

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
COASTAL INCENTIVE GRANT AWARD AGREEMENT  
CYCLE 20**

**Green Stormwater Management and Beautification in Habersham Village**

This Award Agreement is entered into as of this 1<sup>st</sup> day of October, 2017, between the Georgia Department of Natural Resources, Coastal Resources Division (“DNR”), and the City of Savannah (“Subgrantee”). In consideration of the mutual promises and terms and conditions set forth in this Award Agreement, the parties covenant and agree as follows:

**A. DEFINITIONS**

“Subgrantee’s Application” means the Coastal Incentive Grant (CIG) application attached as Exhibit A to this Award Agreement.

“Grant Program” means the Coastal Incentive Grant Program as set forth in Chapter 391-2-5-.01 of the Rules and Regulations of the State of Georgia.

“Intellectual Property” means patentable inventions, including patentable business methods and processes, copyrightable materials, trademarks, software, and trade secrets.

“Life of the Project” is twenty (20) years after completion of the Project Services and includes expected repairs to a facility.

“Match Funds” means the minimum amount the Subgrantee is committed to provide as non-federal match funds in the Subgrantee’s Application.

“OMB” means the federal Office of Management and Budget.

“Project Services” means the deliverables required under this Award Agreement, including the Scope of Work and the special conditions set forth in the attached Exhibit A.

“Records” means Subgrantee’s books, records, documents, and other evidence pertaining to the costs and expenses of Subgrantee’s performance of the Project Services.

“Reimbursable Amount” means the maximum amount established in Section F that DNR will pay to Subgrantee under this Award Agreement on a reimbursable basis for allowable expenses incurred performing the Project Services.

“Reimbursable Cost(s)” means the portion of Subgrantee’s Request for Reimbursement that is approved by DNR for reimbursement of allowable expenses Subgrantee incurs in the performance of the Project Services.

“Request for Reimbursement” means Subgrantee’s invoice for reimbursement of allowable expenses incurred performing the Projects Services submitted to DNR on a form approved by DNR.

“Scope of Work” means the Scope of Work included in Subgrantee’s Application.

**B. PURPOSE**

The purpose of the Coastal Incentive Grant Program is to provide financial assistance in the form of grants to eligible county and municipal governments, state agencies other than DNR, and educational and research institutions for projects that further the mission of the Coastal Management Program. After review and evaluation of Subgrantee’s application, DNR determined

that Subgrantee is an eligible entity and that Subgrantee's proposal meets the qualifications and requirements for financial assistance in accordance with the CIG Program.

### **C. AWARD**

DNR awards a financial assistance subgrant to Subgrantee consistent with the terms of this Award Agreement. Subgrantee accepts the award of a financial assistance subgrant and will comply with the terms and conditions of this Award Agreement. Subgrantee will complete all Project Services in a manner reasonably satisfactory to DNR.

The following provision applies if this Award Agreement is for a 306A low-cost construction project, and survive beyond the term of this project provided for in Section D: Funds shall only be used for projects on publicly owned or leased land, or land for which a public easement has been obtained. If the property is subject to a reversionary clause and reverts, then the Subgrantee shall reimburse DNR for the full amount of funds received for the project. If the land ceases to be available, or the project ceases to be used, for the intended use at any time during the Life of the Project, the Subgrantee shall reimburse DNR the full amount of the funds received for the project.

### **D. TERM**

The initial term of this Award Agreement begins on October 1, 2017 and continues until September 30, 2018 or until the Project Services required under this Award Agreement are completed, whichever is earlier. DNR reserves the right, in its sole discretion, to extend the term of this Award Agreement, if the extension is determined to be in the best interest of DNR. Any extension is contingent upon the availability of funds lawfully appropriated and applicable to the deliverables described in the Scope of Work.

### **E. TIME OF PERFORMANCE**

Time is of the essence in the performance of this Award Agreement. Subgrantee will submit semi-annual interim narrative Status Reports and a narrative Final Report to DNR in accordance with the following schedule and in a format provided by the DNR:

- Interim Status Report(s) by April 7, 2018 and every six months thereafter until project completion.
- Final Report no more than seven (7) days after completion of the Project Services or any earlier expiration or termination date.

### **F. REIMBURSABLE AMOUNT**

DNR will reimburse Subgrantee a maximum of **\$48,650.00** for allowable expenses Subgrantee incurs in the performance of the Project Services.

### **G. MATCH FUNDS**

Subgrantee will contribute a minimum of **\$53,550.00** in Match Funds toward its performance of the Project Services. Subgrantee will include summary information concerning its contribution of the Match Funds in the Final Report submitted to DNR under this Award Agreement. If the Reimbursable Costs actually payable to the Subgrantee are less than the maximum Reimbursable

Amount, Subgrantee is only obligated to contribute Match Funds in the same ratio as the actual Reimbursable Costs is to the maximum Reimbursable Amount.

#### **H. DISBURSEMENT OF AWARD**

(1) DNR, in its reasonable discretion, will determine when Subgrantee's performance of the Project Services is satisfactory and complete. However, the final disbursement shall not occur until the Final Report and all deliverables and work products are approved by DNR.

(2) If Subgrantee is a local government, the disbursement of funds under this Award Agreement is contingent upon Subgrantee's status as a Qualified Local Government under the Georgia Planning Act (O.C.G.A § 50-8-1 *et seq.*) and compliance with the audit requirements of O.C.G.A § 36-81-7.

(3) DNR reserves the right to withhold disbursement of funds and require the return of all funds previously disbursed if Subgrantee fails to fulfill its obligations under this Award Agreement or fails to comply with the requirements of the Georgia Planning Act or the audit requirements, if applicable.

