

LOWER ST JOHNS RIVER RESTORATION
PROJECTS NOMINATED FOR SPECIAL LEGISLATIVE
APPROPRIATIONS
FISCAL YEAR 2007

LOWER ST JOHNS TAC REVIEW & PRIORITIZATION
THURSDAY, AUGUST 25, 2005
10:00 AM – 2:00PM
JACKSONVILLE CITY HALL, ST JAMES BUILDING
MEZZANINE LEVEL, EXAM ROOM #3

PREPARED FOR THE ST JOHNS RIVER WATER MANAGEMENT DISTRICT
TIFFANY L. BUSBY, WILDWOOD CONSULTING

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**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): Duval County Health Department - Environmental Health & Safety Division

Contact Person: Antoinette Jackson Telephone Number: (904) 665-2548

E-mail Address: antoinette_jackson@doh.state.fl.us

Other Sponsors (if any):

Project Description

Project Name: Septic Tank Enforcement Project

Project Short Description (one sentence or less/for spreadsheet use): Identification and repair of failing septic tank systems in Duval County

Detailed Project Description: This project is a critical component of a comprehensive Lower St. Johns River Initiative that expands the current capabilities of the Duval County Onsite Sewage Treatment Disposal Systems (OSTDS) Program to identify failing septic tank systems through the Septic Tank Enforcement project. The main objectives of this program are: (1) to protect the surface waters of the Lower St. Johns River and its tributaries through the enforcement of the State of Florida statutes, rules and regulations governing Onsite Sewage Treatment Disposal Systems (OSTDS), and (2) to protect the public's health. The septic tank enforcement project is structured and operated to identify and repair all failing septic systems that are currently or have the potential for direct or indirect pollution of the St. Johns River and its tributaries.

Potential contaminants that degrade the quality of surface and groundwater resources as a result of septic system failure include disease causing bacteria, infectious viruses, household chemical and nutrients (nitrates and phosphates). These contaminants present a public health threat to our community. However, the septic tank enforcement project at the Duval County Health Department has developed ongoing enforcement capabilities to reduce the amount of sanitary nuisances that could potentially cause adverse health effects to local residents.

This project is highly specialized to identify old and malfunctioning septic systems to enforce their abandonment, repair, modification, replacement or connection to a central sewerage system. The identification process includes the door-to-door survey of communities that have a documented history of septic system failures and the

investigation of public complaints regarding septic systems. Additionally, this program incorporates the monitoring of septage contamination of the St. Johns River and its tributaries.

The funding received for this program allows a proactive approach to investigating this problem in the Duval County area. The septic tank enforcement project will help assure:

- (1) that all new and repaired OSTDS adequately handle residential and commercial building plumbing wastewater,
- (2) that this wastewater does not produce sanitary nuisance conditions, and
- (3) no potential exists for the degradation of surface water or groundwater quality.

The goals of the Septic Tank Enforcement project are to:

- improve the quality of degraded surface waters;
- maintain and conserve high quality waters;
- restore the ecological functions of the natural communities associated with this aquatic ecosystem;
- prevent or eliminate potential contamination of surface and groundwater, and
- protect the public's health from onsite sewage contaminants.

In order to accomplish these goals, issues dealing with point and non-point source pollution, such as failing residential and commercial septic tank systems, must be resolved.

The Septic Tank Enforcement project will continue to implement the Florida Statutes 381, 386 and Chapter 64E-6 Florida Administrative Code, which governs regulation of Onsite Sewage Treatment Disposal Systems (OSTDS) in Duval County, Jacksonville, Florida. This project will continue to further monitor, review, track, record and enforce the compliance of State statutes, rules, regulations and local ordinances pertaining to OSTDS in residential and commercial areas directly or indirectly connected to the St. Johns River and its tributaries. The program will involve expanded site evaluations, inspections, review of engineering plan design, and construction reviews of septic tank drainfield systems, including repairs to existing and abandoned systems. Information related to monitoring, surveillance, management and enforcement activities will be updated and recorded on a daily basis. This information is a vital part of the link between this Department and other State, local and federal agencies as well as private water and sewer utilities throughout Duval County. With the additional funding, the project will implement a preventive community education campaign to increase public awareness on the design, function, proper use and maintenance of septic tank systems.

This program is a necessary component of the synergistic restorative efforts for the preservation of the Lower St. Johns River. In addition to the commitment of various agencies in the Lower St. Johns River area, the Mayor of the city of Jacksonville has committed to the improvement of environmental issues, especially septic tank systems, which affect the Duval County area. This commitment is demonstrated through the

implementation of a Septic Tank Ordinance as well as appropriating significant funds (through the Better Jacksonville Plan) to remediate public health hazards in septic tank failure areas by making efforts to construct central sewerage systems.

Financial resources are needed from the state in order to continue the expanded monitoring, surveillance, enforcement and educational efforts in all of Duval County to prevent public health hazards from failing systems. This Initiative is a continuation of a previously funded project and resources are needed to continue the scope of work outlined in this document.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? Yes

If yes, this is year number 9 of 10 years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? on-going

Total cost of project: \$325,000

Total local match \$: 50,000 in-kind administrative and technical support

Legislative funding needed in FY07: \$325,000

Legislative funding needed in FY08 (if applicable): \$325,000

Legislative funding needed FY09 (if applicable): \$325,000

Legislative funding needed FY10 (if applicable): \$325,000

Legislative funding needed FY11 (if applicable): \$325,000

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): This project reduces and may potentially eliminate the discharge of nitrogen and phosphorus contained in domestic effluent from failing septic tank systems.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? The Septic Tank Enforcement Project is a nutrient control program designed to reduce the level of bacteria, nitrogen, phosphorus and other components of domestic wastewater that enter ground and surface water. There is between 3-30 mg/L of total phosphorus and 20-85 mg/L of total nitrogen in domestic wastewater.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Total Lbs. Kjeldahl Nitrogen: 77911.34 lbs./ year

Total Lbs. phosphorus: 27827.63 lbs./ year

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? Yes

If yes, please describe how the project supports the reasonable assurance plan:

The major source of fecal coliforms is either directly or indirectly the unintentional discharge of untreated domestic wastewater. The waste management activities specifically address the elimination of domestic waste.

Neighborhoods are surveyed by and/or referred to DCHD for inclusion into the Septic Tank Failure Areas per Ordinance 751: This action targets areas with a high percentage of failing septic tanks. The goal of the program is to provide sanitary sewer to these areas and connect failing systems to the newly provided sanitary sewer. In areas where sanitary sewer is unavailable septic tank systems are brought into compliance under the jurisdiction of Florida Statutes 381, 386 and Chapter 64E-6 Florida Administrative Code

DCHD along with agencies responsible for implementing the Reasonable Assurance Plan (i.e. City of Jacksonville and Department of Environmental Protection - NED) will be conducting sanitary surveys on the Priority Listed WBIDs. The sanitary surveys include, but are not limited to, analyzing historical data for pinpointing possible fecal contamination sources, collecting bacteria samples at possible sources of fecal contamination (including spatial tracking), and walking the waterway searching for illicit connection and other sources of fecal contamination (confined animal areas, wildlife watering points and animal recreational spots, such as dog running/walking areas).

