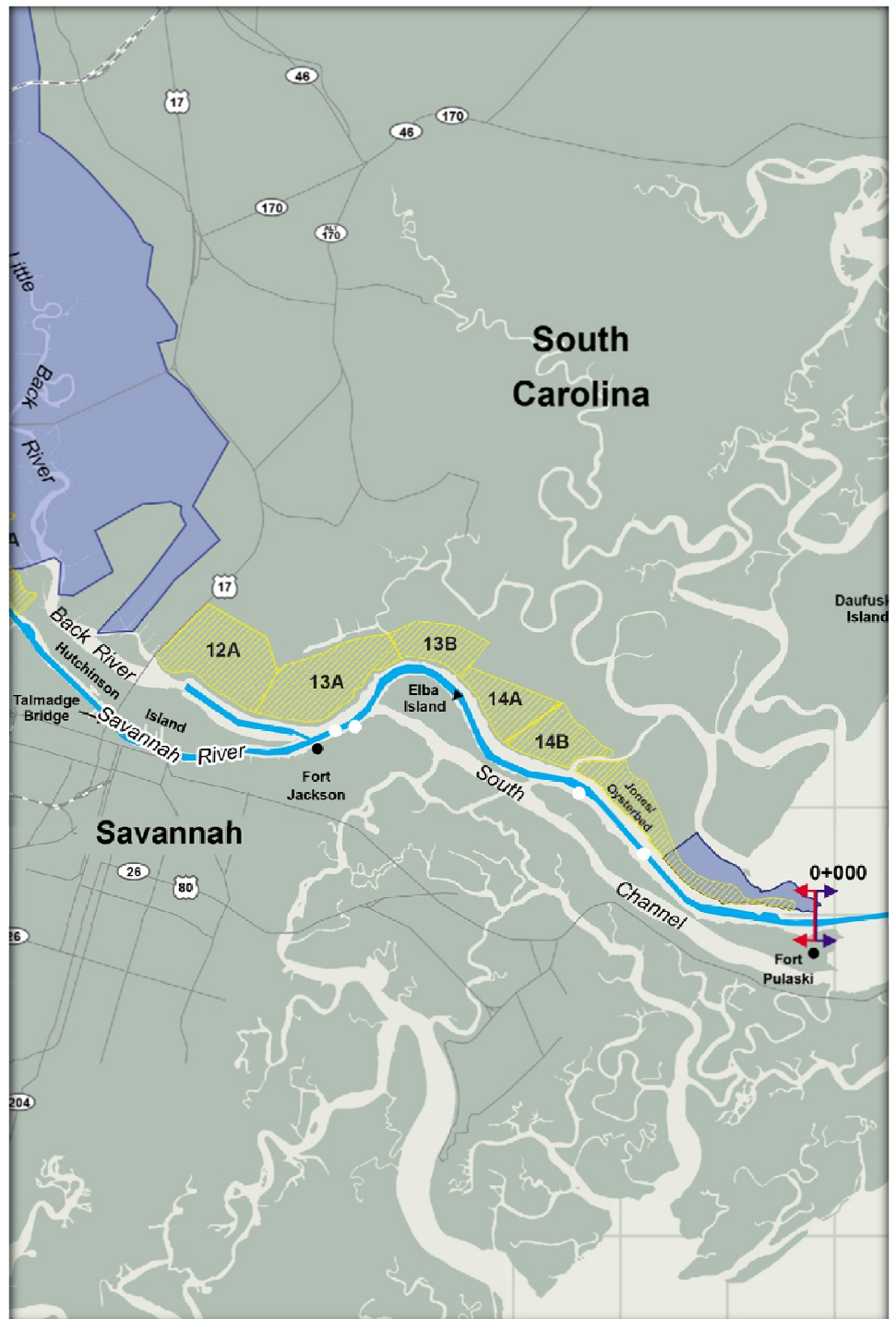

GENERAL RE-EVALUATION REPORT

APPENDIX B: REAL ESTATE

SAVANNAH HARBOR EXPANSION PROJECT

Chatham County, Georgia and Jasper County, South Carolina

January 2012
(Revised July 2012)



**US Army Corps
of Engineers**
*Savannah District
South Atlantic Division*

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**REAL ESTATE PLAN
for
SAVANNAH HARBOR EXPANSION
GENERAL REEVALUATION REPORT**

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Exhibit A - Authorization for Entry for Construction

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**REAL ESTATE PLAN
FOR
GENERAL REEVALUATION REPORT
SAVANNAH HARBOR EXPANSION
SAVANNAH, GEORGIA**

1. THE REAL ESTATE REPORT

This report is tentative in nature and is to be used for planning purposes only. Although the report is written based on specific data from Savannah District, modifications to the plan may occur thus changing the final acquisition areas and/or administrative and land cost. The main report addresses five options for deepening the harbor from its existing depth of 42' to depths of 44', 45', 46', 48' and the Selected National Economic Development (NED) plan of deepening to 47'. The purpose of the Real Estate Report is to detail the real estate components of the recommended plan for navigation improvements at Savannah Harbor and the associated environmental mitigation.

The following standard and non-standard estates will be acquired for this project and will be discussed in detail later in this report.

- a. Fee Simple for mitigation lands and City of Savannah impoundment site
- b. Non-Standard Channel Improvement\Sloughing Easement for channel wideners
- c. Special Use Permit from the Department of Interior – US Fish & Wildlife Service (USFWS) for all lands needed for flow modifications within the boundary of the Savannah National Wildlife Refuge
- d. A land exchange with the Department of Interior, United States Fish and Wildlife Service for lands lost due to harbor widening
- e. Perpetual Road Easements for access to the proposed fish bypass channel and for the proposed Dissolved Oxygen Injection Site two.
- f. Perpetual Pipeline Easement associated with the City of Savannah Impoundment Site

2. AUTHORITY AND PURPOSE

The Georgia Ports Authority (GPA) conducted a feasibility study of potential navigation improvements at Savannah Harbor, Georgia under the authority granted by Section 203 of Water Resources Development Act (WRDA) of 1986 (P.L. 99-662). The US Army Corps of Engineers (the Corps) adopted these documents prepared by the GPA and published a Draft Tier I EIS in May 1998 and the Final Tier I EIS in September 1998. In the Water Resources Development Act of 1999 (Section 101(b)(9)), the US Congress conditionally authorized deepening the Savannah Harbor navigation channel to a maximum depth of -48 feet Mean Low Water (MLW). The conditional authorization stipulated that approval of additional studies and the project is required from the Administrator of the Environmental Protection Agency, the Secretary of Commerce, the Secretary of Interior, and the Secretary of the Army.

The Corps completed the Tier I EIS process when it signed a Record of Decision (ROD) in December 1999. The ROD included additional requirements, including additional review by the Corps of Engineers and approval of the Chief of Engineers to ensure that construction of the project would comply with all applicable laws and policies.

The Savannah District of the Corps in conjunction with the USACE Deep-Draft Navigation Center of Expertise has developed this General Reevaluation Report (GRR) to fulfill the conditions of the conditional authorization granted in 1999 and to conduct investigations required by the National Environmental Policy Act of 1969 (NEPA). This GRR and EIS provide documentation of the technical and plan formulation analyses conducted in the development of a recommended plan for navigation improvement at Savannah Harbor and associated environmental mitigation. The GRR and EIS assess mitigation plans for alternative channel depths. The EIS includes a final mitigation plan and an incremental analysis of alternative channel depths from -42 to -48 feet, as required by the conditional authorization. This study identifies and selects the National Economic Development (NED) plan, the plan that has the greatest net economic benefits consistent with protection of the Nation's environment.

The Georgia Department of Transportation is the non-Federal Sponsor (NFS) for this project. All dredge material disposal areas and staging areas necessary for this project are currently vested in the NFS. These lands were provided for previous federal projects and credit for these lands will not be afforded.

3. PROJECT DESCRIPTION

Savannah Harbor is a Federal navigation project located along the Savannah River. The harbor comprises the lower 21.3 miles of the Savannah River (which, with certain of its tributaries, forms the boundary between Georgia and South Carolina along its entire length of 313 miles) and 11.4 miles of channel across the bar to the Atlantic Ocean. The Port of Savannah is owned by the State of Georgia, operated by the Georgia Ports Authority and is the fourth busiest and fastest growing container terminal in the United States. A vicinity map is at Figure 3-1.

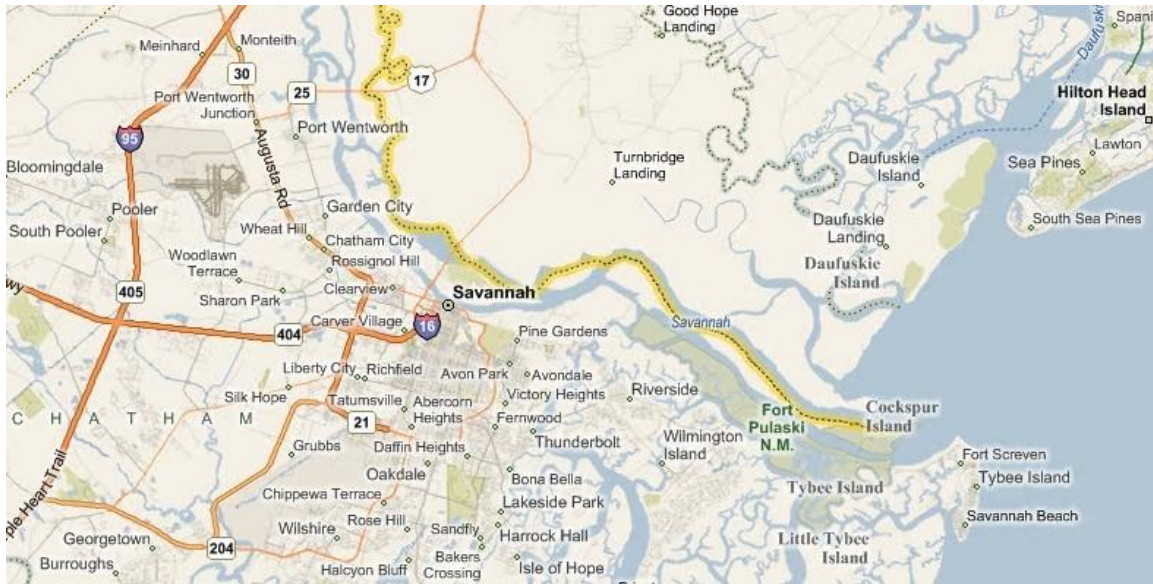


Figure 3-1 Vicinity Map

4. REAL ESTATE ACQUISITION

The requirements for lands, easements, rights-of-way and relocations and disposal areas (LERRD) include the rights to construct, operate, and maintain channel improvement works in connection with the operation and maintenance of the Savannah Harbor. The real estate requirements for this project can be broken down into the following five acquisition categories. Table 4 shows a break down by interest to be acquired, acreage and the estimated land cost excluding administrative and contingencies.

Table 4
Land Cost by Estate & Acreage

Estate	Acreage	Estimated Cost
Fee	2314	\$ 14,275,500
Easement	15	\$ 138,000
Use Permit	48	\$ -
TOTAL	2377	\$ 14,413,500

Category one will consist of acquiring approximately seven acres of land necessary for the deepening phase of the project. This phase requires channel wideners that will be acquired using the non-standard channel improvement/sloughing easement at the locations identified on Table 4-1 and shown on figures 4.1-1 thru 4.1-3. Approval of this non standard estate was recommended in order to stay consistent with existing easements previously acquired throughout the harbor. Approval of this non-standard estate is addressed in Section 15 of this report. Of the seven acres needed for the deepening phase, approximately six acres of uplands and approximately seven (7.2) acres of wetlands identified on figure 4.1-1 and 4.1-2 are managed by the USFWS. The loss of these lands will be offset through a land exchange with the USFWS. The estimated land cost for this category excluding contingencies and administrative cost is \$70,500. The

actual land cost of the exchange will be based on an approved real estate appraisal meeting Federal Appraisal Standards conducted at the time of the transfer.

