

FLORIDA GULF OF MEXICO RESTORATION PROJECT SUBMITTAL FORM

Submit by Email

Form Purpose and Instructions:

- To assist the project proposal and review process, please complete this Submittal Form. Completion of the Form will contribute to the appropriate information being completely and accurately submitted for each project.
- Take as much space as needed for each question, but please keep responses as focused as possible. It may assist you to review all the questions before addressing any one question.
- If you have multiple projects – please submit one Form for each project.
- When you have completed the form hit the submit button in the upper right hand corner. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.
- Submit all back-up maps, information, etc. to Restoration.Projects@dep.state.fl.us
- To submit updated information, please fill out this form and update fields as needed.

All of the following are **Required Fields** for project updates

New Project



Update to Previous Submittal



Project #

Project Name

Sedimentation reduction from unpaved roads - Santa Rosa County

Contact Information: *(Include at least one name, phone number, email address, and organization name if applicable)*

Roger Blaylock, Santa Rosa County Engineer
RogerB@santarosa.fl.gov
850-981-7100

Project Location:

(Include a map, if possible, and the city, county, watershed, longitude/latitude dec.deg, Parcel # if Applicable)

Santa Rosa County, Pensacola Bay Watershed, multiple dirt road locations near wetlands, rivers, bays and creeks.

Project Description:

(Describe all aspects of the project)

Unpaved roads provide a clear and distinguishable impacts to our waters. Sediment from unpaved roads, included eroded particles of rock, is transported by sheet flow runoff into nearby waters. This process is accelerated as citizens utilize the roads. Sedimentation in streams impairs water quality, increases flooding, reduces aquatic habitats, impairs navigation and recreation, and alters fluvial and alluvial geomorphology.

There are hundreds of miles of dirt roads in Santa Rosa County. When properly maintained, many sections of these roads contribute very little to stormwater problems. However, the most

serious stormwater problem associated with dirt roads in Santa Rosa County is associated with wetland road approaches. A wetland road approach is defined as a road that approaches creeks, rivers, bays or other wetland areas, with many of these approaches down slope. The erosion that occurs in these areas accounts for a high percentage of sedimentation and increases county road maintenance costs. Recognizing the stormwater impacts associated with managing dirt roads and the limited funds available to improve them, Santa Rosa County's approach is a priority paving system that centers funding initially on the most critical sections of dirt roads, sections approaching creeks, rivers, bays, and wetlands. Santa Rosa County proposes an innovative approach to project delivery by utilizing in-house design and construction capabilities in concert with external contractors to efficiently and cost effectively deliver a dirt road paving program in Santa Rosa County. Santa Rosa County proposes the following phased approach:

Phase I

Santa Rosa County has already identified key wetland road approach areas that need to be addressed. Due to funding constraints, the first phase will include ranking the most sensitive and problematic dirt road areas to be addressed and determining which best management practices (BMP) to be implemented. A roadway selection matrix along with costs will be utilized to arrive at the most impactful projects fitting the pre-determined construction budget.

Phase II

Provide in-house and possibly consultant design of BMP's for highest ranked wetland road approach locations.

Phase III

Construct roadway paving and BMP's for highest ranked locations with in-house construction crews and/or combine inhouse construction with outside contractors.

Phase IV

Education of Santa Rosa and other county road crews regarding proper maintenance and grading of dirt roads and BMP's. This would include a demonstration of proper road grading and could include erosion and sediment control inspector certification training for Santa Rosa County and other staff.

Estimated Project Costs:

(Describe the estimated costs of the project, including any assumptions for contingency and ongoing operations/maintenance. Identify other secured funding sources such as matching funds, in-kind contributions or state/federal dollars. In addition, if possible, complete and submit the Cost Appendix Sheet associated with this Form)

Design	\$ 260,000
Construction	\$ 1,796,000
SRC In-Kind Construction Contribution	\$ 200,000
Monitoring	\$ 33,000
Construction Supervision	\$ 100,000
Subtotal	\$ 2,389,000
10% Contingency	\$ 238,900
Total	\$ 2,627,900

Other Funding:

(Indicate if the project is submitted for any potential funding or if it may be used to leverage additional funding, if so, please describe the funding source [e.g. State/Federal Grants])

Technical Feasibility:

(Describe the technologies involved and any relevant past experience or proven success with similar projects)

Santa Rosa County has an excellent track record of actually constructing dirt road paving, including erosion and sedimentation control with in-house construction personnel. Santa Rosa County usually performs most of the grading, erosion control, drainage and grassing work and they prepare the base for paving then they utilize outside paving contractors under pricing agreements to complete the paving elements. This approach is very innovative and produces a completed project significantly less than bidding the entire project to contractors. Santa Rosa County could utilize this innovative approach to stretch the allocated grant funding thereby addressing more critical unpaved road areas.

Conflicts or Complements to Existing Efforts:

(Describe any ongoing activities in the project implementation area, if the project is part of another plan, and why the project does or does not interfere with that work. Please consider how the project may complement existing local, regional, and state efforts/plans/objectives)

Project will be part of an overall Pensacola Watershed plan that will be submitted to the Bay Area Resource Council for review and approval after being developed through The Nature Conservancy Watershed workshops.

Project is consistent with FDEP's Bureau of Watershed Restoration strategies to mitigate non-point source impacts of unpaved road pollution on Florida's surface waters and compliments 319 grants implemented by FDEP within Santa Rosa County to address non-point source pollution within the Pensacola Bay Watershed.

