 clams (large), 8 clams (small)	Muck	
	14-13	48,134.70	2,151,675.55	-1.45	4:46 p.m.	2.13	0.65	3 clams (large), 1 clam (small)	12 clams (large), 4 clams (small)	Muck	
	14-14	48,145.04	2,151,684.75	-1.07	4:45 p.m.	1.97	0.60	1 clam (large)	4 clams (large)	Muck, shell	
	14-15	48,153.39	2,151,692.18	-0.79	4:45 p.m.	1.64	0.50	0	0	Muck	
	14-16	48,162.81	2,151,700.57	-0.59	4:44 p.m.	1.31	0.40	0	0	Muck	
	14-17	48,170.19	2,151,707.13	-0.52	4:44 p.m.	0.66	0.20	0	0	Muck	
	14-18	48,178.35	2,151,714.39	-0.38	4:43 p.m.	0.66	0.20	0	0	Muck	
	14-19	48,187.51	2,151,722.53	-0.20	4:43 p.m.	0.33	0.10	0	0	Muck	
	14-20	48,196.69	2,151,730.70	0.01	4:42 p.m.	0.33	0.10	0	0	Muck	
	14-21	48,206.55	2,151,739.47	-0.09	4:42 p.m.	0.33	0.10	0	0	Muck	
	14-22	48,214.36	2,151,746.42	-0.39	4:40 p.m.	0.49	0.15	0	0	Muck	
	14-23	48,224.46	2,151,755.40	-0.88	4:37 p.m.	1.64	0.50	1 clam (large)	4 clams (large)	Muck	
	14-24	48,233.34	2,151,763.31	-0.48	4:35 p.m.	0.66	0.20	1 clam (large) 3 C2	4 clams (large) 12 C2	Muck, shell	
	14-25	48,242.01	2,151,771.03	0.59	4:33 p.m.	0.00	0.00	1 clam (large) 8 C1, 65 C2	4 clams (large) 32 C1, 260 C2	Muck, shell	
	14-26	48,251.66	2,151,779.60	1.62	4:30 p.m.	0.00	0.00	5 C1, 110 C2	20 C1, 440 C2	Muck, shell	Marsh extends ~6m beyond this point

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Brandon Grant, Rebeckah Hollowell						**Date: 9**-8-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	26.9	**Sample Site Location**			**DO & pH:**	9.92 mg/L; 150%	7.47	**Temp (°C):**		**DO & pH:**	
Salinity (ppt):	31.96	State Plane NAD83; Feet			**Tide Level:**	2 hours prior (1:30 p.m.)		**Salinity (ppt):**		**Tide Level:**	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-15	15-1	47,986.60	2,151,625.63		5:16 p.m.	0.00	0.00	20 C1, 125 C2	80 C1, 500 C2	Muck, shell	Edge of marsh
	15-2	48,001.30	2,151,637.62		5:22 p.m.	0.66	0.20	10 C1, 64 C2, 1 C3	40 C1, 256 C2, 4 C3	Muck, shell	
	15-3	48,018.18	2,151,651.38	-2.70	5:23 p.m.	3.61	1.10	1 C2	4 C2	Muck, shell	Whip coral found
	15-4	48,034.33	2,151,664.56	-2.55	5:24 p.m.	3.28	1.00	1 clam (small) 2 C2	4 clams (small) 8 C2	Muck, shell	
	15-5	48,045.18	2,151,673.40	-2.31	5:25 p.m.	3.28	1.00	0	0	Muck, shell	
	15-6	48,055.33	2,151,681.69	-2.10	5:27 p.m.	3.28	1.00	0	0	Muck, shell	
	15-7	48,066.34	2,151,690.67	-1.95	5:27 p.m.	2.95	0.90	1 clam (large)	4 clams (large)	Muck, shell	
	15-8	48,076.63	2,151,699.06	-1.79	5:28 p.m.	2.95	0.90	1 clam (small)	4 clams (small)	Muck, shell	
	15-9	48,086.34	2,151,706.97	-1.60	5:29 p.m.	2.62	0.80	1 clam (large)	4 clams (large)	Muck	
	15-10	48,095.92	2,151,714.79	-1.36	5:30 p.m.	2.30	0.70	0	0	Muck	
	15-11	48,105.50	2,151,722.60	-1.13	5:30 p.m.	1.64	0.50	0	0	Muck	
	15-12	48,119.29	2,151,733.85	-0.74	5:30 p.m.	1.48	0.45	0	0	Muck	
	15-13	48,127.61	2,151,740.64	-0.51	5:30 p.m.	0.98	0.30	0	0	Muck	
	15-14	48,139.57	2,151,750.39	-0.16	5:31 p.m.	0.66	0.20	0	0	Muck	
	15-15	48,149.72	2,151,758.67	0.08	5:31 p.m.	0.98	0.30	0	0	Muck	
	15-16	48,159.39	2,151,766.56	0.38	5:31 p.m.	0.98	0.30	3 clams (large)	12 clams (large)	Muck	
	15-17	48,168.85	2,151,774.27	0.23	5:32 p.m.	1.64	0.50	3 clams (large)	12 clams (large)	Muck	
	15-18	48,180.28	2,151,783.59	-0.51	5:34 p.m.	1.64	0.50	1 C2	4 C2	Muck, shell	
	15-19	48,187.70	2,151,789.65	-0.57	5:35 p.m.	0.98	0.30	25 C2	100 C2	Muck, shell	
	15-20	48,199.45	2,151,799.22	0.57	5:35 p.m.	0.33	0.10	25 C1, 110 C2, 4 C3	100 C1, 440 C2, 8 C3	Muck, shell	
	15-21	48,208.19	2,151,806.35	1.44	5:42 p.m.	0.00	0.00	25 C1, 130 C2, 2 C3	100 C1, 520 C2, 8 C3	Muck, shell	Edge of marsh
	15-22	48,215.94	2,151,812.67								In the marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-16	16-01	47,921.75	2,151,677.36	-		0"	0.00	13 oysters	52 oysters	36 C3, 16 C2	Muck, shell	
	16-02	47,929.77	2,151,683.22	-		0"	0.00	6 oysters	24 oysters	All C3	Muck, shell	
	16-03	47,938.90	2,151,689.87	-		4"	0.10	29 oysters	116 oysters	40 C3, 60 C2, 16 C1	Muck, shell	
	16-04	47,947.39	2,151,696.06	-2.39		25"	0.64	2 oysters	8 oysters	All C2	Sand, shell	
	16-05	47,957.19	2,151,703.20	-2.61		3'2"	0.97	2 clams	8 clams		Sand, shell	
	16-06	47,967.32	2,151,710.59	-2.72		3'2"	0.97	1 clam	4 clams		Sand, shell	
	16-07	47,979.26	2,151,719.29	-2.64		3'1"	0.94	0	0		Sand, shell	
	16-08	47,989.24	2,151,726.57	-2.40		3'	0.91	0	0		Sand, shell	
	16-09	47,998.65	2,151,733.43	-2.18		32"	0.81	0	0		Sand, shell	
	16-10	48,007.73	2,151,740.05	-2.01		30"	0.76	0	0		Sand, shell	
	16-11	48,016.49	2,151,746.44	-1.82		29"	0.74	0	0		Sand, shell	
	16-12	48,025.49	2,151,753.00	-1.63		29"	0.74	0	0		Sand, shell	
	16-13	48,034.90	2,151,759.86	-1.42		25"	0.64	0	0		Sand, shell	
	16-14	48,044.86	2,151,767.12	-1.18		2'	0.61	0	0		Sand, shell	
	16-15	48,054.01	2,151,773.79	-0.85		2'	0.61	2 clams	8 clams		Sand, shell	
	16-16	48,062.83	2,151,780.22	-0.58		16"	0.41	2 clams	8 clams		Sand, muck	
	16-17	48,073.14	2,151,787.74	-0.34		16"	0.41	1 clam	4 clams		Sand, muck	
	16-18	48,081.87	2,151,794.10	-0.07		0"	0.00	0	0		Sand, muck	
	16-19	48,090.84	2,151,800.64	0.14		0"	0.00	0	0		Muck	
	16-20	48,100.46	2,151,807.65	0.35		0"	0.00	0	0		Muck	
	16-21	48,110.85	2,151,815.23	0.42		0"	0.00	0	0		Muck	
	16-22	48,121.60	2,151,823.07	0.35		0"	0.00	0	0		Muck	
	16-23	48,134.00	2,151,832.11	0.35		0"	0.00	0	0		Muck	
	16-24	48,145.64	2,151,840.59	0.70		0"	0.00	0	0		Muck	
	16-25	48,155.51	2,151,847.79	1.20		0"	0.00	3 oysters	12 oysters	All C3	Muck	
	16-26	48,165.80	2,151,855.29	-		0"	0.00	52 oysters	208 oysters	144 C3, 64 C2	Muck	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-2-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	22.31	**Sample Site Location**			**DO & pH:**	101.1%; 7.29 mg/L	6.91	**Temp (°C):**	24.32	**DO & pH:**	142.9%; 9.87 mg/L	6.98
Salinity (ppt):	32.43	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (9:30 a.m.)		**Salinity (ppt):**	34.69	**Tide Level:**	2 hours after low tide (1:30 p.m.)	
Tansect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**	
T-17	17-01	47,876.02	2,151,722.78	-		0.4	0.12	0	0	Muck, shell	Edge of marsh (bank undercutting)	
	17-02	47,885.49	2,151,729.42	-0.03		2	0.61	1 clam (large)	4 clams (large)	Muck, shell		
	17-03	47,896.82	2,151,737.35	-0.63		2.9	0.88	0	0	Muck, shell		
	17-04	47,909.49	2,151,746.23	-1.61		4	1.22	0	0	Muck, shell		
	17-05	47,920.19	2,151,753.72	-2.29							Too deep	
	17-06	47,932.60	2,151,762.42	-2.83							Too deep	
	17-07	47,943.85	2,151,770.30	-2.59	12:20 p.m. 10/4/17						Too deep	
	17-08	47,955.20	2,151,778.25	-2.33		4.9	1.49	1 clam (large)	4 clams (large)	Muck, shell		
	17-09	47,970.20	2,151,788.76	-2.02		4.8	1.46	0	0	Muck, shell		
	17-10	47,990.59	2,151,803.04	-1.54		4.5	1.37	1 clam (small)	4 clams (small)	Muck, shell	Hermit crab	
	17-11	48,010.76	2,151,817.17	-0.88		4.3	1.31	0	0	Muck, shell		
	17-12	48,026.35	2,151,828.09	-0.38		4.2	1.28	0	0	Muck		
	17-13	48,038.86	2,151,836.86	-0.11		2.8	0.85	0	0	Muck		
	17-14	48,052.02	2,151,846.08	0.21		2.8	0.85	0	0	Muck		
	17-15	48,061.65	2,151,852.82	0.45		2.1	0.64	0	0	Muck		
	17-16	48,073.22	2,151,860.93	0.57		1.9	0.58	0	0	Muck		
	17-17	48,082.76	2,151,867.61	0.70		1.5	0.46	0	0	Muck		
	17-18	48,092.70	2,151,874.57	0.87		1.8	0.55	0	0	Muck		
	17-19	48,103.00	2,151,881.79	0.99		2	0.61	0	0	Muck		
	17-20	48,118.44	2,151,892.61	-		2	0.61	0	0	Muck, shell		
	17-21	-	-	-	10:40 a.m.	0.9	0.27	10 C1, 40 C2, 2 C3	40 C1, 160 C2, 8 C3	Muck, shell	~6 feet from edge of marsh	
T-18	18-01	47,832.34	2,151,788.59	-		3.3	1.01	0	0	Muck	In mouth of creek	
	18-02	47,838.92	2,151,793.18	-4.83		4.7	1.43	0	0	Muck		
	18-03	47,847.29	2,151,799.02	-4.61							Too deep	
	18-04	47,855.40	2,151,804.68	-4.40							Too deep	
	18-05	47,865.19	2,151,811.52	-4.26	12:30 p.m.10/4/17						Too deep	
	18-06	47,875.10	2,151,818.44	-4.03		4.8	1.46	0	0	Muck, shell		
	18-07	47,885.74	2,151,825.87	-3.40		4.7	1.43	1 clam (small)	4 clams (small)	Muck, shell		
	18-08	47,897.41	2,151,834.01	-2.73		4.8	1.46	0	0	Muck, shell		
	18-09	47,907.26	2,151,840.89	-2.65		4.7	1.43	0	0	Muck, shell		
	18-10	47,918.20	2,151,848.52	-2.59		4.6	1.40	0	0	Muck, shell		
	18-11	47,929.57	2,151,856.46	-2.44		4.6	1.40	0	0	Muck, shell		
	18-12	47,942.77	2,151,865.68	-2.05		4.2	1.28	0	0	Muck, shell	Whip coral	
	18-13	47,954.23	2,151,873.68	-1.56		3.8	1.16	0	0	Muck, shell		
	18-14	47,964.41	2,151,880.79	-1.03		3.5	1.07	0	0	Muck		
	18-15	47,975.25	2,151,888.36	-0.47		2.6	0.79	1 clam (large)	4 clams (large)	Muck		
	18-16	47,985.81	2,151,895.73	-0.07		2	0.61	0	0	Muck		
	18-17	48,000.12	2,151,905.72	0.29		1.5	0.46	0	0	Muck		
	18-18	48,011.99	2,151,914.00	0.59		1.5	0.46	0	0	Muck		
	18-19	48,021.96	2,151,920.96	0.78		2	0.61	1 clam (large)	4 clams (large)	Muck, pluff mud		
	18-20	48,031.55	2,151,927.66	1.13		1.8	0.55	0	0	Muck, pluff mud		
	18-21	48,040.15	2,151,933.66	1.60		1.5	0.46	12 C1, 42 C2, 7 C3	48 C1, 336 C2, 28 C3	Muck, shell		
	18-22	48,050.61	2,151,940.97	-	11:01 a.m.	0	0.00	116 C2, 22 C3 7 Mussels	464 C2, 88 C3 28 Mussels	Muck, shell	Edge of marsh	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-2-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	22.31	**Sample Site Location**			**DO & pH:**	101.1%; 7.29 mg/L	6.91	**Temp (°C):**	24.32	**DO & pH:**	142.9%; 9.87 mg/L	6.98
Salinity (ppt):	32.43	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (9:30 a.m.)		**Salinity (ppt):**	34.69	**Tide Level:**	2 hours after low tide (1:30 p.m.)	
