

Shell Rake Habitat Enhancement for nesting American Oystercatcher

INTRODUCTION:

American Oystercatchers (Figure 1 - hereafter AMOY) are a species of high conservation concern due to low numbers and dependence on coastal habitats vulnerable to human disturbance, depredation, and tidal flooding. Oystercatchers are a listed species in Georgia's State Wildlife Action Plan (SWAP) highlighting the need to improve nesting success through nest protection, predator management and habitat restoration. While traditionally open beach nesters, approximately 40% of Georgia's AMOY now nest on shell rakes (Figure 2). See Figure 13 for map of nests in area of this project.

One of the growing threats to AMOY across their range is Sea Level Rise leading to the direct loss of habitat, or loss of productivity through nest flooding during extreme tide events. The Georgia coast, given its high tidal amplitude, suffers from regular inundation of otherwise suitable nesting habitat. The number of extreme tidal events is increasing exponentially (Figure 3), directly impacting AMOY and many other beach nesting birds' ability to successfully raise clutches.



Figure 1: American Oystercatcher adult



Figure 2: AMOY chick on shell rake

Shell rakes are berms of dead oyster-shell formed along saltmarsh edges where dead shell and wave action co-occur (Figure 4). In the southeast, these often form along the Intracoastal Waterway (ICW) and open sound systems where regular boat wakes and natural wave action help build up the rakes. The last 10 years has seen a deterioration (loss of area and elevation) and complete loss of many suitable nesting rakes due to hurricanes and an increase in extreme flooding tides.

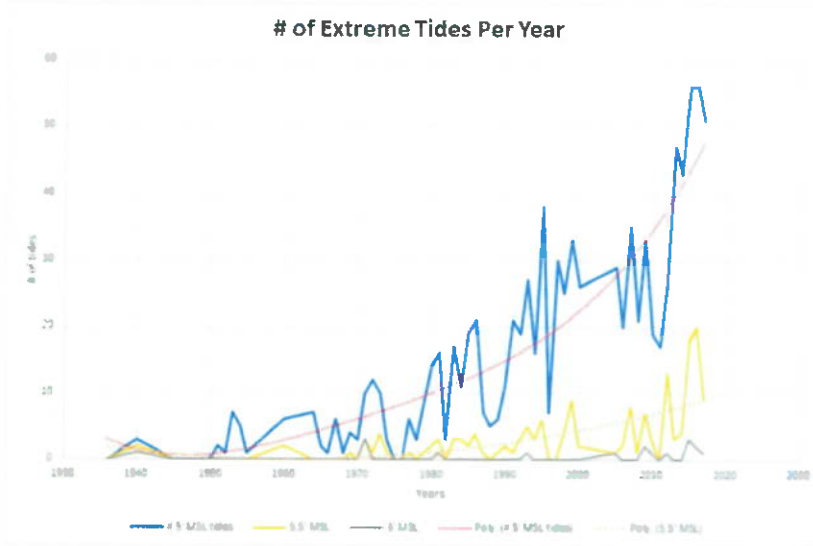


Figure 3: Extreme tide events measured at the Fort Pulaski tide gauge.

This project proposes to enhance 6 existing shell rakes on two Camden County GA marsh islands by adding shell/limerock to these rakes to increase the elevation enough that nests are unlikely to overwash during a typical breeding season. If successful, these 6 sites have the potential to fledge up to 18 chicks annually. This could help us approach or surpass our statewide productivity targets of approximately 40 chicks fledging annually. Even a partial success rate would get us closer to our statewide goals.

SHELL RAKE RESTORATION:



Figure 4: Shell Rake used by nesting AMOY

Several factors need to be considered when planning for shell rake restoration, including site selection, target elevation and rake size and configuration. To select sites for restoration, we considered several site factors plausibly influencing productivity, as well as factors influencing the logistics of project completion.

TARGET ELEVATION

Target elevations for restoration were developed by taking elevation measures from 30 shell rake nests during the 2019 season with an RTK and correlating nest productivity by elevation (Table 1, Figure 5). We determined that nests in the 5-6' NAVD88 range had the best productivity. We had no successful nests below 4' NAVD88. We chose a target minimum elevation of between 5-7' NAVD88 to minimize the chance of nest lost to flooding.

Sound System	Location	Nests	Average nest elev.	Chicks Fledged	chicks/nest
St Catherines	ICW West	7	1.59 M (5.243ft)	8	1.14
St Catherines	N. Medway/Oss	2	1.502M (4.931ft)	4	2.00
St Andrews	Satilla Marsh Isl	2	1.419M (4.656ft)	6	3.00
St Andrews	S. Satilla & Mud	6	1.399M (4.593ft)	8	1.33
St Catherines	Killkenny Rakes	1	1.270M (4.167ft)	2	2.00
Cumberland Sound	Stafford Island	6	1.209M (3.967ft)	1	0.17
Cumberland Sound	ICW Rakes	6	1.133M (3.720ft)	1	0.17

Table 1: Shell Rake Nest elevations and nest success by sound system. Elevations in NAVD88

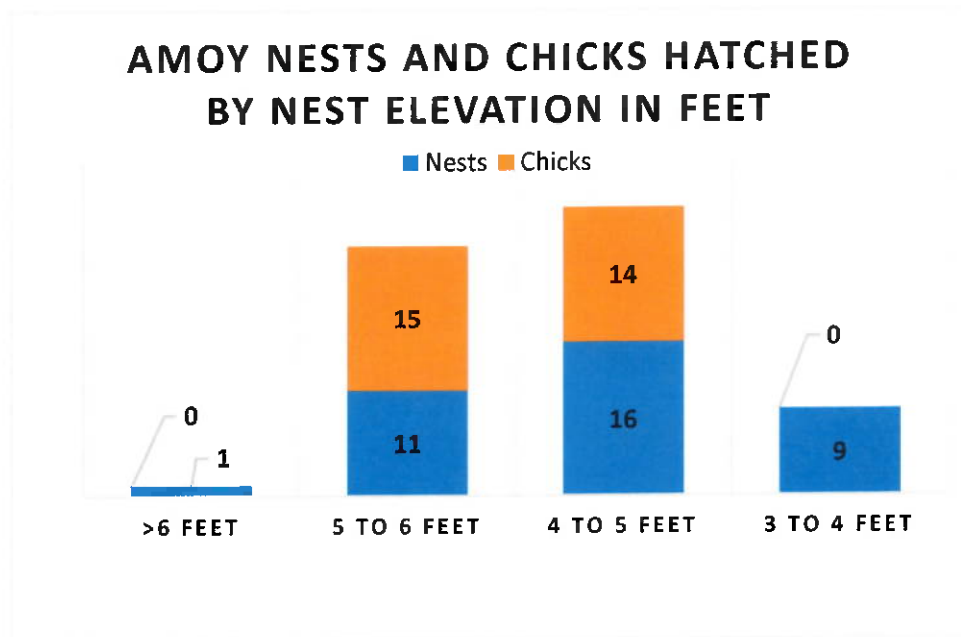


Figure 5. Productivity by elevation for AMOY nesting on Shell Rakes in 2019.

PLATFORM CONFIGURATION

While AMOY select shell rakes with a wide array of shapes and sizes, we documented the majority selected sites with a seaward berm protecting a lower nest platform landward. Presumably this provides some protection from wave action and may also give the incubating birds a lower profile on the rake, despite the fact these birds are clearly not cryptic. We recommend the construction of nesting platforms that emulate this configuration (Figure 6, 7). The size of restored nesting platform will vary depending on shell sources and expense, but we will attempt to construct nest platforms that are approximately 15'X20' (exact size will vary depending on shape of site and availability of local shell) providing a much larger available nest platform than previous efforts. The elevation of the seaward berm will be between +6-7' NAVD88 and the nesting platform behind the berm will be between +5-6' NAVD88. This should provide a suitable elevation that nests will be at low risk of tidal inundation during the nesting season. These will be built over existing shell rakes that have been used by AMOY.

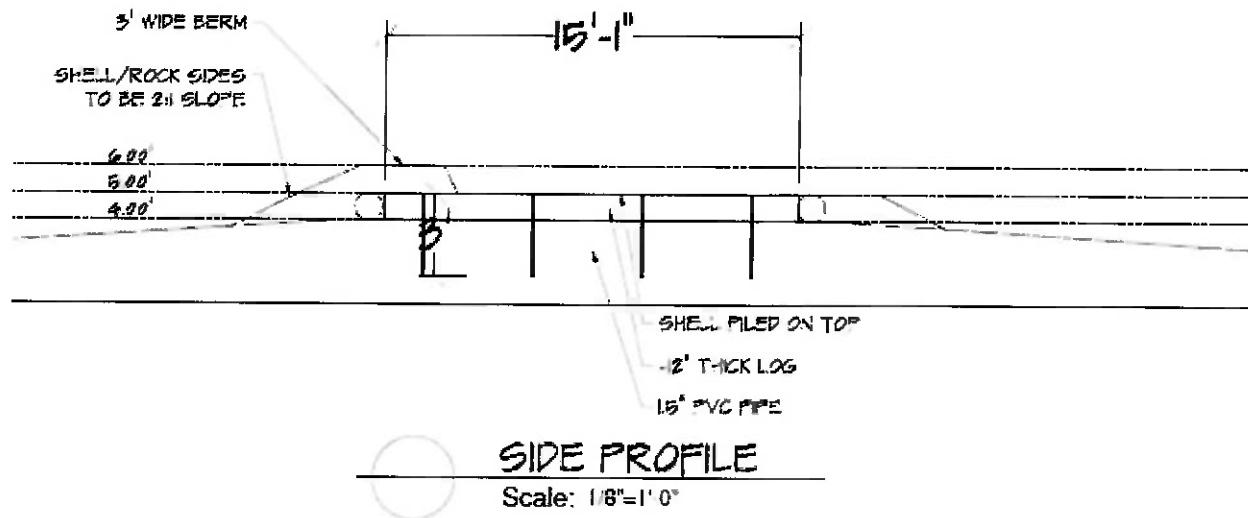


Figure 6: Generic cross-sectional schematic of how newly placed material could build up a nest platform on top of an existing shell rake.

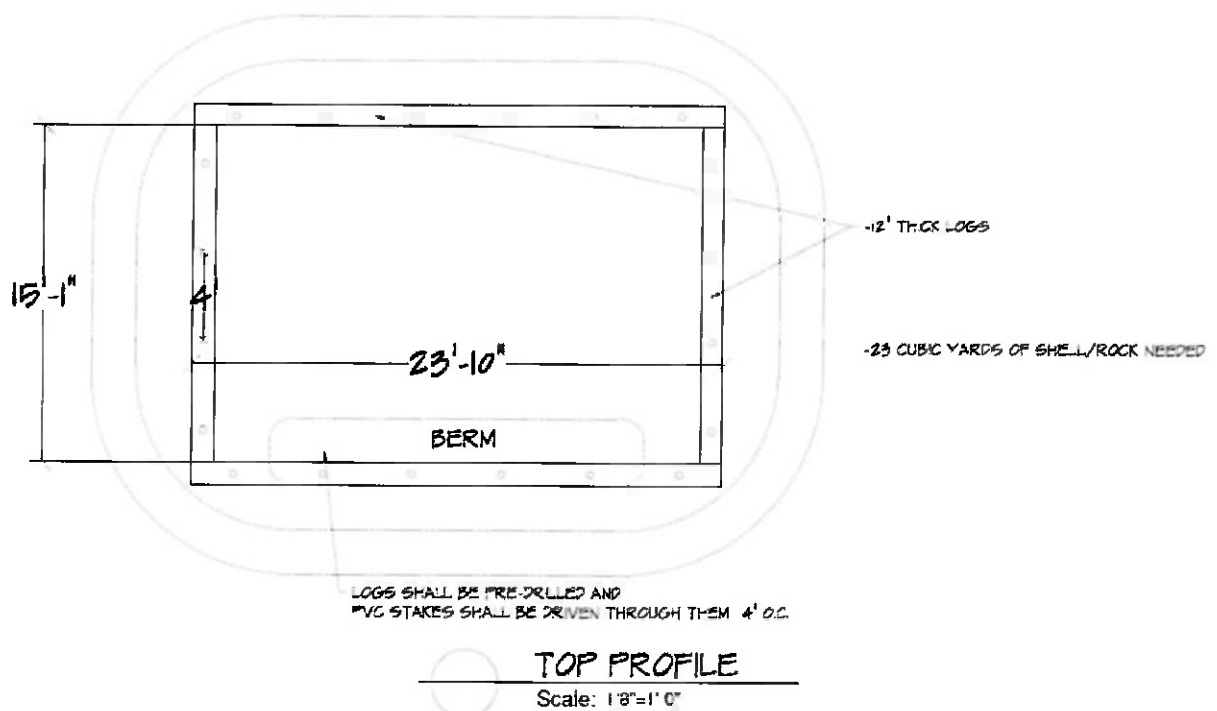


Figure 7. Aerial view of restored shell rake nesting platform.

