

**SEMINOLE COUNTY GOVERNMENT  
AGENDA MEMORANDUM**

**SUBJECT:** Agreement Between the Florida Department of Environmental Protection and Seminole County for the Construction of the Lockhart-Smith Canal Regional Stormwater Facility – Contract No. S0261

**DEPARTMENT:** Public Works      **DIVISION:** Roads - Stormwater

**AUTHORIZED BY:** W. Gary Johnson, PE, Director      **CONTACT:** Mark Flomerfelt, P.E.      **EXT.** 5569  
Michael K. Arnold, Division Manager

Agenda Date 01-24-06    Regular     Consent     Work Session     Briefing   
Public Hearing – 1:30     Public Hearing – 7:00

**MOTION/RECOMMENDATION:**

Approve and authorize the Chairman to execute the Agreement between the Florida Department of Environmental Protection (FDEP) and Seminole County for receipt of funding from the FDEP for the Lockhart-Smith Canal Regional Stormwater Facility (Contract No. S0261) and approve and authorize execution of related Budget Amendment Request.

**District 5 - Commissioner Carey**                      **(Mark Flomerfelt, P.E.)**

**BACKGROUND:**

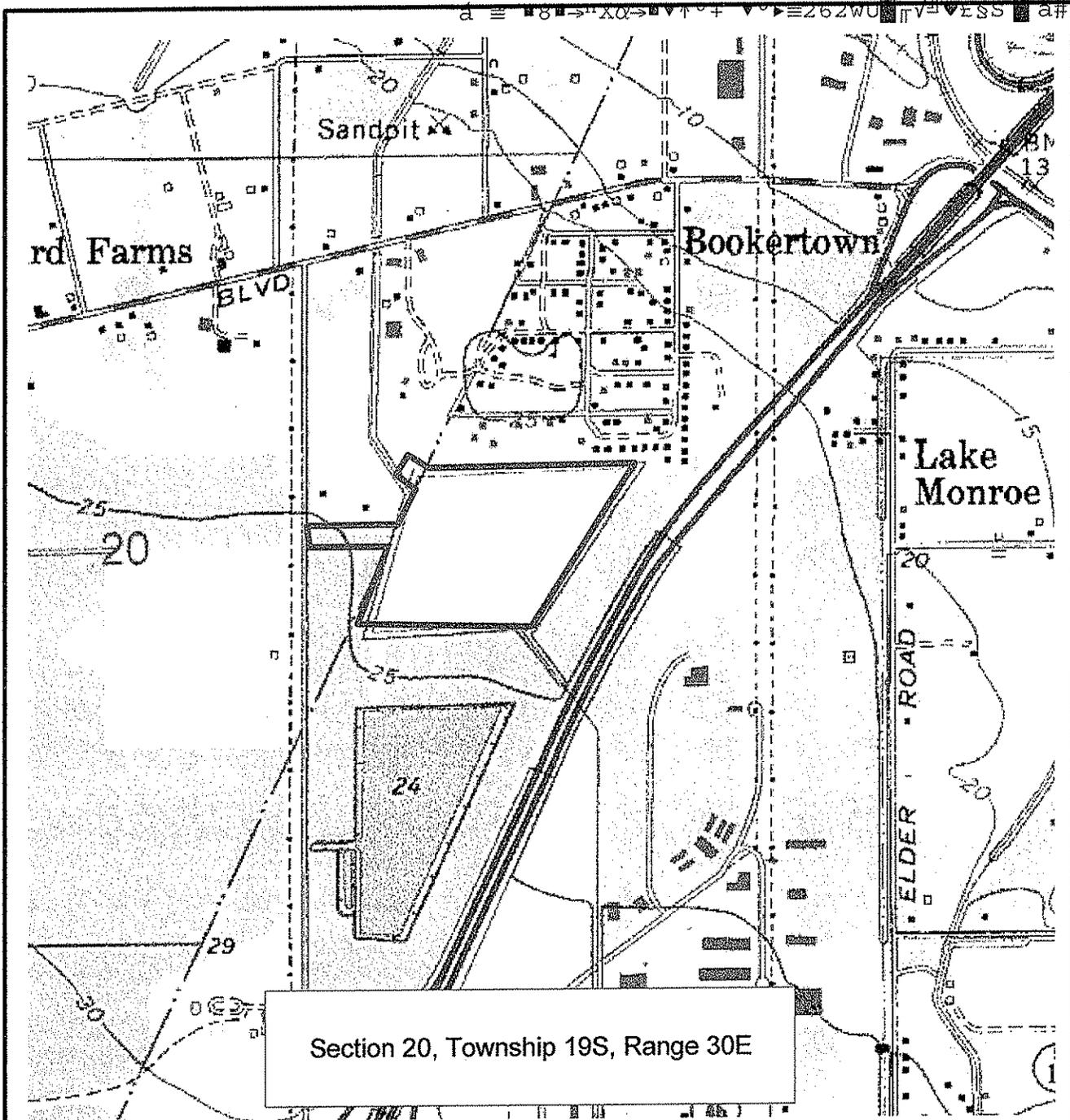
This Agreement involves construction of a Regional Stormwater Facility (RSF) designed to provide water quality treatment for approximately 2,800 acres of the Lake Monroe Basin. This RSF was identified in the Lake Monroe Basin Engineering Study and Deficiency Correction Alternatives (October 2001).