Tansect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**	
T-19	19-01	47,782.40	2,151,893.71	-		1.5	0.46	0	0	Mucky sand	In mouth of creek	
	19-02	47,790.58	2,151,898.19	-		3.3	1.01	0	0	Mucky sand		
	19-03	47,800.89	2,151,903.83	-2.06		4.2	1.28	0	0	Mucky sand		
	19-04	47,811.58	2,151,909.68	-3.17						Muck, pluff mud	Too deep	
	19-05	47,823.92	2,151,916.43	-4.52							Too deep	
	19-06	47,834.53	2,151,922.24	-5.79							Too deep	
	19-07	47,846.44	2,151,928.76	-6.63							Too deep	
	19-08	47,855.88	2,151,933.93	-6.41							Too deep	
	19-09	47,867.83	2,151,940.46	-5.40							Too deep	
	19-10	47,877.49	2,151,945.75	-4.05	12:40 p.m.I0/4/17						Too deep	
	19-11	47,888.33	2,151,951.69	-3.39		4.9	1.49	0	0	Muck, shell		
	19-12	47,898.94	2,151,957.49	-2.80		4.1	1.25	0	0	Muck, shell		
	19-13	47,910.85	2,151,964.01	-2.10		3.8	1.16	1 clam (small)	4 clams (small)	Muck, shell		
	19-14	47,920.91	2,151,969.52	-1.57		3.25	0.99	1 clam (large)	4 clams (large)	Muck, shell		
	19-15	47,930.66	2,151,974.85	-0.88		2.8	0.85	2 clams (large)	8 clams (large)	Muck, shell		
	19-16	47,938.96	2,151,979.39	-0.62		2.5	0.76	0	0	Muck, shell		
	19-17	47,948.19	2,151,984.45	-0.22		2	0.61	2 clams (large)	8 clams (large)	Muck		
	19-18	47,960.99	2,151,991.45	0.34		1.6	0.49	0	0	Muck		
	19-19	47,972.02	2,151,997.49	0.76		1.2	0.37	1 clam (large)	4 clam (large)	Muck		
	19-20	47,982.92	2,152,003.46	0.87		1	0.30	0	0	Muck		
	19-21	47,992.83	2,152,008.88	1.07		0.8	0.24	0	0	Muck, shell		
	19-22	48,002.74	2,152,014.30	1.35		0.6	0.18	16 C2, 4 C3	64 C2, 16 C3	Muck, shell		
	19-23	48,009.51	2,152,018.01	1.53		0.5	0.15	11 C2	44 C2	Muck, shell		
	19-24	48,017.65	2,152,022.47	-		0	0.00	40 C1, 172 C2, 25 C3	160 C1, 688 C2, 100 C3	Muck, shell		
	19-25	48,026.07	2,152,027.07	-		0.3	0.09	0	0	Pluff mud		
	19-26	48,035.01	2,152,031.97	-		0.1	0.03	0	0	Pluff mud		
	19-27	48,040.67	2,152,035.06	-	11:30 a.m.	0	0.00	15 C1, 48 C2, 10 C3	15 C1, 48 C2, 10 C3	Muck, shell		

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-20	20-01	47,760.23	2,152,023.12	1.44		0"	0.00	50 oysters	200 oysters	All C3	Sand, shell	
	20-02	47,767.52	2,152,026.03	1.20		0"	0.00	59 oysters	236 oysters	152 C3, 84 C2	Sand, shell	
	20-03	47,774.70	2,152,028.89	0.46		3"	0.08	17 oysters	68 oysters	56 C3, 12 C2	Sand, shell	
	20-04	47,781.21	2,152,031.50	-0.30		2'8"	0.81	0	0		Sand, shell	
	20-05	47,790.79	2,152,035.32	-1.47		3'4"	1.02	0	0		Sand, shell	
	20-06	47,799.48	2,152,038.79	-2.57		4'6"	1.32	0	0		Sand, shell	
	20-07	47,809.36	2,152,042.74	-3.86		4'7"	1.40	0	0		Sand, shell	
	20-08	47,818.26	2,152,046.29	-4.97		4'7"	1.40	0	0		Sand, shell	
	20-09	47,828.52	2,152,050.39	-5.95		Over 6'		N/A	N/A		Sand, shell	Too deep
	20-10	47,837.42	2,152,053.95	-5.89		Over 6'		N/A	N/A		Sand, shell	Too deep
	20-11	47,847.90	2,152,058.13	-5.53		Over 6'		N/A	N/A		Sand, shell	Too deep
	20-12	47,857.18	2,152,061.84	-5.05		4'6"	1.37	0	0		Sand, shell	
	20-13	47,865.72	2,152,065.25	-4.21		3'8"	1.12	1 clam	4 clams		Sand, shell	
	20-14	47,876.72	2,152,069.64	-3.40		3'	0.91	0	0		Sand, shell	
	20-15	47,887.87	2,152,074.10	-2.62		25"	0.64	1 clam (S)	4 clams (S)		Sand, shell	
	20-16	47,898.05	2,152,078.16	-2.01		2'	0.61	0	0		Sand, shell	
	20-17	47,907.78	2,152,082.05	-1.76		2'3"	0.69	2 clams (S)	8 clams (S)		Sand, shell	
	20-18	47,920.28	2,152,087.04	-1.51		1'9"	0.53	1 clam (S)	4 clams (S)		Shell	
	20-19	47,931.66	2,152,091.59	-1.28		14"	0.36	0	0		Shell	
	20-20	47,942.14	2,152,095.77	-0.79		3"	0.08	1 clam	4 clams		Shell	
	20-21	47,952.84	2,152,100.05	0.01		0"	0.00	18 oysters	72 oysters	28 C2, 44 C1	Shell	
	20-22	47,965.83	2,152,105.24	-		0"	0.00	9 oysters	36 oysters	All C2	Shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-2-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	22.31	**Sample Site Location**			**DO & pH:**	101.1%; 7.29 mg/L	6.91	**Temp (°C):**	24.32	**DO & pH:**	142.9%; 9.87 mg/L	6.98
Salinity (ppt):	32.43	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (9:30 a.m.)		**Salinity (ppt):**	34.69	**Tide Level:**	2 hours after low tide (1:30 p.m.)	
Tansect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**	
T-21	21-01	47,729.99	2,152,120.60	-		0	0.00	0	0	Muck	~7 feet from edge of marsh	
	21-02	47,738.01	2,152,122.33	0.48		0.6	0.18	0	0	Muck, pluff mud		
	21-03	47,748.64	2,152,124.63	-0.19		1	0.30	0	0	Muck, pluff mud		
	21-04	47,761.12	2,152,127.32	-1.06		2	0.61	0	0	Muck, pluff mud		
	21-05	47,773.12	2,152,129.92	-1.93		4	1.22	0	0	Muck, pluff mud		
	21-06	47,785.77	2,152,132.65	-2.84		4.5	1.37	0	0	Muck, pluff mud		
	21-07	47,797.45	2,152,135.18	-3.56		5	1.52	0	0	Muck, pluff mud		
	21-08	47,811.85	2,152,138.29	-3.73								
	21-09	47,827.61	2,152,141.69	-3.52								
	21-10	47,843.19	2,152,145.06	-3.38	12:55 p.m.I0/4/17							
	21-11	47,855.25	2,152,147.67	-3.22		4.6	1.40	0	0	Muck, shell		
	21-12	47,871.73	2,152,151.23	-2.54		3.7	1.13	1 clam (large)	4 clams (large)	Muck, shell		
	21-13	47,886.90	2,152,154.51	-2.27		3.6	1.10	0	0	Muck, shell	Too deep	
	21-14	47,900.44	2,152,157.44	-2.11		3.5	1.07	1 clam (small)	4 clams (small)	Muck, shell	Too deep	
	21-15	47,913.86	2,152,160.34	-2.04		3.6	1.10	0	0	Muck, shell	Too deep	
	21-16	47,926.81	2,152,163.13	-1.94		3.6	1.10	0	0	Muck, shell		
	21-17	47,939.93	2,152,165.97	-1.82		3.8	1.16	3 clams (small)	12 clams (small)	Muck, shell		
	21-18	47,955.19	2,152,169.27	-1.50		3.2	0.98	0	0	Muck, shell		
	21-19	47,965.95	2,152,171.59	-0.49		2	0.61	0	0	Muck, shell		
	21-20	47,978.69	2,152,174.35	0.62		1.5	0.46	0	0	Muck, shell		
	21-21	47,995.79	2,152,178.04	-		0	0.00	0	0	Shell		
	21-22	48,008.99	2,152,180.90	-	11:52 a.m.	0	0.00	0	0	Shell	In marsh	
T-22	22-01	47,732.47	2,152,228.60	-	12:35 p.m.	0	0.00	165 C2, 10 C3 8 Mussels	660 C2, 40 C3 32 Mussels	Muck, shell	Edge of marsh	
	22-02	47,744.59	2,152,230.38	0.94		0	0.00	30 C1, 260 C2, 22 C3	120 C1, 1,040 C2, 88 C3	Shell		
	22-03	47,756.69	2,152,232.17	0.56		2	0.61	4 C1, 22 C2	16 C1, 88 C2	Muck, pluff mud		
	22-04	47,768.87	2,152,233.96	0.14		3	0.91	18 C2	72 C2	Muck, pluff mud		
	22-05	47,779.80	2,152,235.57	-0.47		3	0.91	1 clam (large)	4 clams (large)	Muck, pluff mud		
	22-06	47,789.05	2,152,236.94	-0.92		3	0.91	1 clam (large)	4 clams (large)	Muck, pluff mud		
	22-07	47,802.41	2,152,238.91	-1.15		3	0.91	1 clam (large)	4 clams (large)	Muck, pluff mud		
	22-08	47,812.89	2,152,240.45	-1.26		3	0.91	0	0	Muck, pluff mud		
	22-09	47,824.94	2,152,242.23	-1.46		3.2	0.98	0	0	Muck, pluff mud		
	22-10	47,841.16	2,152,244.62	-1.77		3	0.91	0	0	Muck		
	22-11	47,858.06	2,152,247.11	-2.10		3.5	1.07	0	0	Muck		
	22-12	47,875.07	2,152,249.62	-2.32		3.8	1.16	0	0	Muck		
	22-13	47,892.31	2,152,252.16	-2.25		3.8	1.16	0	0	Muck, shell		
	22-14	47,907.17	2,152,254.35	-2.25		3.7	1.13	0	0	Muck, shell		
	22-15	47,924.96	2,152,256.97	-2.27		3.7	1.13	0	0	Muck, shell		
	22-16	47,935.82	2,152,258.58	-2.30		3.7	1.13	2 clams (small)	8 clams (small)	Muck, shell		
	22-17	47,946.03	2,152,260.08	-2.33		3.7	1.13	0	0	Muck, shell		
	22-18	47,965.50	2,152,262.95	-2.37		3.7	1.13	0	0	Muck, shell		
	22-19	47,979.47	2,152,265.01	-2.41		3.5	1.07	0	0	Muck, shell		
	22-20	47,989.59	2,152,266.50	-2.29		3.4	1.04	0	0	Muck, shell		
	22-21	48,002.67	2,152,268.43	-2.12		3.7	1.13	0	0	Muck, shell	Whip coral	
	22-22	48,019.80	2,152,270.96	-1.31		3	0.91	7 C2	28 C2	Muck, shell		
	22-23	48,038.38	2,152,273.70	0.04		1.6	0.49	3 C1, 20 C2	12 C1, 80 C2	Muck, shell		
	22-24	48,050.09	2,152,275.42	-		1	0.30	20 C1, 50 C2	80 C1, 200 C2	Muck, shell		
	22-25	48,064.10	2,152,277.49	-	12:05 p.m.	0	0.00	15 C1, 10 C2 18 Mussels	60 C1, 40 C2 72 Mussels	Muck, shell	In the marsh	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-2-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	22.31	**Sample Site Location**			**DO & pH:**	101.1%; 7.29 mg/L	6.91	**Temp (°C):**	24.32	**DO & pH:**	142.9%; 9.87 mg/L	6.98
Salinity (ppt):	32.43	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (9:30 a.m.)		**Salinity (ppt):**	34.69	**Tide Level:**	2 hours after low tide (1:30 p.m.)	
