

## **Planning Assistance to States Program**

### **Thomas Creek, Nassau County**

#### **Scope of Work**

##### **GENERAL**

The Jacksonville District of the U.S. Army Corps of Engineers (USACE) shall assist Nassau County in the identification of long-term structural and nonstructural flood risk management measures to alleviate flooding associated with Thomas Creek. Thomas Creek floods from normal rain events and Nassau County would like to know what potential long-term solutions could be implemented to address flooding concerns. This Planning Assistance to States (PAS) study will focus on the Thomas Creek watershed and will identify potential solutions to address flooding concerns.

##### **WORK TO BE PERFORMED**

##### **NEEDS ASSESSMENT**

Identification of geographic limits of the potential project area. This will include areas where flood risk management measure could potentially be implemented and constructed. This work will be a joint by the Jacksonville District and Nassau County.

##### **Engineering Efforts:**

##### **Obtain Necessary Data**

This task includes research of available data and field work to obtain new data.

##### **Task 1 – Research Available Data**

1. Research available recent topography and As-Builts of drainage system and structures in the project area.
2. Collect topographic and hydrographic survey data.
3. Collect past flood records, such as flood stages and high water marks for specific storm events.
4. Collect precipitation and stream gage data.
5. Research available geotechnical data in the project area, collect grab samples if necessary.
6. Sea Level Rise from Storm Surge (in-kind service by Nassau County)
7. Bridge location and information (in-kind service by Nassau County)
8. Culvert locations, outlet locations and elevations (in-kind service by Nassau County)
9. Lidar data or shape files as needed of 1 foot contours (in-kind service by Nassau County)
10. Lidar data or shape files as needed of zoning, flood, or other pertinent data (in-kind service by Nassau County)

11. Any available construction plans for development and redevelopment in the basin on file with the county (in-kind service by Nassau County)

## **Task 2 – Hydrologic and Hydraulic Analysis**

1. Hydrology analysis if expected storm flows using HEC-HMS.
2. Hydraulic analysis of proposed management measures, with scour analysis.
3. Nassau County would like to include Higher Study Standards (HSS) for CRS rating 410 and 420. The following items will be part of the study.
  - a. Flood Hazard Mapping due to sea level rise.
    - i. Factor of safety of at least 25% for the 100-year discharge
  - b. Changing precipitation
    - i. For coastal studies must use an estimate of the anticipated sea level rise that is at least as high as the NOAA intermediate high (3.9 foot average) projections for 2100
  - c. Future Conditions hydrology for land use changes
    - i. Flood Discharges associated with a fully developed watershed
    - ii. Without consideration of projected future flood detention structures or hydraulic modification

<b>Engineering Efforts and Needs Assessment</b>	<b>Estimate</b>
Total:	\$140,000

### **Planning Efforts: Formulation, Comparison, Evaluation and Selection of Alternative Plan(s):**

A list of structural and non-structural measures which meet project objectives will be developed with preliminary (concept level) design. Alternative plans must achieve the intended goals of reducing flood risk from Thomas Creek to the residents of Nassau County. This will be a joint effort between the USACE and the Nassau County. Nassau County will coordinate with stakeholders for input on the array of alternatives developed. A stakeholder workshop will be held by Nassau County and Jacksonville District to describe the alternatives develop, provide an opportunity for them to provide input on the alternatives and provide a platform for stakeholders to ask questions. Jacksonville District and Nassau County will jointly facilitate and host the public meeting or workshop. Presentations from both the Nassau County and Jacksonville District will be developed to provide the stakeholders an update on the project and alternatives. Nassau County will reserve the facilities for the public meeting and will be responsible for coordinating with agencies and stakeholders regarding the details and goals of the meeting.

Measures will be compared and plans will be ranked based on their ability to meet project goals and other relevant factors. A discussion of effects on local infrastructure, environmental considerations, surrounding community use, assessment of historical resources, and potential public acceptance will also be included.