Category two will require the execution of a Special Use Permit between the NFS and the USFWS covering approximately forty-eight (48) acres of land required for the construction of mitigation features proposed within the boundaries of the Savannah National Wildlife Refuge. As part of these mitigation features proposed, the Tide Gate located on Back River constructed as part of the 1977 Savannah Harbor Project will be removed and a public boat ramp will be constructed in this location. Approximately twenty (20) acres in fee will be required for this feature at an estimated land cost of \$1,885,000 excluding contingencies and administrative cost.

Category three will consist of acquiring approximately 2,245 acres of land necessary for mitigation purposes to offset losses to wetlands. These mitigation lands will be acquired in fee simple by the NFS and deeded to the USFWS to become part of the Savannah National Wildlife Refuge. The estimated land cost for the 2,245 acres is \$10,102,500 excluding contingencies and administrative cost. Two additional properties consisting of approximately 10.5 acres in fee simple and approximately two acres in a perpetual road easement will be acquired by the NFS for the construction of Dissolved Oxygen Injection Systems. The Dissolved Oxygen facilities will be constructed and maintained by the United States of America, Savannah District, Corps of Engineers. The estimated land cost for these sites is approximately \$397,500 excluding contingencies and administrative cost.

Category four will consist of the construction of an above ground raw water impoundment on approximately thirty-five (35) acres of NFS owned lands and the acquisition of a Perpetual Pipeline Easement from CSX Railroad Corporation for two pipeline crossings located adjacent to the impoundment. The estimated real estate cost for this feature is \$1,926,000. Office of Counsel has determined based on the Chief's Report that this would be considered a chloride mitigation feature and not a utility relocation.

Category five will consist of acquiring approximately seven acres of land in fee for the proposed Fish Bypass Channel located at the New Savannah Bluff Lock & Dam at an estimated real estate cost of \$24,500 excluding contingencies and administrative cost. A perpetual road easement over approximately six acres will also be required for access to the proposed fish bypass channel at an estimated real estate cost of \$7,500 excluding contingencies and administrative cost.

A more detailed description of all project features and measures follows. All dredge material disposal areas and necessary staging areas are currently vested in the NFS and maintained by the Corps of Engineers as part of the existing Savannah Harbor Project. No real estate credit will be given for these disposal areas previously provided. The following is a description of lands required for each feature of the project.

4.1 CHANNEL WIDENERS

Three areas consisting of 6.6 acres above the ordinary mean high water mark along the harbor will be impacted by dredging. The mean high water mark was established by survey over a nineteen year (Jan 1983- Dec 2001) National Tidal Datum Epoch. These three areas are identified on Table 4-1 and Figures 4.1-1 and 4.1-2 and will be acquired using the non-standard Channel Improvement\Sloughing Easement. The uplands on the north side of Kings Island Turning Basin, station 97+000 and at station 102+000 are vested in the United States of America (USA) and managed by the USFWS and comprise a combined six acres of uplands. The loss of these uplands will be offset through a land exchange with the USFWS. The uplands on the north side of station 88+500 are vested in the Chatham County Economic Development Authority and consist of 0.60 of an acre above the ordinary mean high water mark. Approximately 7.2 acres of wetlands will be lost as a result of these wideners and turning basin thus requiring mitigation.

The navigational servitude is the dominant right of the Government under the Commerce Clause of the U.S. Constitution (U.S. CONST. Art.I, §8,cl.3) to use, control and regulate the navigable waters of the United States and the submerged lands thereunder for various commerce-related purposes including navigation and flood control. In tidal areas, the servitude extends to all lands below the ordinary mean high water mark. In non-tidal areas, the servitude extends to all lands within the bed and banks of a navigable stream that lie below the ordinary high water mark. It is a power, not a property right, and the owner of the underlying land is not entitled to compensation, as the ownership interest was always subject to this right.

The practical result is that no interest in real estate is required for the United States to implement a project purpose or measure related to navigation in areas subject to the navigation servitude. Here, the measures proposed for implementation within the servitude are related to navigation and include the navigation features and those measures to address the impacts of the navigation project.

The City of Savannah's municipal and industrial water supply intake is located within the navigational servitude but the proposed raw water impoundment designed to address impacts from increased chlorides is being treated as a mitigation feature authorized by the Chief's Report. See Section 4.4.

Some of the lands that are subject to the servitude are owned by the United States of America and managed by the U S Fish and Wildlife Service. The Corps of Engineers will not assert the navigational servitude against a sister agency. Rather, the land (approx. 7.2 ac. wetlands) that would otherwise be subject to the servitude will be included in the lands acquired through a land exchange from the other Federal Agency.

Historical maps have been reviewed and no lands proposed for acquisition appear to fall within lands filled during previous projects or by other mechanical means. A more detailed search of the historical records will be accomplished during the preliminary acquisition phase. After this more detailed search, any adjustments to acreage required for the project will be identified and adjustments made accordingly.

Table 4-1
LANDS REQUIRED FOR CHANNEL WIDENERS

FIGURE #	STATION LOCATION	OWNER	ACREAGE ABOVE MHW 46', 47' & 48' Depth
Figure 4.1-1	Kings Island Turning Basin	USFWS	4.4
Figure 4-1-1	102+000	USFWS	1.1
Figure 4-1-2	97+000	USFWS	0.5
Figure 4-1-3	87+500	Chatham County Economic Development Authority	0.6
		TOTAL	6.6