In April 2002, the City, the FDEP, and DCHD initiated the Duval County Tributary Watch and Tributary Posting Program. The goal of the program is to inform the public about the risks associated with primary contact activities in tributaries that have exceeded Class III criteria for fecal coliform bacteria. As a result of this collaborative initiative, nine tributaries have been posted, warning the public concerning primary contact in that specific tributary.

Additional comments:

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Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville, FL
Contact Person: Kevin Shell, P.E., Project Manager Telephone Number: (904) 360-5965
E-mail Address: kshell@buildbetterjax.com

Other Sponsors (if any):

Project Description

Project Name: Durkeeville West Drainage Improvements
Project Short Description (one sentence or less/for spreadsheet use): Upgrade of drainage system with off-site detention ponds
Detailed Project Description: Reconstruction of City of Jacksonville and JEA infrastructure including stormwater collection, sanitary sewer, and domestic water, plus the reconstruction of all disturbed streets. The project area comprises a 185-acre drainage basin. Two compensating wet detention ponds will be constructed downstream of the improvements, adjacent to Moncrief Creek. The ponds will serve a 106-acre drainage basin that is developed as a mix of medium density residential and industrial land use. This area currently receives no stormwater treatment. Although the drainage improvements will require attenuation in the compensating ponds, no new impervious surface or additional curb and gutter will be added as part of this project, so the stormwater treatment performed in the compensating ponds will result in considerable net pollutant removal from Moncrief Creek. This project also includes regrading approximately 1,850 linear feet of Moncrief Creek and installing a new 10 ft. by 7 ft. box culvert under 26th Street.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number of years.

Is this a multi-year project (yes/no)? no

If yes, what fiscal year will the project be completed?

Total cost of project: \$1,454,620

Total local match \$: 1,091,620

Legislative funding needed in FY07: \$363,000

Legislative funding needed in FY08 (if applicable):

Legislative funding needed FY09 (If applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): Pollutant loads will not increase in the project area, and pollutant loads in the compensating basin area will be reduced as follows, in lb/yr: TN- 657, TP- 159, Pb- 79, BOD- 4,400, TSS- 31,904, Zn- 56.

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? yes

If yes, how? It reduces both nitrogen and phosphorous loading to Moncrief Creek, and ultimately to the Lower Basin of the St. John River.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 657 lb TN and 159 lb TP.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? no

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: The funding requested is for construction of the stormwater management facilities only, and the stated cost for the project applies only to the stormwater management facilities. All other aspects of the drainage improvement project will be funded by the City of Jacksonville. Pollutant load reduction calculations are available upon request.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Implementation of Master Stormwater Management Plan - Gum St. Basin
Project Description: Install Exfiltration and End of Pipe BMP in the Gum St. Basin which serves 54 acres of a fully developed area of the old City adjacent to the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$2,062,000

Total local match \$: \$310,000

Legislative funding needed in FY06: \$1,752,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 585 lbs / yr of Nitrogen removal, 390 lbs / yr of Phosphorus removal, 3,206 lbs / yr of suspended solids removal and 2.92 tons / yr of floatables and sediment removal.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Exfiltration under roadway pavement and end of pipe sediment and floatables removal.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 585 lbs / yr of Nitrogen, 390 lbs / yr of Phosphorus, 3,206 lbs / yr of suspended solids and 2.92 tons / yr of floatables and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project is one of five basins in the old city of Green Cove Springs alongside the St. Johns River that is fully developed.

Please submit this form in electronic format to Tiffany Busby at tibusby@aug.com no later than July 28, 2004. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Implement Master Stormwater Management Plan - Center St. Basin
Project Description: Install Exfiltration and End of Pipe BMP in the Center St. Basin which serves 42 acres of the old City adjacent to the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$2,687,000

Total local match \$: \$400,000

Legislative funding needed in FY06: \$2,287,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 620 lbs / yr of Nitrogen removal, 450 lbs / yr of Phosphorus removal, 3,448 lbs / yr of suspended solids removal and 3.04 tons / yr of floatables and sediment removal.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Exfiltration under roadway pavement and end of pipe sediment and floatables removal.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 620 lbs / yr of Nitrogen, 450 lbs / yr of Phosphorus, 3,448 lbs / yr of suspended solids and 3.04 tons / yr of floatables and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project is one of five basins in the old city of Green Cove Springs alongside the St. Johns River that is fully developed.

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Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Implement Master Stormwater Management Plan - Walburg St. Basin
Project Description: Install End of Pipe BMP in the Walburg St. Basin which serves 22 acres of a fully developed area of the old City adjacent to the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$310,000

Total local match \$: \$50,000

Legislative funding needed in FY06: \$260,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 29 lbs / yr of Phosphorus removal, 115 lbs / yr of suspended solids removal and 1.17 tons / yr of floatables and sediment removal.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? End of pipe sediment and floatables removal.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 29 lbs / yr of Phosphorus, 115 lbs / yr of suspended solids and 1.17 tons / yr of floatables and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project is one of five basins in the old city of Green Cove Springs alongside the St. Johns River that is fully developed.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than **July 28, 2004**. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Implement Master Stormwater Management Plan - Clay St. Basin
Project Description: Install End of Pipe BMP in the Walburg St. Basin which serves 28 acres of a fully developed area of the old City adjacent to the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$497,000

Total local match \$: \$75,000

Legislative funding needed in FY06: \$422,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 39 lbs / yr of Phosphorus removal, 157 lbs / yr of suspended solids removal and .075 tons / yr of floatables and sediment removal.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? End of pipe sediment and floatables removal.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 39 lbs / yr of Phosphorus, 157 lbs / yr of suspended solids and 0.75 tons / yr of floatables and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project is one of five basins in the old city of Green Cove Springs alongside the St. Johns River that is fully developed.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than **July 28, 2004**. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
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Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Implement Master Stormwater Management Plan - Ferris St. Basin
Project Description: Install End of Pipe BMP in the Ferris St. Basin which serves 9.3 acres of a fully developed area of the old City adjacent to the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$316,000

Total local match \$: \$50,000

Legislative funding needed in FY06: \$266,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 11 lbs / yr of Phosphorus removal, 43 lbs / yr of suspended solids removal and 0.35 tons / yr of floatables and sediment removal.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? End of pipe sediment and floatables removal.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 11 lbs / yr of Phosphorus, 43 lbs / yr of suspended solids and 0.35 tons / yr of floatables and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project is one of five basins in the old city of Green Cove Springs alongside the St. Johns River that is fully developed.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than **July 28, 2004**. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville
Contact Person: Kevin Shell, P.E., Project Manager
Telephone Number: (904) 360-5965
E-mail Address: kshell@buildbetterjax.com

Other Sponsors (if any):

Project Description

Project Name: Lenox Avenue, Lane to Normandy

Project Short Description (one sentence or less/for spreadsheet use): Roadway and drainage improvements on Lenox Avenue, Lane to Normandy, including construction of stormwater management facilities.