(4) Subgrantee will submit a Request for Reimbursement upon completion of the Project Services. If requested, Subgrantee must include documentation satisfactory to DNR to support all expenditures associated with a Request for Reimbursement. Each Request for Reimbursement must be accompanied by a written statement from Subgrantee certifying that the requested funds have been utilized by Subgrantee solely in the performance of the Project Services and that copies of records, documents and other evidence (including without limitation purchase orders, agreements, canceled checks, invoices, bills of lading and the like) sufficiently supporting the requested funds are maintained at Subgrantee's place of business and are available for review by DNR, the State Auditor or either's representative during normal business hours. DNR, in its sole discretion, may permit Subgrantee to submit interim Requests for Reimbursement. In no event will DNR consider an interim Request for Reimbursement until the tasks for which reimbursement is sought are completed. A Request for Reimbursement must be submitted to the following person:

Stefanie M. Nagid, Grants Coordinator  
GA DNR, Coastal Resources Division  
One Conservation Way, Suite 300  
Brunswick, Georgia 31520-8687

(5) Upon acceptance of the Project Services and receipt of all required documentation, DNR will conduct its review of the Request for Reimbursement. Upon completion of its review, DNR will provide written notification to Subgrantee as to which portion(s) of the Request for Reimbursement are Reimbursable Costs. Except as otherwise provided in this Award Agreement, DNR will promptly pay the Reimbursable Costs subsequent to DNR's written notification to Subgrantee of its approval. In no event is Subgrantee entitled to receive more than the Reimbursable Amount.

(6) DNR will send payment of the Reimbursable Costs to the attention of the following person(s):

NAME:	Laura Walker
ADDRESS:	P.O. Box 1207 Savannah, GA 31402
EMAIL:	<a href="mailto:lwalker@savannahga.gov">lwalker@savannahga.gov</a>
PHONE:	912-651-2221

Subgrantee may designate a different person(s) to receive payment by written notice to DNR.

### **I. INTERIM STATUS REPORTS**

Subgrantee will provide DNR with one (1) *electronic* copy of all interim narrative Status Reports outlining the status of Subgrantee's implementation of the Project Services. Subgrantee will submit the reports to DNR in accordance with the schedule set forth in Section E and in a format provided by DNR. **The Subgrantee shall include a funding acknowledgement in accordance with Section Y of this Award Agreement on the title or cover page of each interim Status Report.**

### **J. FINAL REPORT**

(1) Subgrantee will submit one (1) electronic copy on CD or USB flash drive of the approved narrative Final Report to DNR within seven (7) days of the completion of the Project Services. In addition to the Final Report, Subgrantee will submit one (1) hard copy set and one (1) electronic set on CD or USB Flash Drive of all deliverables, work product and other materials required by the Scope of Work within seven (7) days of the completion of the Project Services. **The Subgrantee shall include a funding acknowledgement in accordance with Section Y of this Award Agreement on the title or cover page of the Final Report and on all materials required by the Scope of Work.**

(2) Subgrantee will submit one (1) electronic copy on CD or USB flash drive of the approved GIS Metadata, if applicable, to DNR within seven (7) days of the completion of the Project Services and accompanying the Final Report. GIS Metadata must be provided in accordance with the template format supplied to Subgrantee by DNR.

(3) In the event that this Award Agreement is terminated prior to completion of the Project Services, Subgrantee will submit one (1) electronic copy on CD or USB flash drive, within seven (7) days of the termination date, of a narrative Final Report of the work completed prior to the termination date, as well as a hard copy and electronic copy on CD or USB Flash Drive of all materials and metadata in development or completed by the termination date.

### **K. USE OF FUNDS / BUDGET CHANGES**

(1) DNR will only approve the portion of Subgrantee's Request for Reimbursement that is reimbursement for monies that are not part of the Match Fund and that are expended by Subgrantee in performing the Project Services and for no other purpose. In the event DNR determines that all or part of the Reimbursable Costs were utilized for any purpose other than the Project Services, DNR may treat such unauthorized use of the Reimbursable Costs as a material default by Subgrantee and, in addition to any other remedies available to it under this Award Agreement, at law or in equity, may require the return of all funds previously disbursed to Subgrantee.

(2) No changes between categories in the budget set forth in the Subgrantee's CIG Application greater than 10% of the total budget are authorized without DNR's prior written approval. Subgrantee will give DNR written notice of any changes between categories in the budget that are less than 10% of the total budget at the time the change is made.

## **L. INTELLECTUAL PROPERTY**

Any Intellectual Property arising out of the performance of this Award Agreement shall be governed by 15 CFR Part 24 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, Section 24.34.

Subgrantee represents that it owns all right, title and interest in and to any Intellectual Property that Subgrantee uses in connection with this Award Agreement or otherwise has the right to use such Intellectual Property and license it to DNR without infringing or violating any law or right of any third party.

Subgrantee grants DNR a worldwide, non-exclusive, and royalty-free license in perpetuity to use, reproduce, exhibit, transmit and distribute any such Intellectual Property written, created, printed, invented or reduced to practice in connection with this Award Agreement and to create derivative works to such Intellectual Property.

## **M. RECORDS**

### **(1) Accounting System/Records Retention Requirements**

- a. Subgrantee will maintain books, records, documents, and other evidence pertaining to the costs and expenses of this Award Agreement to the extent and in such detail as will properly reflect all costs for which Reimbursable Costs are paid and Match Funds are credited. Subgrantee's accounting procedures and practices will conform to the requirements of the Government Accounting Standards Board. Valuation of in-kind contributions and documentation of cost and cost-share will be consistent with accepted accounting principles and the applicable state and federal regulations, including without limitation OMB Circular A-87.
- b. Subgrantee will preserve and make available its Records to any authorized representative of DNR or the Georgia State Auditor for a period of five (5) years after the expiration of this Award Agreement. If this Award Agreement is completely or partially terminated, the Records relating to the terminated work must be preserved and made available for a period of five (5) years from the date of any resulting final settlement. Subgrantee will retain any Records that relate to appeals, litigation or the settlements of claims arising out of the performance of this Award Agreement, or any costs and expenses to which exception has been taken by the State Auditor or any of his duly authorized representatives, until such appeals, litigation, claims or exceptions are finally concluded.
- c. Subgrantee may, with DNR's prior written consent and in fulfillment of its obligation to retain the Records, substitute photographs, microphotographs or other authentic reproductions of the Records, after the expiration of two (2) years following the date of payment of the respective Reimbursable Cost to which such Records relate. DNR, in its sole discretion and with the concurrence of the State Auditor, may authorize Subgrantee to retain original Records for a shorter period of time.