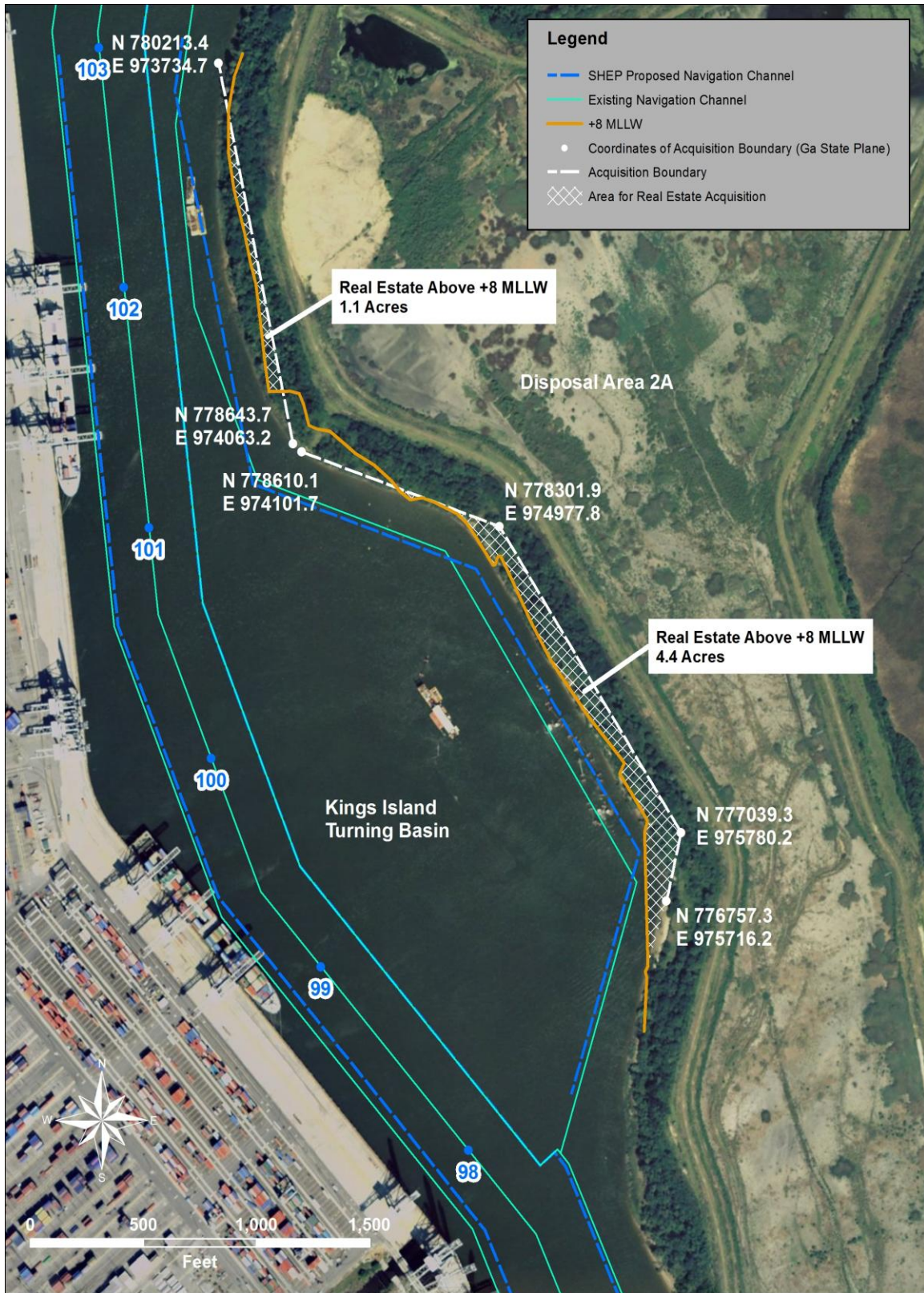


Figure 4.1-1 KINGS ISLAND TURNING BASIN and STATION 102+000



Figure 4.1-2 STATION 97+000

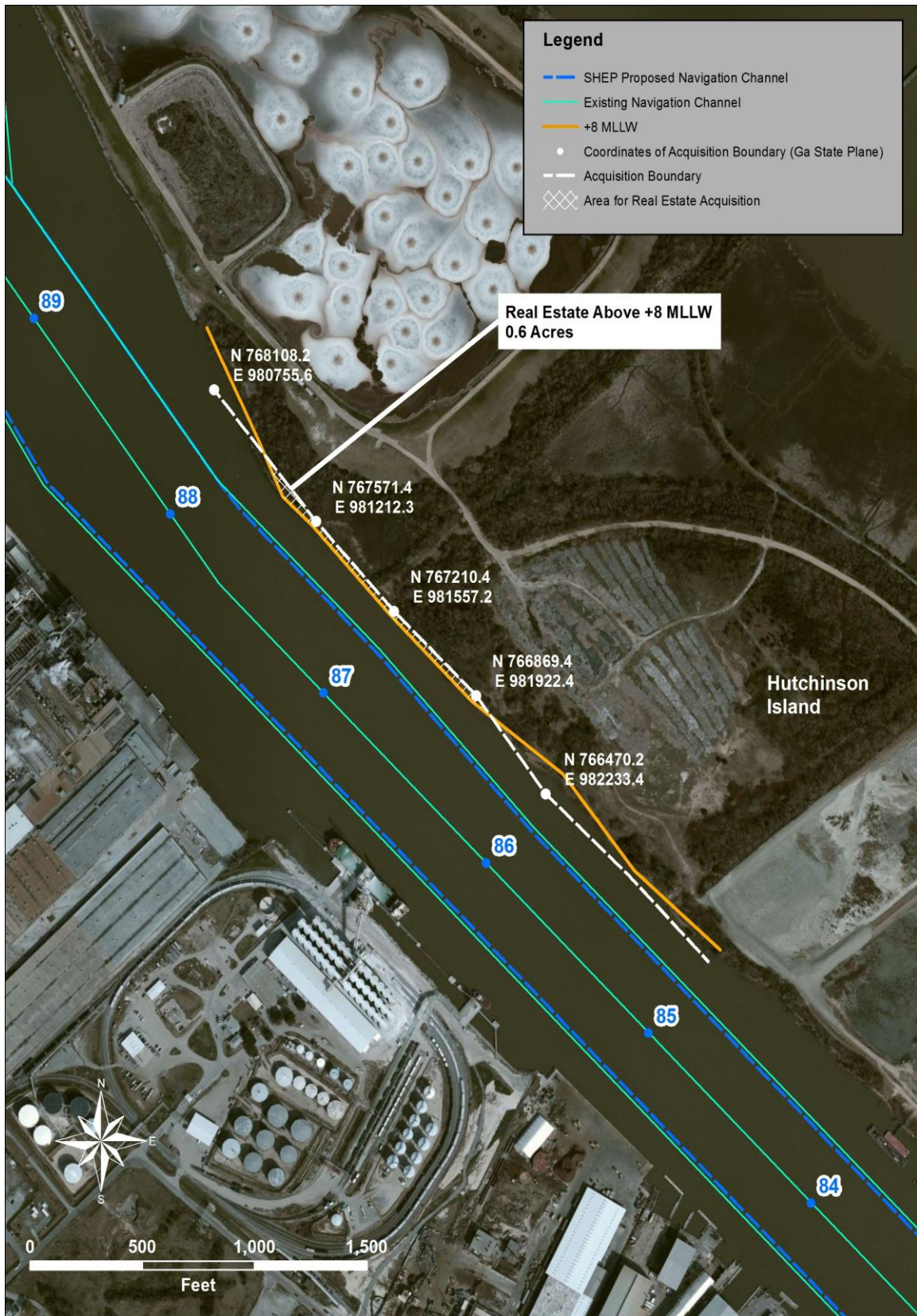


Figure 4.1-3 STATION 87+500

4.2 MITIGATION FEATURES CONSTRUCTED WITHIN REFUGE:

Mitigation Plan 6A, the recommended plan, identifies the need of approximately forty-eight (48) acres of land above the ordinary mean high water mark in various locations throughout the Savannah National Wildlife Refuge (Refuge) and approximately eighteen (18) acres of land located at the tide gate structure on Back River in order to construct water diversion features. The NFS will enter into a Special Use Permit with the USFWS for the forty-eight acres of land located within the Refuge. Table 4.2-1 (taken from Mitigation Plan) is a description of the features to be constructed within the Refuge. Figures 4.2-1 and 4.2-2 show the general location of each feature.

Table 4.2-1
Mitigation Plan 6A - Land Requirements

CHANNEL DEPTH	FLOW-ALTERING PLAN	FEATURES	ACREAGE ABOVE MHW
44'	PLAN 6B	Diversion Structure at McCoys Cut	1 Ac.
		Close western arm at McCoys Cut	1 Ac.
		Close Rifle Cut	1 Ac.
		Fill Sediment Basin	0 Ac.
		Remove Tidegate	18 Ac.
		Disposal Area 1S	45 Ac.
45', 46', 47 and 48'	PLAN 6A	All of Plan 6B plus Deepen at McCoys Cut	0 Ac.
		Total for Plans 6 A&B	66 Ac.

McCoys Cut: The diversion at McCoys Cut would consist of two structures, one on each side of the river. A rock diversion structure would extend about 465' from the Georgia side of the river and a sheetpile diversion wall would extend roughly 150' out from the South Carolina shoreline. Working together, they would divert water flow down through McCoys Cut into the Back and Middle Rivers. Most of the construction would take place from barges to minimize impacts to adjacent lands. The western arm at McCoys Cut shown would be closed by constructing a plug at one end. Approximately two acres of land above the ordinary mean highwater line will be needed for these two features and is vested to the USA and managed by the USFWS.

Closure of Rifle Cut: The closing of Rifle Cut involves constructing a plug at Middle River. Approximately one acre (0.5 of an ac. on either side) of land above the ordinary mean high water mark will be needed for this feature and is vested to the USA and managed by the USFWS.

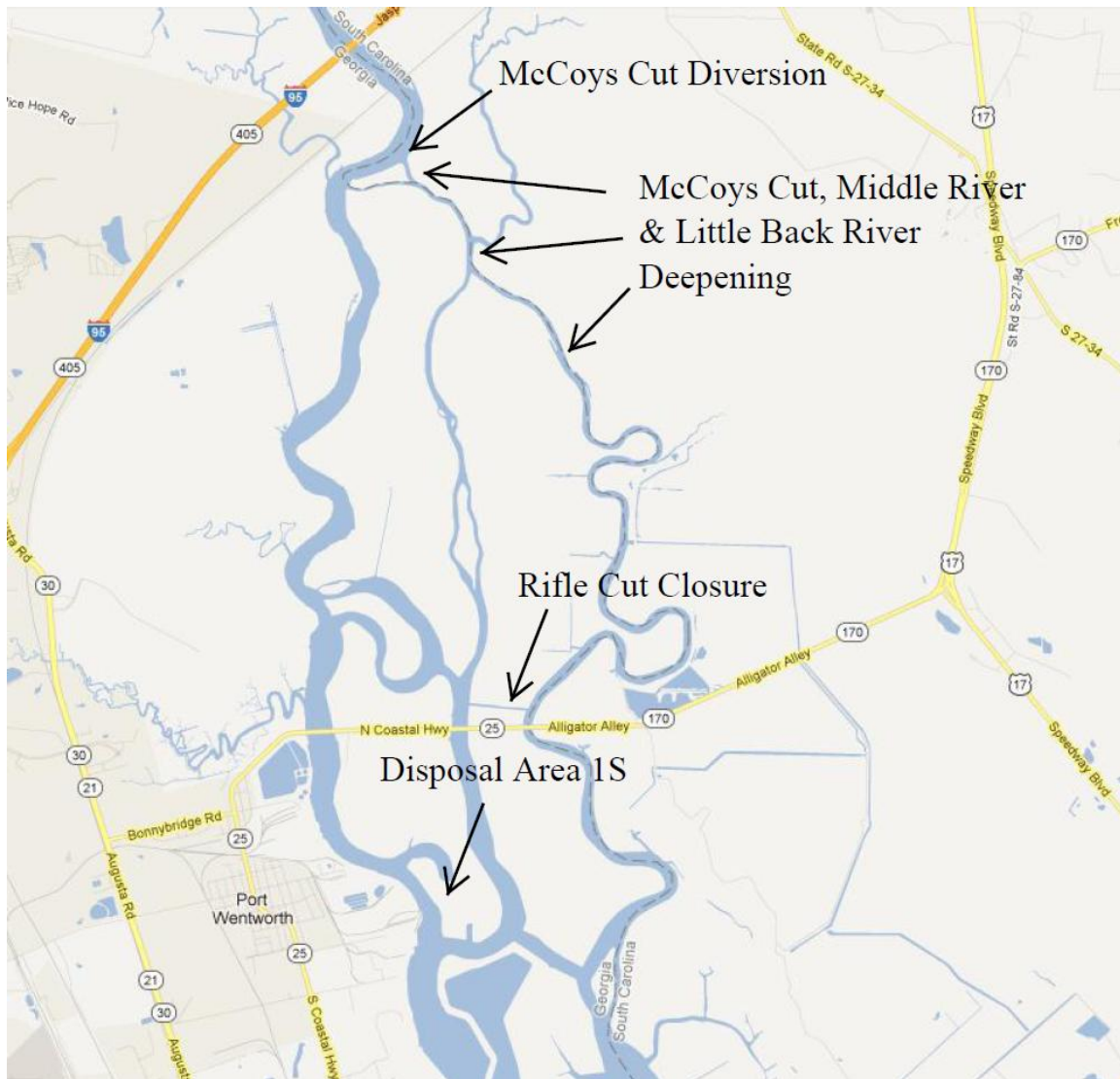


Figure 4.2-1 General Location of Mitigation Features



Figure 4.2-2 General Location of Mitigation Features

Fill Sediment Basin: There are no real estate requirements for this feature.

Remove Tide Gate: The Tide Gate and its abutments shown on Figure 4.2-3 through 4.2-5, are located on seventeen (17) acres of lands vested to the USA and managed by the US Army Corps of Engineers, Savannah District on Back River. The Tide Gate constructed in 1977 as part of the Savannah Harbor project would be removed so that tidal flows are no longer restricted in Back River. Approximately two acres of NFS owned lands would be excavated from the north abutment. Approximately eighteen (18) acres of which eight acres are vested to the United States of America, five acres is vested to Chatham County and, five acres of privately owned lands would be removed from the south abutment to expand the width of the river past the site.



Figure 4.2-5 Remove Tide Gate and Abutments

Disposal Area 1S: Disposal Area 1S, also known as Onslow Island shown on Figure 4.2-6 has been under a perpetual use permit from the U. S. Fish and Wildlife Service to the Corps of Engineers since June 1973. The Corps ceased using this area sometime in the early 1990's. The current proposal is to excavate approximately forty-five (45) acres of high ground down to the adjoining marsh elevation and allow the area to naturally revegetate itself with salt marsh. Upon completion of the restoration, the existing permit will be terminated. There are no operation and maintenance cost associated with this feature.



Figure 4.2-6 Disposal Area 1S

McCoys Cut, Middle and Little Back River Deepening: McCoys Cut and down both Little Back and Middle Rivers would be deepened to allow more freshwater to flow into Little Back and Middle Rivers. The 5,250 foot long section through McCoys Cut would be deepened to a depth of -13.1', while excavation would extend 5,565' down both Little

Back and Middle Rivers, and occur to a depth of -9.8'. There are no real estate requirements for this feature.

The above flow-altering features would be constructed within the Savannah National Wildlife Refuge. All work will be covered under a Special Use Permit between the NFS and the USFWS. The administrative cost for these permits and any additional lands payments required by the USFWS will be credited toward the project. These estimated costs are included in the real estate estimate. Acquisition of privately owned lands required for the removal of the Tide Gate and Abutments will be the responsibility of the NFS. For a more detailed description of these features, please see Section 8 of the Engineering Appendix.

4.2.1 Proposed Hutchinson Island Boat Ramp

Due to the proposed closure of Rifle Cut, recreational boater access routes will be interrupted. For recreational boaters using the public boat ramp at Houlihan Bridge on Front River, the route to move from this ramp to Back River will lengthen substantially as shown in red on Figure 4.2.1-1. To mitigate for this additional impact, a public boat ramp on Hutchinson Island is proposed. This public ramp would provide additional access to the Back River for recreational boaters.

The proposed boat ramp is located on lands vested to the United States of America at the tide gate on the north side of Hutchinson Island, adjacent to Back River. The proposed two lane concrete boat ramp shown on Figure 4.2.1-2 will include the following: floating dock, twenty (20) space trailer parking, handicap accessible parking, and parking spaces for twelve (12) single cars. After construction of the public ramp is complete, the remaining twelve (12) acres of land vested to the USA and managed by the US Army Corps of Engineers, Savannah District will be conveyed by quit claim deed to Chatham County and the ramp will be its responsibility to operate and maintain. Public Law 107-320 authorized the disposal of the tide gate lands to Chatham County, however this disposal action was never funded. Savannah District representatives have met with Chatham County and the County has agreed to the proposed boat ramp and disposal of remaining lands as described. The estimated administrative cost for this disposal action is \$10,000 and is included in the real estate estimate.