Tansect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**	
T-23	23-1	47,760.92	2,152,398.02	0.65	12:41 p.m.	0	0.00	12 C1, 85 C2, 4 C3	48 C1, 340 C2, 16 C3	Muck, shell		
	23-2	47,774.51	2,152,397.89	0.75		2.8	0.85	0	0	Muck, shell		
	23-3	47,788.13	2,152,397.75	0.83		2.5	0.76	0	0	Pluff mud		
	23-4	47,798.66	2,152,397.65	0.88		2.2	0.67	0	0	Pluff mud		
	23-5	47,819.59	2,152,397.45	1.00		2	0.61	0	0	Pluff mud		
	23-6	47,831.34	2,152,397.33	1.08		2	0.61	0	0	Pluff mud		
	23-7	47,848.55	2,152,397.16	1.19		1	0.30	0	0	Pluff mud		
	23-8	47,861.05	2,152,397.04	1.13		1	0.30	0	0	Pluff mud		
	23-9	47,871.91	2,152,396.93	0.96		0.5	0.15	0	0	Muck		
	23-10	47,896.07	2,152,396.70	0.14		0.5	0.15	0	0	Muck		
	23-11	47,916.19	2,152,396.50	-0.75		1.5	0.46	0	0	Muck		
	23-12	47,930.28	2,152,396.36	-1.50		1.8	0.55	0	0	Muck		
	23-13	47,941.91	2,152,396.25	-2.16		2	0.61	0	0	Muck		
	23-14	47,962.06	2,152,396.05	-2.63		4.2	1.28	0	0	Muck		
	23-15	47,977.17	2,152,395.90	-2.73		4.5	1.37	0	0	Muck, shell		
	23-16	47,987.83	2,152,395.80	-2.82		4.6	1.40	0	0	Muck, shell		
	23-17	48,005.54	2,152,395.62	-2.91		4.8	1.46	0	0	Muck, shell	Whip coral	
	23-18	48,020.84	2,152,395.47	-2.87		4.7	1.43	1 clam (small)	4 clams (small)	Muck, shell		
	23-19	48,037.75	2,152,395.31	-2.90		4.8	1.46	0	0	Muck, shell		
	23-20	48,053.84	2,152,395.15	-3.05		4.8	1.46	0	0	Muck, shell	Whip coral	
	23-21	48,066.22	2,152,395.03	-3.02		4.8	1.46	0	0	Muck, shell		
	23-22	48,077.17	2,152,394.92	-2.71		4.8	1.46	0	0	Muck, shell		
	23-23	48,087.05	2,152,394.82	-1.89		3	0.91	3 C2	12 C2	Muck, shell		
	23-24	48,098.92	2,152,394.71	-0.59		2	0.61	0	0	Muck, shell		
	23-25	48,106.34	2,152,394.63	0.18		1	0.30	36 C2	144 C2	Muck, shell		
	23-26	48,117.43	2,152,394.53	-	1:00 p.m.	0	0.00	0	0	Shell		
	23-27	48,126.11	2,152,394.44	-							In marsh	
	23-28	48,135.18	2,152,394.35	-							In marsh	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-24	24-1	47,858.20	2,152,547.09	0.90		0"	0.00	27 oysters	108 oysters	76 C3, 32 C2	Muck	
	24-2	47,873.61	2,152,545.50	1.46		0"	0.00	53 oysters	212 oysters	128 C3, 84 C2	Muck	
	24-3	47,890.59	2,152,543.75	1.41		15"	0.38	0	0		Muck, shell	
	24-4	47,910.99	2,152,541.65	0.78		3'	0.91	3 clams (1 small)	12 clams	4 clams (S) 8 clams (L)	Muck, shell	
	24-5	47,934.97	2,152,539.18	0.37		2'8"	0.81	7 clams (1 small)	28 clams	4 clams (S) 24 clams (L)	Muck, shell	
	24-6	47,951.70	2,152,537.46	-0.24		2"	0.05	0			Muck, shell	
	24-7	47,964.11	2,152,536.18	-0.79		3"	0.08	0			Muck, shell	
	24-8	47,975.46	2,152,535.01	-1.28		12"	0.30	0			Muck, shell	
	24-9	47,995.37	2,152,532.96	-2.21		3'1"	0.94	5 clams (4 small)	20 clams	16 clams (S) 4 clams (L)	More sandy	
	24-10	48,013.53	2,152,531.09	-3.07		4'	1.22	0			Deadshell, sand	
	24-11	48,024.83	2,152,529.93	-3.43		4'	1.22	0			Deadshell, sand	
	24-12	48,038.55	2,152,528.51	-3.56		4'1"	1.24	0			Deadshell, sand	
	24-13	48,051.33	2,152,527.20	-3.60		4'1"	1.24	0			Deadshell, sand	
	24-14	48,062.70	2,152,526.03	-3.64		4'2"	1.27	0			Deadshell, sand	
	24-15	48,073.40	2,152,524.93	-3.70		4'4"	1.32	0			Deadshell, sand	
	24-16	48,085.41	2,152,523.69	-3.78		4'2"	1.27	0			Deadshell, sand	
	24-17	48,099.27	2,152,522.26	-3.82		4'	1.22	0			Deadshell, sand	
	24-18	48,110.03	2,152,521.15	-3.65		4'1"	1.24	0			Deadshell, sand	
	24-19	48,124.54	2,152,519.66	-3.33		3'7"	1.09	0			Deadshell, sand	
	24-20	48,135.52	2,152,518.53	-2.67		2'9"	0.84	0			Deadshell, sand	
	24-21	48,151.31	2,152,516.90	-0.92		2'8"	0.81	4 oysters	16 oysters	12 C3, 4 C2	Deadshell, sand	
	24-22	48,169.79	2,152,515.00	0.60		17"	0.43	77 oysters	308 oysters	236 C3, 72 C2	Deadshell, sand	
	24-23	48,188.77	2,152,513.04	-		0"	0.00	28 oysters	112 oysters	16 C3, 96 C2	Deadshell, sand	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-2-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	22.31	**Sample Site Location**			**DO & pH:**	101.1%; 7.29 mg/L	6.91	**Temp (°C):**	24.32	**DO & pH:**	142.9%; 9.87 mg/L	6.98
Salinity (ppt):	32.43	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (9:30 a.m.)		**Salinity (ppt):**	34.69	**Tide Level:**	2 hours after low tide (1:30 p.m.)	
Tansect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**	
T-25	25-01	47,932.68	2,152,620.27	0.69	1:20 p.m.	1.5	0.46	8 C1, 8 C2	32 C1, 32 C2	Muck, shell	Edge of marsh	
	25-02	47,954.08	2,152,620.98	0.15		2	0.61	2 clams (large)	8 clams (large)	Muck, shell	Edge of marsh	
	25-03	47,971.83	2,152,621.56	-0.27		3.2	0.98	0	0	Muck, shell		
	25-04	47,989.36	2,152,622.14	-0.49		4	1.22	0	0	Muck		
	25-05	48,001.13	2,152,622.52	-0.49		3	0.91	0	0	Muck		
	25-06	48,013.59	2,152,622.93	-0.95		3	0.91	0	0	Muck		
	25-07	48,027.64	2,152,623.40	-1.65		3	0.91	0	0	Muck		
	25-08	48,040.24	2,152,623.81	-2.47		4.9	1.49	0	0	Muck		
	25-09	48,051.68	2,152,624.19	-3.34	1:04 p.m.I0.4.17	3	0.91	0	0	Muck		
	25-10	48,061.90	2,152,624.52	-3.82		5	1.52	0	0	Muck		
	25-11	48,081.97	2,152,625.18	-4.12		5	1.52	0	0	Muck		
	25-12	48,094.43	2,152,625.59	-4.23							Too deep	
	25-13	48,107.81	2,152,626.03	-4.28							Too deep	
	25-14	48,126.34	2,152,626.64	-4.42							Too deep	
	25-15	48,143.90	2,152,627.22	-4.36		4.8	1.46	2 clams (small)	8 clams (small)	Muck, shell		
	25-16	48,155.35	2,152,627.59	-3.89	1:40 p.m.I0/4/17	4	1.22	0	0	Muck, shell		
	25-17	48,168.13	2,152,628.01	-3.19		4.8	1.46	0	0	Muck, shell		
	25-18	48,181.34	2,152,628.45	-1.68		3	0.91	13 C2	52 C2	Muck, shell		
	25-19	48,192.38	2,152,628.81	-0.22		0.5	0.15	25 C1, 45 C2	100 C1, 180 C2	Muck, shell		
	25-20	48,206.86	2,152,629.29	-		0	0.00	60 C2 1 clam (large)	240 C2 4 clams (large)	Muck, shell		
	25-21	48,217.88	2,152,629.65	-	1:06 p.m.	0	0.00	24 C2 6 Mussels	96 C2 24 Mussels	Muck, shell	In the marsh	
	25-22	48,226.84	2,152,629.95	-							In the marsh	
T-26	26-1	47,950.70	2,152,675.26	-	1:22 p.m.	0.5	0.15	0	0	Muck	Edge of marsh	
	26-2	47,965.98	2,152,680.29	0.62		1	0.30	0	0	Muck		
	26-3	47,978.47	2,152,684.40	0.43		1.6	0.49	2 clams (small)	8 clams (small)	Muck		
	26-4	47,987.97	2,152,687.53	0.39		1.8	0.55	0	0	Muck		
	26-5	48,009.25	2,152,694.53	0.26		1.6	0.49	0	0	Muck		
	26-6	48,029.08	2,152,701.06	-0.37		2.5	0.76	0	0	Muck		
	26-7	48,041.51	2,152,705.15	-1.20		3	0.91	0	0	Muck		
	26-8	48,054.23	2,152,709.33	-1.93		3.5	1.07	1 clam (large)	4 clams (large)	Muck		
	26-9	48,074.79	2,152,716.10	-2.89		4.6	1.40	0	0	Muck		
	26-10	48,087.97	2,152,720.44	-3.24	1:34 p.m. I0/4/17	4.5	1.37	0	0	Muck		
	26-11	48,101.15	2,152,724.77	-3.50		4.7	1.43	0	0	Muck		
	26-12	48,119.29	2,152,730.74	-4.01		5	1.52	1 clam (large)	4 clams (large)	Muck		
	26-13	48,131.15	2,152,734.65	-4.40							Too deep	
	26-14	48,143.22	2,152,738.62	-4.82							Too deep	
	26-15	48,162.33	2,152,744.91	-5.72							Too deep	
	26-16	48,174.03	2,152,748.76	-6.06							Too deep	
	26-17	48,183.84	2,152,751.99	-5.60							Too deep	
	26-18	48,204.40	2,152,758.75	-3.61		4	1.22	0	0	Muck, shell		
	26-19	48,221.09	2,152,764.25	-1.49		3.1	0.95	0	0	Muck, shell		
	26-20	48,230.98	2,152,767.50	-0.19		1.8	0.55	0	0	Muck, shell		
	26-21	48,239.21	2,152,770.21	0.26		0.4	0.12	15 C1, 45 C2, 10 C3	60 C1, 180 C2, 40 C3	Muck, shell		
	26-22	48,258.15	2,152,776.44	-		0	0.00	30 C1, 75 C2, 3 C3	120 C1, 300 C2, 12 C3	Muck, shell	Edge of marsh	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-3-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	22.42	**Sample Site Location**			**DO & pH:**	103.52%; 7.44 mg/L	7.2	**Temp (°C):**	24.08	**DO & pH:**	148.6%; 10.16 mg/L 7.22
Salinity (ppt):	33.69	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (10:00 a.m.)		**Salinity (ppt):**	34.79	**Tide Level:**	2 hours after low tide (2:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-27	27-01	47984.63	2152746.74	0.95		0	0.00	0	0	Muck	Hermit crab, purple sea sponge
	27-02	47992.45	2152752.33	0.55		0.1	0.03	1 clam (large)	4 clams (large)	Muck	
	27-03	48004.48	2152760.93	-0.07		0.6	0.18	0	0	Muck, shell	
	27-04	48016.28	2152769.36	-0.63		1.8	0.55	0	0	Muck	
	27-05	48030.13	2152779.26	-1.15		2	0.61	0	0	Mucky sand	
	27-06	48046.89	2152791.24	-1.26		1.9	0.58	1 clam (large)	4 clams (large)	Mucky sand	
	27-07	48061.81	2152801.9	-1.23		1.8	0.55	0	0	Muck	
	27-08	48077.04	2152812.78	-1.04		1.6	0.49	0	0	Muck	
	27-09	48091.96	2152823.45	-1.49		1.6	0.49	0	0	Muck	
	27-10	48109.62	2152836.07	-4.35	1:45 p.m.	2.8	0.85	0	0	Muck	
	27-11	48124.55	2152846.74	-6.59							Too deep, mouth of feeder creek
	27-12	48140.23	2152857.95	-9.06							Too deep
	27-13	48156.14	2152869.32	-11.29							Too deep
	27-14	48171.98	2152880.64	-10.24							Too deep
	27-15	48191.09	2152894.3	-7.50							Too deep
	27-16	48207.31	2152905.89	-5.78							Too deep
	27-17	48222.23	2152916.55	-4.30							Too deep
	27-18	48236.78	2152926.94	-							Too deep
	27-19	48251.32	2152937.34	-		3	0.91	0	0	Muck	
	27-20	48261.14	2152944.35	-		2	0.61	8 C2	32 C2	Muck, shell	
	27-21	48269.64	2152950.43	-	11:50 a.m.	0	0.00	125 C2, 10 C3	500 C2, 40 C3	Muck, shell	~1 foot from edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-20-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	27.2	**Sample Site Location**			**DO & pH:**	71.9%, 4.66 mg/L	7.19	**Temp (°C):**		**DO & pH:**		