### **(2) Audit Requirements**

The Georgia Department of Audits and Accounts (the "State Auditor"), or its duly authorized representatives, shall have the right, at any time and with reasonable notice, to enter into the Subgrantee's premises, or other such places where Services under this Agreement are being

performed, to inspect, monitor, assess, audit, or otherwise evaluate the work performed or being performed under this Agreement. The State Auditor may also enter at any time and with reasonable notice when the State Auditor deems it necessary in order to conduct any activity within his or her authority or responsibility, including without limitation special examinations and audits of the Department, Subgrantee, subcontractor, and persons and entities other than them. These efforts include special examinations and audits which are, without limitation, financial audits (including financial related audits and financial statement audits), compliance audits, performance/operational audits, information systems and security audits, and vulnerability assessments or reviews with respect to Subgrantee's performance hereunder. Subgrantee shall grant the State Auditor and any representatives thereof full and complete access to Subgrantee's books and records as they relate to this agreement or the services, or as they may be required in order for the State Auditor to ascertain any facts relative to Subgrantee's performance hereunder. Subgrantee shall provide the State Auditor or any representatives thereof such information and assistance as requested in order to perform such audits; provided, however, that the parties shall endeavor to arrange such assistance in such a way that it does not interfere with the performance of Subgrantee's duties and obligations hereunder. Subgrantee shall require as a condition of any subcontract that the subcontractor expressly acknowledges and agrees to be bound by the same audit requirements by which Subgrantee is bound under this Agreement.

If Subgrantee is a non-profit organization as defined in O.C.G.A. § 50-20-2(5), Subgrantee will comply with the provisions of O.C.G.A. § 50-20-1 *et seq.*, including without limitation O.C.G.A. § 50-20-3.

**(3) Additional Fiscal Requirements**

- a. If a governmental organization, Subgrantee will comply with OMB Uniform Guidance: *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards*; and 48 CFR 31.2 (as applicable).
- b. If an educational institution, Subgrantee will comply with OMB Uniform Guidance: *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards*; and 48 CFR 31.2 (as applicable).
- c. Subgrantee will comply with any other provisions of law that apply to receiving state and federal funds.

**(4) Open Records Act**

Because DNR is a public agency of the State of Georgia, information received by DNR or Subgrantee in the performance of this Award Agreement is subject to disclosure under Georgia's open records laws, O.C.G.A. § 50-18-70 *et seq.* ("Open Records Act"), unless exempt therefrom. Subgrantee shall timely respond to any Open Records Act request and will provide DNR with written notice of the receipt of the Open Records Act request and its response.

**N. RIGHT TO INSPECT WORK**

DNR, the State Auditor of Georgia or their authorized representatives, have the right to enter onto the premises of Subgrantee and all subcontractors or such other places where the Project Services are being performed during normal business hours for the purpose of inspecting, monitoring or otherwise evaluating such work.

#### **O. RELATIONSHIP OF THE PARTIES**

DNR and Subgrantee are independent contractors and not agents or employees of the other party. No party has authority to make any statements, representations or commitments of any kind, or to take any action, that will be binding on the other party.

#### **P. TRADING WITH STATE EMPLOYEES**

DNR and Subgrantee certify that this Award Agreement does not and will not violate the provisions of O.C.G.A. § 45-10-20 *et seq.* in any respect.

#### **Q. TERMINATION**

(1) DNR may terminate this Award Agreement for the convenience of DNR by providing thirty (30) days written notice of the termination date to Subgrantee.

(2) If, through any cause, Subgrantee fails to fulfill in a timely and proper manner its entire obligations under this Award Agreement or if Subgrantee violates any of the covenants, agreements or stipulations of this Award Agreement, DNR may give Subgrantee written notice of its default, specifying the nature thereof. Subgrantee will have fifteen (15) calendar days from the date of receipt of such notice to cure its default. If the Subgrantee fails to cure the default within the fifteen (15) day notice period, DNR may terminate this Award Agreement by a subsequent written notice of termination to Subgrantee specifying the termination date and DNR may pursue any other rights and remedies available to it under this Award Agreement, at law or in equity. In the event DNR terminates this Award Agreement for cause under this subsection, DNR will not disburse any funds to Subgrantee under this Award Agreement and may require the return of all funds previously disbursed to Subgrantee.

(3) In the event of an early termination for convenience under subsection Q1, DNR's obligations under this Award Agreement are fully discharged at the time that it reimburses Subgrantee for all expenses reasonably incurred prior to the termination date in satisfactory performance of this Award Agreement, including all non-cancelable obligations; provided, however, that where Subgrantee is contractually bound by this Award Agreement to provide matching funds, DNR will reimburse Subgrantee only in the ratio established by dividing the Reimbursable Amount by the Match Funds. In no event, however, will the total payments made by DNR under this Award Agreement exceed the Reimbursable Amount.

(4) If Subgrantee is a Regional Development Commission or a nonprofit corporation either created or controlled or caused to be created by the Commission and DNR finds that Subgrantee is failing or has failed to fully cooperate with the Georgia Department of Community Affairs in its conduct of a performance audit, this Award Agreement will be cancelled pursuant to O.C.G.A. § 50-8-35(i).

#### **R. CHOICE OF LAW AND VENUE**

This Award Agreement is made in the State of Georgia and will be construed in accordance with Georgia law, without application of conflicts of law principles. The exclusive jurisdiction for contract actions against DNR is the Superior Court of Fulton County, Georgia.

### **S. FORCE MAJEURE**

DNR and Subgrantee are not responsible for any failure or delay in the performance of any obligations under this Award Agreement caused by acts of God, flood, fire, war, natural disaster or public enemy.

