RESTORE Act Interest Form

Please fill out the form below to express your interest in funding a project or proposal from the RESTORE Act. (Additional pages may be used, if needed.) Completion of this form does not guarantee funding.

Project Name: South I-75 Canal Spreader Swale
Project Sponsor: Collier County Natural Resources
Contact Person: Jerry Kurtz
Address: 2800 N. Horseshoe Dr., Naples, Fl 34104
Phone: (239) 252-5860 Email: GeraldKurtz@colliergov.net

Project Type according to the Allowable Uses for RESTORE Act Funds:

- Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region
- Mitigation of damage to fish, wildlife, and natural resources
- Implementation of a federally approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring
- Workforce development and job creation
- Improvements to or on State parks located in coastal areas affected by the Deepwater Horizon oil spill
- Infrastructure projects benefitting the economy or ecological resources, including port infrastructure
- Coastal flood protection and related infrastructure
- Activities to promote tourism and seafood in the Gulf coast region

The Board of County Commissioners has adopted Guiding Principles relating to project proposals:

1. Projects provide positive environmental and economic benefits, including job creation.
2. Projects are consistent with local government comprehensive plans and community priorities.
3. Projects incorporate other funding partners to fully leverage grant resources.
4. Projects meet the funding criteria set forth in the RESTORE Act.
5. Projects selected will be diverse and address all our community's eligible needs, including coastal and ecosystem restoration and development, flood protection, and tourism promotion.

Project location (attach map if applicable):
Project Description (describe how the proposal applies to an Allowable Use & a Guiding Principle)
Total Cost: Additional Funding Partners or sources of matching funding if available (RESTORE Act funds):
Suggested implementation timeline:

Mail completed form to:
William Lorenz, Director
Natural Resources Department
2800 North Horseshoe Drive
Naples, Fl 34104

For additional information please call 239-252-2951 or 239-252-8113
PROJECT LOCATION:

The South Belle Meade area is the area generally south of I-75 and north of US 41, bounded on the west by CR 951 (Collier Boulevard) and on the east by the Picayune Strand State Forest.

Source: http://www.dep.state.fl.us/lands/FFAnnual/Belle%20Meade.pdf
PROJECT DESCRIPTION:

The Rookery Bay watershed has decreased by about 100 sq. mi. due to the construction of canals. As a result, the hydrology of the remaining wetlands has changed to shorter hydroperiods with less water stored, negatively affecting native wildlife and fauna. The canals have also resulted in an altered pattern of discharge to the estuary through a dry season deficit and wet season surplus, resulting in excessive fresh water discharge and thus ultimately affecting the salinity of the Naples Bay estuaries. (Allowable Use #2)

The South I-75 Spreader Swale or South Belle Meade rehydration Project has been conceptually designed to improve wetland hydrology, provide water quality treatment to the flows diverted from the I-75 canal to the spreader swale and will also restore timing and discharge rates of freshwater flows into the Picayune Strand State Forest and Rookery Bay. (Allowable Use #1, Guiding Principle #1)
The South I-75 Spreader Swale project would include the design and construction of a 50 cfs pump station to pump water from the interconnected I-75 canal network into a feeder channel. Subsequently, a spreader swale would be constructed to facilitate movement of water out of the canals that parallel I-75 and direct the water south via overland flow. (Allowable Use #6)

The South I-75 Spreader Swale project was identified in the Collier County Watershed Management Plan and will rehydrate wetlands in the Rookery Bay Watershed, the Southern Belle Meade area, and the northern portion of the Picayune Strand State Forest. (Allowable Use #5, Guiding Principle #2)

This project is part of a larger program to restore the hydrology of the entire Belle Meade Flowway which extends from the Golden Gate Main Canal north of I-75 in the north, U.S. 41 and the Ten Thousand Islands in the south, and reaching from the Picayune Strand CERP Restoration Project to the east and urban development and C.R. 951 to the west. The entire Belle Meade Flowway encompasses several thousand acres of wildlife habitat and wetlands that have been severely altered by development, as well as a canal system sending water west to Naples Bay. (Allowable Use #3, Guiding Principle #2)

Design and construction of the pump station and feeder channel will support Collier County’s existing workforce or result in new job creation. (Allowable Use #4)

This project falls within eligible activities listed in the RESTORE Act which are incorporated as “allowable uses” by Collier County. This project was also determined to meet RESTORE Act funding criteria during the National Estuary Programs’ Southwest Florida Regional Ecosystem Restoration Plan project ranking process. (Guiding Principle #4)

TOTAL COST:

The total cost of this project has been estimated to be $3.1 million dollars. This estimate is based on conceptual level project evaluation and development completed as part of the Collier County Watershed Management Plan. Cost considerations for land acquisition, which may be necessary to ultimately construct this project, have not been included in this estimate. Future development of project concepts will refine project estimated costs and necessary land requirements.

SUGGESTED IMPLEMENTATION TIMELINE:

Should Restore Act funding be appropriated to this project the next effort would be further development of the conceptual plans. This will include input from project stakeholders. Once the best alternative has been selected, construction level drawings, permitting and land acquisition will be completed. The estimated timeframe for this process through construction completion is currently 3 to 5 years.
### Water Quality

<table>
<thead>
<tr>
<th>Pollutant loadings to the wetland</th>
<th>South I-75 Spreader</th>
<th>Complete Removal</th>
<th>Total Volume Pumped</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
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<td>26%</td>
<td>$77,000,000</td>
</tr>
<tr>
<td>P</td>
<td>0.622</td>
<td>26%</td>
<td>$77,000,000</td>
</tr>
<tr>
<td>TSS</td>
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<td>26%</td>
<td>$77,000,000</td>
</tr>
</tbody>
</table>

### Water Quality (Wetland Treatment Portion)

- Detention Time = Shallow Concentrated TC
- Flow length = 40,000 ft
- Total hydraulic drop = 5.0 ft (0.5 to 3.5)
- TC = 66.27 hrs (2.76 days)

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