Salinity (ppt):	36.42	State Plane NAD83; Feet			**Tide Level:**	1 hour, 15 minutes before (10:00 a.m.)		**Salinity (ppt):**		**Tide Level:**		
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-28	28-1	47,948.34	2,152,785.88	0.91		0"	0.00	12 oysters	48 oysters	All C3	Muck, shell	
	28-2	47,955.88	2,152,793.92	0.80		9"	0.23	3 oysters	12 oysters	All C3	Muck	
	28-3	47,965.65	2,152,804.33	0.47		20"	0.51	2 clams (1 small)	8 clams	4 clams (S) 4 clams (L)	Muck	
	28-4	47,976.60	2,152,816.01	-0.04		28"	0.71	1 clam	4 clams		Muck	
	28-5	47,988.30	2,152,828.48	-0.51		29"	0.74	0			Muck	
	28-6	48,002.34	2,152,843.45	-0.96		30"	0.76	0			Muck	
	28-7	48,015.62	2,152,857.61	-0.98		31"	0.79	1 clam	4 clams		Muck	
	28-8	48,028.83	2,152,871.69	-0.87		20"	0.51	0			Muck	
	28-9	48,039.76	2,152,883.34	-0.84		21"	0.53	0			Muck	
	28-10	48,050.25	2,152,894.53	-0.94		20"	0.51	0			Sand, muck	
	28-11	48,063.51	2,152,908.67	-1.29		27"	0.69	0			Sand, muck	
	28-12	48,076.27	2,152,922.27	-1.77		29"	0.74	0			Sand, muck	
	28-13	48,091.84	2,152,938.87	-2.82		3'	0.91	1 clam	4 clams		Sand, muck	
	28-14	48,106.66	2,152,954.66	-4.08		3'8"	1.12	0			Sand, muck	
	28-15	48,122.28	2,152,971.32	-5.23		4'5"	1.35	0			Sand, muck	
	28-16	48,130.86	2,152,980.47	-6.15		4'7"	1.40	0			Sand, muck	
	28-17	48,138.32	2,152,988.42	-6.31		Over 6'		N/A	N/A		Sand, muck	
	28-18	48,151.13	2,153,002.08	-3.86		Over 6'		N/A	N/A		Sand, muck	
	28-19	48,163.56	2,153,015.33	-0.80		3'2"	0.97	1 oyster	4 oysters	All C3	Sand, muck	
	28-20	48,176.06	2,153,028.66	-		3"	0.08	34 oysters	136 oysters	All C3	Sand, muck	
	28-21	48,187.52	2,153,040.88	-		0"	0.00	133 oysters	532 oysters	480 C3, 52 C2	Sand, muck	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-3-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	22.42	**Sample Site Location**			**DO & pH:**	103.52%; 7.44 mg/L	7.2	**Temp (°C):**	24.08	**DO & pH:**	148.6%; 10.16 mg/L 7.22
Salinity (ppt):	33.69	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (10:00 a.m.)		**Salinity (ppt):**	34.79	**Tide Level:**	2 hours after low tide (2:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-29	29-01	47881.35	2152852.18	1.63	1:30 p.m.	0	0.00	50 C2, 10 C3	200 C2, 40 C3	Muck, shell	~1 foot from edge of marsh
	29-02	47888.9	2152862.67	0.36		0.2	0.06	65 C1, 125 C2, 15 C3	260 C1, 500 C2, 60 C3	Muck, shell	
	29-03	47896.12	2152872.7	-0.33		2.4	0.73	0	0	Muck, pluff mud	
	29-04	47906.83	2152887.6	-0.75		2.3	0.70	0	0	Muck	
	29-05	47917.26	2152902.11	-0.90		1.9	0.58	0	0	Muck	
	29-06	47926.77	2152915.33	-0.98		2	0.61	0	0	Muck	
	29-07	47937.65	2152930.45	-0.92		1.7	0.52	0	0	Muck	
	29-08	47947.47	2152944.12	-0.85		1.6	0.49	0	0	Mucky sand	
	29-09	47957.7	2152958.33	-0.96		1.5	0.46	0	0	Mucky sand	
	29-10	47969	2152974.05	-1.41		1.8	0.55	0	0	Mucky sand	
	29-11	47980.31	2152989.78	-1.84		2.4	0.73	0	0	Muck	
	29-12	47991.13	2153004.82	-2.65		3	0.91	0	0	Mucky sand	
	29-13	48002.88	2153021.15	-3.91		3.3	1.01	0	0	Mucky sand	
	29-14	48013.37	2153035.75	-5.07		4.2	1.28	1 clam (large)	4 clams (large)	Mucky sand	
	29-15	48027.47	2153055.35	-5.97							Too deep
	29-16	48036.11	2153067.36	-4.90		4	1.22	1 C3	4 C3	Muck, shell	
	29-17	48046.93	2153082.4	-3.77		0.4	0.12	10 C1, 35 C2	40 C1, 140 C2	Muck, shell	
	29-18	48057.74	2153097.45	-1.43	11:35 a.m.	0	0.00	20 C1, 215 C2	80 C1, 860 C2	Muck, shell	Edge of marsh
	29-19	48066.17	2153109.16	0.56							In the marsh
	29-20	48072.69	2153118.23	-							In the marsh
T-30	30-01	47815.69	2152888.6	1.61		0	0.00	33 C2, 4 C3	132 C2, 12 C3	Muck, shell	Edge of marsh
	30-02	47825.49	2152902.32	1.11		0.3	0.09	0	0	Muck	
	30-03	47836.81	2152918.17	0.41		1.5	0.46	0	0	Mucky sand	
	30-04	47851.83	2152939.19	-0.49		1.8	0.55	0	0	Mucky sand	
	30-05	47866.97	2152960.37	-0.92		1.5	0.46	0	0	Mucky sand	
	30-06	47880.28	2152979.01	-1.11		1.6	0.49	0	0	Mucky sand	
	30-07	47897.77	2153003.48	-1.54		1.6	0.49	0	0	Mucky sand	
	30-08	47912.73	2153024.41	-2.05		2	0.61	0	0	Mucky sand	
	30-09	47923.99	2153040.18	-2.36		2.5	0.76	0	0	Muck	
	30-10	47938.6	2153060.62	-3.19		3	0.91	0	0	Muck	
	30-11	47954.61	2153083.04	-4.43	1:16 p.m.	3.5	1.07	0	0	Muck	
	30-12	47972.62	2153108.24	-4.76							Too deep
	30-13	47985.59	2153126.39	-3.52							Too deep
	30-14	48000.02	2153146.58	-1.53							Too deep
	30-15	48015.1	2153167.69	0.96		3.6	1.10	0	0	Muck	
	30-16	48031.04	2153190	-		1.5	0.46	30 C1, 45 C2	120 C1, 180 C2	Muck, shell	
	30-17	-	-	-	11:23 a.m.	0	0.00	35 C1, 110 C2, 70 C3 2 Mussels	140 C1, 440 C2, 280 C3 8 Mussels	Shell	Reef line, mouth of another channel

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-3-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	22.42	**Sample Site Location**			**DO & pH:**	103.52%; 7.44 mg/L	7.2	**Temp (°C):**	24.08	**DO & pH:**	148.6%; 10.16 mg/L 7.22
Salinity (ppt):	33.69	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (10:00 a.m.)		**Salinity (ppt):**	34.79	**Tide Level:**	2 hours after low tide (2:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-31	31-01	47735.37	2152876.5	-	1:06 p.m.	1	0.30	0	0	Muck	
	31-02	47745.47	2152893.62	-0.07		0.6	0.18	0	0	Mucky sand	
	31-03	47752.79	2152906.05	-0.14		0.4	0.12	0	0	Mucky sand	
	31-04	47761.66	2152921.08	-0.29		0.3	0.09	0	0	Mucky sand	
	31-05	47770.81	2152936.6	-0.49		0.1	0.03	0	0	Mucky sand	
	31-06	47782.92	2152957.12	-0.90		0.4	0.12	0	0	Mucky sand	
	31-07	47794.38	2152976.56	-1.06		1	0.30	0	0	Muck, pluff mud	
	31-08	47801.58	2152988.76	-1.09		1.8	0.55	0	0	Muck, pluff mud	
	31-09	47809.81	2153002.72	-1.04		1.7	0.52	0	0	Muck	
	31-10	47817.08	2153015.05	-1.10		1.5	0.46	0	0	Muck	
	31-11	47824.21	2153027.12	-1.24		1.6	0.49	0	0	Mucky sand	
	31-12	47835.44	2153046.18	-1.75		2	0.61	0	0	Mucky sand	
	31-13	47845.63	2153063.45	-2.12		2.2	0.67	0	0	Mucky sand	
	31-14	47856.55	2153081.97	-2.52		2.4	0.73	0	0	Mucky sand	
	31-15	47863.96	2153094.53	-2.91		3	0.91	0	0	Mucky sand	
	31-16	47873.04	2153109.92	-3.67		4	1.22	0	0	Muck	
	31-17	47882.12	2153125.32	-4.38		4.5	1.37	0	0	Muck	
	31-18	47889.73	2153138.21	-5.18		4.8	1.46	0	0	Muck	
	31-19	47895.97	2153148.8	-4.99		4.9	1.49	0	0	Muck	
	31-20	47905.87	2153165.58	-3.90							Too deep
	31-21	47916.52	2153183.65	-2.33							Too deep
	31-22	47926.3	2153200.22	-0.77		4.5	1.37	0	0	Muck	
	31-23	47939.04	2153221.83	1.72		3	0.91	0	0	Muck	
	31-24	47949.99	2153240.39	-		0	0.00	40 C1, 280 C2, 25 C3	160 C1, 1,120 C2, 100 C3	Muck, shell	
	31-25	-	-	-	11:10 a.m.	0	0.00	25 C2, 10 C3	100 C2, 40 C3	Muck, shell	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-32	32-1	47,638.38	2,152,898.50	-		0"	0.00	0	0		Muck	
	32-2	47,648.42	2,152,914.90	0.99		0"	0.00	0	0		Muck	
	32-3	47,656.59	2,152,928.25	0.82		0"	0.00	73 oysters	292 oysters	240 C3, 52 C2	Muck	
	32-4	47,670.48	2,152,950.93	0.23		3"	0.08	3 oysters	12 oysters	All C2	Muck	
	32-5	47,679.33	2,152,965.38	-0.27		7"	0.18	1 clam	4 clams		Muck	
	32-6	47,689.23	2,152,981.56	-0.85		25"	0.64	0	0		Muck	
	32-7	47,699.05	2,152,997.60	-1.38		2'8"	0.81	0	0		Mucky, sand	
	32-8	47,711.73	2,153,018.30	-1.69		2'6"	0.76	0	0		Mucky, sand	
	32-9	47,723.16	2,153,036.97	-1.56		2'3"	0.69	0	0		Mucky, sand	
	32-10	47,732.93	2,153,052.93	-1.47		2'1"	0.64	0	0		Mucky, sand	
	32-11	47,742.93	2,153,069.26	-1.63		2'2"	0.66	0	0		Mucky, sand	
	32-12	47,756.07	2,153,090.72	-2.09		2'3"	0.69	0	0		Mucky, sand	
	32-13	47,769.06	2,153,111.94	-2.58		3'2"	0.97	0	0		Mucky, sand	
	32-14	47,780.94	2,153,131.34	-2.95		3'2"	0.97	0	0		Mucky, sand	
	32-15	47,791.71	2,153,148.92	-3.28		3'5"	1.04	0	0		Mucky, sand	
	32-16	47,806.03	2,153,172.31	-3.83		3'9"	1.14	0	0		Mucky, sand	
	32-17	47,816.12	2,153,188.79	-4.11		4'2"	1.27	0	0		Mucky, sand	
	32-18	47,830.18	2,153,211.76	-3.81		4'5"	1.35	0	0		Mucky, sand	
	32-19	47,843.36	2,153,233.29	-2.09		2'10"	0.86	0	0		Mucky, sand	
	32-20	47,852.68	2,153,248.50	-0.63		1'9"	0.53	0	0		Mucky, sand	
	32-21	47,862.02	2,153,263.75	1.00		3"	0.08	43 oysters	172 oysters	140 C3, 32 C2	Mucky, sand	
	32-22	47,869.64	2,153,276.21	-		0"	0.00	125 oysters	500 oysters	352 C3, 148 C2	Mucky, sand	
	32-23	47875.91	2153286.44	-		0"	0.00	29 oysters	116 oysters	All C3	Mucky, sand	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-3-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	22.42	**Sample Site Location**			**DO & pH:**	103.52%; 7.44 mg/L	7.2	**Temp (°C):**	24.08	**DO & pH:**	148.6%; 10.16 mg/L 7.22
Salinity (ppt):	33.69	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (10:00 a.m.)		**Salinity (ppt):**	34.79	**Tide Level:**	2 hours after low tide (2:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-33	33-01	47570.86	2152983.73	-	11:10 a.m.	0	0.00	35 C2, 3 C3	140 C2, 12 C3	Muck	In/edge of marsh
	33-02	47580.9	2153000.83	0.99		0	0.00	25 C1, 145 C2, 15 C3	100 C1, 580 C2, 60 C3	Muck, shell	
	33-03	47592.49	2153020.56	-0.55		1	0.30	3 C2, 5 C3	12 C2, 20 C3	Muck, shell	
	33-04	47599.64	2153032.71	-1.33		3.2	0.98	0	0	Pluff mud	
	33-05	47607.3	2153045.76	-1.96		3.1	0.95	0	0	Muck	
	33-06	47616.47	2153061.37	-1.92		3	0.91	0	0	Muck	
	33-07	47625.71	2153077.11	-1.89		2.8	0.85	0	0	Mucky sand	
	33-08	47639.44	2153100.48	-1.87		2.5	0.76	0	0	Mucky sand	
	33-09	47647.96	2153114.99	-1.97		2.5	0.76	0	0	Mucky sand	
	33-10	47655.72	2153128.18	-2.13		2.7	0.82	0	0	Muck	