The RSF will be located on a 39-acre parcel, approximately 500 feet west of Interstate 4 and 2,000 feet south of Orange Boulevard. The site is an existing borrow pit excavated in the 1960's for fill associated with the construction of Interstate 4. The property is currently owned by Seminole County.

The project will be managed by Seminole County. FDEP funding for this project will be up to \$1,738,755. The County's obligation is to provide a minimum match of an equal amount. Eligible historic costs of \$664,047 have been documented and will be submitted to the State. The balance of \$1,074,708 will be funded from the 2001 Sales Tax. A Budget Amendment Request to establish this project and related funding sources is attached.

Reviewed by: \_\_\_\_\_  
Co Atty: SJC  
DFS: \_\_\_\_\_  
Other: \_\_\_\_\_  
DCM: SS  
CM: [Signature]  
File No. CPWS01

Attachments: Location Map  
FDEP Agreement No. S0261  
Budget Amendment Request (BAR)



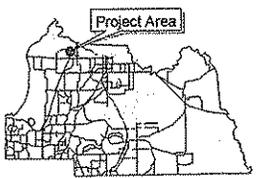
Section 20, Township 19S, Range 30E



1000 0 1000 Feet

Lockhart-Smith Regional Pond

LOCATION



LEGEND

 Project Area

P:\6116\39972\arcview\14.apr



Figure 1-1  
Project Location Map  
(USGS)

STATE FINANCIAL ASSISTANCE AGREEMENT

DEP AGREEMENT NO. S0261

STATE OF FLORIDA  
GRANT ASSISTANCE  
PURSUANT TO LINE ITEM 1700 OF THE 2004-2005 GENERAL APPROPRIATIONS ACT

THIS AGREEMENT is entered into between the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, whose address is 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 (hereinafter referred to as the "Department") and the SEMINOLE COUNTY BOARD OF COUNTY COMMISSIONERS, whose address is 177 Loop Road Sanford, Florida 32773 (hereinafter referred to as "Grantee" or "Recipient"), Local Government, to provide financial assistance for the Smith Lockhart Canal Regional Strom Water Retrofit.

In consideration of the mutual benefits to be derived herefrom, the Department and the Grantee do hereby agree as follows:

1. The Grantee does hereby agree to perform in accordance with the terms and conditions set forth in this Agreement, **Attachment A**, Grant Work Plan, and all attachments and exhibits named herein which are attached hereto and incorporated by reference. For purposes of this Agreement, the terms "Contract" and "Agreement" and the terms "Grantee", "Recipient" and "Contractor", are used interchangeably.
2. This Agreement shall begin upon execution by both parties and end no later than forty (40) months, inclusive. The Grantee shall not be eligible for reimbursement for work performed prior to the execution date of this Agreement. This Agreement may be amended to provide for additional services if additional funding is made available by the Legislature.
3.
  - A. As consideration for the services rendered by the Grantee under the terms of this Agreement, the Department shall pay the Grantee on a cost reimbursement basis in an amount not to exceed \$1,738,755.00 toward the total project cost estimate of \$6,875,190.00. The parties hereto agree that the Grantee is responsible for providing a minimum match of \$1,738,755.00 (or 50% of the total project cost, whichever is less) toward the project described in **Attachment A**, Grant Work Plan. If the Grantee finds, after receipt of competitive bids, that the work described in **Attachment A** cannot be accomplished for the current estimated project cost, the parties hereto agree to modify the Project Work Plan described in **Attachment A** to provide for the work that can be accomplished for the funding identified above.
  - B. The Grantee shall be reimbursed on a cost reimbursement basis for all eligible project costs upon receipt and acceptance of a properly completed **Attachment B**, Payment Request Summary Form. In addition to the summary form, the Grantee must provide from its accounting system, a listing of expenditures charged against this Agreement. The listing shall include, at a minimum, a description of the goods or services purchased, date of the transaction, voucher number, amount paid, and vendor name. All requests for reimbursement of travel expenses shall be in accordance with the travel requirements established in Section 112.061, Florida Statutes.
  - C. In addition to the invoicing requirements contained in paragraph 3.B. above, the Department will periodically request proof of a transaction (invoice, payroll register, etc.) to evaluate the appropriateness of costs to the Agreement pursuant to State and Federal guidelines (including cost allocation guidelines), as appropriate. This information, when requested, must be provided within 30 calendar days of such request. The Grantee may also be required to submit a cost allocation plan to the Department in support of its multipliers (overhead, indirect, general administrative costs, and fringe benefits). All bills for amounts due under this Agreement shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof. State guidelines for allowable costs can be found in the Department of Financial Services' Reference Guide for State Expenditures at <http://www.fldfs.com/aadir/reference%5Fguide>.

4. The State of Florida's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature. The parties hereto understand that this Agreement is not a commitment of future appropriations.
5. The Grantee shall submit quarterly invoices in conjunction with quarterly progress reports describing the work performed, problems encountered, problem resolution, schedule updates and proposed work for the next reporting period. Quarterly reports shall be submitted to the Department's Grant Manager no later than twenty (20) days following the completion of the quarterly reporting period. It is hereby understood and agreed by the parties that the term "quarterly" shall reflect the calendar quarters ending March 31, June 30, September 30 and December 31. The Department's Grant Manager shall have ten (10) calendar days to review deliverables submitted by the Grantee.
6. Each party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.
7.
  - A. The Department may terminate this Agreement at any time in the event of the failure of the Grantee to fulfill any of its obligations under this Agreement. Prior to termination, the Department shall provide thirty (30) calendar days written notice of its intent to terminate and shall provide the Grantee an opportunity to consult with the Department regarding the reason(s) for termination.
  - B. The Department may terminate this Agreement for convenience by providing the Grantee with thirty (30) calendar days written notice.
8. This Agreement may be unilaterally canceled by the Department for refusal by the Grantee to allow public access to all documents, papers, letters, or other material made or received by the Grantee in conjunction with this Agreement, unless the records are exempt from Section 24(a) of Article I of the State Constitution and Section 119.07(1), Florida Statutes.
9. The Grantee shall maintain books, records and documents directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles consistently applied. The Department, the State, or their authorized representatives shall have access to such records for audit purposes during the term of this Agreement and for five years following Agreement completion. In the event any work is subcontracted, the Grantee shall similarly require each subcontractor to maintain and allow access to such records for audit purposes.
10.
  - A. In addition to the requirements of the preceding paragraph, the Grantee shall comply with the applicable provisions contained in **Attachment C (Special Audit Requirements)**, attached hereto and incorporated herein by reference. **Exhibit 1 to Attachment C** summarizes the funding sources supporting the Agreement for purposes of assisting the Grantee in complying with the requirements of **Attachment C**. A revised copy of **Exhibit 1** must be provided to the Grantee for each amendment which authorizes a funding increase or decrease. If the Grantee fails to receive a revised copy of **Exhibit 1**, the Grantee shall notify the Department's Grants Development and Review Manager at 850/245-2361 to request a copy of the updated information.
  - B. The Grantee is hereby advised that the Federal and/or Florida Single Audit Act Requirements may further apply to lower tier transactions that may be a result of this Agreement. The Grantee shall consider the type of financial assistance (federal and/or state) identified in **Attachment C, Exhibit 1** when making its determination. For federal financial assistance, the Grantee shall utilize the guidance provided under OMB Circular A-133, Subpart B, Section \_\_\_.210 for determining whether the relationship represents that of a subrecipient or vendor. For state financial assistance, the Grantee shall utilize the form entitled "Checklist for Nonstate Organizations Recipient/Subrecipient vs Vendor Determination" (form number FSAA\_CL2) that can be found under the "Links/Forms" section appearing at the following website:

<http://www.fsaa.state.fl.us/>

The Grantee should confer with its chief financial officer, audit director or contact the Department for assistance with questions pertaining to the applicability of these requirements.

11. A. The Grantee may subcontract work under this Agreement without the prior written consent of the Department's Grant Manager. The Grantee agrees to be responsible for the fulfillment of all work elements included in any subcontract and agrees to be responsible for the payment of all monies due under any subcontract. It is understood and agreed by the Grantee that the Department shall not be liable to any subcontractor for any expenses or liabilities incurred under the subcontract and that the Grantee shall be solely liable to the subcontractor for all expenses and liabilities incurred under the subcontract.
- B. The Department of Environmental Protection supports diversity in its procurement program and requests that all subcontracting opportunities afforded by this Agreement embrace diversity enthusiastically. The award of subcontracts should reflect the full diversity of the citizens of the State of Florida. Upon request, the Department will furnish a list of minority owned businesses for consideration in subcontracting opportunities.
12. In accordance with Section 216.347, Florida Statutes, the Grantee is hereby prohibited from using funds provided by this Agreement for the purpose of lobbying the Legislature, the judicial branch or a state agency.
13. The Grantee shall comply with all applicable federal, state and local rules and regulations in providing services to the Department under this Agreement. The Grantee acknowledges that this requirement includes compliance with all applicable federal, state and local health and safety rules and regulations. The Grantee further agrees to include this provision in all subcontracts issued as a result of this Agreement.
14. The Department's Grant Manager for this Agreement is identified below.

Eric Livingston	
Florida Department of Environmental Protection	
Bureau of Watershed Management	
2600 Blairstone Road – MS#3510	
Tallahassee, FL 32399-2400	
Telephone No.:	(850) 245-8430
SunCom No.:	205-8430
Fax No.:	(850) 245-8434
SunCom Fax No.:	205-8434
E-mail Address:	<a href="mailto:Eric.Livingston@dep.state.fl.us">Eric.Livingston@dep.state.fl.us</a>

15. The Grantee's Grant Manager for this Agreement is identified below.

Marck Flomerfelt	
Seminole County Roads	
Stormwater Division	
177 Loop Road	
Sanford, FL 32773	
Telephone No.:	(407) 665-5569
Fax No.:	(407) 665-5634
E-mail Address:	<a href="mailto:mflomerfelt@seminolecountyfl.gov">mflomerfelt@seminolecountyfl.gov</a>