To maximize the longevity of these projects we propose building a wooden frame from 12” poles held in place by duckbill anchors with stainless steel cables driven deep into the substrate. These 4 poles will be attached at the corners, and then filled and overtopped with shell/rock.

To maximize the stability of the restoration project the shell at the base of the platform may be poured into an anchored honeycomb plastic system called a geocell (Figure 8). This material creates 10” deep openings within which shell or rock can be compressed – forming a rugged base layer that should resist erosion. If used, it would be regularly monitored for required maintenance and possible removal if it becomes uncovered too easily. This honeycomb is both anchored itself, and shell/limerock is compacted into the gaps given it additional strength.



Figure 8. Geocell – could be used if erosion becomes problematic.

PRIORITY RESTORATION SITES:

Our selection process highlighted several locations for restoration priority (Table 2, 4). Two of the most promising were Satilla Marsh Island (Figures 9&10) and Stafford Island (Figures 11&12). Each of these sites are remote islands with limited risk of human disturbance and far enough from uplands that we have not experienced significant mammalian nest depredation. They are also in State ownership or National Park Service.

Site	Area	Ownership	Latitude	Longitude
Satilla Marsh Island	Satilla River	State DNR	30.96735	-81.48964
Stafford Island	Cumberland Sound	NPS	30.80936	-81.48319

Table 2 Locations of top priority shell rake sites.

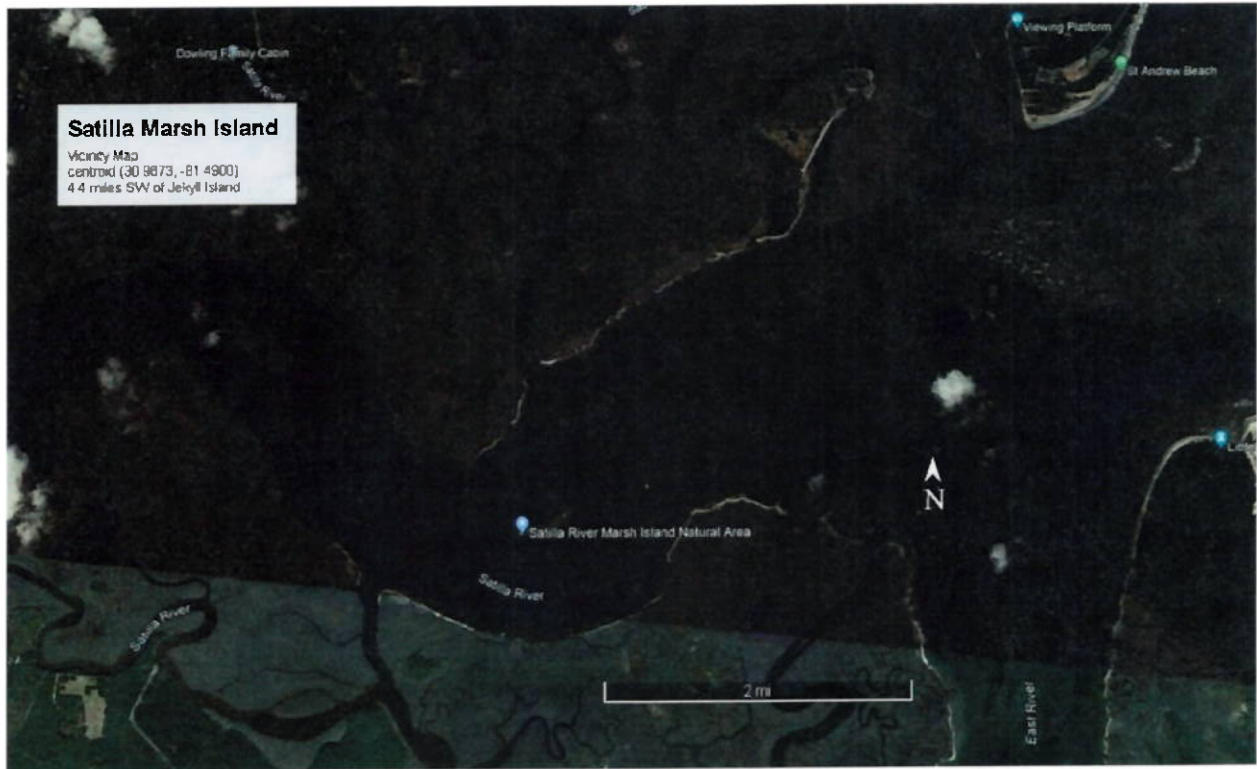


Figure 9. Satilla Marsh Island vicinity map showing location in mouth of Satilla River West of the north end of Little Cumberland Island.



Figure 10. Satilla Marsh Island project centroids for 3 proposed rake restorations.



Figure 11. Vicinity map for Stafford Island, between Kings Bay to the west and Cumberland Island National Seashore to the east.

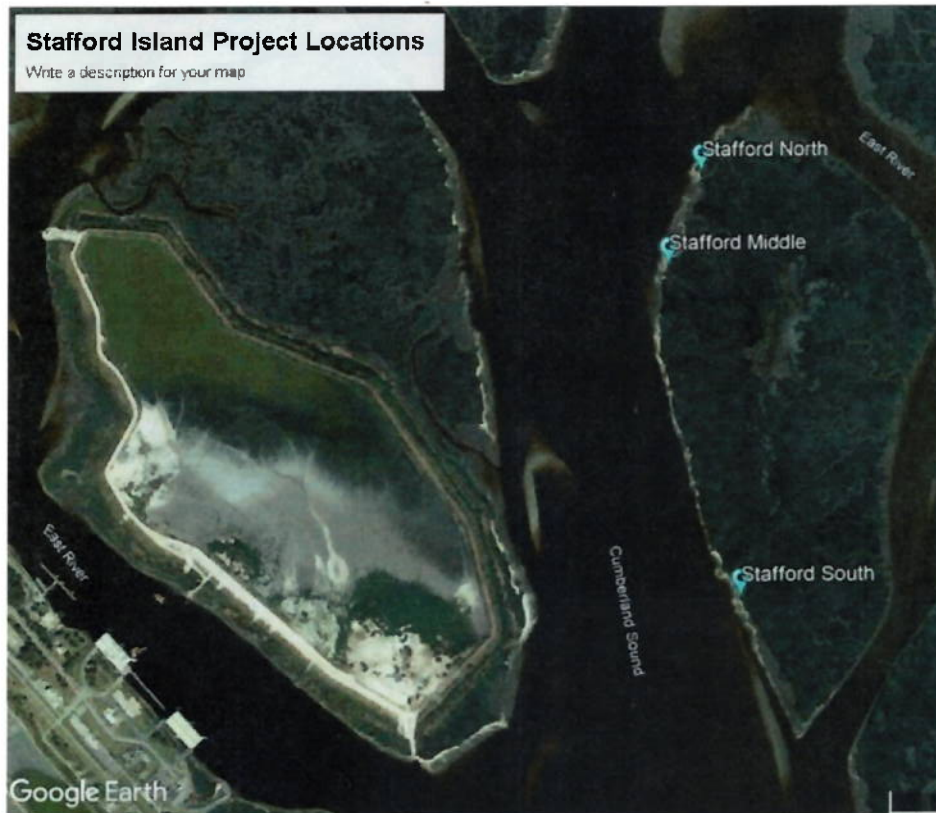


Figure 12. Stafford Island centroid locations for 3 proposed restoration projects

Distance of the project into the waterway from MLW. All project sites are above MLW. The base level on most sites is approximately +4' NAVD88. See architectural drawing for site by site elevations.

Distance of the project from the navigable channel. *Stafford Island Project.* The closest proposed project to a navigable channel is the "Stafford Middle" site, which is approximately 150 M (492ft) east of the Intracoastal Waterway. *Satilla Marsh Island Project.* It is approximately 550 M (1804ft) south of the northern channel on the Satilla River and approximately 1000 M (3280ft) north of the south channel.

Depths of the Waterway at MLW: MLW of 3.65M (12 ft) at closest point to Stafford Middle project from NOAA chart.

Total Width of the Waterway from MLW to MLW: Stafford Island projects. The approximately width of the waterway ranges from 805 to 920 M (2641-3018ft) depending on which project site is considered.

CONSTRUCTION METHODS:

Materials. We will attempt to use cured oyster shell for all restoration projects. Given the challenges of accessing large volumes of shell, we may also use crushed lime rock (#3 or #4 size). While we would prefer shell, AMOY have nested on crushed limestone on a restoration project on Lake Worth Lagoon FL. Given the greater density of lime rock, projects created with rock may be less susceptible to erosion during storms and high tides potentially adding to the longevity of the project. We also may use a base layer of lime rock with shell placed on top of the rock.

Four 12" diameter wooden poles rated for marine use will be used to construct the base "frames" upon which the nesting berms will be constructed. These should provide some additional stability adding to the longevity of the restoration projects. The exact size and configuration of these frames will depend on the shape and size of the rake being restored. Poles will be anchored using "duck-bill" style anchors with stainless cable driven deep into the substrate on either side the pole. Poles will subsequently be buried by shell.

Construction mats will be placed over any marsh that needs to be traversed during the transport of materials and construction of the rakes. In all cases there is a short distance to cover, and we anticipate rapid regrowth of any damaged marsh vegetation.

Materials will be transported to and deposited on the restoration locations via barge or Munson boat. Materials will be offloaded at high tide by various means depending on the exact equipment situation. Large bags of shell may be moved onto site with a davit arm and loose shell may be moved with either a small dozer or excavator arm. The shaping of the restored nest platforms will be conducted with a small dozer, excavator and likely manual manipulation.

CONSTRUCTION CONSIDERATIONS:

All construction can be completed without any blocking of any navigable channels. Satilla Marsh Island is approximately 6km west of the ICW. Stafford shell rakes are over 150M (492ft) from the ICW.

Several rakes – especially on Satilla Marsh Island have become overgrown with vegetation, primarily *borrichia*, *suaeda*, *distichlus* and *baccharis*. Vegetation will likely be removed from site minimizing the chance of vegetation growing up through the new shell placement, given that AMOY prefer to nesting in areas with little or no vegetation.

Timing: We hope to complete any restoration project by late February. By this time AMOY have formed pairs, selected territories and are preparing to nest. While the earliest documented nest in Georgia was March 10th, most pairs begin laying in late March and peak nest establishment is typically in mid-April. If these projects are complete by March, we presume a good chance that they will be selected as suitable nesting sites.

Jurisdiction designation:

The entirety of both island sites except for 2 small areas on "Satilla East" and "Satilla West" are below +5.6' NAVD88 and are therefore within the state jurisdiction zone. There are no uplands on either site. There are no existing structures on either island.

Stormwater management plan:

Project will be conducted within the guidelines of the Stormwater Management Plan. There will be no discharge of any water, other than locally pumped water may be used to spray shell off the barge.

Impervious Surface calculations:

There will be no impervious surface created by this project. Both shell and crushed lime rock provide exceptional drainage.

MONITORING:

We will regularly monitor these sites, both to assess any damage and conduct any required maintenance, but also to determine their use by nesting American Oystercatcher and the success of the pairs that use them for nesting. Throughout the nesting season sites will be visited approximately every 2 weeks. During the rest of the year sites will be visited every 2 months or following any large storms/hurricanes that may lead to required maintenance.

Site Name	CMPA - Jurisdiction	Maximum Shell/Rock Volume
Satilla West	Partially >5.6'	23 cy
Satilla Middle	All <5.6'	23 cy
Satilla East	Partially > 5.6	40 cy
Stafford North	All <5.6'	60 cy
Stafford Middle	All <5.6'	48 cy
Stafford South	All <5.6'	50 cy

Table 3: Volume of shell estimated per site

ALTERNATIVE ANALYSIS:

Site Selection:

In selecting the sites of these projects, we considered 16 nesting rakes used by AMOY on the Georgia coast ranging from Wassaw Sound in the north to Beach Creek at the south end of Cumberland Island (Table 4). There are many sites that would benefit from similar restoration projects, but Satilla Marsh and Stafford Marsh Islands were selected as we felt they had a high likelihood of success. We used 8 factors to rank sites for restoration, including: ownership, active oyster leases, past AMOY productivity, isolation from upland habitat, availability of local shell, fetch (degree of protection from wave action), type of equipment requires, and the number of AMOY pairs that used a given site. Four locations were classified as high restoration priority. These included Grass Island on the Medway River, Cumberland Marsh Island, Satilla Marsh Island and Stafford Island. We determined that both Grass Island and Cumberland Marsh Island would require significantly more material to build them up. Grass Island has eroded dramatically in the past few years making it too difficult to restore without a significant amount of sediment and likely hardening to protect from the open ocean to the east

An additional 11 sites were deemed suitable for restoration but had additional complications, including private ownership, existing oyster leases that may complicate the logistics, and proximity to upland habitats that may harbor mammalian predators that could decrease or eliminate the benefit of elevation restoration. The remaining 3 sites were deemed poor options for restoration due to long history of nest failures, few pairs using the sites, or proximity to uplands.

