




**Interoffice Memorandum**

**AGENDA ITEM**

June 23, 2017

**TO:** Mayor Teresa Jacobs  
-AND-  
Board of County Commissioners

**FROM:** Jon V. Weiss, P.E., Director   
Community, Environmental and Development  
Services Department

**CONTACT PERSON:** **Lori Cunniff, CEP, CHMM, Deputy Director  
Community, Environmental and Development  
Services Department  
(407) 836-1405**

**SUBJECT:** July 18, 2017 – Consent Item  
Extension to Period of Performance for Subrecipient Agreement  
with Florida Forest Service – Protecting and Restoring Urban Tree  
Canopy for Stormwater Management

On November 29, 2016, the Board of County Commissioners (BCC) approved a subrecipient agreement between Orange County and the Florida Forest Service (FFS). The subrecipient agreement relates to Orange County's participation in a study that seeks to link urban tree canopy to stormwater mitigation, specifically for communities with Municipal Separate Storm Sewer Systems (MS4). The original subrecipient agreement indicated that the term of the agreement would end on August 31, 2017. The FFS has agreed to extend the term of the subrecipient agreement to February 28, 2018. Accordingly, their authorized representative has executed an amendment, which now must be approved by the BCC and countersigned before it becomes final.

The project, which encompasses seven southern states, including Florida, is being sponsored by the U.S. Forest Service (USFS). The FFS decided to reallocate some of their grant funding designated for local governments to allow Orange County to participate. The Green Infrastructure Center (GIC), a 501(c)(3) non-profit, was selected by the USFS to lead the project in order to provide consistency and comparability of data across the study areas. The original subrecipient agreement was not executed by the FFS until January 6, 2017. The estimated timeframe to complete the study in other jurisdictions was 14 to 18 months. The original timeline for completion of the study in Orange County was shortened considerably because the FFS was concerned that the federal funding they had earmarked for the grant would expire at the end of federal fiscal year 2016-2017.

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July 18, 2017 - Consent Item

Extension to Period of Performance for Subrecipient Agreement with FFS – Protecting and Restoring Urban Tree Canopy for Stormwater Management

Subsequent to the award of the subrecipient agreement, the FFS project coordinator determined that the funds would not expire as early as originally thought. Therefore, he indicated that he would be willing to entertain a six-month extension, if needed. GIC determined that an extension was required to complete the work, and the FFS project coordinator indicated he would favorably consider the request, if it was supported by Orange County.

The study is expected to outline a number of Orange County's commitments and ongoing efforts, including MS4 permit compliance requirements, Basin Management Action Plans, Total Maximum Daily Loads (TMDL) compliance, the development of Orange Code, and Orange County's "Our Home for Life" sustainability plan, which includes a strategy to "promote urban forestry and expand tree canopy."

The amendment was reviewed by the County Attorney and approved as to form.

**ACTION REQUESTED:**      **Approval and execution of Florida Department of Agriculture and Consumer Services Division of Administration Contract Amendment to the Federal Financial Assistance Subrecipient Agreement between the Florida Department of Agriculture and Consumer Services and Orange County to extend the end date for the term of the agreement from August 31, 2017 to February 28, 2018, relating to a study involving protecting and restoring urban tree canopy for stormwater management. All Districts**

JVW/LC: mg

Attachment



ADAM H. PUTNAM  
COMMISSIONER

Florida Department of Agriculture and Consumer Services  
Division of Administration

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APPROVED BY ORANGE  
COUNTY BOARD OF COUNTY  
COMMISSIONERS

**CONTRACT AMENDMENT**

BCC Mtg. Date: July 18, 2017

Please Respond To: Florida Department of Agriculture  
and Consumer Services  
Florida Forest Service  
Forest Management Bureau  
3125 Conner Boulevard, C-25  
Tallahassee, Florida 32399-1650

May 19, 2017

Mr. David Jones  
Orange County Board of County Commissioners  
3165 McCrory Place, Suite 200  
Orlando, Florida 32803

**RE: Amendment of Contract # 24021 dated 01/06/17.**

This letter, upon execution by both parties and attachment to the original contract shall serve to amend said contract. The contract shall be amended as follows:

Page 1, paragraph 4 currently reads:

**B. EFFECTIVE DATE/TERM**

1. The effective date of this AGREEMENT shall commence upon execution, and, unless sooner terminated or canceled, shall end on the 31st day of August, 2017. ("Term").

Shall be amended to read as:

**B. EFFECTIVE DATE/TERM**

1. The effective date of this AGREEMENT shall commence upon execution, and, unless sooner terminated or canceled, shall end on the 28th day of February, 2018. ("Term").

