

## FY2017 Cooperative Funding Initiative Application Form

**Project Name** Bee Branch Phase I  
**Project Number**  
**Cooperator** Pinellas County  
**Department** Environment And Infrastructure  
**Contact Person** David Talhouk, E.I.  
**Address** 14 S. Ft. Harrison Ave.  
**City State Zip** Clearwater, FL 33756  
**Phone #** 727-464-3780  
**Email** dtalhouk@co.pinellas.fl.us

**Project Type:**

Water Supply    Water Quality    Flood Protection    Natural Systems

**Strategic Initiatives:**

Water Quality Maintenance and Improvement    Water Quality Monitoring  
 Alternative Water Supply    Conservation  
 Reclaimed Water    Regional Water Supply Planning  
 Emergency Flood Response    Floodplain Management  
 Minimum Flows and Level Establishment and Monitoring    Minimum Flows and Levels Recovery  
 Natural Systems Conservation and Restoration    Natural Systems Identification and Monitoring

**Indicate All Counties to Benefit From Project:**

Charlotte    Citrus    Desoto    Hardee    Hernando    Highlands    Hillsborough    Lake  
 Levy    Manatee    Marion    Pasco    Pinellas    Sarasota    Sumter    Polk

**Project Description/Benefit/Cost****Description:**

The overall objective of this project is to eliminate erosion and encroachment of the Bee Branch Creek onto private properties between 15th Street and Omaha Street (CR 1) in Palm Harbor, Florida. The creek embankment is experiencing areas of erosion and washout due to current flow conditions. The preliminary analysis included data collection from various sources for input in developing a revised existing conditions model (RECM) using the computer program ICPR. Also, using the computer program HEC-RAS, an existing conditions model (HEC ECM) was developed for further evaluation. Site visits were conducted by Cardno staff on 1/14/2015, 3/5/2015 and 8/25/2015, which confirmed channel degradation throughout the project limits. The RECM and the HEC ECM will be utilized to assist in analyzing the hydraulic characteristics throughout the channel.

The project is divided into two segments, Phase I and Phase III. The Phase I segment begins at 14th Street and extends westward to the CR 1 Pond site. The existing creek consists of primarily residential properties along the north and south banks of the channel throughout both segments. The Phase I limits of the channel are contained within the County right-of-way by means of existing drainage easements and the platted right-of-way for Virginia Ave. The existing banks are highly eroded throughout the length of the channel segment. Various man-made debris are found throughout the channel such as broken concrete, cinder blocks and rubber tires, all which seem to have been placed in efforts to reduce the amount of erosion occurring along the banks. At a few locations along the channel, existing fence lines as well as some residential structures are threatened because of channel degradation along the channel banks. Trees have lost root stability and have fallen throughout the two channel segments. These fallen trees have redirected channel flow, causing several washout areas within the banks.

Prior work has been performed in the vicinity of Bee Branch Creek between 15th Street and CR 1 (Omaha Street). To the west of the County's Phase I segment, a sump was constructed within the creek, located just upstream of the box culvert crossing CR 1. The sump provides a sediment basin within the channel, reducing the amount of sediments being transported downstream. Also in this area, a treatment pond has been constructed adjacent to the channel for the recent roadway improvements along CR 1. To the east of the County's Phase III segment, channel improvements were constructed within the Bee Branch Creek from 15th Street to 19th Street (Phase II). The channel improvements for Phase II included tiered gabions, rubble riprap and sodded banks throughout the channel for stream restoration. Additionally, other improvements included an energy dissipater, which was constructed at the discharge point into Bee Branch Creek for the storm sewer system located to the north along 14th Street. The energy dissipater assists in reducing velocities and erosion at this discharge point within the channel. The aforementioned work was cooperatively funded by SWFWMD. This phase is the next segment which needs to be addressed along the creek.

**Benefit:**

The benefits of this project will be to reduce erosion and sediment transport downstream and improve water quality by reducing TSS loading through erosion protection in a manner which conserves the low flow channel allowing it to meander consistent with stream restoration principles as utilized in the previous segments cooperatively funded by SWFWMD. We will also provide protection to homes along the creek from damage due to continued erosion. Currently fences and private property are being threatened by this condition including homes if left unresolved.

**Cost:**

The construction cost for this project is estimated at \$800,000 with an additional \$80,000 for CEI services. These costs are projected for FY2017. We are requesting construction and CEI funding for this project.

**Describe your complementary efforts in developing, implementing and enforcing water conservation, water quality and flood protection ordinances.**

Pinellas County participates in the National Flood Insurance Program and has adopted a flood plain ordinance. We regulate and manage floodplains up to the 100 yr event. All development is required to receive the proper building and site plan development permits. We participate in the NPDES program and have an ongoing Watershed Management effort throughout the County. We acquire and manage preserve areas, which provide water quality benefits. We encourage water conservation and have invested in the development of a reclaimed water system for our citizens to reduce the use of potable water for irrigation. We promote Florida friendly landscaping and in partnership with state and federal regulatory agencies, are involved with the adoption and development of ordinances to promote water conservation and resource protection

Funding Source	Prior Funding	FY2016 Budget	FY2017 Budget	Future Funding	Total Funding
Applicant Share	200,000	100,000	440,000		740,000
Pinellas Anclote			440,000		440,000
Total	200,000	100,000	880,000		1,180,000

**Matching Fund Reduction**

Check here if requesting a reduction in matching funds requirement pursuant to s.288.06561, F.S.

**Timelines**

**Data Collection Assessment:**

No data will be collected for this project

Recommendation Approved: Mark S. Woodard Date: 9/28/15  
Mark S. Woodard, County Administrator