This project should be permitted given that there is a real possibility that very small-scale efforts, such as these – requiring 20-30 CY of shell/rock per site, could significantly improve the productivity of AMOY for the whole state. With only 120 pairs nesting, and an average production of between 20 and 60 fledglings, even restoring 6 sites, which could allow for fledging of 1-3 chicks per site could move the state population from a sink level of productivity to a source. If these small projects are successful, we may be able to expand to other areas, as well as sharing our success with members of the AMOY

working group many of whom are facing similar deterioration of habitat that we are witnessing in Georgia. There is also no real downside to this project. We will be restoring elevation to sites, using natural materials. This project will improve the resiliency of these habitats to raising sea levels and storm surges maintaining the ecological value of marsh systems.

Alternative approaches:

These projects will likely be installed over several seasons. We will apply what we learn from the early installations to the later installations. If for instance, there is rapid erosion and elevation loss, we would consider using a matt to help consolidate and maintain the structure of the restored rake.

PUBLIC INTEREST STATEMENT:

There should be no negative impacts associated with this project. Natural material will be used to restore nesting sites so that a conservation priority species may be able to meet its productivity targets for stability and even population growth. These sites will be regularly monitored so that if any maintenance is required, we can take care of it in a timely manner.

There will be no impacts to navigable channels. There will not be any erosion associated with this project and one of the primary purposes of the project is to counteract the erosion that has occurred.

The purpose is to benefit wildlife, particularly AMOY, and there should be no negative wildlife consequences. Even if most of the shell ends up in the intertidal zone, this becomes habitat for fish and may even promote local Oyster growth as the shell are suitable substrate for spat to attach.

The Georgia Department of Natural Resources Mission includes conserving and promoting wildlife through management education and scientific research. This project fits directly within the conservation goals of our agency.

SOUND	LOCATION	OWNERSHIP	OYSTER LEASE	PRODUCTIVITY	ISOLATION	LOCAL SHELL	FETCH	EQUIP	AMOY PAIRS	RESTORATION PRIORITY
Wassaw	N. Wassaw Rakes	USFWS	NO	None	Low	Yes	High	No	1-2 pairs	Low
Ossabaw	Raccoon Key	State	NO	None	Low	Yes	Moderate	Yes	3 pairs- high depredation	Low
Sapelo	Dog Hammock	Private	YES	High	High	Yes	Moderate/High	Yes	2 pairs	Moderate
Sapelo	Johnson Creek	SCI	NO	Low	Moderate	Yes	Moderate	No	1 pair	Moderate
St Catherines	Kilkenny	State	NO	High	Moderate	Yes	Low	Yes	2 pair	Moderate
St Catherines	S. Ossabaw	State	NO	Moderate	Moderate	Yes	Low	Yes	2 pairs	Moderate
St Catherines	Medway S.	State	Moderate	Moderate	Moderate	Yes	High	Yes	3 pairs	Moderate
St Catherines	Grass Island	State	YES	High-historically	High	No	High	Yes		High
St Catherines	ICW West	State & Private	NO	High	Moderate	Yes	Moderate			Moderate
St Andrews	Satilla Marsh Isl.	State	NO	High	High	No	Moderate	Yes	2 Pairs	High
St Andrews	S.Satilla	Bayer	NO	High/Variable	Moderate	Yes	High	Yes	3-4 pairs	Moderate
St Andrews	Mud River	State	YES	High	Moderate	Yes	Moderate	Yes	2 Pairs	Moderate
Cumberland	Stafford	NPS/State	NO	High	High	Yes	Moderate	No	3-4 pairs	High
Cumberland	Marsh Island	State	NO	Mixed	High	No	Moderate	No	1-2 pairs	High
Cumberland	Point Peter Rakes	Navy	NO	High	Moderate	No	High	Yes	1 pair	Moderate
Cumberland	S. CINS rakes	CINS	NO	Low	Low	Yes	Moderate	No	1 Pair	Low

Table 4. Productivity summarizes chicks fledges over last 5 years of monitoring, Isolation: High – primarily islands, Moderate – extensive marsh far from uplands, Low - close to hammocks. Local shell – Yes means no offsite shell would need to be brought in, No – sites would require off-site shell. Fetch – qualitative measure of how vulnerable site may be to erosion from storms. High fetch sites are typically exposed to large open sounds. Low fetch sites are more protected. Equip – Yes – sites that are large and stable where a skid steer or tiller could likely operate safely. No – sites with shallow lens of shell over mud, or narrow steep sided rakes that would be unsafe to operate on.



Figure 13. Nest locations for AMOY in 2022 with nest fates by color.

STATE OF GEORGIA

REQUEST FOR A REVOCABLE LICENSE FOR THE USE OF TIDAL WATERBOTTOMS

APPLICANT NAME(S): Timothy Keyes, Georgia DNR - Wildlife Resources Division

MAILING ADDRESS: One Conservation Way, Brunswick GA 31520
(Street) (City) (State) (Zip)

PROJECT ADDRESS/LOCATION: Stafford Island, ICW east of Crab Island, and west of Cumberland Island

COUNTY: Camden WATERWAY: AIWW

LOT, BLOCK & SUBDIVISION NAME FROM DEED: Tract 02-185, Stafford Island Marshlands

Georgia Department of Natural Resources
Coastal Resources Division
One Conservation Way
Brunswick, Georgia 31520-8687

I am requesting that I be granted a revocable license from the State of Georgia to encroach on the beds of tidewaters, which are state owned property. Attached hereto and made a part of this request is a copy of the plans and description of the project that will be the subject of such a license. I certify that all information submitted is true and correct to the best of my knowledge and understand that willful misrepresentation or falsification is punishable by law.

I understand that if permission from the State is granted, it will be a revocable license and will not constitute a license coupled with an interest. I acknowledge that this revocable license does not resolve any actual or potential disputes regarding the ownership of, or rights in, or over the property upon which the subject project is proposed, and shall not be construed as recognizing or denying any such rights or interests. I acknowledge that such a license would relate only to the property interests of the State and would not obviate the necessity of obtaining any other State license, permit, or authorization required by State law. I recognize that I waive my right of expectation of privacy and I do not have the permission of the State of Georgia to proceed with such project until the Commissioner of DNR or his/her designee has executed a revocable license in accordance with this request.

Sincerely,

By: Timothy Keyes
Signature of Applicant
Wildlife Biologist
Title, if applicable

Date: 8/25/2022

By: _____
Signature of Applicant

Title, if applicable

Date: _____

Attachments

STATE OF GEORGIA

REQUEST FOR A REVOCABLE LICENSE FOR THE USE OF TIDAL WATERBOTTOMS

APPLICANT NAME(S): Timothy Keyes

MAILING ADDRESS: One Conservation Way, Brunswick GA, 31520
(Street) (City) (State) (Zip)

PROJECT ADDRESS/LOCATION: Satilla Marsh Island Natural Area

COUNTY: Camden WATERWAY: Satilla River near entry to St Andrews Sound

LOT, BLOCK & SUBDIVISION NAME FROM DEED: 1995 Executive Order

Georgia Department of Natural Resources
Coastal Resources Division
One Conservation Way
Brunswick, Georgia 31520-8687

I am requesting that I be granted a revocable license from the State of Georgia to encroach on the beds of tidewaters, which are state owned property. Attached hereto and made a part of this request is a copy of the plans and description of the project that will be the subject of such a license. I certify that all information submitted is true and correct to the best of my knowledge and understand that willful misrepresentation or falsification is punishable by law.

I understand that if permission from the State is granted, it will be a revocable license and will not constitute a license coupled with an interest. I acknowledge that this revocable license does not resolve any actual or potential disputes regarding the ownership of, or rights in, or over the property upon which the subject project is proposed, and shall not be construed as recognizing or denying any such rights or interests. I acknowledge that such a license would relate only to the property interests of the State and would not obviate the necessity of obtaining any other State license, permit, or authorization required by State law. I recognize that I waive my right of expectation of privacy and I do not have the permission of the State of Georgia to proceed with such project until the Commissioner of DNR or his/her designee has executed a revocable license in accordance with this request.

Sincerely,

By: Timothy Keyes
Signature of Applicant

Date: 8/25/2022

Wildlife Biologist
Title, if applicable

By: _____
Signature of Applicant

Date: _____

Title, if applicable

Attachments



Sonny Perdue
Governor

Chris Clark
Commissioner

Jurisdiction Line: The entirety of these projects on both Satilla Marsh Island and Stafford Marsh Island falls within the States Jurisdiction Zone as they are located on tidal marsh islands that fall below the 5.6 feet above mean tide level. There is no upland on either island.



United States Department of the Interior

NATIONAL PARK SERVICE
Cumberland Island National Seashore
101 Wheeler Street
Saint Marys, GA 31558



IN REPLY REFER TO:

9.D. (A3815b CUIS)

June 22, 2022

Georgia Department of Natural Resources
Attn: Tim Keyes
One Conservative Way
Suite 300
Brunswick, Georgia 31520-8687

Subject: Letter of Support; Shell Rake Habitat Enhancement Project along Cumberland Sound
Stafford Island, Cumberland Island National Seashore

Dear Georgia Department of Natural Resources:

The protection of natural and cultural resources is of the utmost importance in the management and operation of Cumberland Island National Seashore. As Superintendent of Cumberland Island National Seashore, I support the efforts to restore shell rake habitat for the American Oystercatcher along the Cumberland Sound at Stafford Island of Cumberland Island National Seashore. If you have any questions or concerns, please contact me at (912) 882-4336 x228 or Gary_Ingram@nps.gov

Sincerely,

Gary Ingram
Superintendent
Cumberland Island National Seashore
Fort Frederica National Monument

cc: Michael Seibert, Chief of Integrated Resource Management

Interior Region 2 • South Atlantic–Gulf

Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi
North Carolina, Puerto Rico, South Carolina, Tennessee, U.S. Virgin Islands

ACL:DJOB

33-11-512-31

33-11-512-21

hbm

Received

JAN 13 1975

PL

Office of the Attorney General
Washington, D. C. 20530

January 9, 1975

Honorable Rogers C. B. Morton
Secretary of the Interior
Washington, D. C.

My dear Mr. Secretary:

Re: File Nos 33-11-512-31 and 33-11-512-21
Tract No. 02-147
County Camden State Georgia

An examination has been made of the title evidence and related papers pertaining to certain land in which interests have been acquired under authority of existing legislation. The land and estate acquired by the United States are more particularly described in the deed.

The title evidence and accompanying data disclose valid title to be vested in the United States of America subject to the rights and easements noted in Schedule A attached hereto which your Department has advised will not interfere with the proposed use of the land.

The title evidence and related papers have been retained in the files of this Department.

Sincerely yours,

Acting Attorney General

Schedule A

File Nos.: 33-11-512-31 and 33-11-512-21

Tract No.: 02-147

Project: Cumberland Island National Seashore located in
Camden County, Georgia

Estate acquired: Fee title

Acreage: Certain lands

Consideration: donation

The deed to the United States of America was executed by Lucy Foster, a/k/a Lucy Sprague Foster, on July 9, 1973, filed for record on August 6, 1973, and recorded in Record Book 112, folio 20.

The title insurance policy and endorsement thereof were prepared as of January 24, 1974, by Chicago Title Insurance Company.

The title is subject to the following:

1. Easements for existing roads and public utilities including easement rights noted at items Nos. 3, 4 and 10, Special Exceptions, Schedule B of the policy.
2. Easement rights as set out in the order of the Superior Court of Camden County, Georgia, in Case #1667, and its order of July 6, 1964, and its supplemental order of June 1, 1965, as set forth at items Nos. 2 and 5, Special Exceptions, Schedule B of the policy and as set forth in the deed to the United States.

3. Rights of third parties in and to private roads crossing subject lands noted at item No. 10, Special Exceptions, Schedule B of the policy and as noted in the deed to the United States.
4. Reservation by the grantor of easements and rights of ingress and egress to and from certain lands as noted in the deed to the United States.
5. Rights outstanding in the public to use any part of the land seaward of the natural line of vegetation or of the extreme high water line as a public beach or recreation area as noted at item No. 9, Special Exceptions, Schedule B of the title policy.