### **T. NOTICES**

Any notice given under this Award Agreement will be in writing and is effective (i) at the time of the delivery if personally delivered, or (ii) the next business day following deposit with a nationally recognized mail or courier service, if addressed to the recipient as follows:

#### **TO SUBGRANTEE:**

Name: Laura Walker  
Title: Water Environmental Administrator  
Address: City of Savannah  
P.O. Box 1027  
Savannah, GA 31402  
Email: [lwalker@savannah.gov](mailto:lwalker@savannah.gov)  
Telephone: (912) 651-2221  
Fax:

#### **TO DNR:**

Name: Stefanie M. Nagid  
Title: Grants Coordinator  
Address: GA DNR-Coastal Resources Div.  
One Conservation Way, Suite 300  
Brunswick, Georgia 31520-8687  
Email: [stefanie.nagid@dnr.ga.gov](mailto:stefanie.nagid@dnr.ga.gov)  
Telephone: (912) 264-7224  
Fax: (912) 262-3131

Either party may from time to time, by notice to the other, designate a different person or title, or both if applicable, or address to which notices to said party are to be given.

### **U. COMPLIANCE WITH ALL LAWS**

Subgrantee will comply with all applicable federal, state and local laws, rules, regulations, ordinances or executive orders, including, without limitation, the Americans with Disabilities Act of 1990 (42 U.S.C. § 1201 *et seq.*) and all other labor, employment and anti-discrimination laws.

### **V. AUTHORITY**

Subgrantee represents that it has full power and authority to enter into and perform this Award Agreement, and that the person signing on behalf of Subgrantee has been properly authorized and empowered to enter into this Award Agreement. Subgrantee further acknowledges that it has read this Award Agreement, understands it and agrees to be bound by it.

### **W. DRUG FREE WORKPLACE**

(1) Subgrantee certifies that:

- A. A drug-free workplace will be provided for Subgrantee's employees and/or subcontractors during the performance of this Award Agreement; and
- B. It will secure from any subcontractor hired to work in a drug-free workplace the following written certification: "As part of the subcontracting agreement with (Subgrantee's Name), (Subcontractor's Name) certifies to (Subgrantee's Name) that a drug-free workplace will be provided for the subcontractor's employees during the performance of this Award Agreement pursuant to paragraph 7 of subsection B of Code Section 50-24-3."



(2) Subgrantee understands and acknowledges that it may be suspended, terminated, or debarred if it is determined that:

- A. Subgrantee has made false certification; or
- B. Subgrantee has violated such certification by failure to carry out the requirements of O.C.G.A. § 50-24-3.

#### **X. ASSIGNMENT**

Subgrantee may assign this Award Agreement or any right or obligation to a third party only with the prior written consent of DNR.

#### **Y. ACKNOWLEDGEMENT**

Subgrantee acknowledges that grant award #NA17NOS4190164 between the Coastal Management Program of the Georgia Department of Natural Resources and the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (CFDA #11.419) is the source of funding for the Project Services. Subgrantee shall include a DNR/NOAA Funding Credit/Disclaimer on all work products, including without limitation any interim status reports, the final report and all information, data, materials and deliverables produced as a result of this Award Agreement, which contains the following language:

*This [report/video] was prepared by [Subgrantee's Name] under grant award #NA17NOS4190164 to the Georgia Department of Natural Resources from the Office for Coastal Management, National Oceanic and Atmospheric Administration. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of DNR, OCM or NOAA.*

Any structure completed in whole or in part with funds under this Award Agreement must include a permanent sign, posted by Subgrantee and provided by DNR, acknowledging the source of funding.

#### **Z. CONTRACT INTERPRETATION**

(1) All provisions of this Award Agreement are severable, and the unenforceability, illegality or invalidity of any of the provisions will not affect the validity or enforceability of the remaining provisions.

(2) If a court of competent jurisdiction finds any provision of this Award Agreement to be ambiguous, an interpretation consistent with the purpose of this Award Agreement that would render the provision valid is favored over any interpretation that would render it invalid.

(3) In the event of a conflict, inconsistency or incongruity between this Award Agreement and Subgrantee's CIG Application, this Award Agreement controls.

(4) DNR and Subgrantee fully negotiated this Award Agreement and, consequently, the Award Agreement will be interpreted fairly and consistently in accordance with its terms.

(5) Any covenant, representation, or provision of this Award Agreement that by its nature survives the expiration or termination of this Award Agreement continues in full force and effect.

(6) No amendment to this Award Agreement is effective unless it is in writing and signed by duly authorized representatives of DNR and Subgrantee.

(7) No waiver of any of the provisions of this Award Agreement is binding unless executed in writing by the party making the waiver. No waiver of one provision constitutes a waiver of any other provision nor does it constitute a continuing waiver.

(8) The section headings are for reference purposes only and are not a part of this Award Agreement.

(9) All exhibits referenced in this Award Agreement are incorporated by reference and form an integral part of this Award Agreement.

(10) This Award Agreement constitutes the entire understanding between DNR and Subgrantee with respect to the subject matter and all prior agreements, representations, statements, negotiations and undertakings are superseded by this Award Agreement.

In witness whereof, the parties have executed this Award Agreement effective the date first written above.

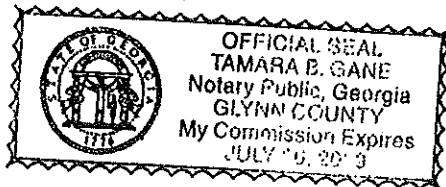
GEORGIA DEPARTMENT OF NATURAL  
RESOURCES, COASTAL RESOURCES  
DIVISION ("DNR")

CITY OF SAVANNAH ("Subgrantee")

                      
Name & Title: A.G. Woodward, Director

This 15<sup>th</sup> day of April, 2017.

                      
Notary Public  
My commission expires:                     



                      
Name & Title:  
ATTEST:                     

This 2 day of October, 2017.