Delete Attachment A in its entirety and replace with the attached revised Attachment A.

**NO OTHER PROVISIONS OF THIS CONTRACT ARE AMENDED OR OTHERWISE  
ALTERED BY THIS AMENDMENT.**



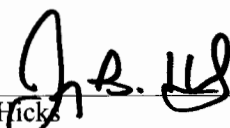


Florida Department of Agriculture and Consumer Services  
Division of Administration

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ADAM H. PUTNAM  
COMMISSIONER


CONTRACT AMENDMENT

  
Joey B. Hicks  
Director of Administration  
Department of Agriculture  
and Consumer Services

(Date)

6-8-17



  
(Signature)  
County Administrator  
(Title)

(Company)

(Date)

7.18.17

## **Attachment A**

### **Scope of Work Orange County**

#### **Protecting & Restoring Urban Tree Canopy for Stormwater Management**

This Scope of Work ("SOW") is dated as of the Date of Execution and is attached to and made a part of that certain Federal Financial Assistance Subrecipient Agreement and all attachments thereto (collectively, the "Agreement") by and between Orange County and the Florida Forest Service ("FFS").

#### **I. Introduction**

Rapid urbanization and increased climatic fluctuations have led to an increased risk of flooding and degraded water quality. Trees intercept, store, and transpire a significant amount of stormwater. Protecting and restoring urban forests are key stormwater management strategies, resulting in significant cost savings. There are opportunities, and increasing interest, for southern communities to incorporate trees as part of their required stormwater management (MS4) programs.

This project was developed as a regional effort, originally designed to use Landscape Scale Restoration funds ([www.fs.fed.us/spf/redesign/fy2016\\_national\\_guidance.pdf](http://www.fs.fed.us/spf/redesign/fy2016_national_guidance.pdf)) to advocate for the use of the urban forest as a stormwater BMP, as part of the required stormwater management (MS4) programs for municipalities. Landscape Scale Restoration funds were insufficient to accomplish the goals of this program in Orange County. Due to the merit of the project, the FFS reallocated funds to conduct this special county wide project. The project will show how tree canopy protection and restoration can help counties with issues such as stormwater compliance, reducing flooding, and meeting TMDL targets for impaired waters. This is one of three pilot projects. FFS funding assures these three pilot projects will be completed in Florida, linking urban forest management to stormwater mandates. The project will use remote sensing analysis to create urban canopy data; code and ordinance audits will be completed; stakeholder facilitation, ordinance amendments and a strategic plan will also be developed. Local government partners will be assisted to establish goals, map urban tree canopy and generate statistics on the stormwater and related benefits, conduct risk analysis for future loss, and establish expansion or management goals to maximize benefits.

#### **II. Background**

Federal support to the Florida Urban and Community Forestry (U&CF) Program is authorized by the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313) as amended. The program operates as a cooperative partnership between the FFS and USDA Forest Service, Southern Region. The U&CF Program's goal is to develop, enhance and support sustainable urban and community forestry programs throughout Florida by encouraging citizen and community involvement. The goal of this project is to engage local government in active urban forest management and encourage retention of urban trees and forested land by incorporating urban forest management into existing stormwater management programs (i.e. Municipal Separate Storm Sewer Systems (MS4) programs).

This SOW specifically identifies the professional services to be provided by Green Infrastructure Center (GIC) to Orange County whereby the two organizations will cooperate to provide deliverables in the specified timeline.

The work will contractually be carried out by the Green Infrastructure Center (GIC), a 501(c) 3 that works with local governments, communities, and regional planning organizations, land trusts and developers to evaluate their green infrastructure assets and make plans to conserve them. The GIC uses economic analysis, mapping, and land use planning and asset assessment needed by communities to protect and restore their natural assets, specifically, green infrastructure. The expertise provided by the GIC will help accomplish the FFS strategic goal incorporated in its Forest Action Plan of encouraging the incorporation of forests and green space in land-use planning through the principles of green infrastructure. As per the approved proposal and Federal narrative, the GIC is a partner in completing the project requirements.