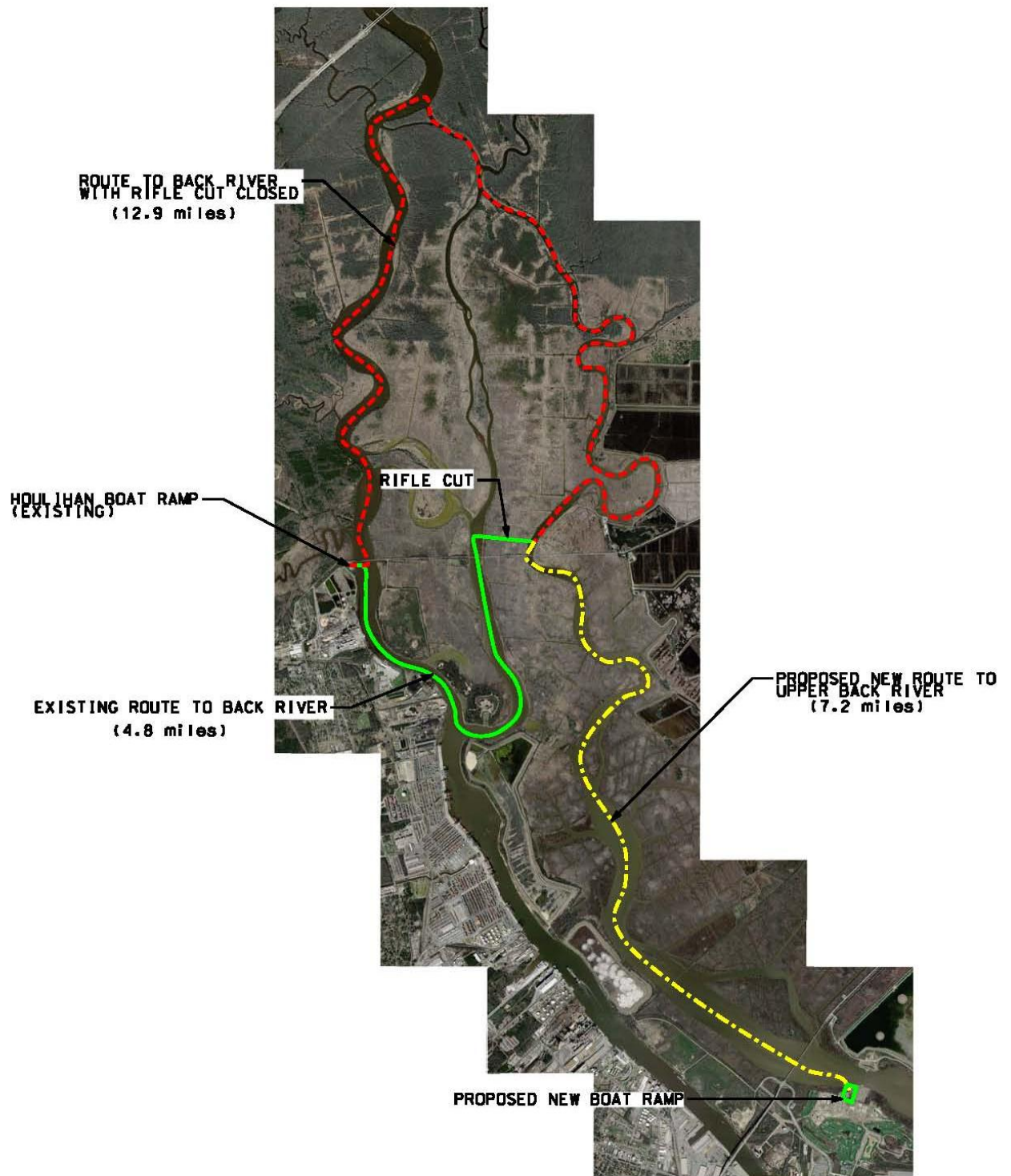


Figure 4.2.1-1 Recreational Boating Routes

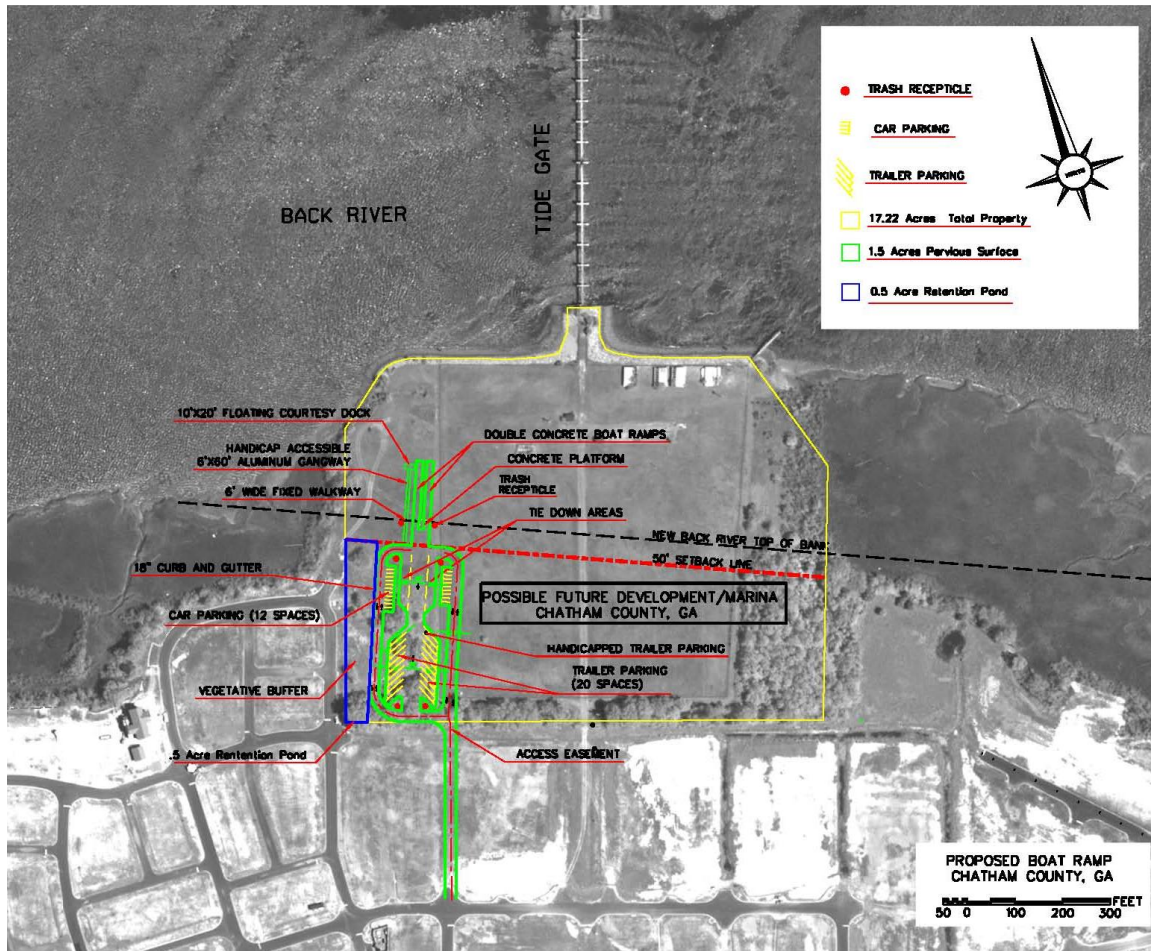


Figure 4.2.1-2 Proposed Hutchinson Island Boat Ramp

4.3 ACQUISITION OF WETLAND MITIGATION LANDS

After implementing the flow-altering features described above, some impacts to wetlands above and below the Ordinary Mean High Water Line would still remain. The Corps used the Savannah District Regulatory Standard Operating Procedures (SOP) to quantify impacts from this Savannah Harbor Expansion Project. That SOP had been developed by natural resources agencies in Georgia to evaluate impacts and mitigation on Regulatory projects requiring Section 404 permits.

Using the SOP, the Corps calculated the following preservation requirements as shown at Table 4.3-1.

TABLE 4.3-1
PROPOSED ACQUISITION OF WETLAND MITIGATION LANDS

CHANNEL DEPTH ALTERNATIVE	NET IMPACTS TO FRESHWATER WETLANDS (ACRES)	REQUIRED ACQUISITION ACREAGE
44-FOOT	-322	0
45-FOOT	32	1,643
46-FOOT	201	2,188
47-FOOT	232	2,245
48-FOOT	337	2,683

These requirements address remaining impacts to brackish and freshwater marshes, excavation of high ground and wetlands within the Savannah National Wildlife Refuge to enlarge the Kings Island Turning Basin, and an amount to compensate for uncertainty in the analysis procedure.

The USFWS and the Savannah National Wildlife Refuge have identified properties within the estuary that they believe are ecologically valuable and provide positive contributions to the goals of the Refuge and enhance the area's fish and wildlife resources. The latest version of the Refuge's Acquisition Plan and is included in the document titled "Final Environmental Assessment and Land Protection Plan; Proposed Expansion of Savannah National Wildlife Refuge." The NFS will acquire specific tracts of land identified in the Refuge's Acquisition Plan and provide them to the USFWS to manage as additions to the Savannah National Wildlife Refuge, to mitigate for the remaining wetland impacts from this project. The USFWS previously identified the ecological value of those properties and believes they would be valuable additions to, and advance the goals of, the Savannah Refuge. The USFWS has the authority to accept these lands, since the lands are already included in their approved Acquisition Plan. The location of these tracts is shown in Figures 4.3-1 through 4.3-3. It is anticipated that approximately 2,245 acres will be acquired in fee at an estimated land cost of \$10,102,500 excluding contingencies and administrative cost. Upon project approval, Savannah District Planning and Real Estate Divisions along with the NFS will coordinate with USFWS to identify the parcels to be acquired.