                      
Notary Public  
My commission expires:                     

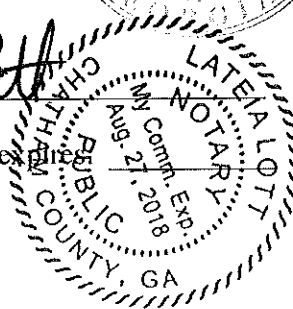


EXHIBIT A  
(CIG Application)

**Georgia Department of Natural Resources  
Coastal Incentive Grant Program  
2017-2018FY Cycle 20 Application Cover Sheet**

**Project Title:** Green Stormwater Management and Beautification in Habersham Village

**Applicant Information (Subgrantee Organization)**

**Applicant (Institution):** City of Savannah

**Federal Employer ID #:** 58-600660

**Contact (receives contract notices)**

**Name:** Laura Walker

**Title:** Water Resources Administrator

**Street Address:** P.O. Box 1027 #6 Lower East Bay Street

**City:** Savannah

**State:** GA

**Zip Code:** 31405

**Phone:** 912-651-4241

**Email:** lwalker@savannahga.gov

**Financial Contact (invoicing and payment)**

**Name:** Laura Walker

**Title:** Water Environmental Administrator

**Address:** P.O. Box 1027 #6 Lower East Bay Street

**City:** Savannah

**State:** GA

**Zip Code:** 31405

**Phone:** 912-651-2221

**Email:** lwalker@savannahga.gov

**Project Manager/Principal Investigator (if different from Contact above)**

**Name:** Laura Walker

**Title:** Water Environmental Administrator

**Address:** P.O. Box 1027 #6 Lower East Bay Street

**City:** Savannah

**State:** GA

**Zip Code:** 31405

**Phone:** 912-651-2221

**Email:** lwalker@savannahga.gov

	<b>Year One</b>	<b>Year Two (if multi-year project)</b>
<b>Federal Funds Requested</b>	<u>\$ 48,650.00</u>	<u>\$ N/A</u>
<b>Match Provided</b>	<u>\$ 53,550.00</u>	<u>\$ N/A</u>
(MUST be 1:1 for each year)		
<b>Total Cost Per Year</b>	<u>\$ 102,200.00</u>	<u>\$ N/A</u>

**Primary Funding Theme (select one):**

☐ Oceans and Wetlands

☐ Disaster Resiliency and Coastal Hazards

☒ Non-Point Source Pollution

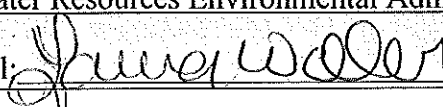
☐ Sustainable Communities

☐ Public Access and Land Conservation

**Typed Name of Authorizing Official:** Laura Walker

**Title of Authorizing Official:** Water Resources Environmental Administrator

**Signature of Authorizing Official:**



**Date:**

2/16/17

## **2017-2018FY Cycle 20 Coastal Incentive Grant (CIG) Application**

**Project Title:** Green Stormwater Management and Beautification in Habersham Village

**Applicant:** Laura Walker, Water Resources Environmental Administrator, Public Works and Water Resources Bureau, City of Savannah.

**Program Theme:** Non-Point Source Pollution

**Project Type:** Non-Research Project

### **A. Background and Justification**

#### **A.1 Project Overview**

Habersham Village is a popular commercial district in Midtown Savannah. Runoff from this 6-acre, mostly impervious, site directly enters the storm sewer and discharges to the Casey Canal. The absence of on-site stormwater retention and water quality treatment contributes to the history of flooding in this area and impaired water quality in the Casey Canal. The Casey Canal has a documented impairment for high fecal coliform (FC) and low dissolved oxygen (DO), and urban runoff/urban effects was identified as the potential cause. A Total Maximum Daily Load (TMDL) evaluation was developed for DO in 2005 (revised in 2007) and FC in 2005. The primary goal for this proposal is to develop conceptual design plans to implement green infrastructure (GI) / low impact development (LID) stormwater management practices in Habersham Village that follow guidance from the Coastal Stormwater Supplement (CSS) and infiltrate runoff from at least a 1.2-inch event. Pollutant load reductions provided by GI/LID practices will help to address the current TMDLs.

Another goal for this grant is to evaluate whether standard or oversized GI/LID practices can cost-effectively provide enough runoff reduction to reduce the size of elements in a planned gray infrastructure project – “Casey Phase II-A.” The “Casey Phase II-A” project is a multi-million-dollar drainage improvement project to address flooding issues in Midtown Savannah, including Habersham Village. It proposes upsizing 7,590 feet of drainage infrastructure to accommodate a 100-year storm. The City of Savannah recently re-posted a Request for Proposals (RFP) for this project, and the RFP closes on March 7<sup>th</sup>. The City edited the RFP following submission of the pre-application for this grant, and the RFP now includes that designs should integrate sustainable stormwater management with community enhancements. This approach is an example of GI/LID practices, and it is the intended outcome of this grant for the Habersham Village area. Habersham Village is a prime example where implementing GI/LID retrofits could have a greater impact on reducing runoff volume and pollutant load per unit area because the site is highly impervious. Since the “Casey Phase II-A” RFP is currently open, the timeline for this project will allow for the City to leverage any positive outcomes and results from this grant to enhance elements that treat or protect water quality prior to construction of the “Casey Phase II-A” project.

A triple, 8-ft. square, box culvert was designed, sized, and constructed along 56<sup>th</sup> Street to facilitate outfall to the Casey Canal for Phase II-A. Phase II-A consists of one main line and one trunk line that flows along Habersham Street and drains Habersham Village (Figure 1). It is proposed to upsize 730 feet to 48-in. diameter reinforced concrete pipe (RCP) and 360 feet to 60-

in. diameter RCP along the Habersham Street trunk line. The effects on this trunk will be evaluated for proposed GI retrofits in Habersham Village.