**III. CONTRACT PERIOD:** Date of Execution – February 28, 2018

**IV. CONTRACTOR CONTRACT ADMINISTRATOR**

David Jones, PE  
3165 McCrory Place, Suite 200  
Orlando, Florida 32803-3727  
407-836-1434  
david.jones2@ocfl.net

**V. WORK PLAN**

**A. Tasks / Activities for Orange County:**

- 1) Form a technical review committee made up of County agencies (e.g. planning, engineering, parks, public works etc). Convene group orientation (anticipate a least 6 technical meetings over the project year).
- 2) Capacity Audits (to be done concurrently).
  1. Perform data audit (assess all data layers available, especially land cover, tree canopy, storm sewer, etc.)
  11. Perform code and ordinance audit - review whether and how trees can be used for stormwater management as well as how well the county's codes and ordinances protect, expand or restore the urban forest (tree ordinances, landscape codes etc.).
- 3) Analysis of current extent of the urban forest: GIC will utilize current high resolution tree canopy or create new canopy data. Determine county's current canopy coverage and calculate stormwater (and related) benefits. Create Possible Planting Area Analysis (PPA) to determine how much canopy could be expanded. Determine potential future stormwater benefits.
- 4) Stormwater and trees calculations methods review: Assess current software (i-Tree, i-Tree Hydro, other reference manuals and models) for determining stormwater uptake. Report results and recommended method.
- 5) Recommendations: Suggest code changes/incentives/programs/ staffing needs, to integrate and utilize the urban forest for better stormwater management.

- 6) Outreach and education: Hold community forum(s)/workshops to educate developers, decision makers, community about the proposed approach.
- 7) Write up recommendations: Suggest how the County can best adopt new programs, codes, processes, staff, to better integrate the County's trees as part of their stormwater management program.
- 8) Sharing the work: Create a case booklet and a PowerPoint presentation which features each of the seven participating states; detailing the project, methodology, lessons learned and best practices for other cities who wish to do this work. Present the booklet and a PowerPoint presentation which features each of the seven participating states; detailing the project, methodology, lessons learned and best practices for other cities who wish to do this work. Present the case booklet at: state forestry conferences, the national Partners in Community Forestry Conference, the American Planning Association, Stormcon (stormwater engineers' conference) and possibly the Water Environment Federation (WEF Tech).

**B. Timeline: Date of Execution to February 28, 2018**

TASKS	DETAIL	2017												2018	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb
<b>Committee Formation and Meetings</b> Step 1	Form technical review committee														
	Meet throughout the project process (about 6 times)														
<b>Data, Code, and County Staff Audits</b> Step 2	Distribute master list of data and codes														
	Distribute list of data and codes unable to be found by GIC														
	Obtain outstanding GIS data and codes from the County														
	Assess GIS data														
	Assess codes and ordinances														
	Assess County Staff roles														
<b>Urban Forest Analysis and Potential</b> Step 3	Collection or creation of tree canopy data														
	Tree canopy data analysis including percent coverage and stormwater benefits														
	Perform Possible Planting Area Analysis														
<b>Stormwater and Trees Calculation Methods Review</b> Step 4	Based on the PPA, determine potential future stormwater benefits														
	Perform review of models determining stormwater uptake by trees														
<b>Code Suggestions</b> Step 5	Report the results and recommended method														
	Suggest code and ordinance revisions/incentives/programs														
<b>Outreach and Education</b> Step 6	County & GIC organize community meetings and workshops														
	County & GIC hold community meetings and workshops														
<b>Formalize Suggestions</b> Step 7	Write up code suggestions														
<b>Present the Work</b> Step 8	Create case booklet and Power Point presentation of findings														
	Present the project at state and national conferences														

Note: This schedule will be modified as necessary.

## **VI. Roles, Responsibilities and Deliverables**

### **Deliverables of GIC for Orange County:**

- 1) A process for integrating trees into the County's stormwater management strategy, each county will get:
- 2) Updated tree canopy and impervious land cover map used to map current canopy and analyze runoff, stormwater benefits and potential for mitigating stormwater (map and GIS digital format) + metadata.
- 3) Potential planting areas map (digital GIS) used for strategic planning to set future canopy goals.
- 4) Codes and Ordinance Audit for urban trees to facilitate better management and care.
- 5) Workshops with local committees to provide education and solicit input.
- 6) Model ordinance language or other program/policy documents for using trees to meet stormwater regulations.
- 7) Written step-by-step strategy and methodology for linking urban forest systems to urban MS4 requirements for the County.
- 8) Case study of the project suitable for sharing at workshops, with elected and appointed officials and other agencies. UF-IFAS and stakeholders.
- 9) The GIC SOW covers all unincorporated areas of Orange County. Municipalities are not included.