Nassau County will provide property inventory as an in-kind service to be used during formulation and evaluation. They will also provide the following:

- List of homes on FEMA's severely damaged homes (claims made), for potential buyout program.
- Compilation of photos and historical information regarding past flooding and drainage concerns

Alternative Plan Development	Estimate
Total	\$35,000

#### **Project Management:**

Project management activities will be a joint effort between USACE and Nassau County. The USACE will be responsible for tracking the budget and schedule, reviewing cost share invoices submitted by Nassau county, revising the scope of work (as needed). Nassau County will be responsible for reviewing the budget and schedule, submitting invoices for cost share credit, and coordinating with locals and stakeholders about the project.

Project Management	Estimate
Total	\$15,000

#### **Concept Level Design:**

A preliminary design effort will be undertaken for project communication and permitting purposes. As this is a concept level effort only, designs will not exceed 30-40% design level. Development of final Plans and Specifications are not a component of this PAS effort. This effort will be a joint effort.

Conceptual Level Design	Estimate
Total	\$20,000

#### **Report Preparation:**

A draft report will be prepared by Jacksonville District and Nassau County that integrates the needs assessment and alternatives analysis. Five hard copies of the report and digital downloads through an ftp site will be produced with the report in Adobe PDF format.

Report Preparation	Estimate
Total	\$15,000

#### **Site Visits:**

Site Visits will be conducted by the project engineers, biologists, and planning technical lead throughout the study period. The initial site visit will occur prior to data collection activities to ensure site conditions are as anticipated, to confirm the appropriate methodologies for the geomatic data

collection activities based on the existing site conditions, and to adjust the scopes for these activities as necessary. The initial site visit is based on four representatives from both USACE and Nassau County attending this site visit. Additional site visits will include both USACE and Nassau county staff as needed to gather additional information to support project needs.

Site Visit	Estimate
Total	\$2,500

#### **Meetings and Conferences:**

The USACE and non-Federal sponsor will meet monthly via teleconference .and/or web meeting. Additional meetings will be held as needed to ensure project development. The estimate assumes four SAJ personnel's attendance at eight meetings. Nassau County is anticipated to require similar effort.

Meeting Attendance	Estimate
Total	\$12,000

#### **POINTS OF CONTACT:**

U.S. Army Corps of Engineers  
Jacksonville District

Martha Jackson  
Planning Technical Lead  
Planning and Policy Division  
(904) 232-2050  
[Martha.C.Jackson@usace.army.mil](mailto:Martha.C.Jackson@usace.army.mil)

Nassau County

Katie Peay  
Sr. Stormwater Engineer  
Nassau County Engineering Services  
96161 Nassau Place  
Yulee, Florida 32097  
(904) 530-6225  
[kpeay@nassaucountyfl.com](mailto:kpeay@nassaucountyfl.com)

#### **SCHEDULE:**

Work on the study will commence with execution of the PAS Agreement. The schedule below assumes the agreement will be executed by June 1, 2019. Nassau County work associated with this study is dependent on funding allocation from the Legislature and availability of funding as determined by Nassau County.

#### **COST ESTIMATE:**

Study costs are estimated to be \$239,500 and will be shared 50/50 between the USACE (government) and Nassau County, Florida (Non-Federal Sponsor). Contributing cost, scope of work and break down of cost are shown in the tables below.

Agency	Cost Sharing	FY19	FY20	Total Contribution Cost Amounts for Study Period
USACE	Cash			
Nassau County	Cash Contributions			
Nassau County	In-Kind Work			
Total				

**WORK -IN-KIND (WIK) CONTRIBUTIONS:**

The non-Federal sponsor, Nassau County, intends to provide their portion of the study costs as WIK. To justify credit as WIK, Nassau County must document all work and submit it to USACE for review and approval. Documentation provided for justification of WIK crediting may include, but is not limited to, invoices, timesheets, receipts, etc. If the value of submitted WIK is less than 50 percent of the study costs, Nassau County will provide cash funds to balance the cost-sharing requirement.

**Scope of Services and Cost Share Breakdown**

Planning Assistance to States Thomas Creek Cost Estimate					
Scope of Services Task	USACE Contributions	Nassau County Labor Contributions	USACE Contract	Nassau County Contract	Schedule*
Engineering Efforts (Data Collection)					
Development of Flood Risk Management Alternatives					
Project Management					
Conceptual Level Design (33% plans)					
Report Preparation					
Site Visits					
Meeting Attendance					
<b>Total</b>					

Cm 2721

AGREEMENT  
BETWEEN  
THE DEPARTMENT OF THE ARMY  
AND  
NASSAU COUNTY  
FOR DEVELOPMENT OF A COMPREHENSIVE PLAN

THIS AGREEMENT is entered into this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_, by and between the Department of the Army (hereinafter the "Government"), represented by the District Commander for the Jacksonville District (hereinafter the "District Commander") and the Nassau County (hereinafter the "Non-Federal Sponsor"), represented by the Chairman of its Board of County Commissioners.