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF GEORGIA
BRUNSWICK DIVISION

U. S. DISTRICT COURT
Southern District of Ga.
Filed in office
9:15 A.M.
JUN 29 1978
[Signature]
Deputy Clerk

UNITED STATES OF AMERICA,
Plaintiff,
vs.
584.65 ACRES OF LAND, MORE OR
LESS, SITUATED IN THE COUNTY OF
CAMDEN, STATE OF GEORGIA, AND
PHINEAS SPRAGUE, ET AL.,
Defendants.

CIVIL NO. 277-11

AMENDED AND SUPPLEMENTAL DECLARATION OF TAKING

TO THE HONORABLE, THE UNITED STATES DISTRICT COURT:

Whereas, pursuant to the authority delegated by the Secretary of the Interior to the Solicitor of the Department of the Interior on February 17, 1959, under subparagraphs (6) and (7) of 210.2.2, Departmental Manual of the Department of the Interior, 24 F.R. 1348, as renumbered (5) and (6) in the Departmental Manual, which authority has been redelegated to Regional Solicitors by Solicitor's Regulation 32, as amended on April 15, 1976, I caused to be filed a Declaration of Taking in the above styled action on February 18, 1977;

Whereas, since the filing of the said Declaration of Taking, certain facts regarding the ownership and certain interests to remain outstanding in said land have been learned by me, which facts were not known by me at the time of the filing of the said Declaration of Taking; and,

Whereas, in order to show the apparent ownership of said land resulting from certain conveyances made by the defendant, Phineas Sprague, to others and to more correctly reflect the estates to be taken hereunder;

Now, THEREFORE, pursuant to the above cited authority, I hereby make and cause the following amendments to the said Declaration of Taking, to wit:

1. Paragraph 3 of said Declaration of Taking is hereby amended as follows:

"3. General descriptions of the tracts of land to be taken, the just compensation therefor, and the estates to be taken for said public use are set forth in Amended Schedules B-1, B-2, B-3, B-4, B-5, B-6, and B-7, all dated June 20, 1978, annexed hereto and made a part hereof."

2. Paragraph 4 of said Declaration of Taking is hereby amended as follows:

"4. A plat dated May, 1973, revised 6/20/78, showing the land to be taken is annexed hereto as "Amended Schedule C" and made a part hereof."

3. Paragraph 5 of the said Declaration of Taking is hereby amended as follows:


"5. The gross sum estimated by me as just compensation for said land, which aggregates 584.65 acres, including any and all interests taken in said land is FOUR HUNDRED SIXTY-EIGHT THOUSAND DOLLARS (\$468,000.00), which sum I have caused to be deposited in the Registry of the Court for the use and benefit of the persons entitled thereto. The persons and the sums to which they appear entitled are as follows:

<u>Purported Owner</u>	<u>Tract No.</u>	<u>Estimated Just Compensation</u>
Phineas Sprague	02-185	\$418,000
Mardean A. Davis	02-186	8,000
C. A. Wright, Sr.	02-187	8,000
C. A. Wright, Jr.	02-188	8,000
William R. Davis	02-189	8,000
Anthony D. Quinney	02-190	8,000
Lucy Foster	02-191	10,000

I am of the opinion that the ultimate award for said land probably will be within any limits prescribed by law on the price to be paid therefor." *

4. All of the rest and remainder of the said Declaration of Taking is hereby reaffirmed.

IN WITNESS WHEREOF, I have signed this Amended and Supplemental Declaration of Taking in the City of Atlanta, this 22nd day of June, 1978.


Regional Solicitor
Department of the Interior

AMENDED SCHEDULE "B1"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-185

DESCRIPTION

All that certain tract of land lying and being situated on Cumberland Island sometimes called the Island of Great Cumberland, Camden County, Georgia, being Tract A of Tract 1 North and more particularly described as follows:

Beginning at a point marked by a concrete monument marked Tract 1S-1N on the southern line of Tract 1 North (said line being the northern line of Tract 1 South as shown and delineated on the aforesaid map) located at "X" coordinate 721,475.69, "Y" coordinate 293,870.98, Cumberland Island, Camden County, Georgia; thence running East along the line formed by "Y" coordinate 293,870.98 a distance of 3,670.89 feet to a point marked by a concrete monument located at "X" coordinate 725,146.58, "Y" coordinate 293,870.98; thence running East along the line formed by "Y" coordinate 293,870.98 a distance of 150 feet, more or less, to the low water mark on the Atlantic Ocean; thence running in a generally northeasterly direction (magnetic) along the aforesaid low water mark on the Atlantic Ocean a distance of 1,416.22 feet, more or less, to a point formed by the intersection of said low water mark on the Atlantic Ocean and the line formed by "Y" coordinate 295,143.89; thence running West along the line formed by "Y" coordinate 295,143.89 a distance of 150 feet, more or less, to a point marked by a concrete monument located at "X" coordinate 725,767.41, "Y" coordinate 295,143.89; thence running North 86°52'40" West (magnetic) a distance of 6,699.50 feet to a point marked by an iron pipe located at "X" coordinate 719,077.86, "Y" coordinate 295,508.84; thence running West along the line formed by "Y" coordinate 295,508.84, a distance of 1,545 feet, more or less, to the low water mark on Stafford Creek; thence running in a generally southerly direction (magnetic) along the aforesaid low water mark on Stafford Creek a distance of 1,800 feet, more or less, to a point formed by the intersection of the said low water mark on Stafford Creek and the line formed by "Y" coordinate 293,870.98; thence running East along the line formed by "Y" coordinate 293,870.98 a distance of 1,460 feet, more or less, to a point marked by an iron pipe located at "X" coordinate 718,829.46, "Y" coordinate 293,870.98; thence running West along the line formed by "Y" coordinate 293,870.98 a distance of 2,646.23 feet, more or less, to the point of beginning.

Together with all that portion of Stafford Island that lies southerly of and adjacent to the westerly extension of line formed by said "Y" coordinate 295,508.84 bounded on the north by said "Y" coordinate 295,508.84, on the west by the low water mark of Cumberland Sound, on the south by the low water of Cumberland Sound and Stafford Creek, and on the east by the low water mark of Stafford Creek.

As more fully shown by that plat of survey dated December 3, 1970, made by John R. MacDonell, Georgia Registered Surveyor, No. 163.

Excepting a tract of land conveyed to Lucy Foster by Phineas Sprague on November 16, 1973, and recorded in Deed Book 113, page 576 of Camden County, Georgia.

Also excepting a tract of land conveyed to Mardean A. Davis by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 217 of Camden County, Georgia.

Also excepting a tract of land conveyed to C.A. Wright, Sr. by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 222 of Camden County, Georgia.

Also excepting a tract of land conveyed to C.A. Wright, Jr. by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 227 of Camden County, Georgia.

Also excepting a tract of land conveyed to William R. Davis by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 278 of Camden County, Georgia.

Also excepting a tract of land conveyed to Anthony D. Quinney by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 273 of Camden County, Georgia.

Containing 577.34 acres, more or less, of which 376.52 acres, more or less, are marsh lands.

Being the same lands conveyed by Millicent Monks, et al, to Phineas Sprague, by a deed recorded on April 29, 1971, in Record Book 99, page 586, Camden County Public Land Records.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$418,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

Phineas Sprague and spouse, if any
Cammock House
Prouts Neck
Scarborough, Maine 04070

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B2"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-186

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called the Island of Great Cumberland 29th District, G.M., Camden County, Georgia more particularly described as follows:

Lot No. 37 of that certain subdivision of Tract "A," Phase One located in Tract 1 North as more fully shown and described by that certain plat of survey made February 17, 1977, by Lee I. Kicklighter, Sr. Georgia Registered Surveyor No. 1714.

Containing 0.76 acres, more or less.

Being the same land conveyed to Mardean A. Davis by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 217, of Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$8,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

Mardean A. Davis and spouse, if any
703 Bealey Street
St. Marys, Georgia 31558

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B3"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-187

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called the Island of Great Cumberland 29th District, G.M., Camden County, Georgia more particularly described as follows:

Lot No. 46 of that certain subdivision of Tract "A," Phase One located in Tract 1 North as more fully shown and described by that certain plat of survey made February 17, 1977, by Lee I. Kicklighter, Sr. Georgia Registered Surveyor No. 1714.

Containing 0.46 acres, more or less.

Being the same land conveyed to C.A. Wright, Sr. by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 222, of Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$8,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

C. A. Wright, Sr. and spouse, if any
Mush Bluff
St. Marys, Georgia 31558

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B4"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-188

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called the Island of Great Cumberland 29th District, G.M., Camden County, Georgia more particularly described as follows:

Lot No. 47 of that certain subdivision of Tract "A," Phase One located in Tract 1 North as more fully shown and described by that certain plat of survey made February 17, 1977, by Lee I. Kicklighter, Sr. Georgia Registered Surveyor No. 1714.

Containing 0.47 acres, more or less.

Being the same land conveyed to C.A. Wright, Jr. by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 227, of Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$8,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

C. A. Wright, Jr. and spouse, if any
300 Dilworth Street
St. Marys Georgia, 31558

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B5"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-189

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called the Island of Great Cumberland 29th District, G.M., Camden County, Georgia more particularly described as follows:

Lot No. 43 of that certain subdivision of Tract "A," Phase One located in Tract 1 North as more fully shown and described by that certain plat of survey made February 17, 1977, by Lee I. Kicklighter, Sr. Georgia Registered Surveyor No. 1714.

Containing 0.57 acres, more or less.

Being the same land conveyed to William R. Davis by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 278, of Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$8,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

William R. Davis and spouse, if any
703 Bealey Street
St. Marys, Georgia 31558

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B6"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-190

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called the Island of Great Cumberland 29th District, G.M., Camden County, Georgia more particularly described as follows:

Lot No. 45 of that certain subdivision of Tract "A," Phase One located in Tract 1 North as more fully shown and described by that certain plat of survey made February 17, 1977, by Lee I. Kicklighter, Sr. Georgia Registered Surveyor No. 1714.

Containing 0.46 acres, more or less.

Being the same land conveyed to Anthony D. Quinney by Phineas Sprague on February 18, 1977, and recorded in Deed Book 130, page 273, of Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$8,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County.

NAME AND ADDRESS OF PURPORTED OWNER

Anthony D. Quinney and spouse, if any
112 South Cherry Street
Ocilla, Georgia 31774

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

AMENDED SCHEDULE "B7"
June 20, 1978

CUMBERLAND ISLAND NATIONAL SEASHORE

TRACT 02-191

DESCRIPTION

A tract of land situated on Cumberland Island sometimes called Island of Great Cumberland 29th District G.M., Camden County, Georgia, more particularly described as follows:

Beginning at a point formed by "X" coordinate 721,046.66 and "Y" coordinate 295,401.49; thence South 86°52'40" East, 225.26 feet to "X" coordinate 721,271.49 and "Y" coordinate 295,389.13; thence South 21°22' West, 56.37 feet to "X" coordinate 721,250.96 and "Y" coordinate 295,336.65; thence South 44°35' East, 1572.38 feet to "X" coordinate 722,354.70 and "Y" coordinate 294,216.73; thence South 45°25' West, 100 feet to "X" coordinate 722,283.49 and "Y" coordinate 294,146.54; thence North 44°35' West, 1527.75 feet to "X" coordinate 721,211.09 and "Y" coordinate 295,234.65; thence South 21°22' West, 527.69 feet to "X" coordinate 721,018.83 and "Y" coordinate 294,743.23; thence North 68°38' West, 50 feet to "X" coordinate 720,972.27 and "Y" coordinate 294,761.45; thence North 21°22' East, 550.0 feet to "X" coordinate 721,172.65 and "Y" coordinate 295,273.65; thence North 44°35' West 179.52 feet to the point of beginning.

Containing 4.59 acres, more or less.

Being a portion of Tract 1 North, according to a plat of Cumberland Island prepared by Watts Engineering Co. and recorded in Plat Book 3, page 118, Camden County, Georgia.

Also being the same land conveyed to Lucy Foster by Phineas Sprague on November 16, 1973, and recorded in Deed Book 113, page 576, Camden County, Georgia.

Estimated Compensation Deposited in the Registry of the Court for the Above Described Property: \$10,000.00

ESTATE TAKEN

The fee simple title, subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines, and easements as set out in the order of the Superior Court of Camden County, Georgia, in Case Number 1667, and its Order of July 6, 1964, and its Supplemental Order of June 1, 1965, and easements from Lucy C. Rice to Okefenokee REMC dated January 4, 1966, and recorded in Deed Book 83, Page 287 of the Public Land Records of Camden County, Georgia, and a similar easement dated September 23, 1966, and recorded in Deed Book 83, Page 258, of the Public Land Records of Camden County, Georgia, between said parties; and subject also to any right of the State of Georgia or of Camden County; also, however, reserving those rights in and to the airstrip as contained in those certain instruments dated July 9, 1973, recorded August 7, 1973, in Record Book 112, Page 9; dated November 16, 1973, recorded December 5, 1973, in Record Book 113, Page 369; dated January 2, 1975, recorded January 8, 1975, in Record Book 119, Page 479; and dated May 1, 1975, recorded May 6, 1975 in Record Book 121, Page 302.

