

Bay County RESTORE Act Direct Component Proposals 2014-2015

Proj #	Bay PRP 2014-004	
Project Name	North Bay Wastewater System Improvements - Water Reuse	
Project Proposer, affiliation, web site	Benjamin Blicht, Bay County Board of County Commissioners, Utility Services Director www.baycountyfl.gov	
Project Description	Reuse treated wastewater from Bay County's N Bay wastewater plant by providing 7.5 miles of pipe infrastructure to send the treated wastewater to the nearby Gulf Power Lansing Smith Power Plant. The treated wastewater would be used as cooling water at the plant. This water would replace the existing use of bay surface water for cooling. After use for cooling, the treated wastewater would be disposed of by deep well injection rather than discharging to St. Andrew Bay.	
Proj. Size (acres)		
Economic	Project would preclude need to construct additional Rapid Infiltration Basin Systems to receive treated wastewater.	
Environmental	Project is estimated to reduce the carbonaceous biochemical oxygen demand & total suspended solids by 91,000 lbs/yr each, & reduce the nitrate nitrogen by 55,000 lbs/yr. The reuse water would also be used for the boiler process, reducing groundwater pumping & putting less demand on the aquifer.	
Social		
Other		
Project Location	Southport area in Bay County, FL.	
Est total project cost		\$5,750,000
Amount requested		\$1,500,000
Describe what funds will be used for	Construction of pipeline to provide treated wastewater reuse water for power plant operation and to reduce discharge to surface waters	
Long term funding needed? Source? Availability?	Operation and maintenance will be covered by utilities revenue.	
Est yrs completion	0-2	
Matching \$ available?	Yes.	
Match source? Secured?	\$100,000 worth of engineering design. Bay County is working to secure the remaining necessary funding of approximately \$1.65 million.	
Amount match secured		\$2,600,000
% proj cost from match		74%
Partners anticipated?	Yes.	
Partner names	Gulf Power	
Funds request other source?	Yes.	

Bay County RESTORE Act Direct Component Proposals 2014-2015

If yes, name source, decision date	Pursuing multiple potential funding sources, undetermined decisions/dates of decisions.
Proj fully funded by other source?	No
FULL PROPOSAL FORM	
Project number (proposal)	Bay PRP 2014-004
Submittal date proposal	
Project name (proposal)	North Bay Water Reuse Project
Applicant name	Bay County Utility Services
Project description (proposal)	Treated wastewater from Bay County's North Bay wastewater plant is currently discharged into Rapid Infiltration Basin Systems (RIBS), which further treat the wastewater before migrating into the aquifer and surface waters. This project would provide the infrastructure to reuse the water by providing 7.5 miles of pipe infrastructure to send the treated wastewater to the nearby Gulf Power Lansing Smith Power Plant. The treated wastewater would be used as cooling water at the plant. This water would replace the existing use of bay surface water for cooling. After use for cooling, the treated wastewater would be disposed of by deep well injection rather than discharging to St. Andrew Bay. For the St. Andrew Bay system, this project is estimated to reduce the amount of carbonaceous biochemical oxygen demand and total suspended solids by 91,000 pounds per year each, and reduce the nitrate nitrogen by 55,000 pounds per year. In addition, the plant's boiler process currently uses 1.2 million gallons of groundwater per day. The reuse water would also be used for the boiler process, reducing groundwater pumping and putting less demand on the aquifer
Project location description	The project is located in central Bay County, north of Fannin Bayou of North Bay, between SR 77 and CR 2300. The project center is approximately latitude 30.30, longitude -85.68.
1. Restore nat res	Through the reduction of nutrients being discharged to North Bay/St. Andrew Bay system and the reduction in groundwater pumping, the project would help with the restoration of natural resources, ecosystems, fisheries, coastal wetlands and wildlife habitats.
2. Mitigate	
3. Implement plan	
4. Workforce/Jobs	
5. Improve state park	

Bay County RESTORE Act Direct Component Proposals 2014-2015

<p>6. Infrastructure</p>	<p>The project entails installing a pipeline to transport treated wastewater from the treatment plant to a power plant where the water will be reused for cooling and boiler operations. This will result in a reduction of nutrients being discharged to North Bay and a reduction in groundwater pumping, and would help with the restoration of natural resources, ecosystems, fisheries, coastal wetlands and wildlife habitats. It will also temporarily benefit the economy by providing construction jobs. In addition, the reduced nutrient load makes it less likely that future economic development around the bay will be restricted by the nutrient levels being too high in the bay.</p>
<p>7. Flood protect</p>	
<p>8. Planning</p>	
<p>9. Promote tourism</p>	
<p>10. Promote seafood</p>	
<p>1.1 Diversify</p>	
<p>1.2 Infrastruc</p>	
<p>1.3 Airport</p>	
<p>1.4 Job train</p>	
<p>1.5 Workforce dev</p>	
<p>1.6 Facil tourism/econ dev</p>	
<p>1.7 Rec, transport, wage</p>	
<p>1.8 Protect nat res</p>	<p>Through the reduction of nutrients being discharged to North Bay and the reduction in groundwater pumping, the project would help with the restoration and protection of natural resources, ecosystems, fisheries, coastal wetlands and wildlife habitats.</p>
<p>1.9 Promote fishing</p>	
<p>1.10 Commun resil</p>	
<p>2.1 Protect SAB</p>	