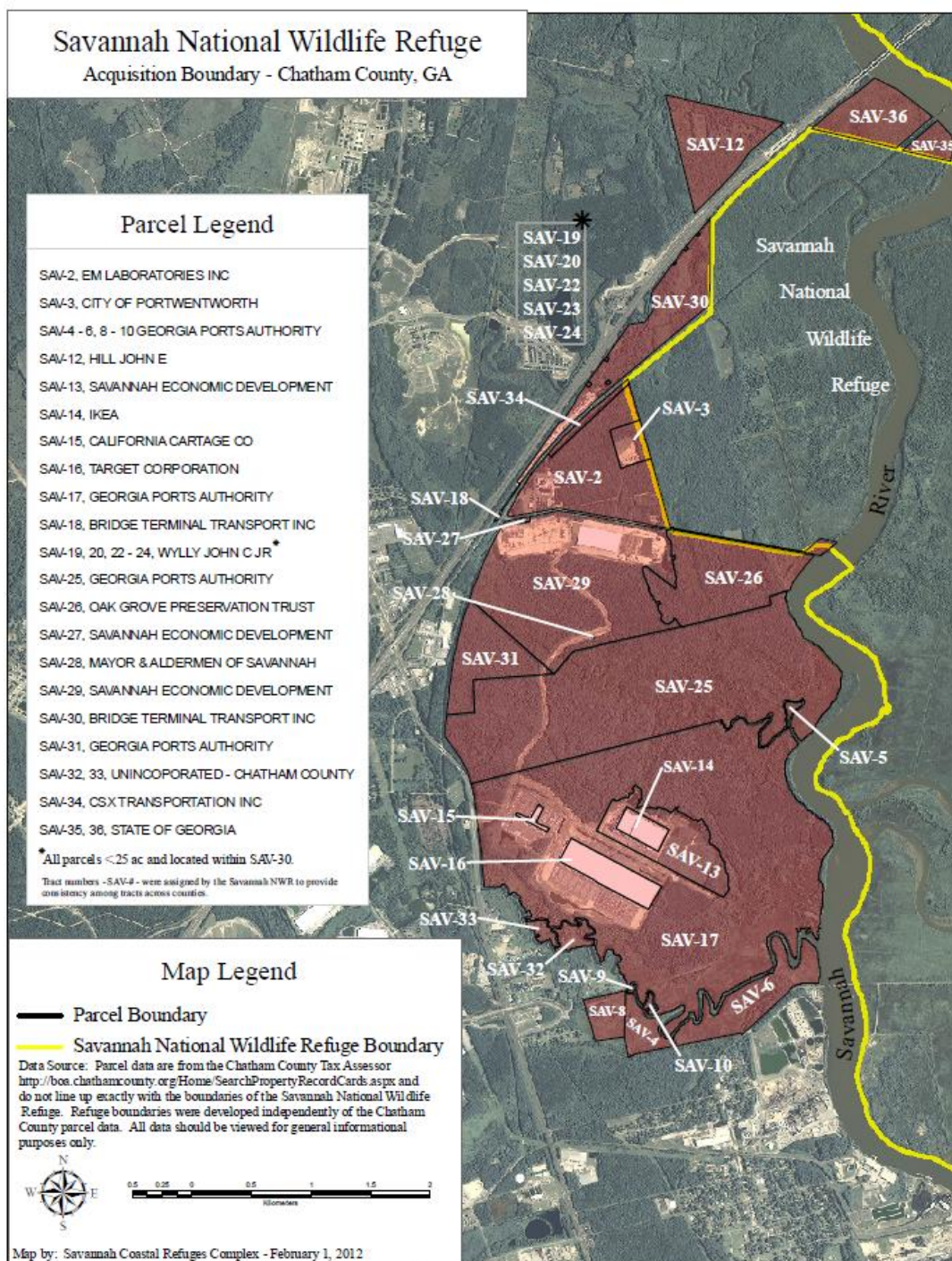


Figure 4.3-1 USFWS Acquisition Plan (Chatham County, Georgia)

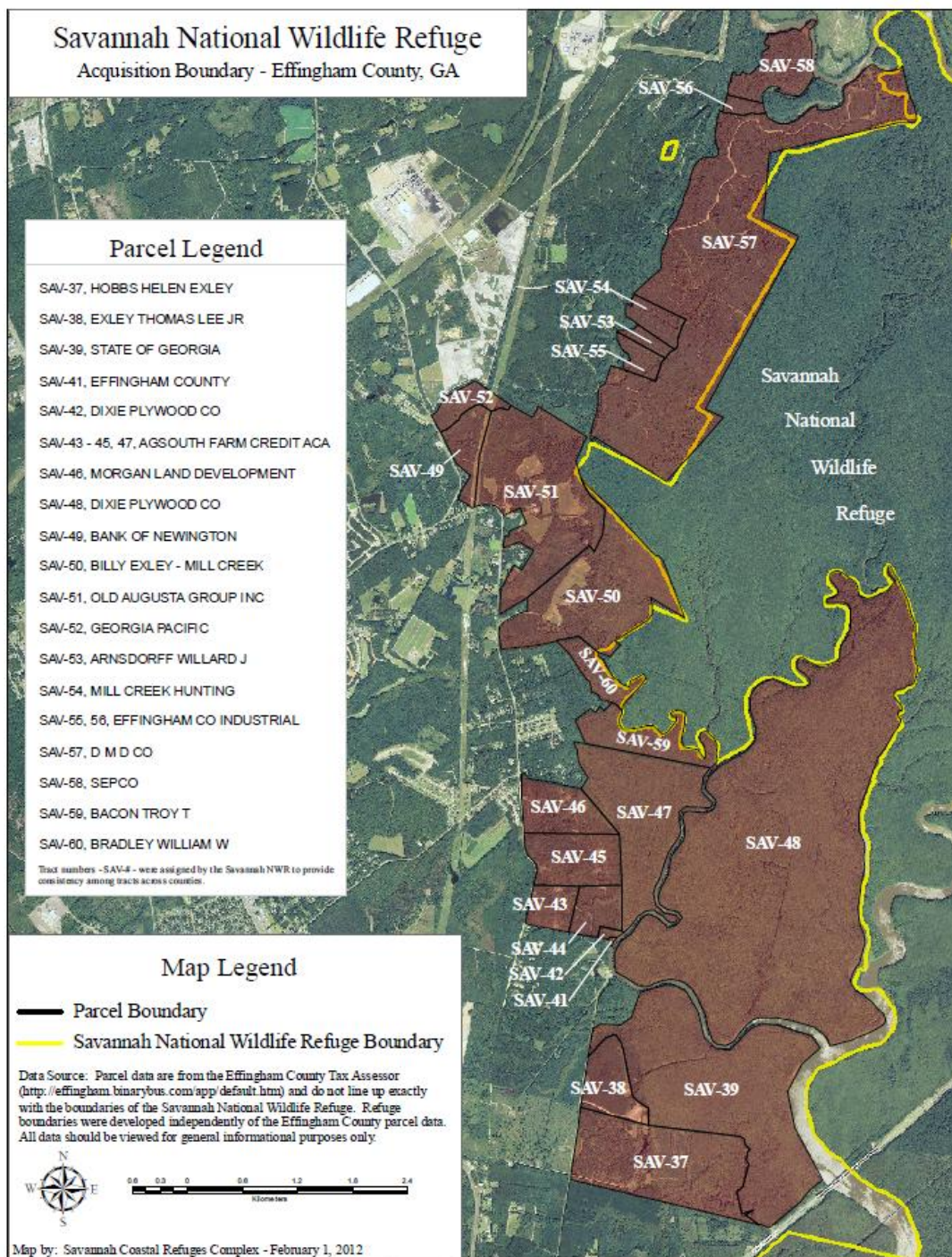


Figure 4.3-2 USFWS Acquisition Plan (Effingham County, Georgia)

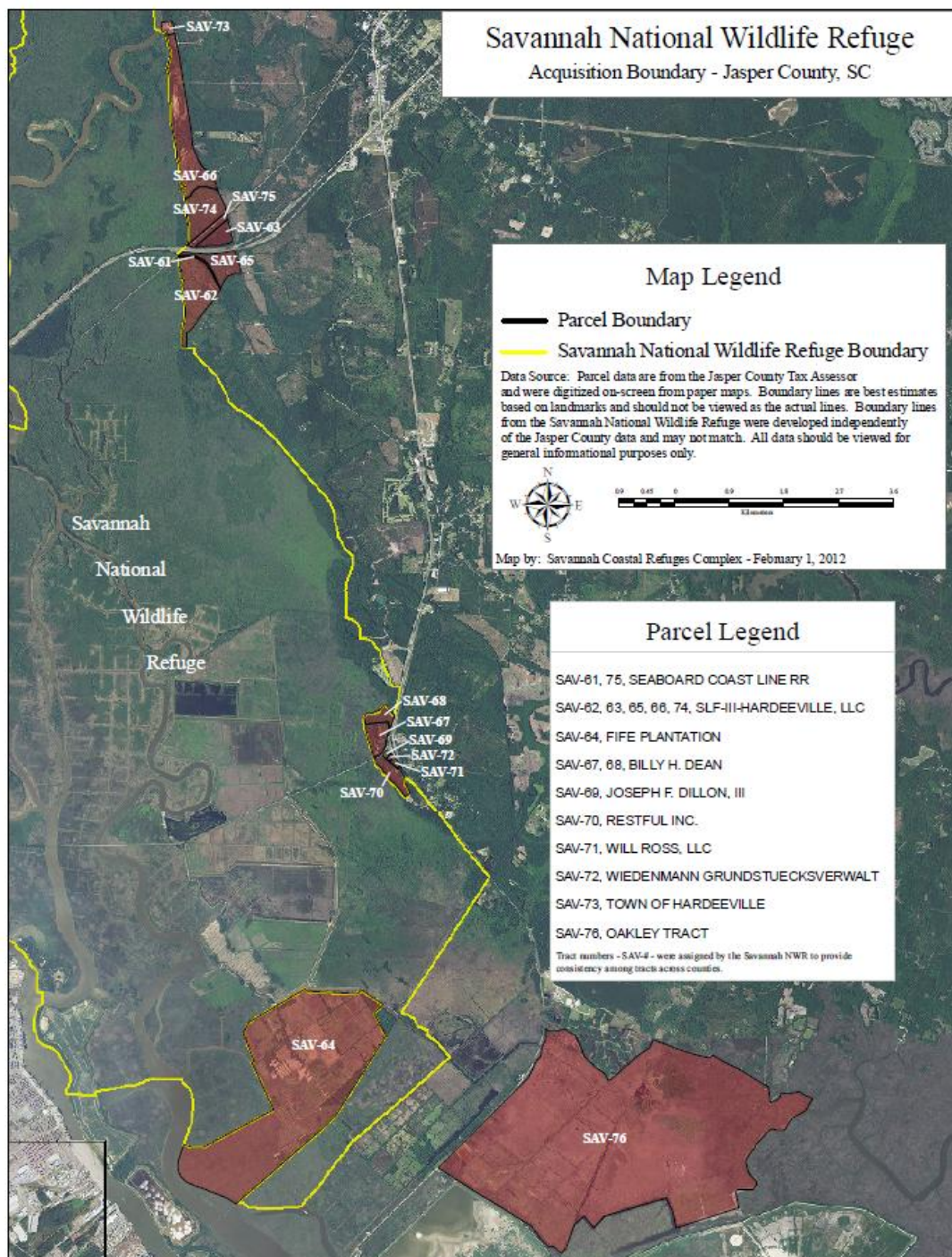


Figure 4.3-3 USFWS Acquisition Plan (Jasper County, South Carolina)

4.4 CHLORIDE MITIGATION FOR CITY OF SAVANNAH WATER INTAKE

The City of Savannah operates a municipal and industrial water supply intake located on Abercorn Creek (Figure 4.4-1). The facility is approximately eleven (11) river miles upstream of the proposed Savannah Harbor Expansion Project's deepening upstream limits and approximately thirty-one (31) miles from the Atlantic Ocean. Water supply from this source is utilized primarily by industrial users for specific plant processes; however, it also supplies residences in west Savannah, Pooler and south Effingham County. The water intake structure is located within the navigational servitude. However, Office of Counsel has determined that mitigation for chlorides is a mitigation feature authorized by the Chief's Report and not a utility/facility relocation.



Figure 4.4-1 City of Savannah Water Intake Facility

Environmental studies coordinated with the City of Savannah indicate that the proposed deepening of Savannah Harbor will increase salinity and chloride concentrations in the upper reaches of the Savannah River Estuary, including Abercorn Creek. The proposed mitigation alternative is a raw water impoundment which provides the means to store water for use by the City for drinking water supply during times of high chloride events. The proposed mitigation was selected as it is the least cost, environmentally acceptable plan that meets the project needs.