NAME AND ADDRESS OF PURPORTED OWNER

Lucy Foster, a/k/a Lucy Sprague Foster,
and spouse, if any
Cumberland Island
St. Marys, Georgia 31558

NAMES AND ADDRESSES OF OTHER PARTIES WHO MAY HAVE OR CLAIM AN INTEREST IN THE
LAND

Tax Collector
Camden County Courthouse
Woodbine, Georgia 31569

(For taxes which may constitute
a lien on subject property)

State Attorney General
132 State Judicial Building
Atlanta, Georgia 30334

(For taxes which may constitute
a lien on subject property)

Lucy Foster, a/k/a Lucy Sprague Foster,
and spouse, if any
and
Franklin R. Foster, individually,
and as Trustee, and spouse, if any
Cumberland Island
St. Marys, Georgia 31558

(Reservation in and to use of
said airstrip)

Millicent S. Monks and spouse, if any
and Robert A. G. Monks, individually,
and as Trustee, and spouse, if any
and Austin D. Higgins, as Trustee
c/o Howard A. Goldenfarb
103 Exchange Street
Portland, Maine 04111

(Reservation in and to use of
said airstrip)

QUITCLAIM DEED

THIS INDENTURE is made this 9th day of July, 1973, by and between:

LUCY POSTER (also known as Lucy Sprague Foster), party of the first part (hereinafter sometimes referred to as "Grantor") of Baltimore County, Maryland; and THE UNITED STATES OF AMERICA, party of the second part (hereinafter sometimes referred to as "Grantee"), whose address is Washington, D. C. 20240.

W I T N E S S E T H :

That for and in consideration of the development by the party of the second part of the Cumberland Island National Seashore as authorized by Public Law 92-536, approved October 23, 1972, the performance of which is acknowledged by the party of the first part, and to further the development of said Seashore, the party of the first part remises, releases and quitclaims all of her right, title and interest to the party of the second part in and to the following property:

STAFFORD ISLAND MARSHLAND:

ALL THAT MARSHLAND PORTION of the tract or parcel of land situate, lying and being on Stafford Island, Camden County, Georgia, being the same island shown and delineated as "Stafford Island" on Watts Engineering Company Map of Cumberland Island, dated November 1, 1946, revised January 1965, recorded in Plat Book 3, Page 118, Office of the Clerk of the Superior Court of Camden County, Georgia, the "Marshland" being any marshland or salt marsh within the estuarine area of the above mentioned property, whether or not the tide waters reach the littoral areas through natural or artificial means, including all of those areas upon which grow one, but not necessarily all of the following: saltmarsh grass (*Spartina alterniflora*), black grass (*Juncus gerardi*) and high-tide bush (*Iva frutescens* var. *oraria*), and the occurrence and extent of salt marsh peat at the undisturbed surface shall be conclusive evidence of the extent of a salt marsh or part thereof.

TOGETHER WITH AND SUBJECT TO non-exclusive easements in common with Grantor and others, of ingress, egress and use in and to the Main Dock, Service Area, Service Road and Main Road as set forth in paragraphs 4 and 5 of the Judgment and Decree of the Superior Court of Camden County, Georgia entered July 6, 1964, and more particularly described in the Supplemental Decree entered June 1, 1965, in the case of Bullard, et al vs. Ferguson, et al, Case No. 1667, and easements of ingress and egress over existing roadways on adjoining lands of Grantor for access to and from and across the premises herein conveyed and other lands and interest in lands of Grantee on Cumberland Island; and,

Camden County, Georgia
Real Estate Transfer Tax
Paid \$ None
Date August 6, 1973
Carlisle Warren
Deputy Clerk of Superior Court

TOGETHER WITH all and singular right, title and interest of Grantor in and to any streams, alleys, roads, streets, ways, strips, gores, or railroad rights-of-way abutting or adjoining said land, and all privileges and appurtenances to said property, reversions, issues and profits thereof and of every part thereof.

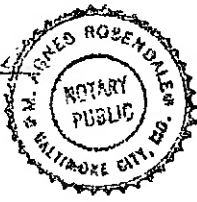
IN WITNESS WHEREOF, the Grantor by her hand has caused these presents to be executed and seal affixed as of the day, month and year first above written.

Signed, sealed and delivered in the presence of:

Lucy Foster (SEAL)
LUCY FOSTER (a/k/a
Lucy Sprague Foster)

Edith H. Ferguson
Unofficial Witness

M. Arnes Rosendale
Notary Public
My commission expires
July 1, 1974.



RECORDED AUG 7 1973 Carolyn Warren
DEPUTY CLERK SUPERIOR COURT, SANDHILL COUNTY, GEORGIA

To
1973

Georgia, Camden County
Clerk's Office, Superior Court

I hereby certify that the within instrument
was filed for record at 1 o'clock PM,
this 6 day of August, 1973
and recorded in 112 Folio 20-21
Record Book
this 7 day of August, 1973
Caroline Y. Wilkins
Deputy Clerk



THE STATE OF GEORGIA

EXECUTIVE ORDER

BY THE GOVERNOR:

WHEREAS: The State of Georgia holds title to and is in possession of certain islands named Egg Island Bar, Pelican Spit, Satilla River Marsh Island, and St. Catherines Island Bar (the "premises"), as described in the attached **EXHIBIT "A,"** incorporated herein by reference; and

WHEREAS: The premises change their locations, shapes and sizes from time to time, as a result of action by winds, waves and tides, and the attached maps only approximately illustrate the locations of the premises; and

WHEREAS: Despite said changes in the locations, shapes and sizes of the premises, their ownership remains in the State of Georgia, since they accrete from state-owned water bottoms; and

WHEREAS: The Department of Natural Resources has determined that the premises contain some of the best remaining nesting habitats on the Georgia coast for beach-nesting and colonial-nesting bird species; and

WHEREAS: The Department of Natural Resources desires to gain custody of the premises, in order to protect habitat for said birds by supervising and controlling visitor use and access; and

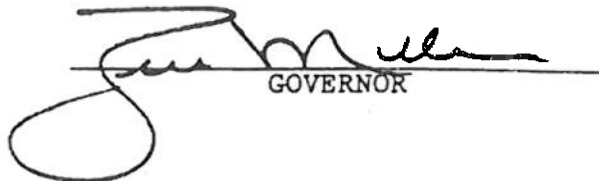
WHEREAS: I have determined that it is in the best interest of the State of Georgia to transfer custody of the premises from the State of Georgia to the Department of Natural Resources to protect habitat for said birds.

NOW, THEREFORE, PURSUANT TO THE AUTHORITY VESTED IN ME AS GOVERNOR OF THE STATE OF GEORGIA, PARTICULARLY BY VIRTUE OF THE PROVISION OF O.C.G.A. §50-16-61, IT IS HEREBY

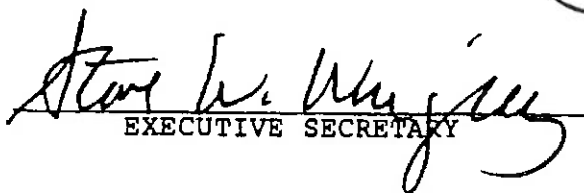
15
CE: Eason W. Walker
Dwight W. Jones
J. Earl L. Jones
John Walker

ORDERED: That the custody of the premises is hereby transferred from the State of Georgia to the Department of Natural Resources for the purposes above states.

This 14th day of December 1995.


GOVERNOR

ATTEST:


EXECUTIVE SECRETARY

A-11-0024-1995

**DESCRIPTIONS OF CERTAIN ISLANDS NAMED
EGG ISLAND BAR, PELICAN SPIT, SATILLA RIVER MARSH ISLAND
ST. CATHERINES ISLAND BAR, AND WILLIAMSON ISLAND**

Egg Island Bar is all of the land lying above mean low water which comprises the sand bar island, as it is now or may hereafter be configured, which is located in the Atlantic Ocean to the east of Egg Island, in McIntosh County, Georgia, as illustrated on the attached Map #1, which map is incorporated herein by reference; and

Pelican Spit is all of the land lying above mean low water which comprises the sand bar island, as it is now or may hereafter be configured, which is located in the Atlantic Ocean to the northeast of Sea Island, in Glynn County, Georgia, as illustrated on the attached Map #2, which map is incorporated herein by reference; and

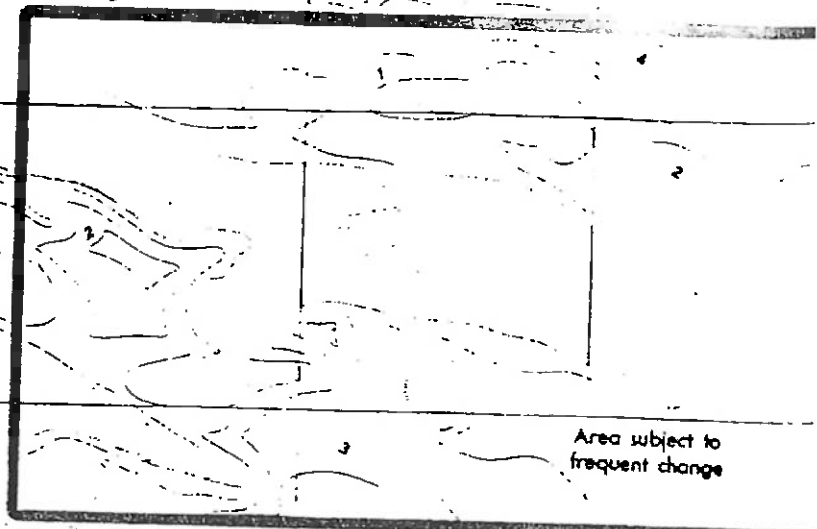
Satilla River Marsh Island is all of the land lying above mean low water which comprises the island, as it is now or may hereafter be configured, which is located in the Satilla River, in Camden County, Georgia, to the east of that area known as the Bulkhead, south of the entrance to Dover Creek, and west of the area known as Horseshoe Shoal, as illustrated on the attached Map #3, which map is incorporated herein by reference; and

St. Catherines Island Bar is all of the land lying above mean low water which comprises the sand bar island, as it is now or may hereafter be configured, which is located in the Atlantic Ocean to the northeast of St. Catherines Island, in Liberty County, Georgia, as illustrated on the attached Map #4, which map is incorporated herein by reference.

frequent change

Little Egg Island
NWR
AWA

SOUND



Area subject to frequent change

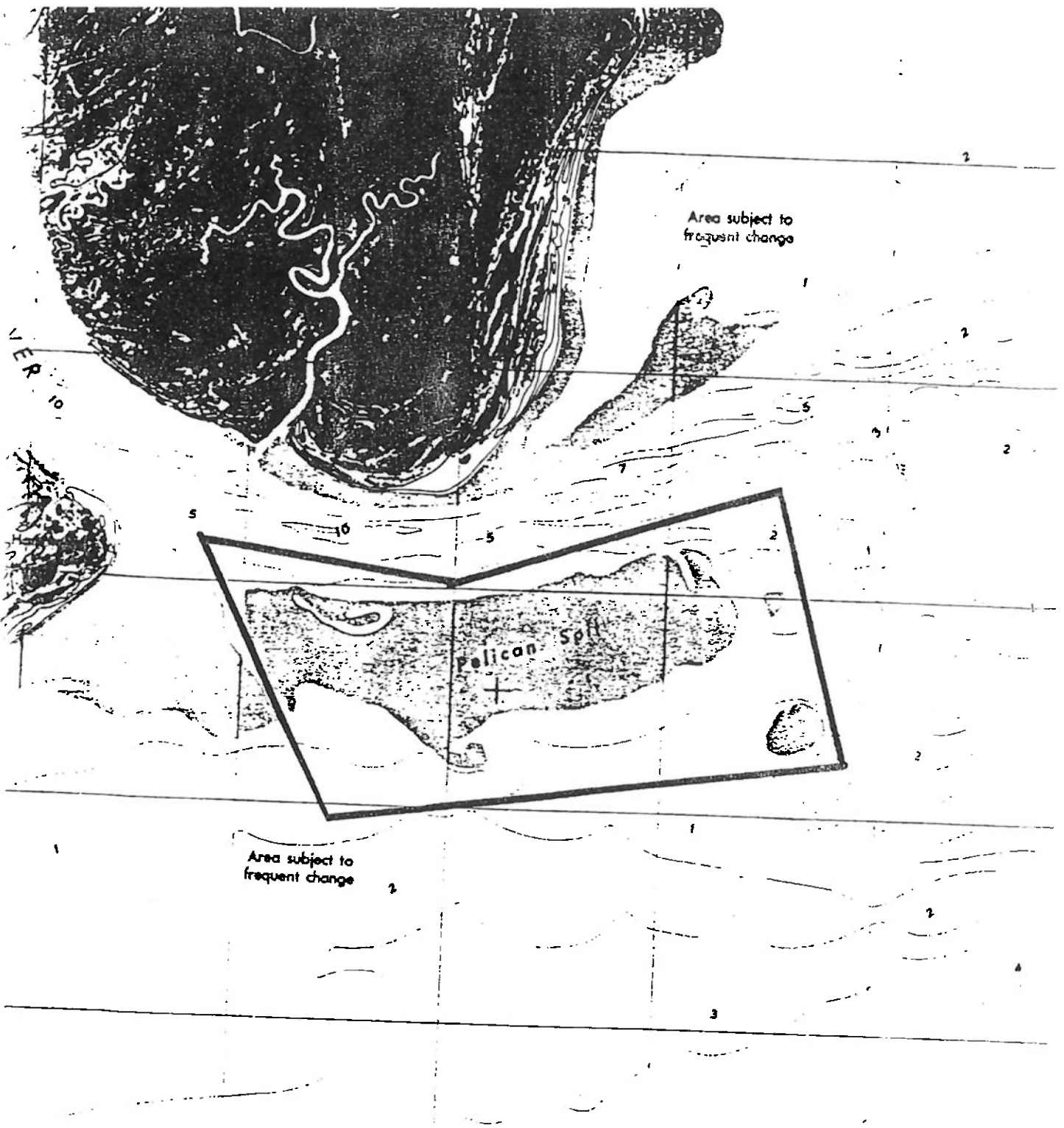
A T L A N T I C

MC INTOSH CO
GLYNN CO

LOCATION MAP #1
ISLAND BAR (McIntosh County)