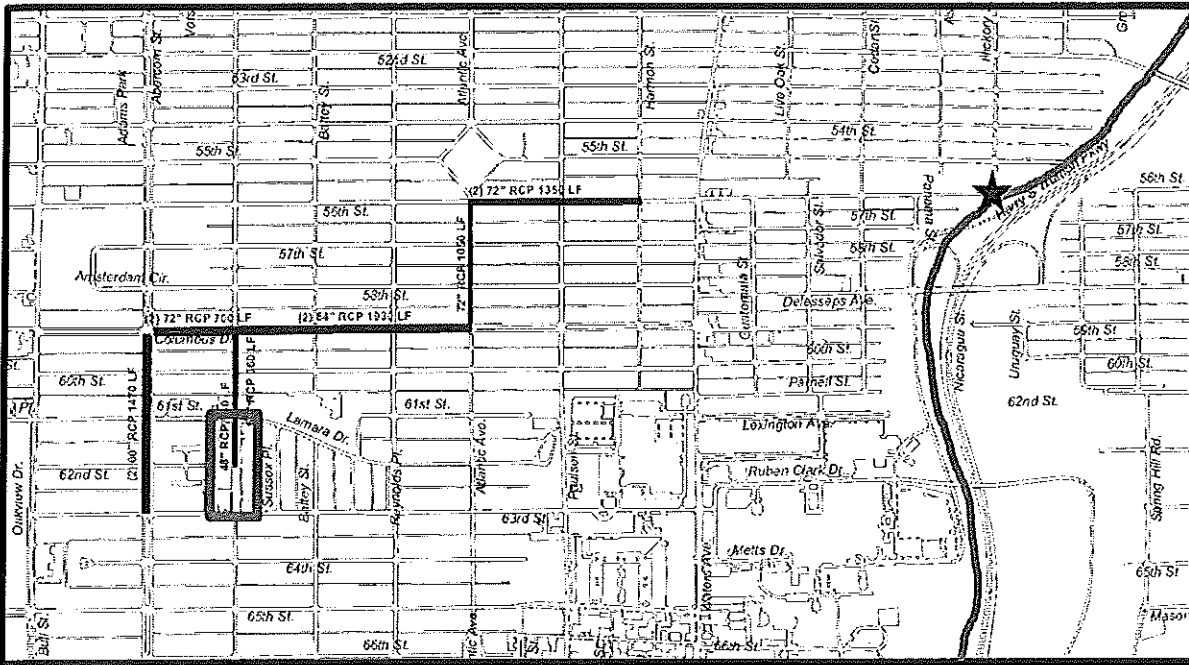


Figure 1. The proposed upsizing of infrastructure as part of Phase II-A (red lines) in relation to Habersham Village (green box) and the discharge point to Casey Canal from Phase I (red star).

Available land in the public right-of-way is not sufficient to completely treat the entire Habersham Village site. As a result, the City will host public meetings with local partners and business and property owners to allow for feedback and input during the GI design process and to garner local support for implementing additional GI/LID practices on private property. The Ardsley Chatham Crescent Garden Club and Savannah Tree Foundation have already agreed to participate in the public meetings. In addition to treating water quality and reducing runoff volume, GI/LID practices improve aesthetics. Therefore, an important step to gain support from business and property owners will be creating renderings to highlight the aesthetic improvements.

## A.2 Coastal Management Relevance

A primary benefit of this project to the Georgia Coastal Management Program and local municipalities is exploring how combining green infrastructure planning can affect gray infrastructure capital improvement projects aimed at minimizing flooding. Ideas and approaches developed as part of this project and presented in the conceptual plans can be implemented at other sites in the City, and they can serve as an example for how GI/LID practices in the CSS can be retrofitted in urbanized areas of coastal Georgia. This project will hopefully demonstrate how GI/LID can provide better service for the "Casey Phase II-A" project and future work across the City, including areas in the impaired Casey Canal watershed. The impairment along Casey Canal extends from the head of the canal until it reaches the Vernon River, and the entire 8-mile section

is on Georgia's most recent (2014) 305(b)/303(d) List of Waters for not supporting its designated use for fishing.

The City is supportive of including green infrastructure to replace gray infrastructure options, when it is cost-effective. This is evidenced by the following statements in the most recent RFP: "An analysis of gray versus green infrastructure to include life cycle costs is desired for future conceptual planning. Future phases may consider sustainable practices for managing stormwater in combination with/or in lieu of a new outfall and conduit route to the Casey Canal." As the City is expecting to do more work in this watershed, this study can serve as the foundation for future projects that explore green infrastructure alternatives to traditional gray infrastructure approaches.

The "Casey Phase II-A" project is a collaborative effort that can be leveraged for information already collected in the project area. Since the "Casey Phase II-A" project had a hydrologic and hydraulic model developed to determine the pipe sizes needed to pass the 100-year event, the grant can utilize that model to explore how implementing green infrastructure can reduce flow in the storm sewer. The grant can also use information already collected about the drainage network. An opportunity for partnerships between the project and grant during design plan development would also be possible. Because the "Casey Phase II-A" project is in an early stage (open RFP), the City will have enough time to amend the Habersham Street trunk line plans in "Casey Phase II-A" if the outcome from this grant proves that green infrastructure can be a more cost-effective option.

### A.3 Project Goals

The primary project goals for this grant application include:

- Develop a cost-alternative analysis of whether green infrastructure can offset the size of gray infrastructure specified in the "Casey Phase II-A" plans by modeling storage capacity provided by standard and oversized GI design approaches in Habersham Village.
- Develop a conceptual plan to implement green infrastructure as a retrofit project in Habersham Village, and prepare plan view drawings and schematics.
- Host public meetings that bring together local partners and local business and property owners to garner support for implementation of green infrastructure in Habersham Village.

The design alternatives for oversizing GI/LID practices will explore expanding storage capacity to the maximum extent practical based on site conditions, and up to a 100-year return frequency event. If incorporating GI in Habersham Village alone cannot make the "Casey Phase II-A" project more cost-effective, the conceptual design plans for managing the water quality event depth will be used as part of construction plans for future implementation grants (e.g., Section 319(h)) to address the TMDLs for the Casey Canal. These grants would target implementing GI/LID practices proposed in the public right-of-way and at sites with property-owner support.

This project will support several state and local planning goals and measures. For example, it will help address two short term goals in Georgia's (2014) "Statewide Nonpoint Source Management Plan." First, Short Term Goal 3.5, on Page 60, states "Encourage and/or incentivize green infrastructure retrofits to reduce NPS runoff from existing development in urban areas. Encourage stakeholder participation to identify appropriate incentives." The local community

and partners will help to plan and encourage implementation of GI retrofits in Habersham Village during the public meetings. Second, Short Term Goal 5.1, on Page 61, states “Compile existing research, collect local monitoring data as available, and disseminate findings as appropriate related to the economic cost-benefit of GI/LID, as available.” This project will support creating a new data point that explores economic cost-benefits of GI/LID and whether it can be cost-effective when implementing with gray infrastructure projects.