Bay County RESTORE Act Direct Component Proposals 2014-2015

2.2 Improv wtr qual	Through the reduction of nutrients being discharged to North Bay and the reduction in groundwater pumping, the project would help with the restoration of natural resources, ecosystems, fisheries, coastal wetlands and wildlife habitats.
2.3 Protect seagrass	
2.4 Wildl hab	
2.5 Acq lands	
2.6 Preserve dunes, shore	
2.7 Protected spp	
2.8 Water data	
3.1 Deer Pt Lk wtr qual	
3.2 Stabil roads	
3.3 Sewer AWT	The proposed project will improve the water quality of the St. Andrew Bay system by reducing the discharge of treated wastewater to the ground and the bay system. For the St. Andrew Bay system, this project is estimated to reduce the amount of carbonaceous biochemical oxygen demand and total suspended solids by 91,000 pounds per year each, and reduce the nitrate nitrogen by 55,000 pounds per year.
3.4 Septic to central	
3.5 Stormwtr	
3.6 LID	
3.7 Coast resil	
3.8 Support port	
Budget justification	The total budget for this project is approximately \$5.75 million. Of this, Gulf Power provided \$2.5 million for a deep well injection station. Bay County will provide \$100,000 worth of engineering design. \$1.5 million is being requested from Bay County's RESTORE Act Direct Component funds. Bay County is working to secure the remaining necessary funding of approximately \$1.65 million.
Ongoing costs	Any ongoing costs to support the project will be offset by the decommissioning of the current RIBs and the savings of roughly \$8 million for not having to build necessary RIBS in the future.
Objective and measures	The objective of the proposed project is to reduce the nutrient loading being discharged into the North Bay system. The criteria used to evaluate the success will be to calculate the pounds of nutrients diverted to the reuse line.
Nat Res Proj	Yes.
Best Avail Science	Information on Best Available Science, if required, will be provided at the time of the grant application. This project will be done with input from Northwest Florida Water Management District and Florida Department of Environmental Protection.
Env issues	No issues anticipated.

Bay County RESTORE Act Direct Component Proposals 2014-2015

Econ Dev proj?	No
Econ Dev description	
Job Creation?	Yes.
Describe how jobs created	This is not primarily a job creation project, but the project will create a temporary increase in construction jobs during the construction phase for the infrastructure.
No. jobs created	
No. jobs created Yr 1	
No. jobs created Yr 2	
No. jobs created Yr 3	
Avg wage	
Total proj cost	
Complement. proj descr.	
Proj readiness descr	The project has completed planning, design, and local zoning and land use requirements for the pipeline.
Permits required?	Yes.
Permits status	FDEP WW Construction Permit - Needs to be requested. FDEP ERP - Needs to be requested. FODT permit for bore under HWY 77 - Needs to be requested. USACOE Permit - Approved October 2013 and expires July 2017
Land acq?	N
Acquire fee simple?	
Acquire easement?	N
Fee and easement descri	
Terms of easement	
Entity to hold title	
Easement acres	
Fee simple acres	
Appraisal avail?	
Appraised value	
Title opinon avail?	
Material risks	None anticipated

Bay County RESTORE Act Direct Component Proposals 2014-2015

Likelihood of success	The likelihood of the project accomplishing its main purpose is highly likely due to no effluent being discharged into the bay once the reuse line is in service.
Contract out work?	Yes.
Contracting strategy	The work in this application will be contracted out and will be managed using Bay County's approved CIPMS.
Applic manage proj?	Yes.
L 1. Proposed mgr	Bay County Utility Services will manage the project.
L 2. Mgr agreed?	Yes.
L 3. Mgr experience	Bay County has managed multiple grants and contracts in the recent past with a track record of projects being completed on time and under budget. The Alternate Water Supply project completed in 2015 required managing a \$5 million grant from the NFWFMD.
L 4. Post proj maint	Bay County has the technical ability to maintain the project upon completion due existing licensed operators and qualified maintenance staff at the facility.
L 5. Mgmt approach	The project will be managed using Bay County's approved CIPMS.
Outreach descr	