MILES

Area subject to frequent change

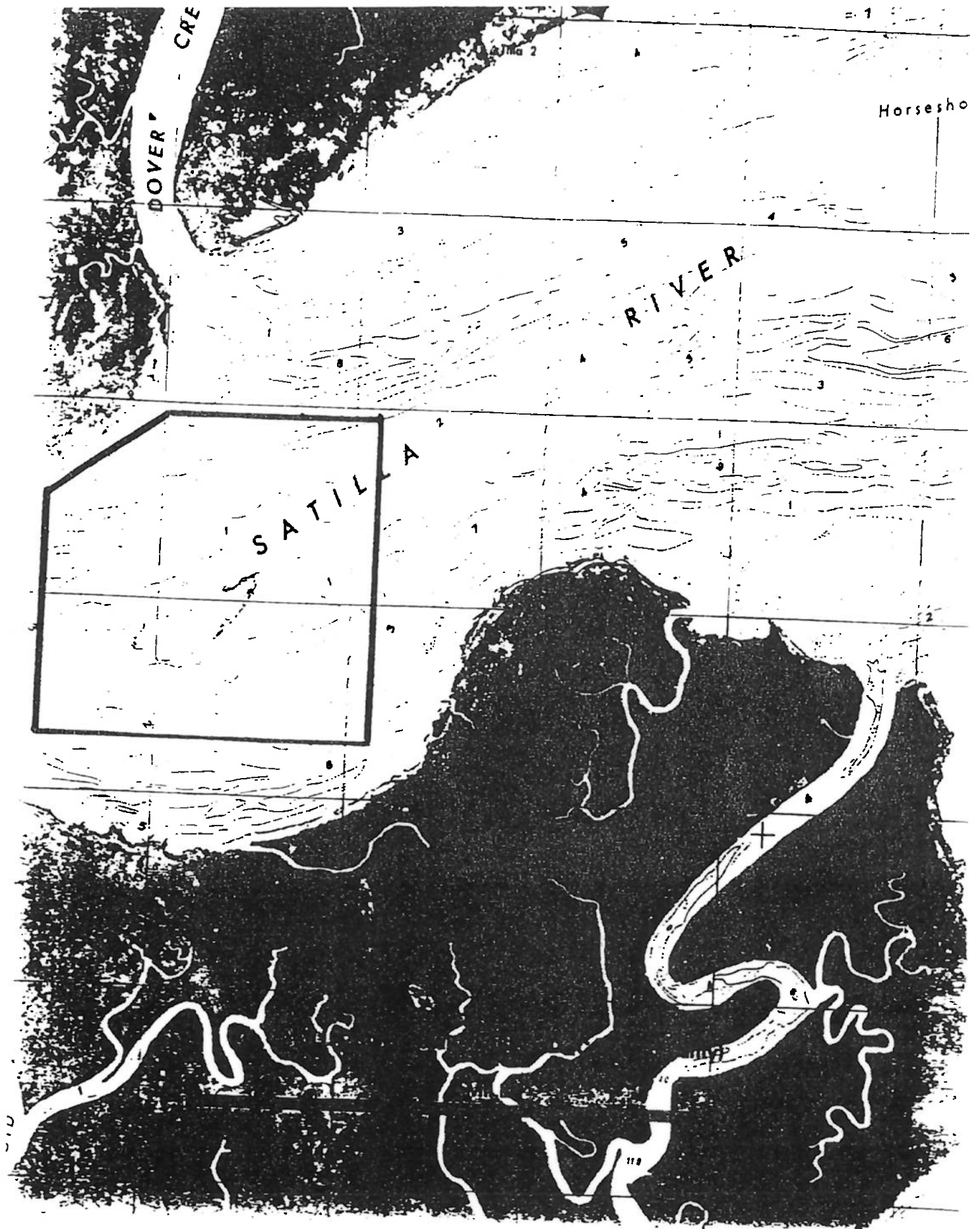


LOCATION MAP #2
PELICAN SPIT (Glynn County)

MILES



L A N T I C O C E A N



DOVER CREEK

= 1

Julia 2

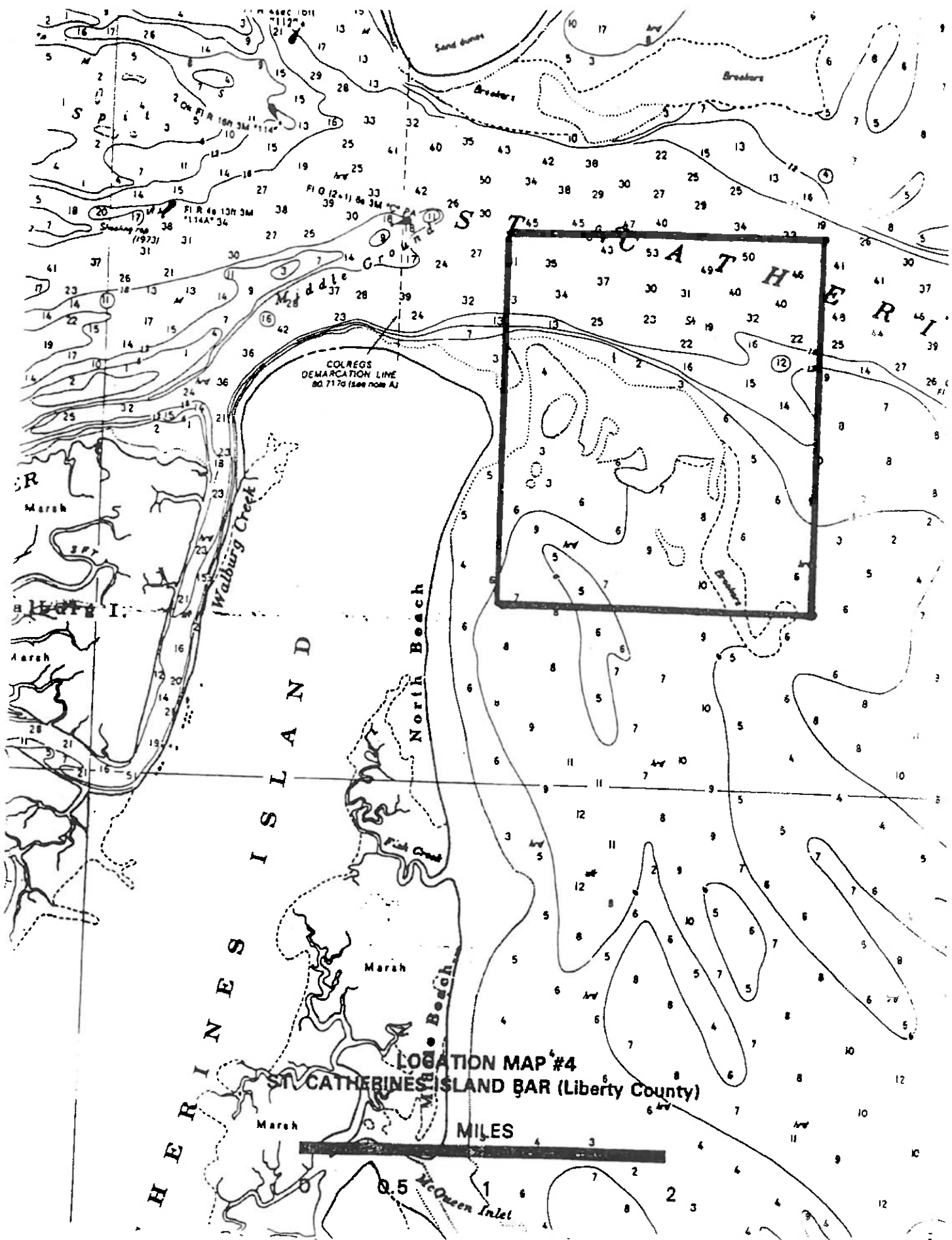
Horsesho

RIVER

SATILLA

SATILLA

118



LOCATION MAP #4
ST. CATHERINE'S ISLAND BAR (Liberty County)

MILES





Board of County Commissioners

Office of Planning & Development

107 N. Gross Road Suite 3 • Kingsland, GA 31548

Phone: (912) 729.5603 • Fax: (912) 729.5543 • www.co.camden.ga.us

Georgia DNR
Coastal Resources Division
Attn: Tim Keyes
One Conservation Way
Brunswick GA 31520

RE: CMPA permit application

This letter is in response to your zoning inquiry about the CMPA permit in unincorporated Camden County. The proposed request is in compliance with zoning requirements.

The Camden County Unified Development Code can be found at the following address for more information: <http://www.co.camden.ga.us/760/Organization-of-the-Code>

If I can assist in any other way, please feel free to contact me.

Thank you,

Joey Yacobacci
Director of Planning & Development
Camden County Board of Commissioners
Office: 912-510-4310
www.co.camden.ga.us

"Award-Winning Government"

STEVE L. HOWARD
County Administrator

JOHN S. MYERS
County Attorney

LANNIE E. BRANT
Commissioner, District 1

CHUCK CLARK
Commissioner, District 2

TREVOR READDICK
Commissioner, District 3

GARY BLOUNT
Commissioner, District 4

BEN L. CASEY
Commissioner, District 5

List of Sites on HSI by County

HSI ID	Site Name	Site County
10022	Baxley Creosoting Company	Appling
10221	Akzo Coatings (Former)	Appling
10202	McCranie Brothers Wood Preserving	Atkinson
10720	Alma - Radio Station Road MSWLF	Bacon
10385	Baldwin County Sanitary Landfill	Baldwin
10799	Concord Fabrics, Inc.	Baldwin
10274	Speedway SR 324 Landfill	Barrow
10359	Winder-Barrow Speedway	Barrow
10512	Georgia Classic Cleaners	Barrow
10924	Amrep, Inc.	Bartow
10283	Ben Hill County - Joshlyn Road MSWL	Ben Hill
10192	Berrien Products	Berrien
10643	Berrien County Landfill	Berrien
10027	Graphic Packaging International, Inc.	Bibb
10043	Southern Wood Piedmont - Central of Georgia Railroad	Bibb
10167	Macon Naval Ordnance Landfill (Former) - NPL Site	Bibb
10294	Walker Road Landfill (formerly 11th Street Landfill)	Bibb
10308	Allied Industrial Park - NPL Site	Bibb
10402	Central of Georgia Railroad Company - Macon Site	Bibb
10502	Transco Railcar Facility (Former)	Bibb
10511	Macon MGP Site	Bibb
10524	Wheelers Manufacturing Company, Inc.	Bibb
10737	Atlantic Cotton Mills	Bibb
10779	Mercer University Triangle	Bibb
10467	Bleckley County Municipal Landfill	Bleckley
10645	Quitman - SR 333 Landfill	Brooks
10646	Bryan County - US 280 Mill Creek MSWLF	Bryan
10391	Statesboro/Bulloch County Lakeview Rd. Landfill	Bulloch
10573	Louisiana Pacific Corp. - Statesboro	Bulloch
10739	Daniel Measurement and Control, Inc.	Bulloch
10188	Atlas Chemical Company	Burke
10322	Waynesboro Old City Dump	Burke
10450	Burke County Landfill	Burke
10614	Legion Industries	Burke
10278	Butts County - Brownlee Road Landfill	Butts
10854	Calhoun County SR 45 Morgan (SL)	Calhoun
10093	U.S. Naval Submarine Base, Kings Bay	Camden
10647	Camden County Vacuna Road LF	Camden
10711	Candler County S.R. 121 Metter # 021-001D(SL)	Candler