ACTION PLAN — Land Management 12

Secure Funding Sources to Assist in Unpaved Road Maintenance throughout the Watershed

Complies with Federal, State, Local, and Tribal Laws/Regulations:

(Describe any concerns or potential conflicts)

Project will be designed and constructed in accordance with all Federal, State of Florida and Santa Rosa County laws/regulations. All wetland areas will be delineated, flagged and protected during construction activities.

Readiness for Implementation:

(Describe if the project has had any design or permitting work started or completed [attach permits or design work]. Please address any issues that may delay start or finish of the project)

Santa Rosa County has already identified unpaved roadway projects for paving and drainage/erosion upgrades. No formal design has been completed, however, estimated time to complete design effort is only 4-6 months. Projects selected will have appropriate existing R/W so no delays are anticipated. Project can be ready for implementation within 6 months of a notice to proceed.

Environmental Benefits:

(Describe the nature, magnitude, and timing of any environmental benefits attributable to the project. If possible, describe potential environmental performance measures [e.g. pollutant reduction]. Please address any potential environmental impacts associated with implementing or maintaining the project [e.g. loss of a habitat or conversion of habitat from one type to another during implementation])

Unpaved roads with steep gradients, deep cut-and-fill sections, poor drainage, erodible soils, and road-stream crossings contribute to most of this sediment load, with road-stream crossings being the most frequent sources of erosion and sediment. Suspended sediment can:

- irritate the gills of fish, making them prone to disease;
- smother fish spawning and feeding grounds;
- gradually fill in near shore, resulting in the loss of desirable shoreline (due to encroaching weeds, for instance) ;
- cause algal blooms, resulting from the attached phosphorus;
- reduce levels of dissolved oxygen; and
- diminish recreational and aesthetic values of the waterbody.

Nutrients, such as phosphorus, are attached to dirt road sediments. In natural conditions, the scarcity of phosphorus in a water body limits algal growth. When a water body receives extra phosphorus in the form of dirt road sediment, algal growth increases dramatically. Sometimes this growth causes choking algal blooms, but more often it results in small, negative changes in water quality that, over time, damage the health and aesthetics of the lake.

Implementation of this action would provide funding to assist in the management of Santa Rosa County's critical wetland approach unpaved roads and reduce the sedimentation into various creeks, rivers and bays. Reducing the erosion into the river will reduce turbidity, improve water quality, and improve the overall biological health and productivity of the river. Promoting stabilization of road structures throughout the Santa Rosa County side of the Pensacola watershed will result in improved water quality in several of the area's impaired waterbodies.

Monitoring Environmental Response/Performance measures

The environmental response could be measured by the performance of physical, chemical, and biological assessments before and after restoration project.

Related Indicators:

Average Turbidity

Compliance with Best Management Practices

Total Nitrogen

Dissolved Oxygen

Economic and Social Benefits:

(Describe the economic and social benefits including those related to the project's improved ecosystem services and any estimates on jobs created or preserved)

Some of the benefits to the Pensacola Bay Watershed include:

- reducing sedimentation and turbidity
- improving water quality
- improving the overall biological health and productivity of the watershed

Approximately 25 construction related jobs will be created and/or preserved during the estimated two year construction period.

Community Resilience:

(Describe if the project assists Florida's ability to anticipate, withstand, or recover from hazards or threats [e.g. hurricane preparedness, establishing living shorelines])

Unpaved roads are a source of pollution. Soil particles are loosened and carried away from the road by water, wind, traffic, or other transport means. Exposed soils, high runoff velocities and volumes, sandy or silty soil types, and poor compaction increase the potential for erosion. Loosened soil particles are carried from the road bed and into the roadway drainage system. Particles settle out, diminishing the ditch carrying capacity and causing roadway flooding, leading to more roadway erosion. Most of the eroded soil ends up in streams and rivers, reducing channel capacity, causing more frequent and severe flooding, destroying aquatic and riparian habitat, and adversely affecting water quality. Long term, this project will help reduce the potential flooding by maintaining stream and river channel capacity during extreme weather events.

Public Acceptance:

(Describe any known or potential public approval or opposition to the project)

Public has been very receptive to the Santa Rosa County dirt road paving program in the past and Santa Rosa County expects significant positive support with the proposed innovative approach to dirt road paving.

Additional Information you wish to provide:

(Please include any maps, designs, drawings, photos or background resources that may assist in completely and accurately understanding the project. If these are too large to attach here, please email them to

Restoration.Projects@dep.state.fl.us

Cost Appendix Sheet

Cost Item

Cost Estimate

Planning

Contracts	
Feasibility	
Engineering, Design, Land Rights & Bid Prep	240,000
Restoration Plan	
Site Visits & Cost of Site Selection	
Administration, Overhead and Indirect	20,000
Other	
Planning Subtotal:	260,000

Construction

Contracts	1,700,000
Administration & Mobilization/Demobilization	96,000
Other	200,000
Construction Subtotal:	1,996,000

Monitoring

Contracts	30,000
Data Collection	
Monitoring Administration	3,000
Other	
Monitoring Subtotal:	33,000

Project Cost

Supervision	100,000
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Subtotal: 2,389,000

Contingency (<i>traditionally calculated at 10% of the subtotal</i>)	238,900
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TOTAL: 2,627,900

Estimated Costs by Year

Year 1	1260000
Year 2	1334900
Year 3	11000
Year 4	11000
Year 5	11000
Year 6	