WITNESSETH, THAT:

WHEREAS, Section 22 of the Water Resources Development Act of 1974, as amended (42 U.S.C. 1962d-16) authorizes the Secretary of the Army, acting through the Chief of Engineers, to provide assistance in the preparation of a comprehensive water resources plan (hereinafter the "Plan") to a State or non-Federal interest working with a State, and to establish and collect fees for the purpose of recovering 50 percent of the costs of such assistance except that Secretary may accept and expend non-Federal funds provided that are in excess of such fee; and

WHEREAS, the Government and the Non-Federal Sponsor have the full authority and capability to perform in accordance with the terms of this Agreement.

NOW, THEREFORE, the parties agree as follows:

1. The Government shall develop the Plan, in coordination with the Non-Federal Sponsor, in accordance with the attached Scope of Work, and any modifications thereto, that specifies the scope, cost, and schedule for activities and tasks, including the Non-Federal Sponsor's in-kind services.

2. The Non-Federal Sponsor shall provide 50 percent of the costs for developing the Plan in accordance with the provisions of this paragraph. As of the effective date of this Agreement, the costs of developing the Plan are projected to be \$240,000, with the Government's share of such costs projected to be \$120,000 and the Non-Federal Sponsor's share of such costs projected to be \$120,000, which includes estimated credit in the amount of \$120,000 for in-kind services.

a. After considering the estimated amount of credit for in-kind services that will be afforded in accordance with paragraph 4, if any, the Government shall provide the Non-Federal Sponsor with a written estimate of the amount of funds required from the Non-Federal Sponsor for the initial fiscal year of development of the Plan, with a fiscal year beginning on October 1<sup>st</sup> and ending on September 30<sup>th</sup> of the following year. No later than 15 calendar days after such notification, the Non-Federal Sponsor

shall provide the full amount of such funds to the Government by delivering a check payable to "FAO, USAED, Jacksonville (K3)" to the District Commander or by providing an Electronic Funds Transfer of such required funds in accordance with procedures established by the Government.

b. No later than August 1<sup>st</sup> prior to each subsequent fiscal year during development of the Plan, the Government shall provide the Non-Federal Sponsor with a written estimate of the amount of funds required from the Non-Federal Sponsor during that fiscal year. No later than September 1<sup>st</sup> prior to that fiscal year, the Non-Federal Sponsor shall provide the full amount of such required funds to the Government using one of the payment mechanisms specified in paragraph 2.a. above.

c. If the Government determines at any time that additional funds are needed from the Non-Federal Sponsor to cover the Non-Federal Sponsor's costs of developing the Plan, the Government shall provide the Non-Federal Sponsor with written notice of the amount of additional funds required. Within 60 calendar days of such notice, the Non-Federal Sponsor shall provide the Government with the full amount of such additional funds.

d. Upon completion of the Plan and resolution of any relevant claims and appeals, the Government shall conduct a final accounting and furnish the Non-Federal Sponsor with the written results of such final accounting. Should the final accounting determine that additional funds are required from the Non-Federal Sponsor, the Non-Federal Sponsor, within 60 calendar days of written notice from the Government, shall provide the Government with the full amount of such additional funds. Should the final accounting determine that the Non-Federal Sponsor has provided funds in excess of its required amount, the Government shall refund the excess amount, subject to the availability of funds. Such final accounting does not limit the Non-Federal Sponsor's responsibility to pay its share of costs, including contract claims or any other liability that may become known after the final accounting.

3. In addition to its required cost share, the Non-Federal Sponsor may determine that it is in its best interests to provide additional funds for development of the Plan. Additional funds provided under this paragraph and obligated by the Government are not included in calculating the Non-Federal Sponsor's required cost share and are not eligible for credit or repayment.

