



Leaders at the Core of Better Communities

2010 Annual Awards Program

Program Excellence Awards Nomination Form

Deadline for Nominations: March 12, 2010

Complete this form (sections 1 and 2) and submit with your descriptive narrative.

SECTION 1: Information About the Nominated Program

Program Excellence Award Category (*select only one*):

- Community Health and Safety
- Community Partnership
- Community Sustainability
- Strategic Leadership and Governance

Name of program being nominated: Erosion Control Projects

Jurisdiction(s) where program originated: City of Casselberry

Jurisdiction population(s): 25,000

Please indicate the month and year in which the program you are nominating was fully implemented. (Note: All Program Excellence Award nominations must have been fully implemented by or before January 31, 2009, to be eligible. The start date should not include the initial planning phase.)

Month: January Year: 2009

Name(s) and title(s) of individual(s) who should receive recognition for this award at the ICMA Annual Conference in San José, California, October 2010. (Each individual listed MUST be an ICMA member to be recognized.):

Name: Barbara Lipscomb

Title: City Manager Jurisdiction: City of Casselberry

Name: _____

Title: _____ Jurisdiction: _____

Name: _____

Title: _____ Jurisdiction: _____

SECTION 2: Information About the Nominator/Primary Contact

Name of contact: Kristen Chamberlain
Title: Special Projects Coordinator Jurisdiction: City of Casselberry
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City: Casselberry State/Province: Florida
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Erosion Control Projects

Problem Assessment

As a result of hurricanes and subsequent storm events, the banks along Gee Creek, a major conveyance system that drains two-thirds of Casselberry's land area, suffered severe erosion. Personal properties and public structures faced catastrophic flooding and structural failure if the erosion was not addressed immediately.

Project Implementation & Costs

In March 2007, the Casselberry Public Works Department submitted an application for the Gee Creek Erosion Control Project to the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) in an effort to obtain matching funds under the Emergency Watershed Protection (EWP) Program. NRCS agreed to contribute 75% of the total cost for the project given the following provisions: 1) the City contributes a 25% match and 2) complete the project, including design, permitting, and construction, within 180 days. The project cost was not to exceed \$840,000. To reduce costs and expedite the process, the project was completely designed in-house by the City Engineer and the Public Works Director.

Construction began in June 2008 and was two-thirds complete when Tropical Storm Fay hit Florida in late August 2008. According to the U.S. Geographical Survey (USGS), Tropical Storm Fay produced approximately 16 inches of rainfall in the City. Not only did the storm damage part of the Gee Creek Erosion Control Project, it also caused severe erosion and flooding at five new locations: Gee Creek Weir, Queens Mirror Lake/South Lake Triplet Canal, Gee Creek at the North Winter Park Drive Bridge, Gee Creek at Gee Creek Lane, and North Lake Triplet Channel at Secret Lake Park. Approximately 70 homes, 15 roads, 2 bridges, a park, and the Casselberry Recreation Center faced imminent danger if the erosion was not remedied. Casselberry received an extension for the Gee Creek Erosion Control Project; however, the City

Erosion Control Projects

was still in need of assistance for the five new locations. After the state of Florida was declared a Federal Disaster Area, Casselberry became eligible for additional federal funding from NRCS. In order to receive assistance, the grant application had to be submitted within 10 days of the disaster. The City of Casselberry was one of only two cities in the entire state of Florida to receive funding. Under the “exigency” grant, NRCS approved funding for Casselberry in the amount of \$1.925 million to complete five projects in 120 days. In just one day, Casselberry was able to obtain Field Authorizations from St. Johns River Water Management District (SJRWMD) for the five projects—in lieu of standard permitting that normally takes 2-3 months.

The total actual cost to complete all six projects was \$1,519,213, of which the City was only responsible for approximately \$380,000. By performing some of the design work in-house and obtaining low bids from contractors, the City was able to reduce the original budget by 45%.

Project Results

In partnering with NRCS, Casselberry completed the following projects by January 2009:

Gee Creek Erosion Control Project: The segment of Gee Creek immediately behind the homes on the south end of Osceola Trail experienced pervasive erosion where the creek curves. Funding from NRCS allowed the City to implement both structural and non-structural erosion control measures. As a result, creek erosion no longer threatens nearby homes and public structures.