Detailed Project Description: This project consists of roadway and drainage improvements involved with the reconstruction and widening of the roadway, including treatment of runoff from the roadway. In addition to roadway and drainage improvements, water, sewer, electric, and communication infrastructure will be installed. The three stormwater treatment ponds for this project will result in reductions in pollutant loading from the existing area. This reduction will go beyond what the District requires, which is no increase of pollutant loading. These three ponds represent the portion of the project for which funding is requested.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number of years.

Is this a multi-year project (yes/no)? no

If yes, what fiscal year will the project be completed?

Total cost of project: \$5,468,221

Total local match \$: 5,118,221

Legislative funding needed in FY07: \$350,000

Legislative funding needed in FY08 (if applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): For the three ponds for which funding is requested, the pollutant load reductions are as follows, in lb/yr: TN- 71, TP- 27, Pb- 17, BOD- 1072, TSS- 7830, Zn- 12.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? yes

If yes, how? It results in reduction of current levels of TN and TP to Cedar River, and ultimately to the Lower Basin, by the amounts listed above.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? TN- 71 lb/yr, TP- 27 lb/yr

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? no

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: Funding for this project is being requested only for a portion of the construction of stormwater management facilities portion of the project. All other aspects of the project are funded by the City of Jacksonville. Pollutant load reduction calculations are available upon request.

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville, FL
Contact Person: Jeff Cunningham, P.E., Project Manager
Telephone Number: (904) 360-5997
E-mail Address: jcunning@buildbetterjax.com

Other Sponsors (if any):

Project Description

Project Name: Pulaski Road Drainage Improvements

Project Short Description (one sentence or less/for spreadsheet use): Roadway and drainage improvements on Pulaski Road, including construction of stormwater management facilities.

Detailed Project Description: This project consists of roadway and drainage improvements involved with the reconstruction and widening of the roadway, including treating the runoff from the roadway. In addition to roadway and drainage improvements, water, sewer, electric, and communication infrastructure will be installed. Properties served by the new sewer line were previously served by septic systems. Two of the three stormwater treatment ponds for this project will result in reductions in pollutant loading from the existing area. This reduction will go beyond what the District requires, which is no increase of pollutant loading. These two ponds represent the portions of the project for which funding is requested.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number of years.

Is this a multi-year project (yes/no)? no

If yes, what fiscal year will the project be completed?

Total cost of project: \$4,055,848

Total local match \$: \$3,655,848

Legislative funding needed in FY07: \$400,000

Legislative funding needed in FY08 (if applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): For the two ponds for which funding is requested, the pollutant load reductions are as follows, in lb/yr: TN- 49, TP- 13, Pb- 6, BOD- 293, TSS- 1,896, Zn- 4.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? yes

If yes, how? It results in reduction of current levels of TN and TP to Dunn's Creek, and ultimately to the Lower Basin, by the amounts listed above.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? TN reduction- 13 lb/yr, TP reduction- 6 lb/yr

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)?

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: Funding for this project is being requested only for the construction of stormwater management facilities portion of the project. All other aspects of the project are funded by the City of Jacksonville. Pollutant load reduction calculations are available upon request.

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

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Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville, FL
Contact Person: Kevin Shell, P.E., Project Manager
Telephone Number: (904) 360-5965
E-mail Address: kshell@buildbetterjax.com

Other Sponsors (if any):

Project Description

Project Name: LaMoya Avenue Roadway Improvements project
Project Short Description (one sentence or less/for spreadsheet use): Roadway widening with stormwater management facilities
Detailed Project Description: The LaMoya Avenue Roadway Improvements Project involves the reconstruction of an existing rural collector roadway with roadside swales into a two-lane urban section roadway complete with curb and gutter, bicycle lanes and sidewalks. The roadside swales collected and conveyed stormwater runoff from both the roadway and offsite drainage areas and then discharged all collected stormwater to Fishing Creek, near the confluence of the Ortega and Cedar Rivers. None of these existing discharges received treatment or attenuation prior to discharge. With the implementation of the stormwater management system, which includes wet detention ponds, the area receives treatment and attenuation greater than that required by District regulations. The roadway prior to improvements varied in width from 18 feet to 20 feet, and had a four-foot sidewalk on the southside only. The new roadway is 33 feet wide (including curb and gutter), with five feet of sidewalk in each side.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? no

If yes, what fiscal year will the project be completed?

Total cost of project: \$1,956,243

Total local match \$: 1,761,243

Legislative funding needed in FY07: \$195,000

Legislative funding needed in FY08 (if applicable):

Legislative funding needed FY09 (If applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): The two stormwater management facilities (SMF's) designed for LaMoy Avenue are wet detention ponds. New construction will collect, treat, and attenuate rainfall runoff from the old roadway corridor that did not previously have any such best management practices. The new SMF's will provide a measure of protection to Fishing Creek from oil and grease. A portion of the roadway is not able to be treated, so pollutant load reduction calculations factor in the loads removed by the two ponds as well as the increased loading from the untreated areas. Annual pollutant load reductions are estimated as follows, in lb/yr: no reduction in TN, TP- 5.4, Pb- 2.0, BOD- 145.5, TSS- 839.5, Zn- 1.8.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? yes

If yes, how? The project decreases the pollutant loading of TP into the Lower Basin by 5.4 lb/yr.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)?

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? no

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: Although this project does not specifically support the TMDL for the Lower Basin, as noted above, it will result in the reduction of about 5.4 lb/yr in TP from the drainage area. Pollutant load reduction calculations are available upon request.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
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Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): Clay County Board of County Commissioners

Contact Person: Daniel Littles, Jr.
Telephone Number: (904) 284-6301

E-mail Address: dan.littles@co.clay.fl.us

Other Sponsors (if any): N/A

Project Description

Project Name: Williams Park Road Stormwater-Water Quality Enhancements

Project Description: This project will consist of the stabilization and stormwater runoff improvements to a 7,661 linear foot corridor bordered by a large area of pristine wetlands and terminating at the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

1A. *Technical Linkages and Coordination:* Linkage between system health indicators (e.g. chemical, biological, sediments).

1B. *Technical Linkages and Coordination:* Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).

- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number N/A of N/A years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed? N/A

Total cost of project: \$927,000.00

Total local match \$: 463,500.00

Legislative funding needed in FY06: \$463,500.00

Legislative funding needed in FY07 (if applicable): N/A

Legislative funding needed FY08 (If applicable): N/A

Legislative funding needed FY09 (if applicable): N/A

Legislative funding needed FY10 (if applicable): N/A

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): The completion of this project will significantly reduce the stormwater runoff and pollutant load into adjacent pristine wetlands, Clark's Creek, and the St. Johns River. Using a conservative figure of

3 inches of solid runoff per year, it is estimated that the completion of this project could cause of a reduction of .88 acre/feet per year of sediment runoff comprised of solids, animal and plant waste, nutrients, and petroleum.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? N/A

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? By controlling approximately .88 acre/feet/year of pollutant loading into the St. Johns River, Clark's Creek, and adjacent pristine wetlands.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Approximately .88 acre/feet/year or 2,388,618 pounds/year of sediment runoff containing nitrogen, phosphorous, animal and plant waste, and petroleum products.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? N/A

If yes, please describe how the project supports the reasonable assurance plan:
N/A

Additional comments: N/A

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than **July 28, 2004**. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville
Contact Person: John P. Pappas, P.E.
Chief of Engineering
220 East Bay Street, Room 901
Jacksonville, Florida 32202
Telephone Number: (904) 630-1363
E-mail Address: pappas@coj.net

Other Sponsors (if any):

Project Description

Project Name: Sandalwood Canal Regional Stormwater Facility and Channel Improvements

Project Short Description (one sentence or less/for spreadsheet use): Building regional stormwater facilities and instream improvements to reduce erosion and load to Hogpen Creek.

Detailed Project Description: This City of Jacksonville implemented the 1998 stormwater bond program to address specific problem areas identified in the City's Master Stormwater Management Plan (MSMP). The Sandalwood Canal Regional Stormwater Facility and Channel Improvements will address water quantity and water quality problems by (1) implementing a 30 acre retrofit regional wet detention facility in an existing borrow pit, (2) implementing a 25 acre stormwater facility to reduce chronic erosion and provide flood control benefits, and (3) by structurally improving a highly erosive man-made watercourse (Sandalwood Canal). Retrofit water quality treatment for 663 acres of primarily high density residential land uses will be provided, as well as flood control benefits and reductions in instream velocities. Significant erosion in the canal and subsequent deposition in Hogpen Creek have necessitated extensive multi-million dredging projects in past years. This project will significantly reduce land use based sediment loading as well as instream/erosion based sediment loading to Hogpen Creek.

The retrofit wet detention facility is estimated to annually remove 4,685 lbs of TN, 1,091 of TP, and 220 tons of TSS.

Channel improvements associated with the project will include installation of instream velocity control structures, channel restoration, and armoring erosion prone areas to reduce sediment loads to the Intra-Coastal Waterway. In addition, a 25 acre facility will be constructed downstream of the retrofit facility to provide additional treatment, erosion control, and flood control. Sandalwood Canal was identified in the 1992 MSMP as a problem area in future land use conditions due to multiple reaches with excessive velocity.

The City of Jacksonville has set aside approximately \$3,000,000 for improvements in the basin; The project cost is expected to be approximately \$5,000,000. Additional funding of \$2,000,000 is requested in the form of Special Legislative Funding.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? 2008

Total cost of project: \$5,000,000

Total local match \$: \$3,000,000

Legislative funding needed in FY07: \$1,000,000

Legislative funding needed in FY08 (if applicable): \$1,000,000

Legislative funding needed FY09 (If applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): Implementation of the 30 acre retrofit regional wet detention facility to remove TN, TP, and TSS from stormwater runoff, the 25 acre stormwater facility, and channel improvements will reduce sediment and nutrient loads to the Intra-Coastal Waterway and provide additional treatment for 663 acres of tributary area in the basin. One of the priority projects identified in the original Lower St. Johns River Basin (LSJRB) SWIM plan (SJRWMD 1989) was to develop a Master Stormwater Management Plan (MSMP) for the City of Jacksonville (City of Jacksonville 1992). The City of Jacksonville completed the MSMP in 1992 and continues to implement projects identified in the MSMP. The proposed wet detention facility is expected to reduce TP loads by 50% (1,091 lbs/yr), TN loads by 30% (4,685 lbs/yr), and sediment loads by an estimated 220 tons/yr.

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Reducing load to the ICW and LSJRB

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 4,685 lbs of TN, 1,091 of TP, and 220 tons of TSS.
Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)?
If yes, please describe how the project supports the reasonable assurance plan:

Additional comments:

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

Note: Projects that were previously submitted but not funded are welcome to edit and update their information for further consideration. Please contact Ms. Busby (904-797-2721) or Kraig McLane, St Johns River Water Management District (386-329-4374) for more details on updating previous project submittals. You must contact us to officially re-submit your project.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): Florida Department of Transportation (FDOT)

Contact Person: Unknown

Telephone Number: Unknown

E-mail Address: Unknown

Other Sponsors (if any):

Editor's Note: Submitted by City of Jacksonville Beach, Ty Edwards.

Project Description

Project Name: FDOT State Road A1A Stormwater Drainage Channel / Collection System Improvements Project, from State Road 212 north to Hopkins Creek

Project Short Description (one sentence or less/for spreadsheet use): Project to Improve Stormwater Treatment / Attenuation and Erosion Control along the Stormwater Drainage Channel and Collection System for State Road A1A from State Road 212 north to Hopkins Creek

Detailed Project Description: Beginning at the eastern portion of State Road 212 (US 90 / Beach Boulevard), the stormwater drainage for State Road A1A (3rd Street North), flowing west / north and the eastern portion of State Road 212, flowing north, is collected through various drainage collection piping, enclosed boxes, and catch basins and gravity flows to an enclosed box system and open drainage channel known as the 8th Street North Drainage Channel in Jacksonville Beach and flows north in the open drainage channel through Neptune Beach and then flows west under Penman Road into Hopkins Creek and eventually to the Lower Saint Johns River. (Stormwater from the north also flows into the portion of the drainage channel that flows east - west to Hopkins Creek. Within the past year, FDOT completed a project bulkheading the drainage channel for several hundred feet east of Penman Road, which should reduce erosion significantly along this stretch. This project would extend the bulkheading to the south along the remaining entire length of the open drainage channel to its transition to the enclosed box in the vicinity of 15th Avenue North in Jacksonville Beach. Retrofit stormwater treatment can be constructed by installing a weir wall and pump station along the drainage channel east of Hopkins Creek. This will allow the drainage channel to be utilized for stormwater treatment and attenuation. In addition, pump down prior to storms could allow for improved drainage and collection of first flush rainfall. Available vacant land adjacent to the drainage channel should be included in the treatment area to increase stormwater treatment and attenuation as much as possible. The entire drainage channel also needs to

be dredged to remove siltation buildup to improve treatment, attenuation, and drainage from SR A1A and the east portion of SR 212, which currently flood at various locations during heavy rain storms. The existing FDOT stormwater collection infrastructure has been in place for decades and is in dire need of repairs as part of this project to reduce erosion, siltation buildup, and blockage of the collection system. Also, drainage culverts crossing under roadways (with retaining walls) need to be upsized / replaced / repaired (such as at 15th / 18th / 20th Ave. N.)