## **VII. Summary of Roles and Responsibilities**

<b>GIC</b>	<b>COUNTY</b>	<b>DOF</b>	<b>Notes</b>
Develop Tree Canopy Data Layer	Review data/quality assurance	Review work product	Much of this review is on line
Review data	Provide base data for analysis	n/a	County provides existing data – e.g. parcels
Code and ordinance audit	Provide relevant codes and review work.	Review work product	County recommends codes to review
Work with review committee to establish goals	Convene review committee and review results	Attend meeting (if desired)	GIC can assist with facilitation. There will be several meetings (6 or more over the year).
Calculate stormwater and other benefits	Review process and results	Review work product	
Create a potential planting area analysis and calculate potential future benefits	Convene review committee and review results	Review work product	Not an actual plan but a model of potential for informing strategies
Draft recommendations for integrating trees in stormwater management/Chesapeake Bay TMDL/Local TMDL	Recommend future actions for integrating trees in stormwater management/Chesapeake Bay TMDL/Local TMDL	Review work product and make recommendations	Used to create case study
Training in using updating data	Update data, integrate actions into local activities, plans, strategies	Participate in training	All data created to be given to County in GIS and related formats
Write and present case study and related presentation	Review and contribute to case study	Review work product and assist in dissemination	Limited copies to be printed/others to be PDF format.

Summary Responsibilities are subject to Agreement Requirements set forth in MOA.

### **VIII. Project Budget: \$49,875.00**

### **IX. Budget and Match Requirements**

The County must prepare documentation showing how it will provide its match. Following are the rules for documenting and submitting the match. The FFS must adhere to these requirements as they have been established by the USDA Forest Service who are the project funders. Match documentation is due every three months and must be received by the FFS - the deadlines will be provided once the project begins.

- 1) The County must use the official reporting form to list receipts, paid invoices and amounts as well as subtotals. (The GIC can provide the electronic form in MS Excel).
- 2) Ensure that copies of invoices and receipts show clearly visible dates and amounts. All invoices and receipts must either show a zero balance or have written verification of payment. If the vendor is not obvious (e.g. Fred's Discount Store), notate what the item was for (e.g. display boards for mounting maps).
- 3) The volunteer form will be provided to record match hours for staff, attendees at meetings etc. Ideally use one sheet for staff and one for volunteers. If a community meeting is held, record names and sign form on behalf of the attendees - a responsible party must certify those persons attended.
- 4) If using rent as a match, provide documentation of rental payment or estimate of square footage dedicated to this project and evidence of fair market value (e.g. class A office space @ \$30/sq. ft. at 20 percent of floor area)
- 5) Only non-federal or non-state sources can be used as a match. For example, if a staff member is funded by a federal grant, their time may not be used as match. Similarly, federal funds cannot be used as a match, nor can federal facilities etc.
- 6) Matches are only appropriate for work or supplies used on this grant. Unrelated work or supplies may not be used as a match.
- 7) Documentation for the match requirement outlined above must be submitted quarterly.

Match documentation can be submitted by email. If submitting digitally, provide scanned copies of receipts.

- X. Data:** In order for GIC to map current and potential future tree canopy, calculate impervious areas and develop the possible planting area analysis, the GIC must obtain a copy of the datasets used by the County such as roads, parcels, zoning etc. The County may choose to sign a data sharing agreement. An agreement form is not required by GIC. The GIC will ensure that all data are kept confidential. All data created for the project becomes the property of the County. The GIC and the state of Florida may represent results in presentations or reports.

- XI. PAYMENT SCHEDULE:** GIC invoices and FFS reimbursement requests paid on a monthly basis, per the Deliverables table. Payments may be made on partial completion of task but percent task complete must be specified. This is a not-to-exceed contract and amounts within categories may be shifted as long as the total amount is not exceeded. Payments will be limited to those outlined in this contract. **Reports and requests for reimbursement to be submitted to the Contract Administrator listed below.**

**XII. CONTRACT ADMINISTRATOR:** All contract related questions should be directed to the Contract Administrator.

David Jones, PE  
Environmental Programs Administrator  
3165 McCrory Place, Suite 200  
Orlando, FL 32803-3727  
407-836-1434  
david.jones2 @ ocfl.net

**XIII. GIC TEAM AND ROLES:**

Karen Firehock ([firehock@gicinc.org](mailto:firehock@gicinc.org)) – GIC Executive Director- Contact Karen about grant requirements, municipality responsibilities, budgets etc.

Chris McCormick ([mccormick@gicinc.org](mailto:mccormick@gicinc.org)) – GIC Community Landscape Associate – Contact Chris about project workflow, project status, scheduling workshops etc.

Andrew Walker ([walker@gicinc.org](mailto:walker@gicinc.org)), Matthew West ([west@gicinc.org](mailto:west@gicinc.org)) and John Scrivani ([scrivani@gicinc.org](mailto:scrivani@gicinc.org)) – GIS Data Team – Contact Andrew, Matthew or John about GIS data, map making or anything technical

GIC's Phone Number is 434-244-0322. You can access all of us at this number. Calls roll over.