Operation of the feature would require that water from the existing Abercorn Creek intake be utilized for treatment and pumped to the impoundment during occurrences of low chlorides. During occurrences of high chlorides, water from the impoundment will be pumped to the City's existing water treatment plant via the proposed pump station. During high chloride events at the intake, the intake pumps will be stopped and the plant will draw water from the impoundment thereby avoiding the high chlorides occurring in Abercorn Creek. When chloride concentrations on Abercorn Creek return to acceptable levels during low tide the impoundment can be refilled and made ready for use during the next high tide.

It is estimated that approximately thirty-five (35) acres of land will be required in fee for the construction of this feature. Lands currently owned by the NFS, identified as Parcel 3 on Figure 4.4-2, have been tentatively identified as a suitable construction site. The estimated cost of these lands exclusive of administrative and contingencies is \$1,925,000. Two standard perpetual pipeline easements from CSX Corporation will also be required for the dual 36" influent and effluent pipes to connect the impoundment to the existing raw water pipeline. The estimated cost of the pipeline easements is \$1,000 excluding contingencies and administrative cost. The conceptual site plan is shown at figure 4.4-3. An aerial image showing the locations of the City's raw water intake, the proposed impoundment and the City's raw water treatment facility is shown at Figure 4.4-4.

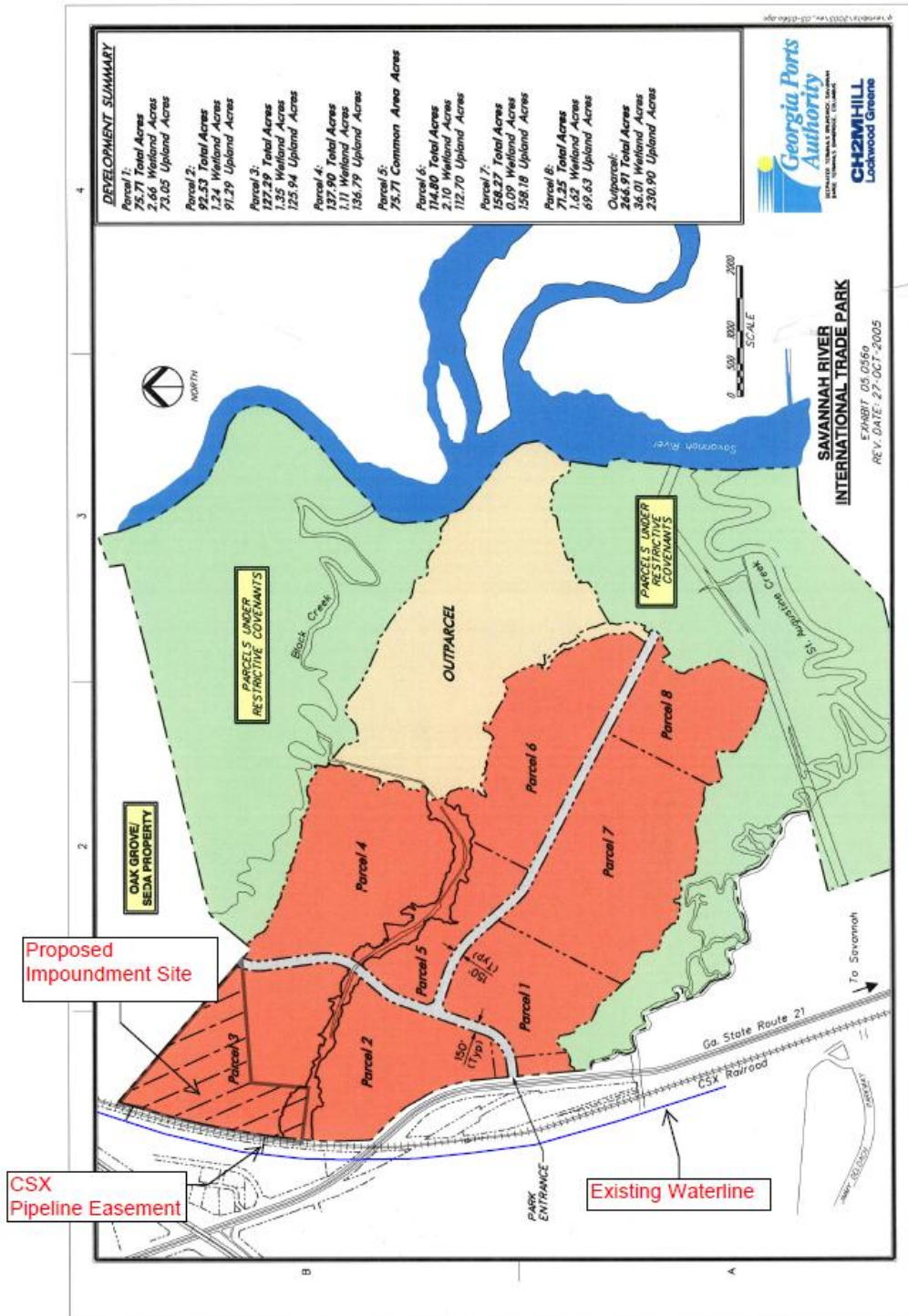
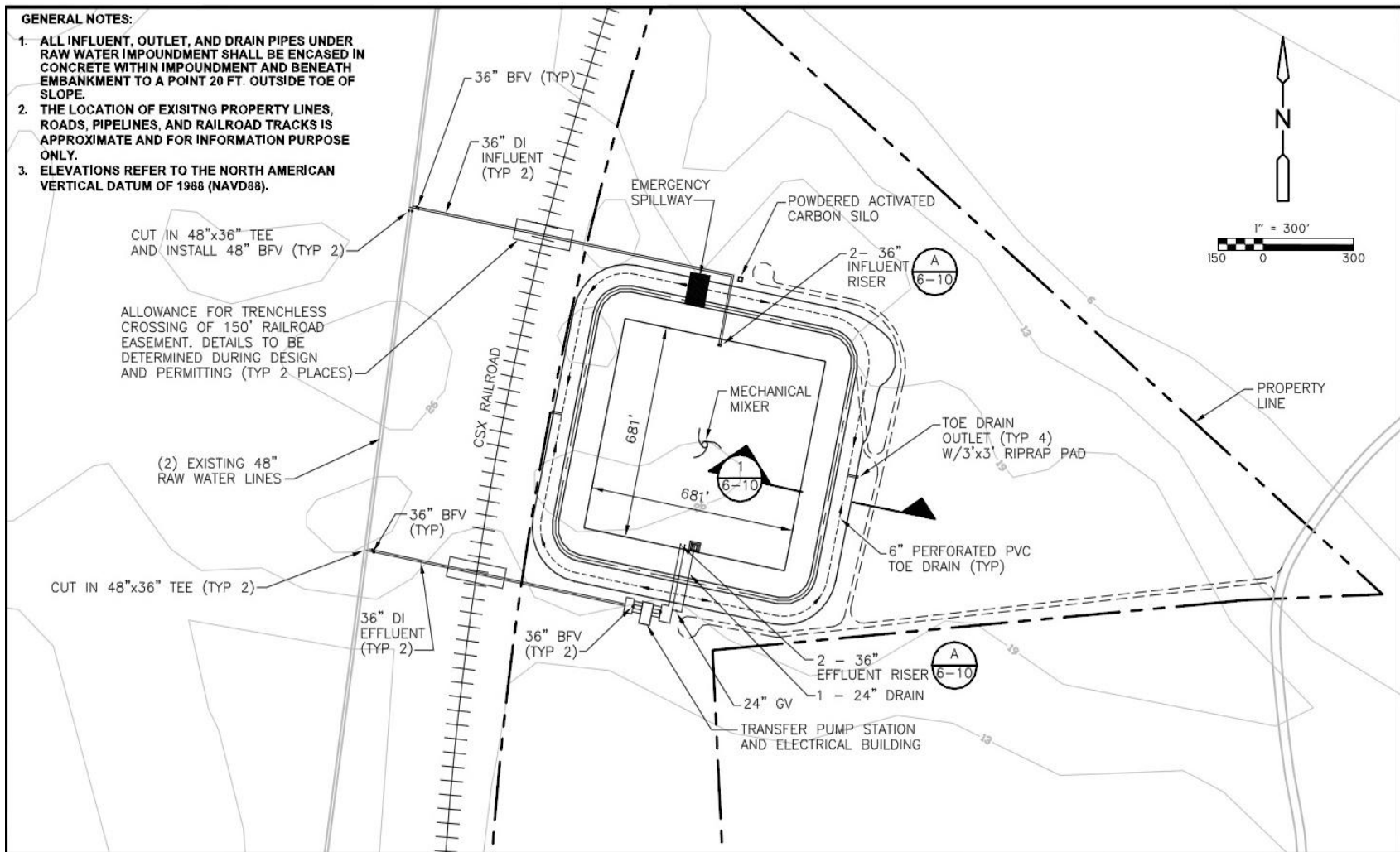


Figure 4.4-2 NFS Owned Lands for Raw Water Impoundment



1
2
3

Figure 4.4-3 Conceptual Site Plan



Figure 4.4-4 General Vicinity of Raw Water Mitigation

4.5 DISSOLVED OXYGEN MITIGATION

Deepening the navigation channel would adversely impact dissolved oxygen levels in the harbor. Since this is a critical resource in the harbor, the Corps has included a feature in the mitigation plan for each depth alternative that minimizes that adverse effect.

The Corps' studies indicate that oxygen injection is the most cost effective method to raising dissolved oxygen levels in the harbor. Due to site-specific requirements, the Corps has determined that a land based injection system would be the most effective solution. It identified use of Speece cones as the specific technique to inject oxygen into the water, although another land-based technique could be found to be more cost-effective. The site locations identified for these systems are shown in Figures 4.5-1 and 4.5-2. Site 1 is located on Hutchinson island and consists of 5.5 acres owned by International Paper and will be acquired in fee by the NFS. Access to the site will be across existing perpetual road easements owned by the NFS. Site 2 is located on lands owned by Georgia Power Company and consists of a three acre site to be acquired in fee along with a perpetual road easement for access consisting of approximately two acres. The systems would be land based, with water being withdrawn from the river through pipes, then treated and returned to the river. The water intake structure would include screens to reduce the intake of trash and other suspended solids. The intake and discharge would be located along the side of the river and not extend out into the navigation channel.



Figure 4.5-1 Proposed Dissolved Oxygen Site 1



Figure 4.5-2 Proposed Dissolved Oxygen Site 2

4.6. SHORTRNOSE STURGEON MITIGATION

The Corps consulted with natural resource agencies about potential ways to address remaining adverse impacts to Shortnose sturgeon. Neither the Corps nor the agencies could identify methods that could be implemented in the estuary that would restore sturgeon habitat or enhance existing habitats. The Corps suggested an action that had previously been identified on the Savannah River that would increase the extent of sturgeon habitat by allowing fish to bypass the lowest dam on the river, the New Savannah Bluff Lock & Dam (NSBL&D) at Augusta, Georgia, which is operated by the US Army Corps of Engineers. A fish bypass around the structure would allow migrating fish to move past the dam, opening up an additional twenty (20) miles of habitat upstream of the dam to Shortnose sturgeon. The structure would also open up the river to American shad and other fish species migrating up river, thereby helping those populations.