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Gee Creek Weir Project: The Gee Creek weir controls the water level for several of the City's lakes and regulates the water flow into Gee Creek. As a result of Tropical Storm Fay, flows overtopped and eroded around the sides of the structure, threatening homes and property along Gee Creek. Funding from NRCS allowed Casselberry to construct a new structurally sound weir and deep sheet pile walls to prevent further erosion.

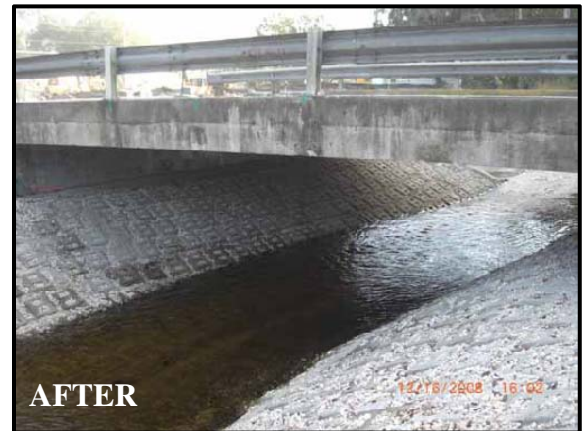


Queens Mirror Lake/South Lake Triplet Canal Project: The canal connecting Queens Mirror Lake and South Lake Triplet experienced substantial erosion, threatening adjacent homes and a City sewage lift station. Funding from NRCS allowed the City to install metal sheet pile with a concrete cap at the eroded bank as well as install silt fences and multiple turbidity barriers. As a result, the homes located along the canal are no longer threatened by severe property erosion and the canal can more safely discharge floodwaters downstream.

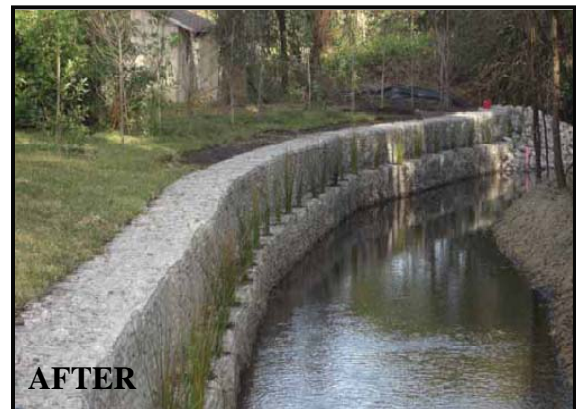


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Gee Creek at North Winter Park Drive Bridge Project: Following the storm, one of the bridge approaches developed a 5 foot deep hole, which forced the City to close the bridge while a temporary repair was completed. NRCS funding allowed the City to install articulated block to retain the soil under the bridge approaches and to provide erosion protection underneath and around the bridge.



Gee Creek at Gee Creek Lane Project: The existing private concrete retaining wall behind a home was overtopped by the creek flows, eroding and undermining the retaining wall. Additionally, a storm sewer outfall that discharges into the creek collapsed. Funding provided by NRCS was used to build a protective wall of gabion rock and replace the storm sewer that collapsed. The private properties adjacent to the creek are now protected from further erosion.



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North Lake Triplet Channel at Secret Lake Park Project: During Tropical Storm Fay, the northern channel of North Lake Triplet eroded near a roadway in Secret Lake Park. NRCS funding allowed the City to install metal sheet pile with a concrete cap at the eroded areas, thus preventing further erosion of the channel and roadway. This also substantially reduced sediment loading to downstream portions of Gee Creek and the receiving water body, Lake Jessup.



Lessons Learned

- ***Partnerships expedite services to citizens.*** During the projects, the City worked closely with NRCS and St. Johns River Water Management District to ensure proper construction and timely completion. Completion of so many major projects in such a short timeline is virtually unheard of in the engineering and construction industry.
- ***Being cognizant of all resources is fiscally responsible.*** Through grant funding opportunities, Casselberry was able to get 75% of the project funded. Being cognizant of different funding opportunities saved the City and its taxpayers millions of dollars.
- ***Open communication between residents and City officials is instrumental to a project's success.*** During the planning and implementation phases of the project, the City Engineer personally met with property owners affected by the erosion to discuss the project need and benefits. As a result, the City had full support and cooperation from the residents.