(Submitted by the City of Jacksonville Beach, Contact: Ty Edwards, 904-247-1777, TEdwards@jaxbchfl.net)

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number N/A of N/A years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? 2009

Total cost of project: Pre-Preliminary Design (Very Soft Ballpark) Cost Estimate: \$8,000,000. This ballpark estimated cost should be updated by FDOT each FY as more information is developed.

Total local match \$: N/A

Legislative funding needed in FY07: \$1,000,000 for concept plan, preliminary design, and final design.

Legislative funding needed in FY08 (if applicable): \$7,000,000 for capital construction (This estimated cost is very soft and should be updated each FY as more information is developed.)

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): Unknown

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? N/A

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Once executed, the capital improvements should significantly lower the nutrient concentration of the stormwater draining into the stormwater collection system (north of SR 212) for SR A1A / SR 212 that is flowing to Hopkins Creek, which eventually flows to the Lower Saint Johns River.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Unknown

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:
N/A

Additional comments: Several years ago, Jacksonville Beach requested special legislative funding for the dredging / cleaning of siltation and repair of the stormwater collection system, which was causing severe stormwater flooding and backup along 3rd Street N., Beach Boulevard, and along the route of the stormwater collection system. The project was funded through special legislation. However, FDOT was only able to clean the enclosed box along the 8th Street North Drainage Channel and the stormwater collection system which flowed into the enclosed box. Repairs were not made to the existing infrastructure at that time nor was the open drainage channel dredged to remove siltation. Therefore, the bottom of the open channel is higher than the bottom of the enclosed box which is upstream of the open channel. In addition, the cleaned system is silting in quickly due to the leaks / cracks in the collection system that were not repaired.

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

Note: Projects that were previously submitted but not funded are welcome to edit and update their information for further consideration. Please contact Ms. Busby (904-797-2721) or Kraig McLane, St Johns River Water Management District (386-329-4374) for more details on updating previous project submittals. You must contact us to officially re-submit your project.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): Clay County Board of County Commissioners

Contact Person: Daniel Littles, Jr.
Telephone Number: (904) 284-6301

E-mail Address: dan.littles@co.clay.fl.us

Other Sponsors (if any): N/A

Project Description

Project Name: Loch Rane/Bel-Med Regional Stormwater Treatment-Water Quality Enhancements

Project Description: Funding will be used to design and construct stormwater treatment facilities in conjunction with the two major ditches that convey residential, commercial, and highway runoff from the Loch Rane/Bel-Med area into the Ortega River. There are 3,128 acres of residential and commercial land without current stormwater treatment. Completion of this task could significantly lessen the current loading impacts. The Loch Rane/Bel-Med Stormwater Master Plan (2001) recommends retrofit work at the total cost of \$4,171,400.00

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number N/A of N/A years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? Contingent upon funding availability.

Total cost of project: \$4,171,400.00

Total local match \$: 2,085,700.00

Legislative funding needed in FY07 (updated for FY07): \$1,660,400.00

Legislative funding needed in FY08 (if applicable)(updated for FY07): \$1,201,200.00

Legislative funding needed FY09 (If applicable)(updated for FY07): \$609,600.00

Legislative funding needed FY10 (if applicable)(updated for FY07): \$700,200.00

Legislative funding needed FY10 (if applicable): N/A

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): The benefits of this project include improved water quality, reduction of undesirable algal species, reduced sedimentation impacts, and reduced residential flooding.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? N/A

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? By reducing the amount of nutrients, petroleum, and animal/plant waste into the wetlands and the Ortega River, and thereby reducing the contribution of undesirable algal species.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Dissolved phosphorus and nitrogen. The use of wet detention should yield a pollutant removal factor of 2 to 3 times that of dry detention systems (Loch Rane/Bel-Med Study 2001).

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:
N/A

Additional comments: N/A

Please submit this form in electronic format to Tiffany Busby at tbusby@aug.com no later than July 28, 2004. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

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Lower St. Johns River Projects
For River Restoration Requesting
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In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville

Contact Person: Brad Thoburn, COJ and Technical POC Mike Hollingsworth, COE
Telephone Number: COJ (904) 630-2851 - COE (904) 232-1687
E-mail Address: Bthoburn@coj.net and Michael.J.Hollingsworth@saj02.usace.army.mil

Other Sponsors (if any): none

Project Description

Project Name: Hogans Creek Ecosystem Restoration Project

Project Short Description (one sentence or less/for spreadsheet use): Restoration of impacted urban stream habitat through wetland creation, littoral enhancement, and muck removal.

Detailed Project Description: In order to restore the creek to a less degraded, more natural state, channel improvements and several littoral marsh area sites are proposed. The littoral marsh sites would be excavated to restore hydrologic conditions necessary for shallow water habitat. These sites would provide filtration of overland flows to reduce the amount of sediments and pollutants, in addition to attenuation of the peak hydrograph by providing in-channel storage.

A total dredge/excavation volume of 326,000 cubic yards is anticipated. The majority of the dredged/excavated material may be suitable for daily cover at an area landfill. Exotic plant species, debris, abandoned pipes, and non-historic abandoned structures within the watershed of the creek would be removed as part of the project.

Alternative features might include: (a) connecting the creek to proposed open-marsh areas to increase residence time and purification, (b) deepening of the creek in the historic Klutho area, (c) creating sediment traps to remove sediments and associated pollutants, (d) removing established nuisance vegetation, (e) providing a concomitant reduction of flood damage to business and residential dwellings, if possible; and possible recreational component.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number of years.

Is this a multi-year project (yes/no)? yes

If yes, what fiscal year will the project be completed? 2008
Total cost of project: 5,016,000
Total local match \$: 1,748,000
Legislative funding needed in FY07: 400,000
Legislative funding needed in FY08 (if applicable):
Legislative funding needed FY09 (If applicable):
Legislative funding needed FY10 (if applicable):
Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.):

- Muck removal of about 8000 lineal feet of creek from the St. Johns River to Eighth Street.
- Creation of littoral wetland shelves along one side of the natural creek north and south of the Historic District.
- Creation of approximately 8.0 acres total of open marsh area would provide for inline filtration and storage of surface waters.
- Removal of exotic plant species, debris, abandoned pipes, and non-historic abandoned structures over the creek.
- Removal and disposal of about 326,000 cubic yards of dredged and excavated material.