Once the plans developed from this grant proposal are implemented through future grants or as part of “Casey Phase II-A,” they will address management practices identified in Georgia’s (2011) “Coastal Regional Water Plan” and a minimum measure for urban existing development in Georgia’s (draft phase) “Coastal Nonpoint Source Management Plan.” The management practices highlighted in the “Coastal Regional Water Plan” to manage nonpoint source pollution from urban/suburban (NPSU) locations include: (1) manage stormwater runoff (NPSU-2) and (2) increase stormwater infiltration (NPSU-3). Another related management practice is stormwater management best management practices to address existing impairments and TMDL listed streams (TMDL-3). In the “Coastal Nonpoint Source Management Plan,” the relevant minimum measure is to identify priority local and/or regional watershed pollutant reduction opportunities, e.g., improvements to existing urban runoff control structures.

## **B. Task Descriptions**

### **Task 1: Compile available site and project information**

**Task 1 Description:** The project manager (Laura Walker) will coordinate meetings with the subcontractor (Ecological Planning Group) and other groups at the City of Savannah to compile available information related to the drainage network, topography, and existing hydrologic/hydraulic model inputs/results for pipe upsizing planned for “Casey Phase II-A.” Following the meetings, the subcontractor will determine the information still needed to conduct the analysis.

- Task Outcomes: Two meetings and plan for site-specific information still needed.
- Anticipated Date of Completion: November 30, 2017.

### **Task 2: Conduct geotechnical survey**

**Task 2 Description:** Based on the outcome of the meetings in Task 1, the subcontractor will inventory and survey drainage network to determine information needed for model inputs and to determine feasibility of different GI/LID practices. The subcontractor will coordinate a geotechnical survey to determine depth to water table and soil strata in areas specific to where GI/LID practices are proposed to be installed.

- Task Deliverables: Geotechnical survey report with soil profile and depth to water table.
- Anticipated Date of Completion: December 31, 2017.

### **Task 3: Hold three (3) public meetings**



**Task 3 Description:** The City will host three (3) public meetings in the Habersham Village area that will include local partners, property owners, business owners, and residents. The City will advertise the meetings, and both the City and subcontractor will participate in the facilitation of the meeting and present GI/LID alternative. The purpose of these meetings will be to present GI/LID alternatives, gather feedback, and garner community support for implementation during the design process. The expected meeting schedule is January 2018, April 2018, and June 2018. It is expected that at least 20 participants will be in attendance for each meeting.

- Task Deliverables: Sign-in sheets, agendas, meeting minutes, PowerPoint presentations.
- Anticipated Date of Completion: June 30, 2018.

**Task 4: Develop cost estimates for incorporating green infrastructure into current plan**

**Task 4 Description:** The subcontractor will develop a cost estimate to manage the water quality event (1.2 inches) through the 100-year event (11.6 inches), to the maximum extent practical based on site constraints (e.g., available land, depth to water table, soil conditions). At least three sizing options between the water quality and 100-year events will be evaluated to determine the most cost effective approach.

- Task Deliverables: Summary report.
- Anticipated Date of Completion: April 30, 2018.

**Task 5: Develop conceptual green infrastructure design plan for Habersham Village**

**Task 5 Description:** If one of the green infrastructure options is more cost-effective than the gray-only option and the City pursues implementation, the conceptual design will be for that event/option. Otherwise, a conceptual design will be developed to manage the water quality event depth (first 1.2 inches) by following guidance in the CSS, and these design plans can be used as part of the construction plans for future implementation grants (e.g., Section 319(h)).

- Task Deliverables: Conceptual design plan that includes plan and profile views, design calculations, cost estimates, and proposed schematic.
- Anticipated Date of Completion: August 31, 2018.

**Task 6: Host and present findings at local community meeting**

**Task 6 Description:** The City will host a community meeting, in which the subcontractor will present the final proposed design and outcomes of the study to the project partners and local community. The City will also invite coastal managers to this event.

- Task Deliverables: Sign-in sheets, PowerPoint presentation.
- Anticipated Date of Completion: September 30, 2018.

**Task 7: Present technical results and outcome of study at a local/coastal conference**

**Task 7 Description:** The final results of this study will also be presented at a local, coastal conference. Since the project manager, Laura Walker, is on the planning committee for Confluence Conference, this conference will be targeted. This annual conference, typically held in September, includes water professionals from Georgia, South Carolina, and North Carolina.

Travel funds will not be requested for this task. The subcontractor will present the findings of this study at a conference at their own expense.

- Task Deliverables: Registration List, PowerPoint presentation.
- Anticipated Date of Completion: September 30, 2018.

### **C. Communications**

The outreach plan for this project targets “Educational Activity.” The project results, impacts, and benefits of including green infrastructure will be disseminated through two (2) oral presentations. First, the City will host a community meeting and invite all those that participated in the public meetings as well as coastal managers. This presentation is estimated to reach 40 people, which include general coastal public and coastal managers. The second presentation will be at a local/coastal conference. As described in the description for Task 7, the Confluence Conference will be targeted. The expected number of people to reach at this conference will be all those registered, which is typically 130, because this conference has one track. This group includes water professionals working in the public and private sectors and academia from Georgia, South Carolina, and North Carolina.

### **D. Project Timeline and Milestones**

Task 1: Months 1–2 (October – November)

Task 2: Month 3 (December)

Task 3: Months 4, 7, and 9 (January, April, and June)

Task 4: Months 4–7 (January – April)

Task 5: Months 8–11 (May – August)

Task 6: Month 12 (September)

Task 7: Month 12 (September)

### **E. Project Management**

Laura Walker, Water Resources Environmental Administrator, will serve as the primary project manager. She will manage the subcontract with Ecological Planning Group and work to provide coordination with the subcontractor and City of Savannah employees when meetings and transfer of information are needed. She will also coordinate and host the public meetings and final community meeting/presentation. Other City of Savannah personnel who will contribute to this project include: Roger Raines (Stormwater Management Department Director), Zack Hoffman (Administrator/Project Manager), and Zack Strickland (Stormwater Technician).