	33-11	47665.08	2153144.13	-2.37		2.9	0.88	0	0	Muck	
	33-12	47674.58	2153160.29	-2.72		3	0.91	0	0	Muck	
	33-13	47687.81	2153182.83	-3.27		3.1	0.95	0	0	Muck	
	33-14	47697.86	2153199.93	-3.56		3.6	1.10	0	0	Muck	
	33-15	47704.89	2153211.9	-3.73		3.9	1.19	0	0	Muck	
	33-16	47718.76	2153235.51	-3.91		4.5	1.37	0	0	Muck	
	33-17	47726.31	2153248.36	-3.73		4.5	1.37	0	0	Muck	
	33-18	47734.01	2153261.46	-2.88		4.6	1.40	0	0	Muck	
	33-19	47743.16	2153277.05	-1.54		4.2	1.28	0	0	Muck, shell	
	33-20	47751.66	2153291.52	-0.47		3	0.91	1 clam (large)	4 clams (large)	Muck, shell	
	33-21	47761.35	2153308.01	0.54		2.5	0.76	0	0	Muck, shell	
	33-22	47768.25	2153319.76	0.94		1.6	0.49	9 C2 1 clam (small)	36 C2 4 clams (small)	Muck, shell	
	33-23	47779.19	2153338.38	-	11:00 a.m.	0	0.00	42 C2, 7 C3	168 C2, 28 C3	Muck, shell	In/edge of marsh
T-34	34-01	47481.69	2153039.63	1.99	12:30 p.m.	0	0.00	10 C1, 160 C2, 18 C3 1 Mussel	40 C1, 640 C2, 72 C3 4 Mussels	Muck, shell	~1 foot from edge of marsh
	34-02	47492.22	2153058.43	1.23		1	0.30	1 clam (large)	4 clams (large)	Muck, pluff mud	
	34-03	47506.73	2153084.33	-0.14		2.5	0.76	0	0	Muck	
	34-04	47514.8	2153098.74	-0.83		2.3	0.70	0	0	Muck	
	34-05	47527.98	2153122.29	-1.51		2.4	0.73	0	0	Muck	
	34-06	47541.13	2153145.76	-1.69		2.5	0.76	0	0	Muck	
	34-07	47550.96	2153163.31	-1.91		2.9	0.88	0	0	Mucky sand	
	34-08	47560.91	2153181.09	-2.25		3	0.91	0	0	Mucky sand	
	34-09	47570.82	2153198.79	-2.59		3.4	1.04	0	0	Mucky sand	
	34-10	47585.24	2153224.53	-3.09		3.5	1.07	0	0	Mucky sand	
	34-11	47595.15	2153242.22	-3.38		3.9	1.19	0	0	Mucky sand	
	34-12	47604.6	2153259.11	-3.67							Too deep
	34-13	47616.81	2153280.91	-3.97							Too deep
	34-14	47625.03	2153295.58	-4.10							Too deep
	34-15	47632.14	2153308.27	-3.27							Too deep
	34-16	47642.5	2153326.77	-1.76		4.7	1.43	0	0	Muck, shell	
	34-17	47655.94	2153350.77	1.05		3.1	0.95	1 clam (small)	4 clams (small)	Muck, shell	
	34-18	47662.52	2153362.48	1.96		1.5	0.46	10 C1, 65 C2	40 C1, 260 C2	Muck, shell	
	34-19	47668.49	2153373.13	-	10:51 a.m.	0.1	0.03	75 C2, 2 C3	300 C2, 8 C3	Shell	Reef line, ~7 to 8 feet from edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, Robert Neal, Rebeckah Hollowell						**Date:** 10-3-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	22.42	**Sample Site Location**			**DO & pH:**	103.52%; 7.44 mg/L	7.2	**Temp (°C):**	24.08	**DO & pH:**	148.6%; 10.16 mg/L 7.22
Salinity (ppt):	33.69	State Plane NAD83; Feet			**Tide Level:**	2 hours prior to low tide (10:00 a.m.)		**Salinity (ppt):**	34.79	**Tide Level:**	2 hours after low tide (2:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-35	35-01	47382.08	2153088.38	-		0	0.00	10 C1, 115 C2, 8 C3 4 Mussels	40 C1, 460 C2, 32 C3 16 Mussels	Muck, shell	Edge of marsh
	35-02	47392.79	2153107.21	1.43		0.5	0.15	0	0	Muck, pluff mud	
	35-03	47402.32	2153123.95	0.73		1.5	0.46	0	0	Pluff mud	
	35-04	47412.74	2153142.26	0.08		2	0.61	0	0	Muck	
	35-05	47423.66	2153161.45	-0.57		2.5	0.76	0	0	Muck	
	35-06	47434.62	2153180.71	-1.10		2.2	0.67	0	0	Muck	
	35-07	47444.25	2153197.63	-1.52		2.5	0.76	0	0	Muck	
	35-08	47456.39	2153218.98	-2.00		3	0.91	0	0	Muck	
	35-09	47468.05	2153239.47	-2.27		3	0.91	0	0	Muck	
	35-10	47480.89	2153262.04	-2.58		3.25	0.99	0	0	Muck	
	35-11	47490.91	2153279.65	-2.78		3.8	1.16	0	0	Muck	
	35-12	47503.31	2153301.44	-3.19		4	1.22	0	0	Muck	
	35-13	47512.54	2153317.66	-3.29	12:15 p.m.	4.7	1.43	0	0	Muck	
	35-14	47524.05	2153337.89	-3.33							Too deep
	35-15	47534.87	2153356.9	-3.35							Too deep
	35-16	47544.5	2153373.82	-2.44							Too deep
	35-17	47557.49	2153396.65	-0.78		3.8	1.16	5 C2	20 C2	Muck, shell	
	35-18	47567.46	2153414.18	-		2.5	0.76	0	0	Muck, shell	
	35-19	47575.47	2153428.25	-	10:40 a.m.	0.2	0.06	8 C1, 35 C2	32 C1, 140 C2	Muck, shell	~1 foot from edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-36	36-1	47,285.10	2,153,140.51	-		0"	0.00	21 oysters	84 oysters	60 C3, 24 C2	Muck	
	36-2	47,290.18	2,153,149.51	1.99		0"	0.00	11 oysters	44 oysters	36 C3, 8 C2	Muck	
	36-3	47,296.67	2,153,161.02	1.41		2"	0.05	39 oysters	156 oysters	64 C3, 92 C2	Muck	
	36-4	47,305.85	2,153,177.29	0.71		28"	0.71	3 oysters	12 oysters	All C2	Muck	
	36-5	47,313.68	2,153,191.17	0.17		2'8"	0.81	0	0		Muck	
	36-6	47,320.86	2,153,203.90	-0.25		3'7"	1.09	0	0		Muck	
	36-7	47,330.81	2,153,221.55	-0.87		3'6"	1.07	0	0		Muck	
	36-8	47,337.58	2,153,233.55	-1.04		3'3"	0.99	0	0		Muck	
	36-9	47,345.97	2,153,248.42	-1.22		2'8"	0.81	0	0		Muck	
	36-10	47,353.24	2,153,261.31	-1.38		2'8"	0.81	0	0		Muck	
	36-11	47,365.41	2,153,282.89	-1.79		2'6"	0.76	0	0		More sand, but still mucky	
	36-12	47,374.86	2,153,299.64	-2.14		2'3"	0.69	0	0		More sand, but still mucky	
	36-13	47,384.13	2,153,316.09	-2.57		1'9"		0	0		Mucky, sand	
	36-14	47,391.80	2,153,329.67	-2.99		1'9"		0	0		Mucky, sand	
	36-15	47,399.28	2,153,342.93	-2.93		15"		0	0		Mucky, sand	
	36-16	47,409.69	2,153,361.40	-3.00		13"		0	0		Mucky, sand	
	36-17	47,416.61	2,153,373.67	-3.03		11"		0	0		Mucky, sand	
	36-18	47,430.88	2,153,398.96	-3.10		8"		0	0		Mucky, sand	
	36-19	47,440.86	2,153,416.66	-3.10		7"		0	0		Mucky, sand	
	36-20	47,453.22	2,153,438.57	-2.43		3"		0	0		Mucky, sand	
	36-21	47,461.10	2,153,452.54	-1.92		0"	0.00	5 oysters	20 oysters	All C3	Mucky, sand	
	36-22	47,471.62	2,153,471.20	0.25		0"	0.00	197 oysters	788 oysters	472 C3, 240 C2, 76 C1	Mucky, sand	
	36-23	47,484.56	2,153,494.13	-		0"	0.00	109 oysters	436 oysters	320 C3, 76 C2, 40 C1	Mucky, sand	
	36-24	47,479.22	2,153,484.67	-		0"	0.00	49 oysters	196 oysters	136 C3, 48 C2, 12 C1	Mucky, sand	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-37	37-01	47,215.65	2,153,194.57	2.07		0	0.00	2 clams (large)	8 clams (large)	Muck, shell	~5 feet from edge of marsh
	37-02	47,221.99	2,153,205.99	1.93		0	0.00	0	0	Muck	
	37-03	47,230.41	2,153,221.18	1.55		0.1	0.03	0	0	Muck	
	37-04	47,240.07	2,153,238.61	1.12		0.5	0.15	0	0	Muck	
	37-05	47,249.62	2,153,255.84	0.55		0.8	0.24	0	0	Muck	
	37-06	47,261.53	2,153,277.31	-0.14	2:05 p.m.	0.8	0.24	0	0	Muck	
	37-07	47,267.77	2,153,288.57	-0.46		0.7	0.21	0	0	Muck	
	37-08	47,276.32	2,153,303.99	-0.81		1	0.30	0	0	Muck	
	37-09	47,285.77	2,153,321.02	-1.04		1.6	0.49	0	0	Mucky sand	
	37-10	47,293.69	2,153,335.30	-1.55		2	0.61	0	0	Mucky sand	
	37-11	47,303.35	2,153,352.73	-2.06		2.4	0.73	0	0	Mucky sand	
	37-12	47,315.87	2,153,375.31	-2.47		2.9	0.88	0	0	Mucky sand	
	37-13	47,327.06	2,153,395.50	-2.73		3	0.91	0	0	Mucky sand	
	37-14	47,338.01	2,153,415.25	-2.90		3.5	1.07	0	0	Mucky sand	
	37-15	47,347.09	2,153,431.63	-2.84		3.8	1.16	0	0	Mucky sand	
	37-16	47,358.11	2,153,451.49	-2.80		4	1.22	0	0	Mucky sand	
	37-17	47,368.68	2,153,470.56	-2.75		3.8	1.16	0	0	Mucky sand, shell	
	37-18	47,377.14	2,153,485.82	-2.59		3.5	1.07	0	0	Mucky sand	
	37-19	47,385.12	2,153,500.21	-2.29		3	0.91	0	0	Mucky sand	
	37-20	47,399.10	2,153,525.42	-0.79		4.5	1.37	0	0	Muck, shell	
	37-21	47,409.44	2,153,544.09	-		1.8	0.55	0	0	Muck, shell	
	37-22	47,417.04	2,153,557.78	-	10:45 a.m.	1.5	0.46	70 C1, 150 C2	280 C1, 600 C2	Muck, shell	Edge of marsh
T-38	38-01	47,127.46	2,153,274.98	1.46	2:14 p.m.	0	0	6 Mussels	24 Mussels	Mucky sand, shell	Edge of marsh
	38-02	47,133.42	2,153,286.11	1.33		0	0	0	0	Mucky sand	
	38-03	47,142.56	2,153,303.20	1.05		0	0	0	0	Mucky sand	
	38-04	47,149.26	2,153,315.72	0.82		0	0	0	0	Mucky sand	
	38-05	47,157.60	2,153,331.29	0.38		0	0	0	0	Mucky sand	
	38-06	47,168.79	2,153,352.21	-0.18		0.1	0.03	0	0	Mucky sand	
	38-07	47,181.35	2,153,375.68	-0.64		0.8	0.24	0	0	Mucky sand	
	38-08	47,191.53	2,153,394.71	-1.15		1.5	0.46	0	0	Mucky sand	
	38-09	47,198.60	2,153,407.92	-1.58		1.6	0.49	0	0	Mucky sand	
	38-10	47,207.84	2,153,425.19	-2.15		2	0.61	0	0	Mucky sand	
	38-11	47,216.67	2,153,441.69	-2.47		2.5	0.76	0	0	Mucky sand	
	38-12	47,225.36	2,153,457.93	-2.78		2.8	0.85	0	0	Mucky sand	
	38-13	47,238.49	2,153,482.47	-2.96		3.25	0.99	0	0	Mucky sand	
	38-14	47,248.13	2,153,500.47	-3.27		3.8	1.16	0	0	Mucky sand	
	38-15	47,257.96	2,153,518.85	-3.13		4	1.22	0	0	Mucky sand	
	38-16	47,266.83	2,153,535.42	-2.81		3.8	1.16	0	0	Mucky sand, shell	
	38-17	47,275.83	2,153,552.25	-2.59		3.5	1.07	0	0	Mucky sand, shell	
	38-18	47,289.58	2,153,577.93	-2.51		3	0.91	0	0	Mucky sand	
	38-19	47,299.69	2,153,596.82	-1.79		3.25	0.99	0	0	Mucky sand	
	38-20	47,310.69	2,153,617.39	0.23		4.6	1.40	0	0	Muck, shell	
	38-21	47,322.40	2,153,639.27			3	0.91	5 C2, 3 C3	20 C2, 12 C3	Muck, shell	
	38-22	-	-	-	11:00 a.m.	1.5	0.46	20 C1, 200 C2, 15 C3	80 C1, 800 C2, 60 C3	Muck, shell	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-39	39-01	47,067.15	2,153,321.37	1.30	2:30 p.m.	0	0	0	0	Mucky sand	~4 feet from edge of marsh
	39-02	47,074.08	2,153,334.78	1.13		0	0	0	0	Mucky sand	
	39-03	47,082.79	2,153,351.60	0.88		0	0	0	0	Mucky sand	
	39-04	47,093.27	2,153,371.85	0.43		0	0	0	0	Mucky sand	
	39-05	47,102.75	2,153,390.18	0.11		0	0	0	0	Mucky sand	
	39-06	47,112.63	2,153,409.28	-0.19		0.1	0.03	0	0	Mucky sand	
	39-07	47,123.11	2,153,429.52	-0.53		0.5	0.15	0	0	Mucky sand	
	39-08	47,130.50	2,153,443.81	-0.95		1.5	0.46	0	0	Mucky sand	
	39-09	47,138.43	2,153,459.13	-1.53		2.3	0.70	0	0	Mucky sand	
	39-10	47,149.54	2,153,480.60	-2.27		2.5	0.76	0	0	Mucky sand	