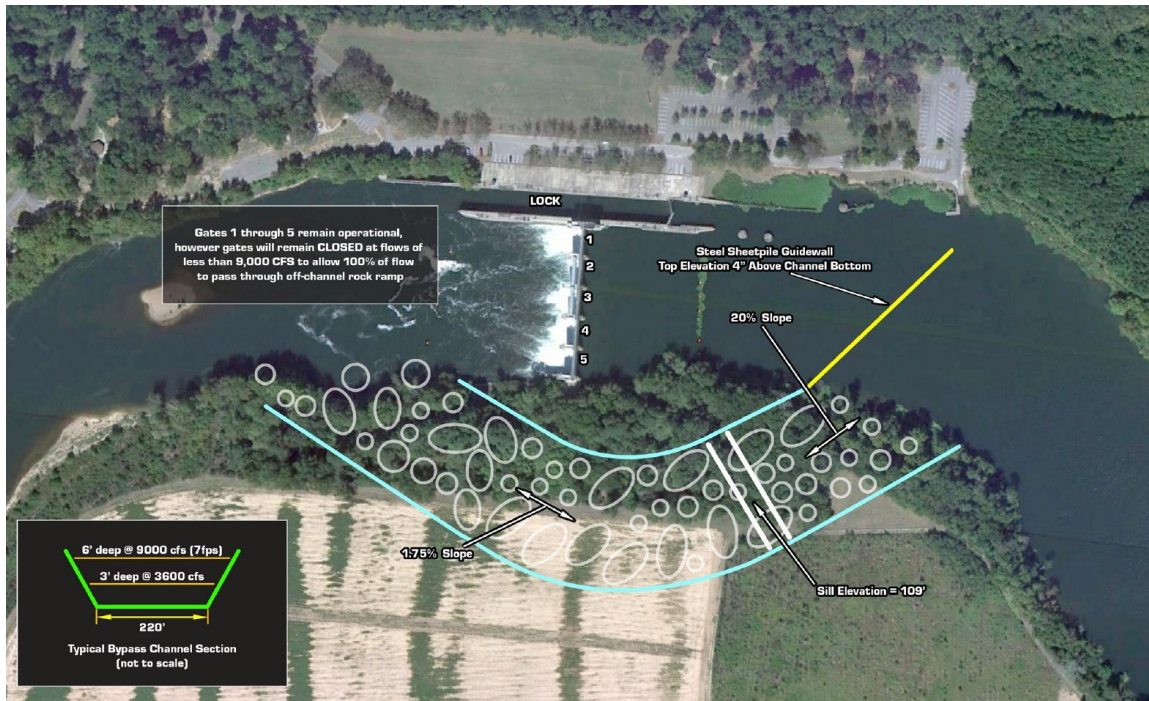


Figure 4.6-1 Proposed Fish Bypass

The fish bypass (Figure 4.6-1) would be located around the South Carolina side of the dam and be constructed on five acres of lands vested in the United States of America and approximately seven acres of privately owned lands. A perpetual, non-exclusive road easement for ingress and egress (Figure 4.6-2) consisting of approximately six acres would also be acquired to allow access for construction and maintenance of the fish bypass. This easement will follow an existing farm road in order to avoid disruptions to the owner.



Figure 4.6-2 Proposed Perpetual Road Easement

5. PUBLIC UTILITY/FACILITY RELOCATION

There are two major privately owned pipelines crossing the channel. Savannah District has coordinated closely with Southern Energy and with International Paper to determine the exact location and depth of each pipe. Plans were submitted to both companies identifying the after project conditions (48' depth +over dig) where their pipelines are located. Both Savannah District and the owners agree that there will be no impacts to these pipelines and that relocation will not be required. Other than the Savannah Water Intake Structure addressed in Section 4.4 of this report, no other public or private utilities will be impacted by this project. Office of Counsel has determined that this feature was authorized as mitigation in the Chief's Report. This conclusion is further documented in the Draft EIS, Vol. 1, Section 5.22. In addition, the proposed project is not expected to impact any existing land-based navigational markers.

6. EXISTING PROJECTS

The Savannah Harbor is an existing Federal Project with the GDOT acting as the NFS. All staging areas and disposal areas are owned by the NFS and were provided for the existing Savannah Harbor.

7. ENVIRONMENTAL IMPACTS

There are no known or suspected contaminants located on the lands proposed for acquisition. Additional environmental impacts are addressed in the Environmental Impact Statement, Volume 1 and 2. Mitigation Features were previously discussed.

8. NON-FEDERAL SPONSOR RESPONSIBILITIES AND CAPABILITIES

The NFS has the responsibility to acquire all real estate interests required for the Project. The NFS shall accomplish all alterations and relocations of facilities, structures and improvements determined by the government to be necessary for construction of the Project.

Title to any privately owned lands acquired for the deepening will be retained by the NFS, and no interest will be conveyed to the United States of America. Title to lands acquired in fee by the NFS for the loss of uplands needed for deepening and lands needed for wetland mitigation purposes will be conveyed to the Department of Interior, U S Fish & Wildlife Service and will become part of the Savannah National Wildlife Refuge. Prior to advertisement of any construction contract, the NFS shall furnish to the government an Authorization for Entry for Construction (Exhibit A) to all lands, easements and rights-of-way, as necessary. The NFS will also furnish to the government evidence supporting their legal authority to grant rights-of-way to such lands. Georgia Code, Section 32-3-4 through Section 32-3-20 discusses the Georgia Department of Transportation's ability to condemn property needed for transportation purposes which includes channel construction, mitigation and other transportation purpose.

The NFS shall comply with applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, approved 2 January 1971, and amended by Title IV of the Surface Transportation Uniform Relocation Assistance Act of 1987, Public Law 100-17, effective 2 April 1989, in acquiring real estate interests for the Project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act(s). An Assessment of Non-Federal Sponsor's Real Estate Acquisition Capability has been prepared with cooperation of the NFS and is shown at (Exhibit B).

The NFS is entitled to receive credits against its share of project costs for the value of lands it provides and the value of any relocation that may be required for the project. The value of the real property interests will also include the documented incidental costs of acquiring such interests, as determined by the Government, to be reasonable. Credit for NFS owned lands that may have been acquired more than five years from the effective date of the Project Partnership Agreement (PPA) will not include incidental costs. Credit for land owned by the NFS at the effective date of the PPA will be based on fair market value of the land on the effective date of the PPA in accordance with federal appraisal rules. For land acquired after the effective date of the PPA, credit will be based on the fair market value at time of acquisition and administrative costs will be based on actual documented costs submitted by the NFS.

The NFS should not acquire lands required for the project prior to execution of the PPA. Should the NFS proceed with acquisition of lands prior to the execution of the PPA, it is at the risk of not receiving credit or reimbursement for any cost incurred in connection with the acquisition process should the PPA not be signed. There is also a risk of acquiring lands either not needed for the project or not acquired in compliance with requirements for crediting purposes in accordance with 49 CFR Part 24, dated March 2, 1989 as amended. A letter explaining these risks was provided to the NFS on 7 April 2011 and is attached as Exhibit C.

9. GOVERNMENT OWNED PROPERTY

Approximately sixty-seven (74) acres of lands owned by the United States of America are within the LERRD required for the project. Of the sixty-seven (74) acres, approximately eight acres are located on the Georgia side of the tide gate structure, approximately five acres are located on the South Carolina side of the New Savannah Bluff Lock & Dam and the remaining lands are located in various locations throughout the Refuge. Credit will not be allowed for the sixty-seven (74) acres of government owned lands.

Table 9.1 GOVERNMENT OWNED LANDS

Owner	Acreage
USA, Corps of Engineers	13
USA, US Fish & Wildlife	54

1 **10. HISTORICAL SIGNIFICANCE**

2
3 The CSS Georgia, a Civil War era iron clad vessel is located at station 58+500 and will
4 be removed from the harbor prior to dredging in the area. The staging area for the
5 removal of this vessel will be at the Engineer Yard, government owned lands located on
6 Hutchinson Island. Planning for this archeological operation is currently being conducted
7 as mitigation for the existing navigation project and is not considered part of this project.
8

9 **11. MINERAL RIGHTS**

10
11 There are no known mineral activities within the scope of the proposed Project.
12

13 **12. PUBLIC LAW 91-646, RELOCATION ASSISTANCE BENEFITS**

14
15 Public Law 91-646, Uniform Relocation Assistance provides entitlement for various
16 payments associated with federal participation in acquisition of real property. Title II
17 makes provision for relocation expenses for displaced persons, and Title III provides for
18 reimbursement of certain expenses incidental to transfer of property. There will be no
19 relocation of persons or Title II costs associated with the project. Title III expenses for
20 the areas acquired in fee will be determined after the final design plans and specifications
21 have been completed.
22

23 **13. ATTITUDE OF PROPERTY OWNERS**

24
25 Although direct contact with all land owners has not taken place, based on past
26 experience with Savannah Harbor projects, it is likely that the NFS will encounter some
27 resistance to acquisition from some of the landowners. The USFWS is a cooperating
28 agency on this project with approval authority.
29

30 **14. ACQUISITION SCHEDULE**

31
32 The NFS has indicated they will use their in house staff to acquire real estate interests
33 required for the project. The NFS has a real estate staff that is highly capable and fully
34 dedicated to acquisition of fee or easement real estate interests required for the project.
35 The NFS has estimated that acquisition will take approximately twelve (12) months, and
36 can begin when final plans and specs have been completed and the execution of the PPA.
37 The NFS, Project Manager and Real Estate Technical Manager will formulate the
38 milestone schedule upon project approval.
39
40

1 **15. ESTATES FOR PROPOSED PROJECT**

2
3 The following standard estates are proposed for this project

4
5 **FEE**

6
7 The fee simple title to (the land described in Schedule A)
8 (Tracts Nos. _____, _____ and _____), subject, however, to existing easements for
9 public roads and highways, public utilities, railroads and pipelines.

10
11 **ROAD EASEMENT**

12
13 A perpetual non-exclusive and assignable easement and right-of-way in, on, over
14 and across (the lands described in schedule A) (Tracts Nos. ___, ___ and ___) for
15 the location, construction, operation, maintenance, alteration or replacement of (a)
16 road(s) and appurtenances thereto; together with the right to trim, cut, fell and
17 remove therefrom all trees, underbrush, obstructions and other vegetation,
18 structures, or obstacles within the limits of the right-of-way; (reserving, however,
19 to the owners, their heirs and assigns, the right to cross over or under the right-of-
20 way as access to their adjoining land at the locations indicated in Schedule B);
21 subject, however, to existing easements for public roads and highways, public
22 utilities, railroads and pipelines.

23
24 **UTILITY AND/OR PIPELINE EASEMENT**

25
26 A perpetual and assignable easement and right-of-way in, on, over and across (the
27 land described in Schedule A) (Tracts Nos. _____),for the location,
28 construction, operation, maintenance, alteration; repair and patrol of an
29 underground pipeline; together with the right to trim, cut, fell and remove
30 therefrom all trees, underbrush, obstructions and other vegetation, structures, or
31 obstacles within the limits of the right-of-way; reserving, however, to the land
32 owners, their heirs and assigns, all such rights and privileges as may be used
33 without interfering with or abridging the rights and easement hereby acquired;
34 subject, however, to existing easements for public roads and highways, public
35 utilities, railroads and pipelines.

36
37
38 The following non-standard estate is required for project purposes and was approved for
39 use by memorandum dated October 27, 2010 by Ralph J. Werthmann, Chief, Real Estate
40 Division. The Memorandum is attached as Exhibit D. The estate is derived from the
41 standard Channel Improvement Easement adding the words “saturate, erode and slough
42 said land” and “Slough” to the title. This estate serves the intended project purpose,
43 substantially conforms with and does not materially deviate from the corresponding
44 standard estate contained in Chapter 5 of ER 405-1-12, and does not increase the costs
45 nor potential liability of the Government.