According to a earlier project design described in the Hogan Creek Subbasin Master Stormwater Management Plan (City of Jacksonville, July 10, 1995), storm water solids could be reduced by about two-thirds (68 percent), total phosphorous discharge decreased by about one half (47 percent), total nitrogen decreased by about one third (36 percent), lead reduced by about two thirds (65 percent), and zinc decreased by about a third (34 percent). Actual reduction rates will be dependent upon final project design.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? The addition of native aquatic vegetation will enhance utilization of nitrogen and phosphorus in water column and sediments through direct uptake and increased water retention.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? To be provided when final wetland configuration and species composition is determined.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? Yes

If yes, please describe how the project supports the reasonable assurance plan: Hogans Creek is a priority 1 WBID in the bacteria reasonable assurance plan and

is listed on the 2004 303(d) Group 2 Verified Impaired List for the Lower St. Johns River Basin. Removal of muck will decrease conditions suitable for bacterial growth in sediment and water column.

Additional comments: This funding will enable the completion of the U.S. Army Corps of Engineers Section 206 Ecosystem Restoration Report and complete pre-construction plans and specifications. Construction will be cost-shared by the Corps (65%) and the local Sponsor--City of Jacksonville (35%). Additional funding from State sources may be solicited. Federal funding is contingent upon inclusion of project appropriation either under the Continuing Authorities Program or via Congressional Ad. Project design and construction will be coordinated with other public agencies and projects in the Hogans Creek watershed.

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

Note: Projects that were previously submitted but not funded are welcome to edit and update their information for further consideration. Please contact Ms. Busby (904-797-2721) or Kraig McLane, St Johns River Water Management District (386-329-4374) for more details on updating previous project submittals. You must contact us to officially re-submit your project.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville
Contact Person: Brad Thoburn, City of Jacksonville, Technical POC, Mike Hollingsworth, Corps of Engineers
Telephone Number: (904) 630-2851 and (904) 232-1687, for COE
E-mail Address: Bthoburn@coj.net and Michael.J.Hollingsworth@saj02.usace.army.mil

Other Sponsors (if any): none

Project Description

Project Name: Big Fishweir Creek Ecosystem Restoration Project
Project Short Description (one sentence or less/for spreadsheet use): Restoration of impacted urban stream habitat through the restoration of the stream contour, aquatic vegetation planting, littoral zone enhancement, and muck removal.
Detailed Project Description: In order to restore the creek to a less degraded, more natural state, improvement to the creek contour, sediment removal, and the planting of several littoral emergent and submerged aquatic vegetation areas are proposed. These sites would be excavated to restore hydrologic conditions necessary for ecologically desirable habitat. This planting of vegetation and the colonization of benthic organisms will stabilize the remaining sediment and support a wide variety of organisms.

A total dredge/excavation volume of approximately 81,000 cubic yards is anticipated. The majority of the dredged/excavated material may be suitable for daily cover at an area landfill. Exotic plant species, debris, abandoned pipes, and abandoned structures within the watershed of the creek would be removed as part of the project.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
 Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)?no

If yes, this is year number of years.

Is this a multi-year project (yes/no)? yes

If yes, what fiscal year will the project be completed? 2009

Total cost of project: 2,216,000

Total local match \$: 776,000

Legislative funding needed in FY07: 200,000

Legislative funding needed in FY08 (if applicable): 200,000
Legislative funding needed FY09 (If applicable):
Legislative funding needed FY10 (if applicable):
Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.):

- Muck removal of about 20 acres of creek from the St. Johns River to US 17.
- Creation of littoral wetland shelves along both sides of the creek east and west of the Herschel St. bridge as well as the confluence area with Little Fishweir Creek.
- Creation of approximately 2.3 acres total of emergent/sumergent vegetation area.
- Removal of exotic plant species, debris, abandoned pipes, and abandoned structures over the creek.
- Removal and disposal of about 81,000 cubic yards of dredged and excavated material.

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? The addition of native aquatic vegetation will enhance utilization of nitrogen and phosphorus in water column and sediments through direct uptake and increased water retention.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? To be provided when final wetland configuration and species composition is determined.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? Yes

If yes, please describe how the project supports the reasonable assurance plan: Big Fishweir Creek is a priority 2 WBID in the bacteria reasonable assurance plan and is listed on the 2004 303(d) Group 2 Verified Impaired List for the Lower St. Johns River Basin. Removal of muck will decrease conditions suitable for bacterial growth in sediment and water column.

Additional comments: This funding will enable the completion of the U.S. Army Corps of Engineers Section 206 draft Ecosystem Restoration Report. Year 2 funding will enable the completion of the final Ecosystem Restoration Report and completion of the pre-construction plans and specifications. Construction will occur in Year 3 and will be cost-shared by the Corps (65%) and the local Sponsor--City of Jacksonville (35%). Federal funding is contingent upon inclusion of project appropriation either under the Continuing Authorities Program or via Congressional Ad. Project design and construction

will be coordinated with other public agencies and projects in the watershed. Project may also be utilized as a pilot project for the testing of "Restoration Tools and Investigations" (category 1A-3C) SLA projects.

Important Information for Project Submitters

Please submit this form in electronic format to Tiffany Busby, TAC facilitator, at busbytl@bellsouth.net no later than **July 22, 2005**. The projects received will be reviewed and prioritized by the Lower St. Johns River Technical Advisory Committee (TAC) at their quarterly meeting on Thursday, August 25, 2005 at Jacksonville City Hall (10 am to 2 pm). *The TAC priority list strongly affects what projects receive Legislative funding.* Sponsors are encouraged to attend this meeting to answer questions about their project. Project sponsors are often requested to give a two-minute verbal summary of their project to the TAC. Time constraints will not permit formal project presentations to the TAC, but sponsors are encouraged to send a representative who can answer technical questions about the project.

The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

Note: Projects that were previously submitted but not funded are welcome to edit and update their information for further consideration. Please contact Ms. Busby (904-797-2721) or Kraig McLane, St Johns River Water Management District (386-329-4374) for more details on updating previous project submittals. You must contact us to officially re-submit your project.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: Purchase a vacuum street sweeper.

Project Description: Purchase a vacuum street sweeper for use on city streets to remove fine particles from the street and prevent them from washing into the St. Johns River.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).

3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number _____ of _____ years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$155,000

Total local match \$: \$25,000

Legislative funding needed in FY06: \$130,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (if applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): 177.5 tons / yr of trash and sediment removal from city streets.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? No

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Fine sediment carries most of the material that is harmful to the river, and its removal from the streets will prevent them from entering the river.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 177.5 tons / yr of trash and sediment.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: The City currently operates a broom and belt sweeper which cannot pick up the fine sediment particles which carry the material that causes more harm to the St. Johns River than the large particles that are removed.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than July 28, 2004. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

Point Source Reduction Projects

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Green Cove Springs
Contact Person: Bob Gamble Telephone Number: 904-529-2213
E-mail Address: bgamble@greencovesprings.com

Other Sponsors (if any):

Project Description

Project Name: South WWTP Reuse Distribution
Project Description: Construct distribution lines for delivering reuse water to customers.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? No

If yes, what fiscal year will the project be completed?