	39-11	47,160.54	2,153,501.87	-2.74		3.2	0.98	0	0	Mucky sand	
	39-12	47,169.05	2,153,518.31	-3.18		3.9	1.19	0	0	Mucky sand	
	39-13	47,175.87	2,153,531.48	-3.55		4.3	1.31	0	0	Mucky sand	
	39-14	47,188.72	2,153,556.32	-3.42		4.5	1.37	0	0	Mucky sand	
	39-15	47,196.69	2,153,571.73	-3.20		4	1.22	0	0	Mucky sand, shell	
	39-16	47,208.68	2,153,594.91	-2.71		3.5	1.07	0	0	Mucky sand, shell	
	39-17	47,218.68	2,153,614.22	-2.56		3.5	1.07	0	0	Mucky sand	
	39-18	47,226.82	2,153,629.96	-2.87		3.5	1.07	0	0	Mucky sand	
	39-19	47,235.10	2,153,645.96	-2.58		3.5	1.07	0	0	Mucky sand	
	39-20	47,245.78	2,153,666.60	-0.37		4.8	1.46	0	0	Mucky sand	
	39-21	47,252.80	2,153,680.17	-		3	0.91	7 C2, 1 C3	28 C2, 4 C3	Muck, shell	
	39-22	47,256.53	2,153,687.38	-	11:07 a.m.	1.7	0.52	40 C1, 65 C2, 25 C3	160 C1, 260 C2, 100 C3	Muck, shell	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-40	40-01	46,993.41	2,153,385.18	-		0"	0.00	42 oysters	168 oysters	88 C3, 56 C2, 24 C1	Muck	
	40-02	46,999.37	2,153,396.24	0.88		3"		16 oysters	64 oysters	28 C3, 36 C2	Muck	
	40-03	47,006.22	2,153,408.97	0.85		15"		0	0		Muck	
	40-04	47,015.91	2,153,426.97	0.69		2'8"		0	0		Muck	
	40-05	47,024.29	2,153,442.52	0.44		3'3"		0	0		Muck	
	40-06	47,032.15	2,153,457.12	0.22		3'2"		0	0		Muck	
	40-07	47,041.38	2,153,474.26	0.05		3'3"		0	0		Muck	
	40-08	47,048.56	2,153,487.60	-0.40		3'3"		0	0		Muck	
	40-09	47,056.55	2,153,502.44	-1.04		3'8"		0	0		Muck	
	40-10	47,065.57	2,153,519.19	-1.76		4'1"		0	0		Muck	
	40-11	47,073.09	2,153,533.16	-2.28		3'5"		0	0		Muck	
	40-12	47,082.14	2,153,549.96	-2.67		3'2"		0	0		Muck	
	40-13	47,092.87	2,153,569.89	-3.19		2'6"		0	0		Muck	
	40-14	47,103.34	2,153,589.33	-3.61		1'7"		0	0		Muck	
	40-15	47,112.26	2,153,605.89	-3.74		13"		0	0		Muck	
	40-16	47,122.34	2,153,624.61	-3.96		4"		0	0		Muck	
	40-17	47,130.20	2,153,639.21	-3.86		2"		0	0		Muck	
	40-18	47,138.37	2,153,654.38	-3.80				0	0		Muck	
	40-19	47,147.23	2,153,670.84	-3.80				0	0		Muck	
	40-20	47,155.61	2,153,686.40	-3.06				0	0		Muck	
	40-21	47,163.78	2,153,701.57	-2.09				0	0		Muck	
	40-22	47,171.84	2,153,716.55	-1.05				0	0		Muck	
	40-23	47,182.06	2,153,735.51	0.02		0"	0.00	0	0		Muck	
	40-24	47,189.63	2,153,749.58	0.21		0"	0.00	268 oysters	1,072 oysters	760 C3, 208 C2, 104 C1	Muck	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-41	41-01	46,939.31	2,153,447.66	-	2:46 p.m. 10/5/17	0	0	0	0	Mucky sand	Edge of marsh
	41-02	46,950.55	2,153,469.55	0.98		0	0	0	0	Mucky sand	
	41-03	46,961.16	2,153,490.24	0.74		0.1	0.03	0	0	Mucky sand	
	41-04	46,969.71	2,153,506.90	0.39		0.25	0.08	0	0	Mucky sand	
	41-05	46,979.24	2,153,525.48	0.00		0.5	0.15	0	0	Mucky sand	
	41-06	46,986.53	2,153,539.69	-0.34		0.7	0.21	0	0	Mucky sand	
	41-07	46,992.73	2,153,551.77	-0.85		1	0.30	0	0	Mucky sand	
	41-08	47,000.63	2,153,567.16	-1.71		1.5	0.46	0	0	Mucky sand	
	41-09	47,008.30	2,153,582.12	-2.31		2.2	0.67	0	0	Mucky sand	
	41-10	47,021.79	2,153,608.41	-3.48		2.8	0.85	0	0	Mucky sand	
	41-11	47,030.06	2,153,624.52	-3.59		3	0.91	0	0	Mucky sand	
	41-12	47,037.40	2,153,638.82	-3.86		4	1.22	0	0	Mucky sand	
	41-13	47,045.49	2,153,654.61	-4.17	2:45 p.m.	4.9	1.49	0	0	Mucky sand	
	41-14	47,055.10	2,153,673.33	-4.30		5.1	1.55	0	0	Mucky sand	
	41-15	47,064.21	2,153,691.08	-4.24		5.5	1.68	0	0	Mucky sand	
	41-16	47,071.77	2,153,705.82	-4.15		4.9	1.49	0	0	Mucky sand	Sand bar
	41-17	47,081.00	2,153,723.82	-4.04		4.9	1.49	0	0	Mucky sand	Sand bar
	41-18	47,092.29	2,153,745.82	-3.31		4.6	1.40	0	0	Mucky sand	Sand bar
	41-19	47,101.87	2,153,764.48	-2.34		3.9	1.19	0	0	Mucky sand	Sand bar
	41-20	47,108.60	2,153,777.61	-1.60		4.5	1.37	0	0	Muck, shell	
	41-21	47,122.42	2,153,804.53	-0.54		3.5	1.07	0	0	Muck	
	41-22	47,129.19	2,153,817.73	-		3	0.91	3 C3	12 C3	Muck, shell	
	41-23	47,134.43	2,153,827.94	-	11:15 a.m.	2	0.61	5 C1, 5 C2, 10 C3 1 Mussel	20 C1, 20 C2, 40 C3 4 Mussels	Muck, shell	~7 feet from edge of marsh In/near mouth of feeder creek channel
T-42	42-01	46,891.66	2,153,500.32	-		0	0.00	3 C1, 8 C2	12 C1, 32 C2	Muck	Edge of marsh (eroding bank)
	42-02	46,896.74	2,153,510.77	0.93		0	0.00	0	0	Muck	
	42-03	46,904.75	2,153,527.23	0.64		0.2	0.06	0	0	Muck	
	42-04	46,914.00	2,153,546.24	0.21		0.8	0.24	0	0	Muck	
	42-05	46,921.99	2,153,562.67	-0.04		0.8	0.24	0	0	Mucky sand	
	42-06	46,928.93	2,153,576.94	-0.39		0.4	0.12	0	0	Mucky sand	
	42-07	46,939.80	2,153,599.28	-1.16		1	0.30	0	0	Mucky sand	
	42-08	46,950.40	2,153,621.08	-2.18		1.9	0.58	0	0	Mucky sand	
	42-09	46,961.28	2,153,643.43	-2.95		2.5	0.76	0	0	Mucky sand	
	42-10	46,969.83	2,153,661.02	-3.28		3.5	1.07	0	0	Mucky sand	
	42-11	46,980.01	2,153,681.95	-3.67		4.2	1.28	0	0	Mucky sand	
	42-12	46,988.56	2,153,699.53	-4.10		4.8	1.46	0	0	Mucky sand	
	42-13	46,995.49	2,153,713.78	-4.57		5	1.52	0	0	Mucky sand	
	42-14	47,002.30	2,153,727.77	-4.55	10/5/17	5.5	1.68	0	0	Mucky sand	
	42-15	47,010.03	2,153,743.66	-4.34							Too deep
	42-16	47,018.86	2,153,761.81	-4.29	10/5/17	5.2	1.59	0	0	Mucky sand	
	42-17	47,028.52	2,153,781.68	-4.05		4.7	1.43	0	0	Mucky sand	
	42-18	47,037.48	2,153,800.09	-3.01		3.5	1.07	0	0	Mucky sand	Sand bar
	42-19	47,045.09	2,153,815.74	-1.97		4.25	1.30	0	0	Mucky sand, shell	
	42-20	47,053.11	2,153,832.22	-0.81	10/5/17	3.1	0.95	0	0	Muck	
	42-21	47,060.71	2,153,847.84	0.07		4	1.22	2 C2	8 C2	Mucky sand	
	42-22	47,068.86	2,153,864.59	0.88		2.2	0.67	12 C2	48 C2	Muck, shell	
	42-23	47,078.29	2,153,883.99	-	11:25 a.m.	1.2	0.37	5 C1, 18 C2, 3 C3	20 C1, 72 C2, 12 C3	Muck	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-43	43-01	46,831.90	2,153,582.48		10/5/17	0	0.00	15 C1, 35 C2	60 C1, 140 C2	Muck, shell	Edge of marsh, near mouth of creek
	43-02	46,841.99	2,153,602.02	-0.53		3	0.91	0	0	Muck, shell	
	43-03	46,853.38	2,153,624.09	-0.85		1.7	0.52	0	0	Mucky sand	
	43-04	46,864.75	2,153,646.11	-1.67		2	0.61	0	0	Mucky sand	
	43-05	46,877.23	2,153,670.30	-2.39		2.5	0.76	0	0	Mucky sand	
	43-06	46,885.58	2,153,686.46	-2.92		3	0.91	0	0	Mucky sand	
	43-07	46,893.65	2,153,702.10	-3.28		3.2	0.98	0	0	Mucky sand	
	43-08	46,900.54	2,153,715.46	-3.71		3.5	1.07	0	0	Mucky sand	
	43-09	46,907.16	2,153,728.28	-4.03		4.8	1.46	0	0	Mucky sand	
	43-10	46,917.50	2,153,748.31	-4.45	10/5/17	5	1.52	0	0	Mucky sand	
	43-11	46,924.03	2,153,760.97	-4.59							Too deep
	43-12	46,933.13	2,153,778.60	-4.60							Too deep
	43-13	46,944.26	2,153,800.15	-4.42							Too deep
	43-14	46,953.45	2,153,817.96	-4.35							Too deep
	43-15	46,962.12	2,153,834.76	-4.19	10/5/17	5.5	1.68	0	0	Mucky sand	
	43-16	46,970.52	2,153,851.04	-3.24		5	1.52	0	0	Mucky sand	
	43-17	46,980.29	2,153,869.97	-2.12		4.4	1.34	0	0	Mucky sand	
	43-18	46,991.16	2,153,891.01	-0.16	10/5/17	3	0.91	0	0	Mucky sand, shell	
	43-19	47,004.38	2,153,916.63	1.85		4	1.22	0	0	Mucky sand	
	43-20	47,013.05	2,153,933.42			1.5	0.46	5 C1, 25 C2, 5 C3	20 C1, 100 C2, 20 C3	Muck, shell	
	43-21	-	-	-	11:35 a.m.	0.5	0.15	20 C1, 115 C2, 10 C3	80 C1, 460 C2, 40 C3	Muck, shell	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-44	44-01	46,772.08	2,153,625.41	-		0"	0.00	14 oysters	56 oysters	8 C3, 40 C2, 8 C1	Mucky	
	44-02	46,777.92	2,153,637.89	1.29		0"	0.00	0	0		Mucky	
	44-03	46,783.96	2,153,650.81	0.79		6"	0.15	0	0		Mucky	
	44-04	46,792.52	2,153,669.09	-0.42		13"	0.33	0	0		Mucky	
	44-05	46,798.97	2,153,682.88	-1.52		4'8"	1.42	0	0		Mucky, sand	
	44-06	46,805.28	2,153,696.37	-2.59		2'	0.61	0	0		Mucky, sand	
	44-07	46,813.89	2,153,714.76	-2.67		2'8"	0.81	0	0		Mucky, sand	
	44-08	46,821.48	2,153,730.99	-3.07		2'7"	0.79	0	0		Mucky, sand	
	44-09	46,828.89	2,153,746.83	-3.79		3'1"	0.94	0	0		Mucky, sand	
	44-10	46,836.40	2,153,762.86	-3.98		3'8"	1.12	0	0		Mucky, sand	
	44-11	46,843.53	2,153,778.10	-4.27		4'4"	1.32	0	0		Mucky, sand	
	44-12	46,851.55	2,153,795.24	-4.40		4'4"	1.32	0	0		Mucky, sand	
	44-13	46,861.56	2,153,816.63	-4.22		4'1"	1.24	0	0		Mucky, sand	
	44-14	46,868.94	2,153,832.40	-3.88		3'9"	1.14	0	0		Mucky, sand	
	44-15	46,877.36	2,153,850.41	-3.87		3'3"	0.99	0	0		Mucky, sand	
	44-16	46,885.28	2,153,867.32	-3.76		3'	0.91	0	0		Mucky, sand	
	44-17	46,893.42	2,153,884.72	-3.63		3'2"	0.97	0	0		Muck	
	44-18	46,901.72	2,153,902.47	-3.39		3'5"	1.04	0	0		Mucky	
	44-19	46,911.59	2,153,923.56	-3.13		2'9"	0.84	0	0		Muck	
	44-20	46,919.33	2,153,940.09	-2.72		3'2"	0.97	0	0		Mucky	
	44-21	46,927.20	2,153,956.93	-0.69		26"	0.66	0	0		Muck	
	44-22	46,935.52	2,153,974.71	-		0"	0.00	95 oysters	380 oysters	172 C3, 160 C2, 68 C1	Mud, shell	
	44-23	46,943.81	2,153,992.42	-		0"	0.00	0	0		Muck, mud, shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-45	45-01	46,724.32	2,153,679.64	1.66	10/5/17	0	0.00	1 clam (large)	4 clams (large)	Muck	In/edge of marsh
	45-02	46,731.07	2,153,694.71	0.91		0	0.00	1 clam (large)	4 clams (large)	Muck	
	45-03	46,737.66	2,153,709.43	-0.28		0.5	0.15	0	0	Muck	
	45-04	46,743.96	2,153,723.47	-1.41		1	0.30	0	0	Muck	
	45-05	46,754.28	2,153,746.49	-2.90		2.5	0.76	0	0	Muck	
	45-06	46,761.08	2,153,761.67	-3.64		2.8	0.85	0	0	Mucky sand	
	45-07	46,767.75	2,153,776.56	-3.47		3.2	0.98	0	0	Mucky sand	
	45-08	46,777.57	2,153,798.46	-3.69		3.8	1.16	0	0	Mucky sand	
	45-09	46,787.26	2,153,820.09	-4.28		4.6	1.40	0	0	Mucky sand	
	45-10	46,799.06	2,153,846.41	-4.82		5	1.52	0	0	Mucky sand	