1 **NON-STANDARD CHANNEL IMPROVEMENT/SLOUGH EASEMENT**

2
3 A perpetual and assignable right and easement to construct, operate, and maintain
4 channel improvement works on, over and across the herein described land in
5 connection with the operation and maintenance of the Savannah Harbor, including
6 the right to clear, cut, fell, remove and dispose of any and all timber, trees,
7 underbrush, buildings, improvements and/or other obstructions therefrom; to
8 excavate: dredge, cut away, and remove any or all of said land; saturate, erode
9 and slough said land; and to place thereon dredge or spoil material; and for such
10 other purposes as may be required in connection with said work of improvement;
11 reserving, however, to the Grantor, its successors and assigns, all such rights and
12 privileges as may be used without interfering with or abridging the rights and
13 easement hereby acquired; subject, however, to existing easements for public
14 roads and highways, public utilities, railroads and pipelines.
15

16 **16. INDUCED FLOODING**

17
18 There will be no induced flooding as a result of this project.
19

20 **17. ZONING**

21
22 There are no zoning issues associated with this project.
23

24 **18. REAL ESTATE ESTIMATE**

25
26 The values contained in this report were determined using data from public records, and
27 from interviews with local professionals. The sales of comparable properties that are
28 used in the valuation represent the best available comparisons in terms of physical
29 proximity, location, access and highest and best use. A number of bona fide vacant land
30 sales for each property type were compiled to offer reasonable support for unit land
31 values used in calculating gross real estate costs for the project. The estimated real
32 estate costs for the Selected NED plan of 47' (Table 18-1) includes land and improvement
33 values, damages, mineral rights, resettlement cost, and federal as well as non-federal
34 administrative costs. A 25% contingency is applied to the estimate total of these items.
35 The Chart of Accounts for the Selected NED plan is at Table 19-1. All land values are
36 based on June 2011 price level and the dollars are constant.
37

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Table 18-1
Selected NED Plan

Savannah Harbor Expansion Project 47' Depth

a. Lands		12 Tracts / 12		
	Fee	Owners	\$	14,275,500
	Easement	3 Tracts / 3 Owners	\$	138,000
	Permit	7 Tracts / 1 Owner	\$	-
b. Improvements			\$	-
	Residential		\$	-
	Commercial		\$	-
c. Mineral Rights			\$	-
d. Damages			\$	-
e. P. L.. 91-646			\$	-
f. Acquisition cost - Admin			\$	476,000
	Federal	\$ 61,000.00		
	Non-Federal	\$ 415,000.00		
		\$ 476,000.00		
Sub-Total			\$	14,889,500
	25% contingencies		\$	3,722,375
TOTAL			\$	18,611,875
		ROUNDED	\$	18,600,000

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19. CHART OF ACCOUNTS

The cost estimate for all Federal and non-Federal real estate activities necessary for implementation of the project after completion of the feasibility study for land acquisition, construction, LERRDs, and other items are coded as delineated in the Cost Work Breakdown Structure (CWBS). This real estate cost estimate is then incorporated into the Total Current Working Estimate utilizing the Microcomputer Aided Cost Engineering System (MCACES). The costs shown in Table 19-1 are actual estimated cost to be incurred by the Federal and NFS for LERRD acquisition. The costs reflected in these estimates do not necessarily represent the LERRD credit the NFS will receive in accordance with CECW-P/CECC-G Memorandum for Subordinate Commands dated September 19, 2006 which states that LERRD acquired for mitigation for Fish & Wildlife will be credited as part of the total project cost. See Cost Allocation Table 15-6 in the GRR for cost sharing allocations in accordance with this memorandum.

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Table 19-1
Selected NED Plan

Savannah Harbor Expansion Project - Chart of Accounts - 47' Depth

		FEDERAL CONST.	FEDERAL MITIGATION	NON- FEDERAL CONST.	NON- FEDERAL MITIGATION	TOTALS
01A	PROJECT PLANNING					
	Other					
	Project Cooperation Agreement	\$0			\$0	\$0
01AX	Contingencies (25%)	\$0			\$0	\$0
	Subtotal	\$0			\$0	\$0
01B	LANDS AND DAMAGES					
01B40	Acq/Review of PS	\$55,000	\$6,000	\$0	\$0	\$61,000
01B20	Acquisition by PS	\$0		\$360,000	\$55,000	\$415,000
01BX	Contingencies (25%)	\$13,750	\$1,500	\$90,000	\$13,750	\$119,000
	Subtotal	\$68,750	\$7,500	\$450,000	\$68,750	\$595,000
01H	AUDIT					
01H10	Real Estate Audit	\$0			\$0	\$0
01HX	Contingencies (15%)	\$0			\$0	\$0
	Subtotal	\$0			\$0	\$0
01R	REAL ESTATE LAND PAYMENTS					
01R1B	Land Payments by PS	\$0		\$4,311,000	\$10,102,500	\$14,413,500
01R2B	PL91-646 Relocation Pymt by PS	\$0			\$0	\$0
01R2D	Review of PS	\$0			\$0	\$0
01RX	Contingencies (25%)	\$0		\$1,077,750	\$2,525,625	\$3,603,375
	Subtotal	\$0		\$5,388,750	\$12,628,125	\$18,016,875
	TOTALS	\$68,750	\$7,500	\$5,838,750	\$12,696,875	\$18,611,875
	ROUNDED TO					\$18,600,000

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3 **AUTHORIZATION FOR ENTRY FOR CONSTRUCTION**
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5 I, (name of accountable official), (title) for (name of non-Federal
6 sponsor), do hereby certify that the (name of non-Federal sponsor) has acquired the real
7 property interests required by the Department of the Army, and otherwise is vested with sufficient title and
8 interest in lands to support construction of (project name, specifically identified project features, etc.).
9 Further, I hereby authorize the Department of the Army, its agents, employees and contractors, to enter
10 upon (identify tracts) to construct
11 (project name, specifically identified project features, etc.) as set forth in the plans and specifications held
12 in the U. S. Army Corps of Engineers' _____ District Office, (city and state)
13

14 WITNESS my signature as _____ (title) for (name of non-Federal sponsor) this _____
15 day of _____, 20_____.
16

17
18 BY: _____ (name)
19
20 _____ (title)
21

22
23 **ATTORNEY'S CERTIFICATE OF AUTHORITY**
24

25 I, _____ (name), _____ (title of legal officer) for (name non-
26 Federal sponsor), certify that _____ (name of non-Federal sponsor) has
27 authority to grant Authorization for Entry; that said Authorization for Entry is executed by the proper duly
28 authorized officer; and that the Authorization for Entry is in sufficient form to grant the authorization
29 therein stated.
30

31 WITNESS my signature as _____ (title) for _____ (name of non-Federal
32 sponsor), this _____ day of _____, 20_____.
33

34
35 BY: _____ (name)
36
37 _____ (title)
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48 **EXHIBIT A**
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**Assessment of Non-Federal Sponsor's
Real Estate Acquisition Capability**

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? **Yes**
- b. Does the sponsor have the power to eminent domain for this project? **Yes**
- c. Does the sponsor have "quick-take" authority for this project? **Yes**
- d. Are any of the land/interests in the land required for this project located outside the sponsor's political boundary? **Yes**
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? **Yes**
(Federal Lands within the Savannah National Wildlife Refuge)

II. Human Resource Requirements:

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P. L. 91-646, as amended? **No**
- b. If the answer to II.a. is "yes", has a reasonable plan been developed to provide such training? **N/A**
- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? **Yes**
- d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? **Yes**
- e. Can the sponsor obtain contractor support, if required in a timely fashion? **Yes**
- f. Will the sponsor likely request USACE assistance in acquiring real estate? **No**

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? **Yes**
- b. Has the sponsor approved the project/real estate schedule/milestones? **No – Real Estate Schedule and Milestone will be developed upon project approval as a joint effort with RE, project manager and sponsor.**

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EXHIBIT B

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IV. Overall Assessment:

- a. Has the sponsor performed satisfactory on other USACE projects? **Yes**
GADOT has been the sponsor for previous projects located within the Savannah and Brunswick Harbors. Based on their past performance, their RE Staff is considered highly capable.
- b. With regard to the project, the sponsor is anticipated to be: **Highly Capable**

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? **Yes**
- b. Does the sponsor concur with this assessment? **Yes**


John S. Hinely
Realty Specialist


Ralph J. Werthmann
Chief, Real Estate Division

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EXHIBIT B



DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

April 7, 2011

Real Estate Division

Subject: Savannah Harbor Expansion Project

Vance C. Smith, Jr.
Commissioner
Georgia Department of Transportation
600 West Peachtree Street
Atlanta, Georgia 30308

Dear Mr. Smith:

The intent of this letter is to formally advise the State of Georgia, as the potential non-Federal sponsor for the proposed project, of the risks associated with land acquisition prior to the execution of the Project Partnership Agreement (PPA) or prior to the Government's formal notice to proceed with acquisition. If a non-Federal sponsor deems it necessary to commence acquisition prior to an executed PPA for whatever reason, the non-Federal sponsor assumes full and sole responsibility for any and all costs, responsibility, or liability arising out of the acquisition effort.

Generally, these risks include, but may not be limited to, the following:

- (1) Congress may not appropriate funds to construct the proposed project;
- (2) The proposed project may otherwise not be funded or approved for construction;
- (3) A PPA mutually agreeable to the non-Federal sponsor and the Government may not be executed and implemented;
- (4) The non-Federal sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of CERCLA, as amended;
- (5) The non-Federal sponsor may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the project;
- (6) The non-Federal sponsor may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under P.L. 91-646 as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after PPA execution and the Government's notice to commence acquisition and performance of LERRD; and

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EXHIBIT C

(7) The non-Federal sponsor may incur costs or expenses in connection with its decision to acquire or perform LERRD in advance of the executed PPA and the Government's notice to proceed which may not be creditable under the provisions of Public Law 99-662 or the PPA.

We appreciate the State's participation in this project. A copy of this letter will be furnished to Mr. Curtis J. Foltz, Executive Director, Georgia Ports Authority. Should you have questions or concerns pertaining to this letter please feel free to contact Mr. John S. Hinely at (912) 652-5207.

Sincerely,



Ralph J. Werthmann,
Savannah District
Chief, Real Estate Division
Real Estate Contracting Officer

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EXHIBIT C

27 October 2010

MEMORANDUM FOR FILE

SUBJECT: Savannah Harbor Expansion Project

The following non-standard estates is approved for use on the subject project: in accordance with ER 405-1-12, paragraph 12-10c. This estate is derived from the standard Channel Improvement Easement adding the words "saturate, erode and slough said land" and "Slough" to the title. This estate serves the intended project purpose, substantially conform with and does not materially deviate from the corresponding standard estate contained in Chapter 5, and does not increase the costs nor potential liability of the Government.

CHANNEL IMPROVEMENT/SLOUGH EASEMENT

A perpetual and assignable right and easement to construct, operate, and maintain channel improvement works on, over and across the herein described land in connection the operation and maintenance of the Savannah Harbor, including the right to clear, cut, fell, remove and dispose of any and all timber, trees, underbrush, buildings, improvements and/or other obstructions therefrom; to excavate: dredge, cut away, and remove any or all of said land; saturate, erode and slough said land; and to place thereon dredge or spoil material; and for such other purposes as may be required in connection with said work of improvement; reserving, however, to the to the owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.



RALPH F. WERTHMANN
Chief, Real Estate Division

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EXHIBIT D