4. The in-kind services includes those activities (including services, materials, supplies, or other in-kind services) that are required for development of the Plan and would otherwise have been undertaken by the Government and that are specified in the Scope of Work and performed or provided by the Non-Federal Sponsor after the effective date of this Agreement and in accordance with the Scope of Work. The Government shall credit towards the Non-Federal Sponsor's share of costs, the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsor incurs in providing or performing in-kind services, including associated supervision and administration. Such costs shall be subject to audit in accordance with paragraph 9 to determine

reasonableness, allocability, and allowability, and crediting shall be in accordance with the following procedures, requirements, and limitations:

a. As in-kind services are completed and no later than 60 calendar day after such completion, the Non-Federal Sponsor shall provide the Government appropriate documentation, including invoices and certification of specific payments to contractors, suppliers, and the Non-Federal Sponsor's employees. Failure to provide such documentation in a timely manner may result in denial of credit. The amount of credit afforded for in-kind services shall not exceed the Non-Federal Sponsor's share of costs.

b. No credit shall be afforded for interest charges, or any adjustment to reflect changes in price levels between the time the in-kind services are completed and credit is afforded; for the value of in-kind services obtained at no cost to the Non-Federal Sponsor; or for costs that exceed the Government's estimate of the cost for such item if it had been performed by the Government.

5. The Non-Federal Sponsor shall not use Federal Program funds to meet any of its obligations under this Agreement unless the Federal agency providing the funds verifies in writing that the funds are authorized to be used for the Plan. Federal program funds are those funds provided by a Federal agency, plus any non-Federal contribution required as a matching share therefor.

6. In carrying out its obligations under this Agreement, the Non-Federal Sponsor shall comply with all the requirements of applicable Federal laws and implementing regulations, including, but not limited to: Title VI of the Civil Rights Act of 1964 (P.L. 88-352), as amended (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; the Age Discrimination Act of 1975 (42 U.S.C. 6102); and the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Army Regulation 600-7 issued pursuant thereto.

7. Upon 30 calendar days written notice to the other party, either party may elect, without penalty, to suspend or terminate further development of the Plan. Any suspension or termination shall not relieve the parties of liability for any obligation incurred.

8. As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to the parties. Each party shall pay an equal share of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

9. The parties shall develop procedures for the maintenance by the Non-Federal Sponsor of books, records, documents, or other evidence pertaining to costs and expenses for a minimum of three years after the final accounting. The Non-Federal Sponsor shall

assure that such materials are reasonably available for examination, audit, or reproduction by the Government.

a. The Government may conduct, or arrange for the conduct of, audits of the Plan. Government audits shall be conducted in accordance with applicable Government cost principles and regulations. The Government's costs of audits for the Plan shall not be included in the shared costs of the Plan, but shall be included in calculating the overall Federal cost of the Plan.

b. To the extent permitted under applicable Federal laws and regulations, the Government shall allow the Non-Federal Sponsor to inspect books, records, documents, or other evidence pertaining to costs and expenses maintained by the Government, or at the request of the Non-Federal Sponsor, provide to the Non-Federal Sponsor or independent auditors any such information necessary to enable an audit of the Non-Federal Sponsor's activities under this Agreement. The costs of non-Federal audits shall be paid solely by the Non-Federal Sponsor without reimbursement or credit by the Government.

10. In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsor each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other. Neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights a party may have to seek relief or redress against that contractor.

11. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by certified mail, with return receipt, as shown below. A party may change the recipient or address for such communications by giving written notice to the other party in the manner provided in this paragraph.

If to the Non-Federal Sponsor:

Chairman  
Nassau County Board of County Commissioners  
96135 Nassau Place, Suite 1  
Yulee, Florida 32097

If to the Government:

District Commander  
U.S. Army Corps of Engineers, Jacksonville District  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

12. To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

13. Nothing in this Agreement is intended, nor may be construed, to create any rights, confer any benefits, or relieve any liability, of any kind whatsoever in any third person not a party to this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the District Commander.

DEPARTMENT OF THE ARMY

NASSAU COUNTY BOARD OF COUNTY  
COMMISSIONERS

BY: \_\_\_\_\_  
Andrew Kelly  
Colonel, U.S. Army  
District Commander

BY: \_\_\_\_\_  
Justin M. Taylor  
Chairman

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_