	45-11	46,811.99	2,153,875.27	-3.75		5.5	1.68	0	0	Mucky sand	
	45-12	46,821.63	2,153,896.80	-3.30							Too deep
	45-13	46,832.40	2,153,920.82	-2.90							Too deep
	45-14	46,843.30	2,153,945.15	-2.59							Too deep
	45-15	46,849.66	2,153,959.33	-2.49	10/5/17						Too deep
	45-16	46,856.60	2,153,974.81	-2.35		4.5	1.37	0	0	Mucky sand	
	45-17	46,862.61	2,153,988.23	-2.02		4.4	1.34	0	0	Mucky sand	
	45-18	46,868.94	2,154,002.36	-1.07		4.2	1.28	0	0	Mucky sand	
	45-19	46,875.32	2,154,016.60	-0.01		3.9	1.19	0	0	Mucky sand	
	45-20	46,882.41	2,154,032.42	0.91		3.5	1.07	0	0	Mucky sand	
	45-21	46,891.23	2,154,052.09	-		1.9	0.58	0	0	Mucky sand	
	45-22	-	-	-	11:43 a.m.	1	0.30	5 C2, 10 C3	20 C2, 40 C3	Muck, shell	Edge of marsh
T-46	46-01	46,643.34	2,153,737.98	-	10/5/17	0	0.00	0	0	Muck	In/edge of marsh
	46-02	46,652.02	2,153,757.92	0.69		0.2	0.06	0	0	Muck	
	46-03	46,661.79	2,153,780.37	-0.86		1.6	0.49	0	0	Muck	
	46-04	46,669.70	2,153,798.54	-2.12		2.5	0.76	0	0	Mucky sand	
	46-05	46,677.82	2,153,817.18	-2.54		2.8	0.85	0	0	Mucky sand	
	46-06	46,684.36	2,153,832.19	-3.27		3.4	1.04	0	0	Mucky sand	
	46-07	46,692.55	2,153,851.01	-3.69		4	1.22	0	0	Mucky sand	
	46-08	46,701.58	2,153,871.75	-3.83		4.8	1.46	0	0	Mucky sand	
	46-09	46,708.08	2,153,886.68	-4.25		5.5	1.68	0	0	Mucky sand	
	46-10	46,718.50	2,153,910.60	-4.50							Too deep
	46-11	46,730.33	2,153,937.77	-3.76							Too deep
	46-12	46,742.33	2,153,965.34	-2.59	10/5/17						Too deep
	46-13	46,755.41	2,153,995.36	-2.06		4.5	1.37	0	0	Muck	
	46-14	46,767.63	2,154,023.45	-1.45		4.4	1.34	0	0	Muck	
	46-15	46,777.53	2,154,046.18	-0.89		3.5	1.07	0	0	Muck	
	46-16	46,789.31	2,154,073.23	-0.22		3.2	0.98	0	0	Muck	
	46-17	46,801.94	2,154,102.23	0.72		2	0.61	0	0	Muck	
	46-18	46,810.59	2,154,122.10	1.32		1.6	0.49	0	0	Muck	
	46-19	46,816.86	2,154,136.50	-		1.2	0.37	0	0	Muck	
	46-20	-	-	-	11:50 a.m.	0.5	0.15	0	0	Muck	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date:** 10-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):	24.58	**Sample Site Location**			**DO & pH:**	131.5%; 8.96 mg/L	7.01	**Temp (°C):**	24.85	**DO & pH:**	150.5%; 10.21 mg/L 7.13
Salinity (ppt):	35.25	State Plane NAD83; Feet			**Tide Level:**	r prior to low tide (1:00 p.m.)		**Salinity (ppt):**	35.48	**Tide Level:**	1 hour past low tide (3:00 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-47	47-01	46,562.32	2,153,796.36	-	10/5/17	0	0.00	0	0	Muck	In the marsh
	47-02	46,567.59	2,153,808.41	1.34		0	0.00	0	0	Muck	
	47-03	46,574.92	2,153,825.16	0.41		1	0.30	0	0	Muck	
	47-04	46,581.41	2,153,839.99	-0.53		2.4	0.73	0	0	Mucky sand	
	47-05	46,588.46	2,153,856.12	-1.69		2	0.61	0	0	Mucky sand	
	47-06	46,595.63	2,153,872.49	-2.05		3	0.91	0	0	Mucky sand	
	47-07	46,603.21	2,153,889.82	-2.72		3.5	1.07	0	0	Mucky sand	
	47-08	46,613.22	2,153,912.70	-3.89		4	1.22	0	0	Mucky sand	
	47-09	46,627.89	2,153,946.23	-4.65		5.1	1.55	0	0	Mucky sand	
	47-10	46,641.19	2,153,976.62	-4.67	1:34 p.m. 10/5/17	5.5	1.68	0	0	Mucky sand	
	47-11	46,652.37	2,154,002.18	-3.63							Too deep
	47-12	46,666.14	2,154,033.66	-2.28							Too deep
	47-13	46,675.28	2,154,054.55	-1.85		4	1.22	0	0	Sand	
	47-14	46,686.06	2,154,079.20	-1.16		2.6	0.79	0	0	Sand	
	47-15	46,698.07	2,154,106.63	-0.12		0.9	0.27	0	0	Sand	
	47-16	46,710.62	2,154,135.32	0.78		0	0.00	0	0	Sand	Sand bar
	47-17	46,721.65	2,154,160.54	1.09		0	0.00	0	0	Sand	Sand bar
	47-18	46,732.56	2,154,185.47	1.40		0.5	0.15	0	0	Muck, shell	
	47-19	46,744.58	2,154,212.94	-	12:00 p.m.	0.2	0.06	1 C2	4 C2	Muck, shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-48	48-1	46,484.79	2,153,860.34	-		0"	0.00	0	0		Mucky, sand	
	48-2	46,492.24	2,153,877.06	1.08		0"	0.00	0	0		Mucky, sand	
	48-3	46,503.54	2,153,902.41	-0.83		0"	0.00	0	0		Mucky, sand	
	48-4	46,515.78	2,153,929.89	-2.77		0"	0.00	0	0		Mucky, sand	
	48-5	46,525.02	2,153,950.62	-4.06		0"	0.00	0	0		Mucky, sand	
	48-6	46,535.55	2,153,974.27	-5.85		0"	0.00	0	0		Mucky, sand	
	48-7	46,547.88	2,154,001.94	-5.36		27"	0.69	0	0		Mucky, sand	
	48-8	46,560.84	2,154,031.03	-4.29		2'7"	0.79	0	0		Mucky, sand	
	48-9	46,569.54	2,154,050.55	-3.79		4'3"	1.30	0	0		Mucky, sand	
	48-10	46,584.88	2,154,084.96	-2.47		4'7"	1.40	0	0		Mucky, sand	
	48-11	46,596.13	2,154,110.22	-1.58		4'7"	1.40	0	0		Mucky, sand	
	48-12	46,610.12	2,154,141.62	-0.05		4'9"	1.45	0	0		Mucky, sand	
	48-13	46,625.14	2,154,175.34	2.30		6'	1.83	N/A	N/A		Mucky, sand	
	48-14	46,638.77	2,154,205.93	2.46		6'	1.83	N/A	N/A		Mucky, sand	
	48-15	46,648.10	2,154,226.86	2.01		6'	1.83	N/A	N/A		Mucky, sand	
	48-16	46,663.84	2,154,262.19	1.77		6'	1.83	N/A	N/A		Mucky, sand	
	48-17	46,673.40	2,154,283.65	-		6'	1.83	N/A	N/A		Mucky, sand	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17		**Adjacent Shoreline:**			
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-49	49-01	46,415.24	2,153,919.28	2.10	2:38 p.m.	0.82	0.25	0 oysers 1 clam (S)	0 oysers 4 clams (S)	Sand	
	49-02	46,421.96	2,153,935.78	0.98	2:39 p.m.	0.00	0.00	0	0	Sand	
	49-03	46,431.46	2,153,959.11	-1.83	2:40 p.m.	0.00	0.00	0	0	Sand	
	49-04	46,440.21	2,153,980.58	-4.38	2:40 p.m.	0.00	0.00	0	0	Sand	
	49-05	46,450.10	2,154,004.85	-5.26	2:41 p.m.	0.00	0.00	0	0	Sand	
	49-06	46,462.26	2,154,034.70	-6.27	2:42 p.m.	0.00	0.00	0	0	Sand	
	49-07	46,474.35	2,154,064.37	-5.44	2:45 p.m.	1.48	0.45	0	0	Sand	
	49-08	46,485.22	2,154,091.05	-4.45	2:46 p.m.	3.61	1.10	0	0	Sand	
	49-09	46,495.87	2,154,117.17	-3.40	2:48 p.m.	4.76	1.45	0	0	Sand	
	49-10	46,507.95	2,154,146.81	-2.75	2:50 p.m.	5.25	1.60	0	0	Sand	
	49-11	46,519.21	2,154,174.46	-1.34							Too deep, sand substrate, no shell
	49-12	46,531.59	2,154,204.86	1.79							Too deep, sand substrate, no shell
	49-13	46,542.01	2,154,230.43	2.83							Too deep, sand substrate, no shell
	49-14	46,552.36	2,154,255.83	2.83							Too deep, sand substrate, no shell
	49-15	46,561.93	2,154,279.30	2.19							Too deep, sand substrate, no shell
	49-16	46,569.68	2,154,298.33	1.50							Too deep, sand substrate, no shell
	49-17	46,582.99	2,154,331.00	-	2:24 p.m.	0.00	0.00	0	0	Sand, silt	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17		**Adjacent Shoreline:**			
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-50	50-1	46,335.70	2,153,964.67	-	2:22 p.m.	0.00	0.00	0	0	Sand	
	50-2	46,342.91	2,153,983.03	1.11	2:22 p.m.	0.00	0.00	0	0	Sand	
	50-3	46,353.75	2,154,010.63	-5.51							Too deep
	50-4	46,365.82	2,154,041.39	-6.71							Too deep
	50-5	46,377.38	2,154,070.83	-4.80	3:14 p.m.	5.25	1.60	0	0	Sand	
	50-6	46,386.08	2,154,092.99	-4.38	3:12 p.m.	4.43	1.35	0	0	Sand	
	50-7	46,392.47	2,154,109.28	-3.95	3:12 p.m.	3.28	1.00	0	0	Sand	
	50-8	46,398.50	2,154,124.64	-3.53	3:11 p.m.	3.61	1.10	0	0	Sand	
	50-9	46,404.04	2,154,138.76	-3.08	3:07 p.m.	3.94	1.20	0	0	Sand	
	50-10	46,411.62	2,154,158.06	-2.96	3:06 p.m.	3.94	1.20	0	0	Sand	
	50-11	46,423.04	2,154,187.14	-2.54	3:05 p.m.	3.94	1.20	0	0	Sand	
	50-12	46,434.15	2,154,215.44	-1.94	3:03 p.m.	1.97	0.60	0 oysters 1 clam (S)	0 oysters 4 clams (S)	Sand	
	50-13	46,444.98	2,154,243.04	-0.96	3:02 p.m.	1.31	0.40	0	0	Sand	
	50-14	46,457.28	2,154,274.36	1.47	3:01 p.m.	0.49	0.15	0	0	Sand	
	50-15	46,467.50	2,154,300.42	2.11	3:00 p.m.	0.33	0.10	0 oysters 1 clam (L)	0 oysters 4 clams (L)	Sand	
	50-16	46,478.79	2,154,329.16	-	2:59 p.m.	0.00	0.00	0	0	Sand	Marsh edge

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17		**Adjacent Shoreline:**			
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-51	51-06	46,305.83	2,154,121.69	-2.27	1:46 p.m.	0.00	0.00	0	0	Sand	Edge of marsh
	51-07	46,312.06	2,154,137.31	-1.09	1:47 p.m.	0.00	0.00	0	0	Sand	
	51-08	46,318.04	2,154,152.29	-1.21	1:48 p.m.	0.00	0.00	0	0	Sand	
	51-09	46,323.18	2,154,165.20	-1.81	1:48 p.m.	0.66	0.20	0	0	Sand	
	51-10	46,328.73	2,154,179.09	-2.39	1:49 p.m.	1.31	0.40	0	0	Sand	
	51-11	46,335.87	2,154,197.02	-2.33	1:50 p.m.	2.62	0.80	0	0	Sand	
	51-12	46,341.61	2,154,211.40	-2.39	1:51 p.m.	3.61	1.10	0	0	Sand	
	51-13	46,348.26	2,154,228.08	-2.56	1:53 p.m.	3.94	1.20	0	0	Sand	
	51-14	46,357.59	2,154,251.48	-1.68	1:54 p.m.	4.26	1.30	0	0	Sand	
	51-15	46,367.22	2,154,275.62	-0.52	1:55 p.m.	3.61	1.10	0	0	Sand	
	51-16	46,377.67	2,154,301.82	0.18	1:55 p.m.	2.30	0.70	0	0	Sand	
	51-17	46,388.72	2,154,329.52	0.90	1:56 p.m.	2.13	0.65	0	0	Sand	
	51-18	46,400.36	2,154,358.72	2.21	1:57 p.m.	2.30	0.70	0	0	Sand	
	51-19	46,408.13	2,154,378.19	-	1:58 p.m.	3.28	1.00	0	0	Sand	
	51-20	46,418.36	2,154,403.83	-	1:59 p.m.	4.59	1.40	0	0	Sand	
	51-21	46,428.58	2,154,429.46	-							Too deep
	51-22	46,437.09	2,154,450.80	-							Too deep
	51-23	46,444.93	2,154,470.46	-	2:16 p.m.		0.50	0	0	Sand, shell	
	51-24	46,452.56	2,154,489.59	-	2:16 p.m.		0.00	9 C3 oysters	36 C3 oysters	Sand, shell	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey												
Crew: Adam Efird, Robert Neal						**Date:** 7-19-17			**Adjacent Shoreline:**			
Start of Day								**End of Day**				
Temp (°C):	-27	**Sample Site Location**			**DO & pH:**	93.11%, 6.19 mg/L	6.88	**Temp (°C):**	29.18	**DO & pH:**	126.4%, 7.93 mg/L	7.27
Salinity (ppt):	-36	State Plane NAD83; Feet			**Tide Level:**	Low (10:00)		**Salinity (ppt):**	36.47	**Tide Level:**	2 hours past low (12:15 a.m.)	