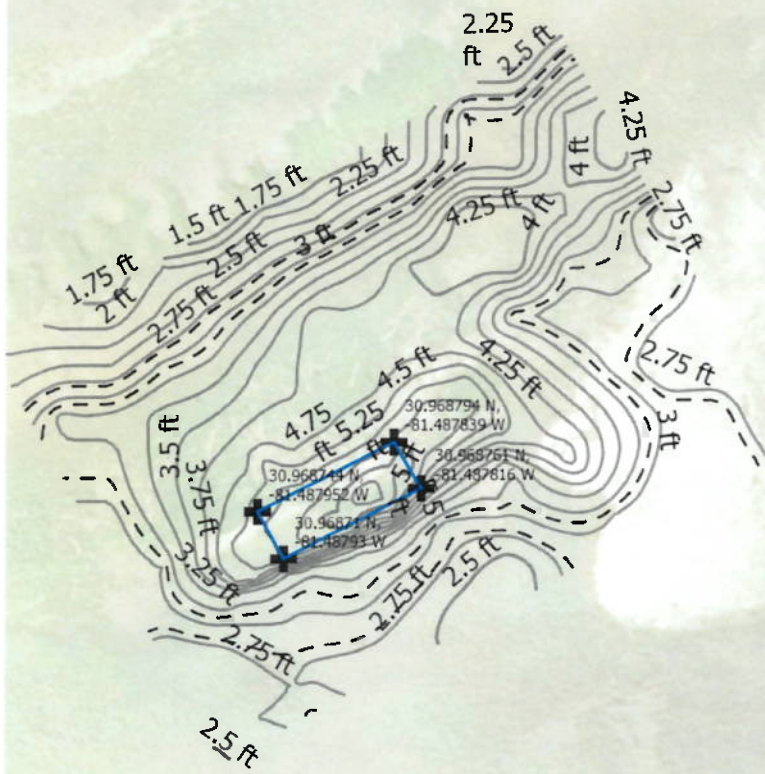
WILDLIFE RESOURCES DIVISION

MARK WILLIAMS
COMMISSIONER

TED WILL
DIRECTOR

This project will be completed in compliance with applicable erosion and sediment control responsibilities. There is no upland component of this project, and it will involve placement of shell/rock on existing shell. Any transport over marsh will be conducted on mats to minimize any potential damage to the marsh. There will be no impervious surfaces created in association with this project.

Satilla (East)



0 15 30 60 Feet

0.25' Contour

— 0.25' Contour

Tide Contour

- - Tide Contour

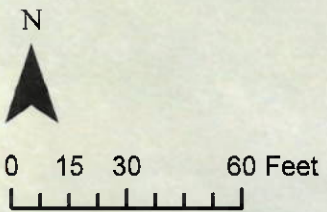
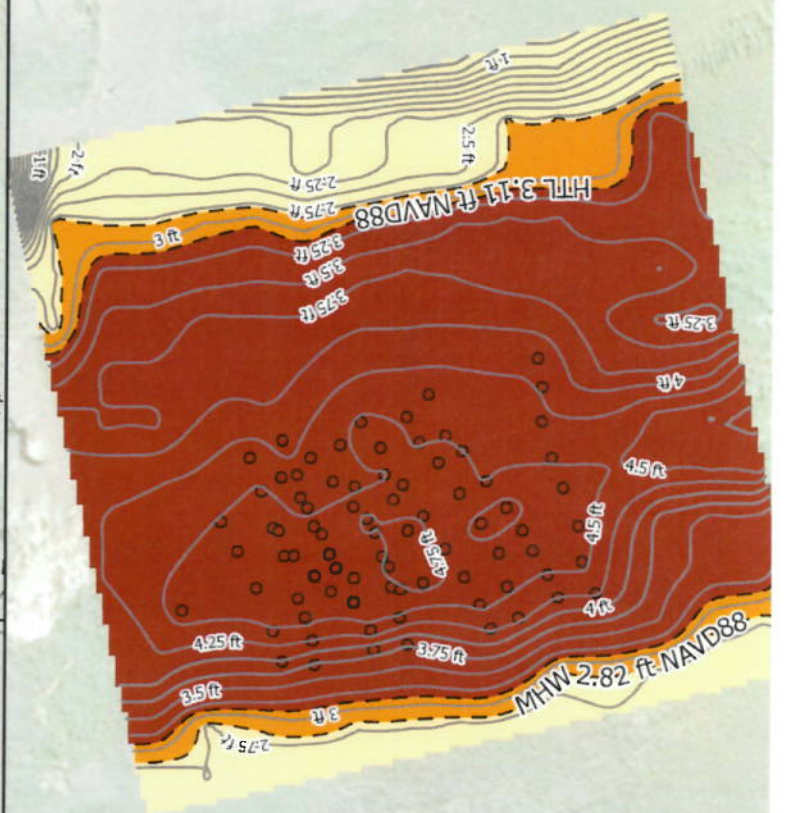
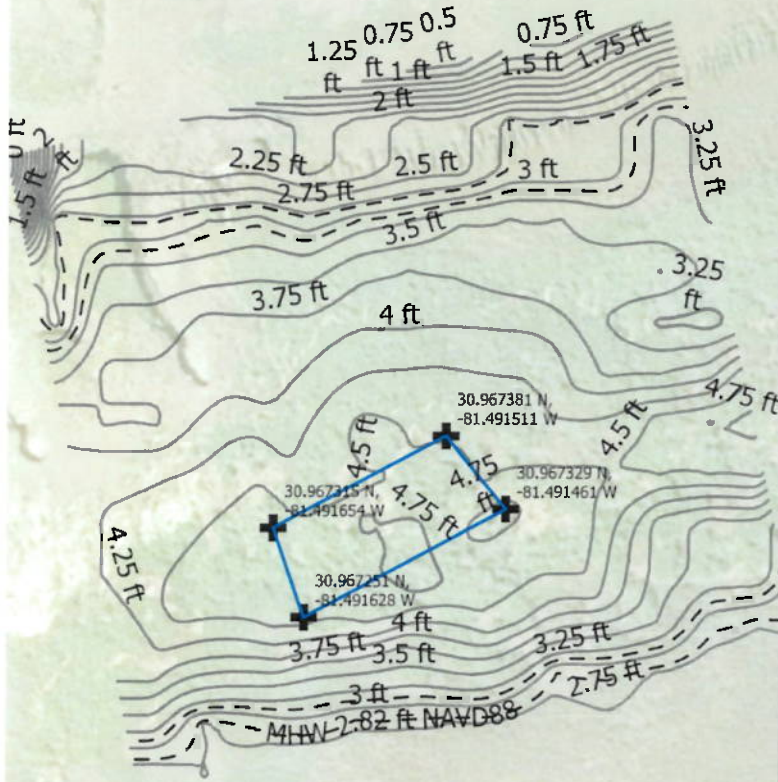
Elevation Survey Points

- MTL to MHW
- ⊙ MHW to HTL
- HTL to 5.6' above MTL
- Greater than 5.6' above MTL

Digital Elevation Model

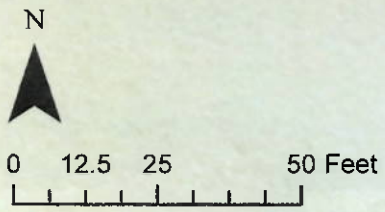
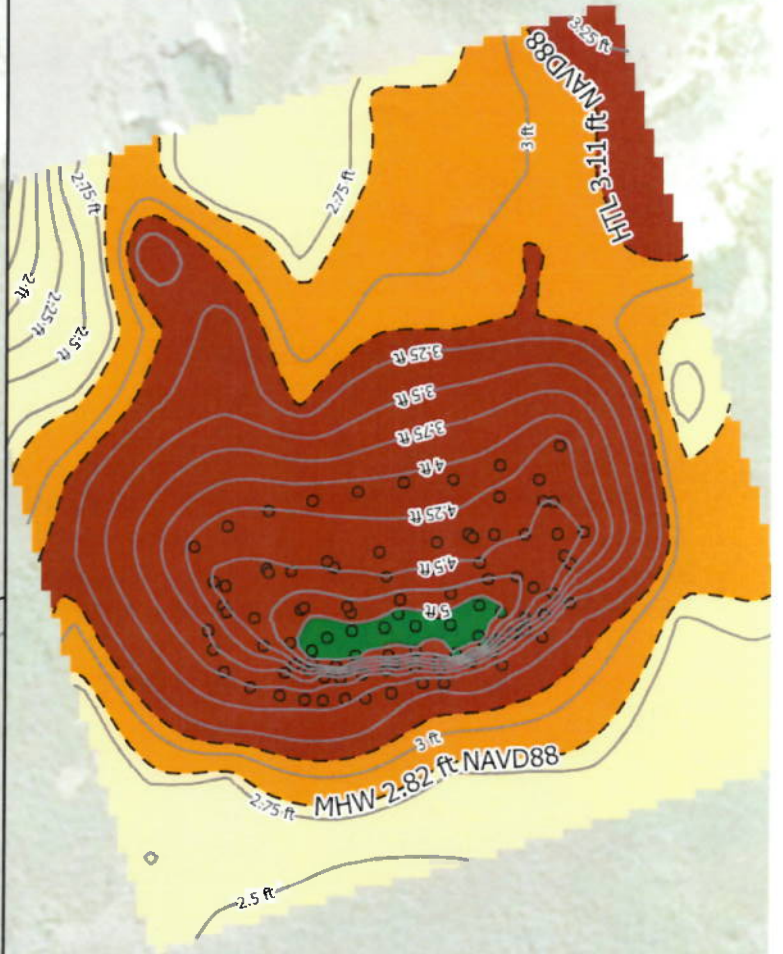
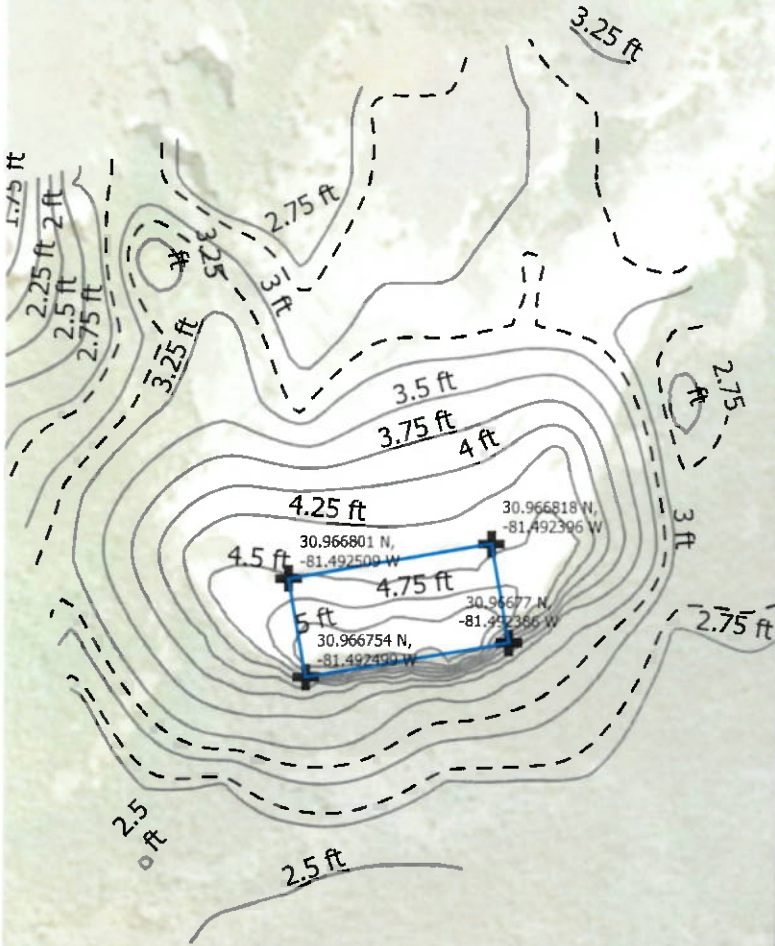
- Light Yellow MTL to MHW
- Orange MHW to HTL
- Dark Red HTL to 5.6' above MTL
- Green Greater than 5.6' above MTL

Satilla (Middle)