Total cost of project: \$775,000

Total local match \$: \$75,000

Legislative funding needed in FY06: \$700,000

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): This project will remove 5,077 lbs. of Nitrogen and 863 lbs. of Phosphorus from the Lower St. Johns River.

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Removes 0.23 MGD (current flow) from a 0.5 MGD WWTP Sewage Effluent from the Lower St. Johns River.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? 5,077 lbs. of N & 863 lbs. of P

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments: This project will complete the total implementation of sewage reuse in Green Cove Springs.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than July 28, 2004. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.

PROJECT TEMPLATE
Lower St. Johns River Projects
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Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): St. Johns County Utility
Contact Person: Neal Shinkre, P.E, MBA, Utility Engineering Manager
Telephone Number: (904) 471-2161 ext. 35
E-mail Address: nshinkre@co.st-johns.fl.us

Other Sponsors (if any): None

Project Description

Project Name: Northwest Water Reclamation Plant
Project Short Description (one sentence or less/for spreadsheet use): Advanced wastewater treatment to provide full reuse
Detailed Project Description: This will include the design, permitting and construction of a initial 2 MGD AWT plant located in the North-West portion of the St. Johns County. The County Utility is extremely committed to provide 100% reuse and will limit discharge of nutrients to the St. Johns River or its tributaries. The wastewater treatment plant will serve the rapidly growing North-west portion of the County.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).

- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? 2009

Total cost of project: 10,000,000

Total local match \$: As needed

Legislative funding needed in FY07: 750,000

Legislative funding needed in FY08 (if applicable): 9,250,000

Legislative funding needed FY09 (If applicable):

Legislative funding needed FY10 (if applicable):

Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): Limit Nitrogen discharge to the St. Johns River Tributaries. Will maximize reuse for the conservation of water.

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Limits nutrients to the St. Johns River Tributaries, mximize reuse

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Nitrogen, Approximately 35,000 Lbs/Year

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? no

If yes, please describe how the project supports the reasonable assurance plan:

Additional comments:

Important Information for Project Submitters

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The State Legislature will consider special funding requests during the legislative session in early 2006. Projects that are selected for funding will be eligible to receive the monies through the St Johns River Water Management District or Florida Department of Environmental Protection starting in October 2006.

Note: Projects that were previously submitted but not funded are welcome to edit and update their information for further consideration. Please contact Ms. Busby (904-797-2721) or Kraig McLane, St Johns River Water Management District (386-329-4374) for more details on updating previous project submittals. You must contact us to officially re-submit your project.

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Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville Beach
Contact Person: Ty Edwards Telephone Number: 904-247-1777
E-mail Address: TEwards@jaxbchfl.net

Other Sponsors (if any): City of Atlantic Beach (Contact: Donna Kaluzniak, 904-270-5834, dkaluzniak@coab.us); City of Neptune Beach (Contact: Leon Smith, 904-270-2420, lsmith@neptune-beach.com); FDEP(Contact: Jim Maher)

Project Description

Project Name: Implementation of Jacksonville Beaches WWTP Improvements
Project Short Description (one sentence or less/for spreadsheet use): The requested funding will be used to fund initially an assessment of the needed improvements to assist the Jacksonville Beaches WWTP facilities to meet the LSJRB nutrient TMDL. The second through fifth years are projected to complete the design and construction. (Originally submitted last year by FDEP.)

Detailed Project Description: The Jacksonville Beaches communities of Atlantic Beach, Jacksonville Beach, and Neptune Beach, are contemplating an area wide approach to address the nutrient allocations for their wastewater treatment facilities that result from the Lower Saint Johns River TMDL BMAP. These three communities, located on the Duval County barrier islands, share a combined effluent outfall to the Lower Saint Johns River near the ocean. This initiative entails an engineering concept study, capital improvement master plan development, implementation of project designs, and execution of the resulting construction projects to upgrade their wastewater treatment facilities. The study and master plan are to result in a prioritized list of projects for seeking funding assistance for implementation.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? 2012

Total cost of project: Estimate unknown until 1st year study is completed

Total local match \$: Unknown

Legislative funding needed in FY07: \$500,000

Legislative funding needed in FY08 (if applicable): To be estimated in 1st year study
Legislative funding needed FY09 (if applicable): To be estimated in 1st year study
Legislative funding needed FY10 (if applicable): To be estimated in 1st year study
Legislative funding needed FY11 (if applicable): To be estimated in 1st year study

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): meet nutrient allocations in the TMDL BMAP

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Once executed, the capital improvements should significantly lower nutrient concentration of each communities' effluent that is being pumped to the combined effluent outfall at the Lower Saint Johns River.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Unknown

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:
N/A

Additional comments: 1.) This was originally submitted last year by FDEP. 2.) The City of Jacksonville Beach is submitting a separate project template to develop a program to improve its wastewater treatment facilities to meet / exceed its nutrient allocation resulting from the TMDL BMAP.

**PROJECT TEMPLATE
Lower St. Johns River Projects
For River Restoration Requesting
Special Legislative Funding
In Fiscal Year 2007**

Submit form in electronic format by July 22, 2005 to Tiffany Busby (telephone: 904-797-2721) at busbytl@bellsouth.net. Please prepare a separate form for each individual project.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Jacksonville Beach
Contact Person: Ty Edwards / Marty Martirone Telephone Number: 904-247-6219
E-mail Address: TEdwards@jaxbchfl.net / MMartirone@jaxbchfl.net

Other Sponsors (if any): None

Project Description

Project Name: Upgrade Wastewater Treatment Facility to Advanced Waste Treatment Process, Jacksonville Beach, Florida

Project Short Description (one sentence or less/for spreadsheet use): Project to Upgrade the Existing Secondary Treatment Wastewater Facility of Jacksonville Beach to Advanced Waste Treatment utilizing the existing constrained site.

Detailed Project Description: The City of Jacksonville Beach, located on a Duval County barrier island, is contemplating addressing the nutrient allocation for its wastewater treatment facility that results from the Lower Saint Johns River TMDL BMAP. This community shares with two other beaches communities a combined effluent outfall to the Lower Saint Johns River near the Atlantic Ocean. This initiative entails an engineering study, preliminary design(s), and execution of construction project(s) to upgrade the treatment process from the existing secondary treatment to advanced waste treatment, to upgrade the plant headworks, to upgrade the co-located lift station and to improve the other site facilities supporting the wastewater treatment process, within the existing constrained site. It would also include determining the feasibility of upgrading the co-located reclaim facility and feasibility of increasing the use of reuse water for irrigation. If feasible, this project might be modified to include the upgrade to the reuse facilities and distribution system.

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.

Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.

Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
- 2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

- 4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)
- 4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

- 5A. *Reducing algae*: Prevention of algal species shift to undesirable species.
- 5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.
- 6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.
- 7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.
- 8. Maximize water resource conservation, including reuse.
- 9. Pollutant source tracking, including runoff coefficients.
- 10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? No

If yes, this is year number of years.

Is this a multi-year project (yes/no)? Yes

If yes, what fiscal year will the project be completed? 2010

Total cost of project: Pre-study Very Soft Ballpark Cost Estimate: \$13,000,000. This ballpark estimated cost will be updated each FY as more information is developed.

Total local match \$: Unknown

Legislative funding needed in FY07: \$1,200,000 estimated for the engineering study, preliminary design, permitting, and final design
Legislative funding needed in FY08 (if applicable): \$11,800,000 for capital construction (This estimated cost is very soft and will be updated each FY as more information is developed.)
Legislative funding needed FY09 (If applicable):
Legislative funding needed FY10 (if applicable):
Legislative funding needed FY11 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): Meet nutrient allocations in the TMDL BMAP

If this is a "Restoration Tools and Investigations" project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation? N/A

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? Yes

If yes, how? Once executed, the capital improvements should significantly lower the nutrient concentration of the effluent from Jacksonville Beach that is being pumped to the combined effluent outfall at the Lower Saint Johns River.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? Unknown

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? No

If yes, please describe how the project supports the reasonable assurance plan:
N/A

Additional comments: Attached is a photographic map of the existing Wastewater Treatment Facility at Jacksonville Beach.

RESUBMITTAL FOR FY07
Project Template
Lower St. Johns River Projects
Requesting
Special Legislative Funding
for Fiscal Year 2006

Submit form in electronic format **by July 28, 2004** to Tiffany Busby at
tlbusby@aug.com.

Project Contact Information

Primary Project Sponsor (Organization Name): City of Palatka
Contact Person: Allen R. Bush, City Manager Telephone Number: 386 329 0100
E-mail Address: arbush@mail.gbso.net

Other Sponsors (if any):

Project Description

Project Name: Palatka Reuse Wastewater Project
Project Description: Reuse of reclaimed wastewater on Citys golf course

Choose a project type (select one that best fits the project) that supports the basin's technical goals:

- Habitat—Provide for the restoration and protection of habitats necessary for healthy ecosystems.
- Water Quality—Attain water quality conditions necessary to promote healthy living resources and safe recreations uses.
- Living Resources—Provide for the restoration and protection of living resources necessary to promote the health, diversity, propagation, and maintenance of native plants and animals.

Please select one category below for your project (check one box in 1A-10):

Restoration Tools and Investigations

- 1A. *Technical Linkages and Coordination*: Linkage between system health indicators (e.g. chemical, biological, sediments).
- 1B. *Technical Linkages and Coordination*: Coordination and collaboration—a holistic approach to ecosystem assessment by design (how do we do it?).
2. *Tool development/refinement* (e.g. LSJRB water quality model, estuarine bio-indicators, IBI).
- 3A. *Effectiveness of Management Efforts*: Effectiveness of current BMPs for urban and construction pollution sources.
- 3B. *Effectiveness of Management Efforts*: Effectiveness of assessments (How well are we doing? How effective are our assessment tools?).
- 3C. *Effectiveness of Management Efforts*: Toxicity testing.

Aquatic Habitat Restoration and Protection

[Note: Critical aquatic habitats, as defined here, include: submerged aquatic vegetation (SAV); wetlands (headwater and floodplain); tidal creeks; oyster bars; and open bottom/sediments.]

4A. *Aquatic Habitat*: Critical habitat thresholds for a healthy ecosystem--both quality and quantities. (e.g. How many wetlands do we need? How many acres of SAV?)

4B. *Aquatic Habitat*: Develop indices of aquatic health.

Water Quality Improvements

5A. *Reducing algae*: Prevention of algal species shift to undesirable species.

5B. *Reducing algae*: Reducing cultural eutrophication as reflected in elevated chlorophyll-*a* concentrations.

6. Develop and implement a structure to evaluate and limit potentially toxic characteristics in sediment.

7. Develop a better understanding of the fate and impact of other non-nutrient contaminants on water quality and the ecological health of the river.

8. Maximize water resource conservation, including reuse.

9. Pollutant source tracking, including runoff coefficients.

10. Reduce anthropogenic sources of bacteria through source identification and source abatement measures.

Project Costs

Is this a continuation of a previously funded legislative project (yes/no)? yes

If yes, this is year number 2 of 3 years.

Is this a multi-year project (yes/no)? yes

If yes, what fiscal year will the project be completed? 2004 for the current phase and 2005 for the project being applied for.

Total cost of project: \$2,500,000 for first phase plus \$600,000 for the phase applied for.

Total local match \$: \$150,000

Legislative funding needed in FY06:

Legislative funding needed in FY07 (if applicable):

Legislative funding needed FY08 (If applicable):

Legislative funding needed FY09 (if applicable):

Legislative funding needed FY10 (if applicable):

Project Benefits

Please describe the expected project benefits as specifically as possible (e.g. pounds of Nitrogen removed, pounds of Phosphorus, acres restored, etc.): The total project will remove approximately one million gpd of effluent from the St. Johns River. This request is an extension of reuse lines to the City's nearby park and the School Board's football and baseball complex. This additional use of reclaimed water will aid the City in its removal of approximately one third of its effluent from the river and the elimination of another consumptive use permit which the School Board has for these fields. These City's consumptive use permit at the golf course was covered under the initial project.

If this is a “Restoration Tools and Investigations” project (categories 1A through 3C), how do the expected results support TMDL development and/or implementation?

Linkage to the TMDLs

Does this project support the implementation of the nutrient TMDL for the Lower Basin (yes/no)? yes

If yes, how? removal of nutrients from the river.

If yes, how many pounds of nutrients (per annum) are expected to be removed and what nutrient(s)? primarily nitrogen along with phosphorous and other lesser pollutants in effluent.

Does this project support the implementation of the reasonable assurance plan for fecal coliform bacteria (yes/no)? yes

If yes, please describe how the project supports the reasonable assurance plan:

The removal of nutrients reduces the possibility of fecal coliform from this source.

Additional comments: The City of Palatka has received two state grants and a CDBG grant for the development of a reuse water system. The initial phase constructs additional treatment at the Wastewater Treatment Plant, a transmission line to the City's golf course, an irrigation system for this reclaimed water and a nine million gallon holding pond. The City's intention is to expand this initial system to remove additional effluent from the river. This particular project will extend reuse lines to the sites listed above.

Please submit this form in electronic format to Tiffany Busby at tlbusby@aug.com no later than July 28, 2004. The projects received will be reviewed by the Lower St. Johns River Technical Advisory Committee at their quarterly meeting on August 19, 2004.