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Category of Oyster Length (1 = small, 2 = mid, 3 = large)**	**Sediment(s)**	**Notes**
T-52	52-01	46,185.77	2,154,001.68	-0.46		0"	0.00	0	0		Mucky, sand	
	52-02	46,194.06	2,154,022.88	-0.80		30"	0.76	0	0		Mucky, sand	
	52-03	46,203.59	2,154,047.27	-2.14		3'6"	1.07	0	0		Mucky, sand	
	52-04	46,214.38	2,154,074.84	-3.79		4'6"	1.37	0	0		Mucky, sand	
	52-05	46,223.49	2,154,098.13	-4.09		3'1"	0.94	0	0		Mucky, sand	
	52-06	46,234.65	2,154,126.69	-1.91		30"	0.76	0	0		Mucky, sand	
	52-07	46,245.14	2,154,153.48	-1.03		15"	0.38	0	0		Mucky, sand	
	52-08	46,254.53	2,154,177.50	-0.60		4"	0.10	0	0		Mucky, sand	
	52-09	46,265.25	2,154,204.92	-1.04		0"	0.00	0	0		Mucky, sand	
	52-10	46,273.54	2,154,226.11	-1.72		28"	0.71	0	0		Mucky, sand	
	52-11	46,283.81	2,154,252.38	-1.88		29"	0.74	0	0		Mucky, sand	
	52-12	46,293.06	2,154,276.03	-2.08		28"	0.71	0	0		Mucky, sand	
	52-13	46,303.54	2,154,302.82	-1.71		2'	0.61	0	0		Mucky, sand	
	52-14	46,313.16	2,154,327.42	-0.96		27"	0.69	0	0		Mucky, sand	
	52-15	46,323.94	2,154,354.99	0.33		0"	0.00	0	0		Mucky, sand	
	52-16	46,333.56	2,154,379.58	1.87		0"	0.00	0	0		Mucky, sand	
	52-17	46,344.86	2,154,408.47	-		0"	0.00	0	0		Mucky, sand	
	52-18	46,353.23	2,154,429.87	-		0"	0.00	0	0		Mucky, sand	
	52-19	46,362.76	2,154,454.25	-		0"	0.00	0	0		Mucky, sand	
	52-20	46,371.73	2,154,477.17	-		0"	0.00	0	0		Mucky, sand	
	52-21	46,375.94	2,154,487.94	-		0"	0.00	0	0		Mucky, sand	

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-53	53-1	46,094.69	2,153,998.15	0.04	1:18 p.m.	1.15	0.35	0 oysters 1 clam (S)	0 oysters 4 clams (S)	Sand	
	53-2	46,103.05	2,154,020.61	-1.50	1:19 p.m.	2.30	0.70	0	0	Sand	
	53-3	46,112.18	2,154,045.12	-2.26	1:20 p.m.	3.12	0.95	0	0	Sand, shell	
	53-4	46,122.94	2,154,074.05	-2.38	1:21 p.m.	2.62	0.80	0	0	Sand	
	53-5	46,132.87	2,154,100.71	-1.91	1:22 p.m.	2.46	0.75	0	0	Sand	
	53-6	46,142.44	2,154,126.42	-1.04	1:23 p.m.	2.30	0.70	0	0	Sand	
	53-7	46,153.46	2,154,156.06	-0.40	1:24 p.m.	1.97	0.60	0	0	Sand	
	53-8	46,163.74	2,154,183.67	0.16	1:25 p.m.	1.31	0.40	0	0	Sand	
	53-9	46,175.39	2,154,214.97	0.85	1:26 p.m.	0.00	0.00	0	0	Sand	
	53-10	46,184.96	2,154,240.68	0.17	1:27 p.m.	0.00	0.00	0	0	Sand	
	53-11	46,194.80	2,154,267.10	-0.86	1:29 p.m.	0.82	0.25	0	0	Sand	
	53-12	46,204.85	2,154,294.12	-1.44	1:30 p.m.	2.30	0.70	0	0	Sand	
	53-13	46,210.66	2,154,309.72	-1.57	1:31 p.m.	2.62	0.80	0	0	Sand	
	53-14	46,216.19	2,154,324.60	-1.69	1:32 p.m.	2.95	0.90	0	0	Sand	
	53-15	46,221.51	2,154,338.89	-1.79	1:32 p.m.	2.95	0.90	0	0	Sand	
	53-16	46,228.07	2,154,356.49	-1.66	1:33 p.m.	2.46	0.75	0	0	Sand	
	53-17	46,234.53	2,154,373.85	-1.58	1:34 p.m.	2.46	0.75	0	0	Sand, shell	
	53-18	46,240.03	2,154,388.63	-1.08	1:35 p.m.	1.97	0.60	0	0	Sand	
	53-19	46,249.11	2,154,413.03	0.66	1:36 p.m.	0.00	0.00	0	0	Sand	
	53-20	46,255.74	2,154,430.83	1.84	1:37 p.m.	0.00	0.00	0 oysters 1 clam (L)	0 oysters 4 clams (L)	Sand	
	53-21	46,261.43	2,154,446.12	2.06	1:38 p.m.	0.00	0.00	0	0	Sand	
	53-22	46,267.14	2,154,461.46	2.05	1:39 p.m.	0.00	0.00	0	0	Sand	
	53-23	46,271.93	2,154,474.34	1.98	1:40 p.m.	0.00	0.00	0 oysters 1 clam (L)	0 oysters 4 clams (L)	Sand	Edge of marsh

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17		**Adjacent Shoreline:**			
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-54	54-1	46,005.51	2,153,954.87		12:15 p.m.	0.00	0.00	0	0	Sand	
	54-2	46,013.78	2,153,978.40	1.55	12:21 p.m.	1.64	0.50	0	0	Sand	
	54-3	46,022.42	2,154,002.99	0.35	12:23 p.m.	2.30	0.70	0	0	Sand	
	54-4	46,032.19	2,154,030.81	-1.23	12:24 p.m.	3.61	1.10	0	0	Sand	
	54-5	46,042.32	2,154,059.66	-1.95	12:25 p.m.	4.26	1.30	0	0	Sand	
	54-6	46,051.90	2,154,086.91	-1.85	12:27 p.m.	3.61	1.10	0	0	Sand	
	54-7	46,061.67	2,154,114.74	-1.14	12:29 p.m.	3.28	1.00	0	0	Sand	
	54-8	46,071.21	2,154,141.89	-0.56	12:30 p.m.	1.64	0.50	0	0	Sand	
	54-9	46,080.65	2,154,168.75	-0.15	12:31 p.m.	1.97	0.60	0	0	Sand	
	54-10	46,090.22	2,154,196.00	-0.03	12:32 p.m.	1.64	0.50	0	0	Sand	
	54-11	46,098.86	2,154,220.59	0.38	12:33 p.m.	1.64	0.50	0	0	Sand	
	54-12	46,109.43	2,154,250.69	0.80	12:34 p.m.	0.33	0.10	0	0	Sand	
	54-13	46,117.95	2,154,274.94	0.47	12:35 p.m.	0.00	0.00	0	0	Sand	
	54-14	46,127.29	2,154,301.51	-0.07	12:36 p.m.	0.16	0.05	0	0	Sand	
	54-15	46,135.83	2,154,325.81	-0.32	12:37 p.m.	1.64	0.50	0	0	Sand	
	54-16	46,141.64	2,154,342.36	-0.68	12:37 p.m.	2.79	0.85	0	0	Sand	
	54-17	46,145.70	2,154,353.93	-0.96	12:38 p.m.	3.12	0.95	0	0	Sand	
	54-18	46,154.92	2,154,380.16	-1.30	12:39 p.m.	3.61	1.10	0	0	Sand	
	54-19	46,163.68	2,154,405.09	-1.28	12:40 p.m.	3.61	1.10	0	0	Sand	
	54-20	46,169.12	2,154,420.59	-1.24	12:41 p.m.	3.61	1.10	0	0	Sand	
	54-21	46,174.03	2,154,434.56	-1.05	12:42 p.m.	3.77	1.15	0	0	Sand	
	54-22	46,185.18	2,154,466.31	0.71	12:43 p.m.	1.64	0.50	0	0	Sand	
	54-23	46,195.20	2,154,494.81	2.17	12:44 p.m.	1.64	0.50	0	0	Sand	
	54-24	46,204.30	2,154,520.71	2.56	12:45 p.m.	0.00	0.00	0	0	Sand	
	54-25	46,213.15	2,154,545.93	2.69	12:45 p.m.	0.00	0.00	0	0	Sand	Edge of marsh, ended here

*All transects align from the west side of Jinks Creek to the east side.

Sunset Beach Shellfish Survey											
Crew: Adam Efird, John Dorney, Rebeckah Hollowell						**Date: 9**-5-17			**Adjacent Shoreline:**		
Start of Day								**End of Day**			
Temp (°C):		**Sample Site Location**			**DO & pH:**	*Battery Dead*		**Temp (°C):**	29.52	**DO & pH:**	10.22 mg/L; 166% 7.04
Salinity (ppt):		State Plane NAD83; Feet			**Tide Level:**			**Salinity (ppt):**	35.9	**Tide Level:**	Low, two hours past (3:30 p.m.)
Transect	**Transect #, point**	**Northing (Ft)**	**Easting (Ft)**	**Elevation (MLW)**	**Time**	**Depth (ft)**	**Depth (m)**	**Number of Shellfish**	**Extrapolated # of Shellfish**	**Sediment(s)**	**Notes**
T-55	55-1	45,935.20	2,154,000.01	-1.34	11:59 a.m.	3.61	1.10	0	0	Silt, muck	
	55-2	45,940.86	2,154,017.16	-2.09	12:03 p.m.	3.61	1.10	0	0	Silt, muck	
	55-3	45,949.79	2,154,044.21	-2.60	12:05 p.m.	4.10	1.25	0	0	Silt, muck	
	55-4	45,959.58	2,154,073.87	-3.46	12:07 p.m.	5.41	1.65	0	0	Silt, muck	
	55-5	45,968.08	2,154,099.60	-2.62	12:09 p.m.	5.25	1.60	0	0	Sand, silt, shell	
	55-6	45,977.98	2,154,129.58	-2.00	1:05 p.m.	2.95	0.90	0	0	Sand	
	55-7	45,987.12	2,154,157.27	-0.55	1:05 p.m.	0.98	0.30	0	0	Sand	
	55-8	45,996.91	2,154,186.93	0.10	1:04 p.m.	1.48	0.45	0	0	Sand	
	55-9	46,007.23	2,154,218.20	-0.01	1:03 p.m.	1.31	0.40	0 oysters 1 clam (L)	0 oysters 4 clams (L)	Sand	
	55-10	46,016.59	2,154,246.56	0.10	1:021 p.m.	0.66	0.20	0	0	Sand	
	55-11	46,026.71	2,154,277.19	0.35	1:01 p.m.	0.33	0.10	0	0	Sand	
	55-12	46,036.49	2,154,306.84	0.92	1:00 p.m.	0.00	0.00	0	0	Sand	
	55-13	46,046.93	2,154,338.44	1.35	1:00 p.m.	0.00	0.00	0	0	Sand	
	55-14	46,056.93	2,154,368.74	1.34	12:59 p.m.	0.66	0.20	0	0	Sand	
	55-15	46,065.96	2,154,396.11	-0.11	12:58 p.m.	1.80	0.55	0	0	Sand	
	55-16	46,075.11	2,154,423.80	-0.93	12:57 p.m.	2.13	0.65	0	0	Sand	
	55-17	46,085.00	2,154,453.78	-0.87	12:56 p.m.	2.13	0.65	0	0	Sand	
	55-18	46,093.73	2,154,480.19	-0.66	12:55 p.m.	1.97	0.60	0	0	Sand	
	55-19	46,102.86	2,154,507.87	-0.21	12:54 p.m.	1.31	0.40	0	0	Sand	
	55-20	46,112.12	2,154,535.91	0.83	12:53 p.m.	0.66	0.20	0	0	Sand	
	55-21	46,119.97	2,154,559.69	1.80	12:53 p.m.	0.00	0.00	0	0	Sand	
	55-22	46,128.68	2,154,586.07	2.44	12:51 p.m.	0.00	0.00	0 oysters 1 clam (S)	0 oysters 4 clams (S)	Sand	
	55-23	46,138.25	2,154,615.07	2.67	12:51 p.m.	0.00	0.00	0	0	Sand	55-24 through 55-32 were beyound the edge of the salt marsh

*All transects align from the west side of Jinks Creek to the east side.