Project partners who will participate as volunteers with the public meetings include: Savannah Tree Foundation and Ardsley Chatham Crescent Garden Club. All business and property owners will be invited to participate in public meetings as stakeholders. Letters of support are included for Savannah Tree Foundation and Ardsley Chatham Crescent Garden Club.

**F. Project Budget Narrative and Standard Form(s)**

<b>Budget Category</b>	<b>CIG Request (Federal)</b>	<b>Match Provided (Non-Federal)</b>	<b>TOTAL (Federal + Non-Federal)</b>
Personnel	\$0	\$35,950	\$35,950
Fringe: (30%)	\$0	\$10,785	\$10,785
Equipment	\$0	\$0	\$0
Travel	\$0	\$0	\$0
Supplies	\$0	\$0	\$0
Subcontract: (Ecological Planning Group)	\$48,650	\$0	\$48,650
Construction	\$0	\$0	\$0
Other: (Volunteers)	\$0	\$2,142	\$2,142
Indirect: (10% de minimis)	\$0	\$4,673	\$4,673
<b>TOTAL</b>	<b>\$48,650</b>	<b>\$53,550</b>	<b>\$102,200</b>

**Budget Narrative:**

**1. Personnel:** Personnel who will work on the grant from City of Savannah include: Laura Walker, Roger Raines, Zack Hoffman, and Zack Strickland. Detailed information is provided below for each, and their salaries will be used as In-Kind Match.

a. Name: Laura Walker

b. Title: Water Resources Environmental Administrator

c. Monthly or annual salary: \$67,000/year

d. Time to be spent on the grant project: 25% (match funds provided: \$16,750)

e. Description of responsibilities: Laura will serve as the primary project manager for this grant. She will coordinate and host the public meetings and the final community meeting/presentation, and she will review and comment on the deliverables provided by the subcontractor.

a. Name: Roger Raines

b. Title: Stormwater Management Department Director

c. Monthly or annual salary: \$75,000/year

d. Time to be spent on the grant project: 5% (match funds provided: \$3,750)

e. Description of responsibilities: Roger will provide supervisory review of this project and associated results. Based on the cost-benefit analysis results, he will incorporate the findings appropriately in the "Casey Phase II-A" project.

- a. Name: Zack Hoffman
- b. Title: Administrator/Project Manager
- c. Monthly or annual salary: \$65,000/year
- d. Time to be spent on the grant project: 15% (match funds provided: \$9,750)
- e. Description of responsibilities: As one of the primary project managers for the "Casey Phase II-A" project, Zack will provide coordination of information needed for this grant. He will also provide review and comments on the proposed design plans and modeling results.

- a. Name: Zack Strickland
- b. Title: Stormwater Technician
- c. Monthly or annual salary: \$38,000/year
- d. Time to be spent on the grant project: 15% (match funds provided: \$5,700)
- e. Description of responsibilities: Zack Strickland will assist the project manager with review and approval of deliverables, outreach for public meetings, and field verifications as needed.

**2. Fringe Benefits:** City of Savannah has a fringe rate of 30%. Fringe benefits include: annual holidays, vacation leave, sick leave, workers' compensation, group medical and hospital insurance, group life insurance, and retirement. Fringe benefits will be used as In-Kind Match.

**3. Equipment (Items with cost > \$5,000):** There will be no equipment charged to the grant or used as match.

**4. Travel:** There will be no travel charged to the grant or used as match.

**5. Supplies (< \$5,000):** There will be no supplies charged to the grant or used as match.

**6. Subcontracts:** One subcontract will be awarded to Ecological Planning Group (EPG) as part of this grant, and it will be charged entirely to the grant. The majority of the budget for EPG is in the form of salary for staff time on this project. The number of hours, salary, and description of work are provided below. EPG will be responsible for subcontracting the geotechnical survey (\$4,000) and the landscape architect renderings for the public meetings and final design plan (\$5,250).

Courtney Reich, AICP, CFM (**40 hours, \$5,400**) – Principal Planner – Ms. Reich will serve as project manager and will provide oversight for the duration of the project. She will coordinate EPG's project deliverables and organize, attend, and facilitate community meetings.

Robert Brown, Ph.D., P.E. (**340 hours, \$34,000**) – Water Resources Engineer – Dr. Brown will serve as EPG's engineer on the project. He will compile all the necessary information to input into the model, perform field inspections and verifications where necessary, develop and run the model, develop cost estimates, prepare design plans, and write the summary report. He will also present findings at community meetings and present the study results at the final community meeting and at the selected conference.

The subcontract budget has also been broken out into requested budget categories:

Personnel - \$39,400 (salary for staff time)

Fringe - \$0 (fringe is included in salary for staff time)  
Equipment - \$0  
Travel - \$0  
Supplies - \$0  
Subcontracts - \$9,250 (geotechnical survey and landscape architect renderings)  
Construction - \$0  
Other - \$0  
Indirect - \$0  
**Total - \$48,650**

**7. Construction:** This project does not include construction, so there will not be associated construction costs.

**8. Other:** (*Volunteer Participation from Stakeholders*) Participants in the three (3) public meetings will be counted as volunteers, and this time will be used as In-Kind Match. It is expected to have on average 20 participants at each meeting and for each meeting to be 1.5 hours. Using a volunteer rate of \$23.80 for the State of Georgia (Source: <https://www.independentsector.org/resource/the-value-of-volunteer-time/>), volunteer participation will contribute \$2,142.

**9. Indirect (Facility and Administrative) Costs:** The City of Savannah has never had a federally Negotiated Indirect Cost Rate Agreement (NICRA), so the applicant will use the 10% de minimis for indirect costs as In-Kind Match. Indirect costs will be used as In-Kind Match.

## **G. Supplemental Information**

The following Supplemental Information are included:

- Match/In-Kind Letters of Support
  - Savannah Tree Foundation
  - Ardsley Chatham Crescent Garden Club
- Referenced Plans
- Certifications Form
- Authorizing Resolution – This form will be submitted after upcoming City Council Meeting.

## **H. Standard Forms**

The following Standard Forms are included:

- Cover Sheet
- Standard Budget Form
- Certifications Form