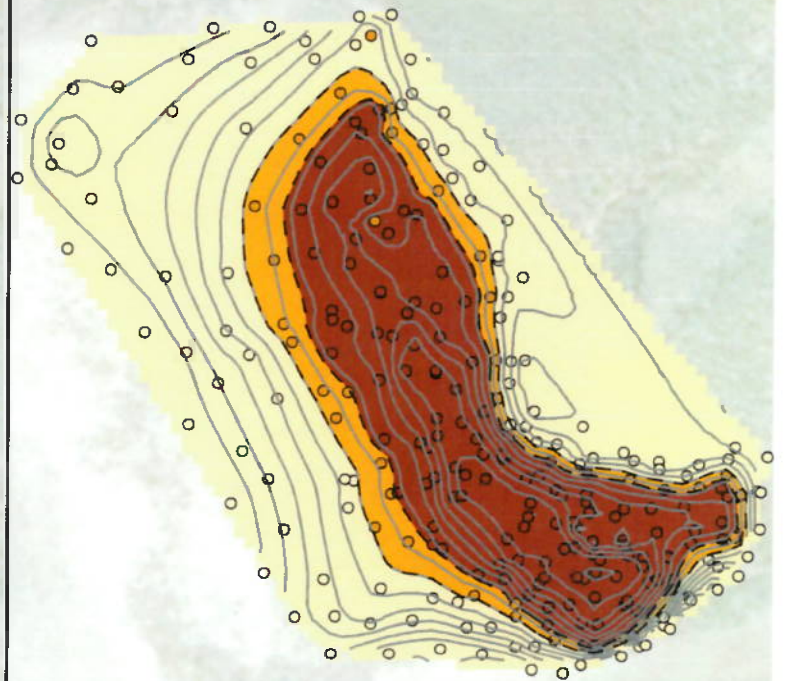
0.25' Contour	Elevation Survey Points	MHW to HTL
— 0.25' Contour	● HTL to 5.6' above MTL	HTL to 5.6' above MTL
Tide Contour	Digital Elevation Model	
- - Tide Contour	MTL to MHW	

Satilla (West)



<p>0.25' Contour</p> <p>— 0.25' Contour</p> <p>Tide Contour</p> <p>- - Tide Contour</p>	<p>Elevation Survey Points</p> <ul style="list-style-type: none"> ● HTL to 5.6' above MTL ● Greater than 5.6' above MTL 	<p>Digital Elevation Model</p> <ul style="list-style-type: none"> ■ MTL to MHW ■ MHW to HTL ■ HTL to 5.6' above MTL ■ Greater than 5.6' above MTL
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Stafford (North)



0 10 20 40 Feet

Tide Contour

- Tide Contour
- .25' Contour
- .25' Contour

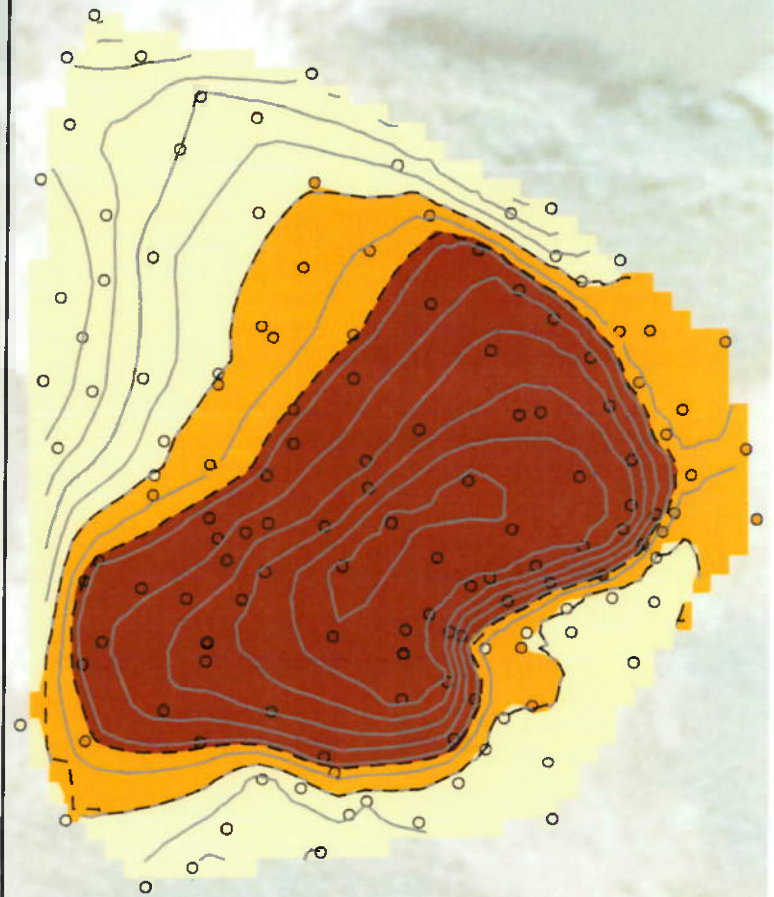
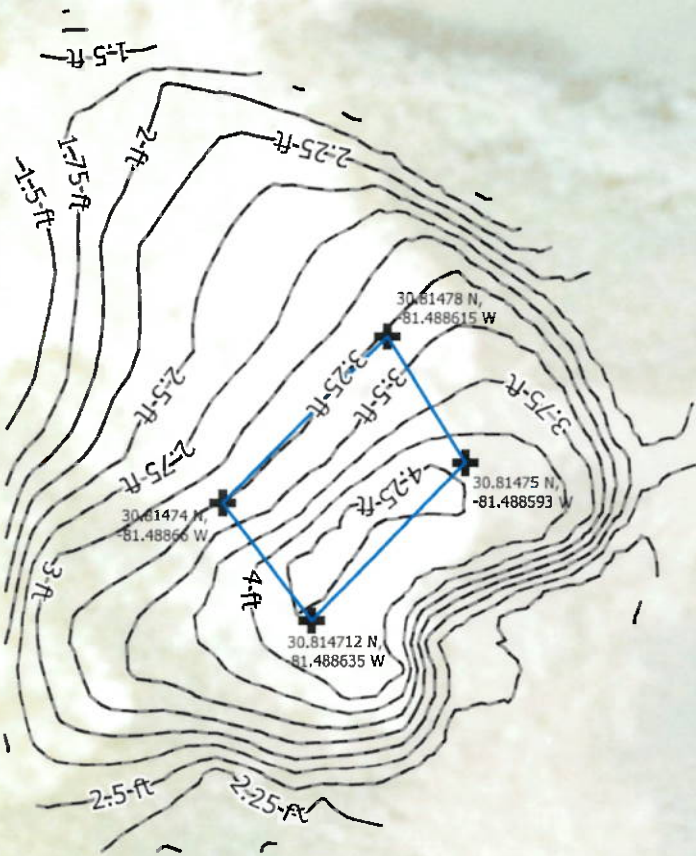
Elevation Survey Points

- Below MHW
- MHW to HTL
- HTL to 5.6' above MTL

Digital Elevation Model

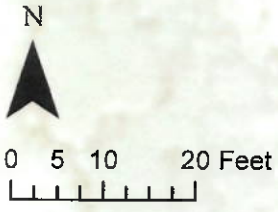
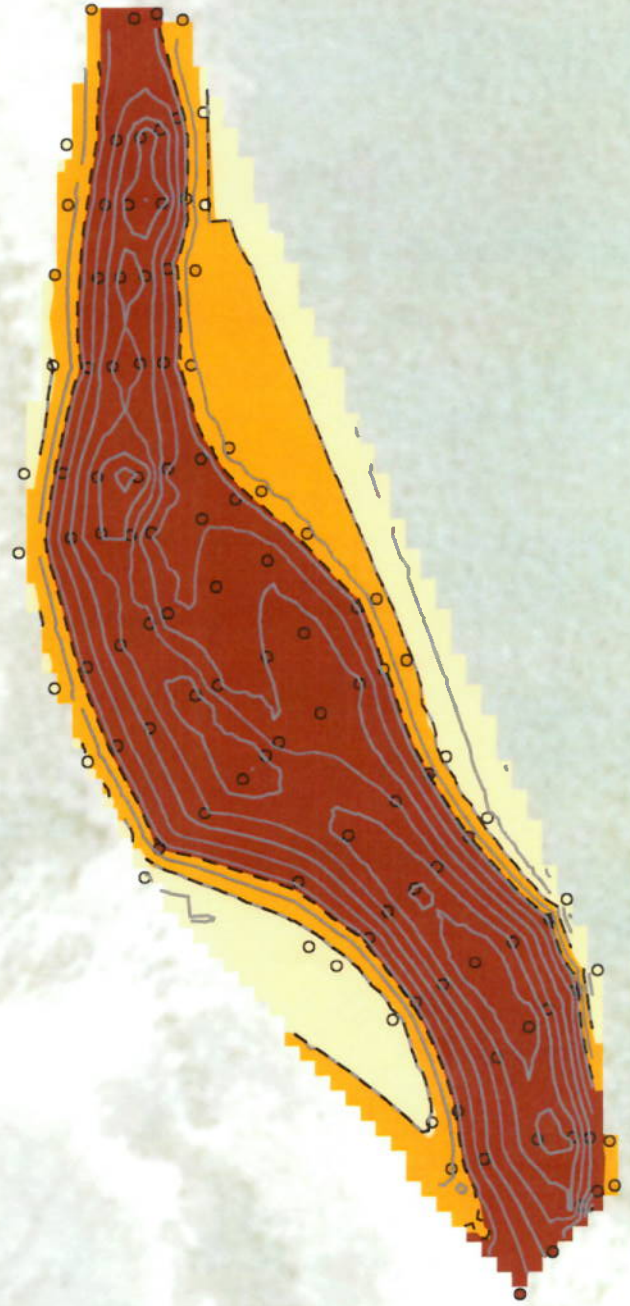
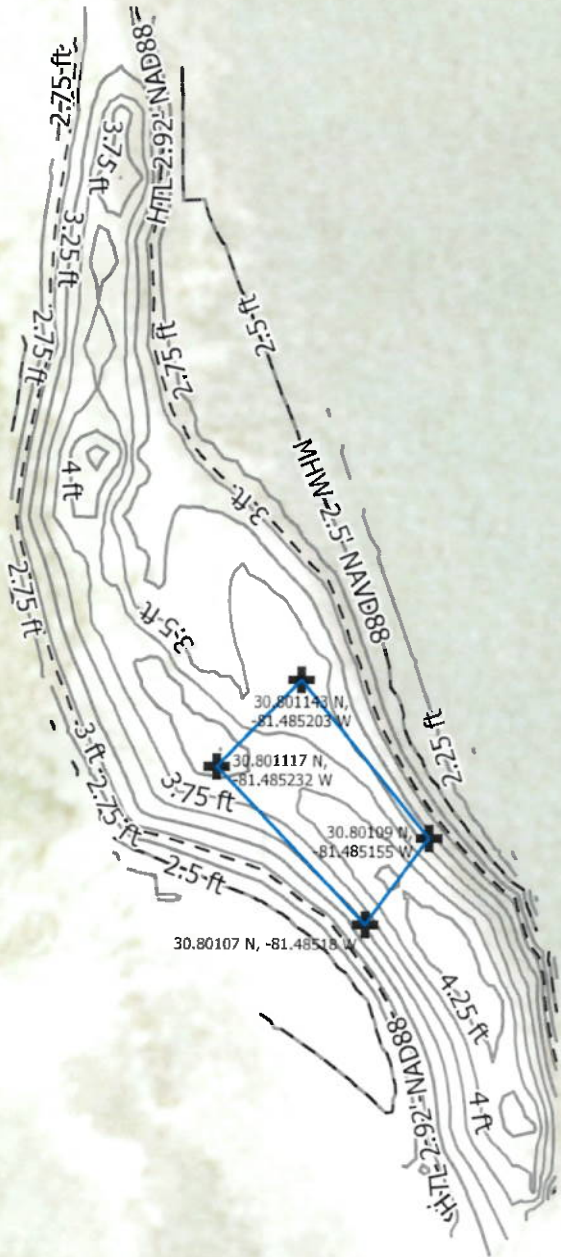
- Below MHW
- MHW to HTL
- HTL to 5.6' above MTL

Stafford (Middle)



Tide Contour	Elevation Survey Points	Digital Elevation Model
--- Tide Contour	○ Below MHW	Light Yellow Below MHW
.25' Contour	● MHW to HTL	Orange MHW to HTL
— .25' Contour	● HTL to 5.6' above MTL	Dark Red HTL to 5.6' above MTL

Stafford (South)



Tide Contour
 - - Tide Contour
.25' Contour
 — .25' Contour

Elevation Survey Points
 ○ Below MLW
 ● MLW to HTL
 ● HTL to 5.6' Above MTL

Digital Elevation Model
 Below MHW
 MHW to HTL
 HTL to 5.6' above MTL