16. To the extent required by law, the Grantee will be self-insured against, or will secure and maintain during the life of this Agreement, Workers' Compensation Insurance for all of his employees connected with the work of this project and, in case any work is subcontracted, the Grantee shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Grantee. Such self-insurance program or insurance coverage shall comply fully with the Florida Workers' Compensation law. In case any class of employees engaged in hazardous work under this Agreement is not protected under Workers' Compensation statutes, the Grantee shall provide, and cause each subcontractor to provide, adequate insurance satisfactory to the Department, for the protection of his employees not otherwise protected.
17. The Grantee, as an independent contractor and not an agent, representative, or employee of the Department, agrees to carry adequate liability and other appropriate forms of insurance. The Department shall have no liability except as specifically provided in this Agreement.
18. The Grantee covenants that it presently has no interest and shall not acquire any interest which would conflict in any manner or degree with the performance of services required.
19. The purchase of non-expendable equipment costing \$1,000 or more is not authorized under the terms of this Agreement.
20. The Department may at any time, by written order designated to be a change order, make any change in the work within the general scope of this Agreement (e.g., specifications, task timeline within current authorized Agreement period, method or manner of performance, requirements, etc.). All change orders are subject to the mutual agreement of both parties as evidenced in writing. Any change, which causes an increase or decrease in the Grantee's cost or time, shall require formal amendment to this Agreement.
21. If the Grantee's project involves environmentally related measurements or data generation, the Grantee shall develop and implement quality assurance practices consisting of policies, procedures, specifications, standards, and documentation sufficient to produce data of quality adequate to meet project objectives and to minimize loss of data due to out-of-control conditions or malfunctions. All sampling and analyses performed under this Agreement must conform with the requirements set forth in Chapter 62-160, Florida Administrative Code, and the Quality Assurance Requirements for Department Agreements, attached hereto and made a part hereof as **Attachment F**.
22.
  - A. No person, on the grounds of race, creed, color, national origin, age, sex, or disability, shall be excluded from participation in; be denied the proceeds or benefits of; or be otherwise subjected to discrimination in performance of this Agreement.
  - B. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity, and may not transact business with any public entity. The Florida Department of Management Services is responsible for maintaining the discriminatory vendor list and intends to post the list on its website. Questions regarding the discriminatory vendor list may be directed to the Florida Department of Management Services, Office of Supplier Diversity, at 850/487-0915.
23. Land acquisition is not authorized under the terms of this Agreement.
24. This Agreement represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing, duly signed by each of the parties hereto, and attached to the original of this Agreement, unless otherwise provided herein.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed, the day and year last written below.

SEMINOLE COUNTY BOARD  
of COUNTY COMMISSIONERS

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Secretary or designee

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Eric Livingston, DEP Grant Manager

\_\_\_\_\_  
DEP Contracts Administrator

Approved as to form and legality:

\_\_\_\_\_  
DEP Attorney

FEID No.: 69-11-03395

\*For Agreements with governmental boards/commissions: If someone other than the Chairman signs this Agreement, a resolution, statement or other document authorizing that person to sign the Agreement on behalf of the Grantee must accompany the Agreement.

List of attachments/exhibits included as part of this Agreement:

Specify Type	Letter/ Number	Description (include number of pages)
<u>Attachment</u>	<u>A</u>	<u>Grant Work Plan (7 Pages)</u>
<u>Attachment</u>	<u>B</u>	<u>Payment Request Summary Form (2 Page)</u>
<u>Attachment</u>	<u>C</u>	<u>Special Audit Requirements (5 Pages)</u>
<u>Attachment</u>	<u>D</u>	<u>Quality Assurance Requirements Provision Options (11 Pages)</u>

**ATTACHMENT A**

**TMDL WATER QUALITY NPS REDUCTION GRANT PROPOSAL APPLICATION**

<b>PROJECT:</b>	Lockhart-Smith Canal Regional Stormwater Facility			
<b>PROJECT FUNDING:</b>	\$1,738,755	<b>TMDL Grant \$</b>	\$1,738,755	<b>Match \$</b>
<b>LEAD ORGANIZATION:</b>	Seminole County Roads – Stormwater Division			
<b>CONTACT PERSON:</b>	Mr. Mark E. Flomerfelt, P.E. 177 Bush Loop Sanford, Florida 32773 (407) 665-5569 (407) 665-5634 (Fax) <a href="mailto:MFlomerfelt@seminolecountyfl.gov">MFlomerfelt@seminolecountyfl.gov</a>			
<b>COOPERATING ORGANIZATIONS:</b>	St. Johns River Water Management District, Florida Department of Transportation.			
<b>PROJECT ABSTRACT:</b>	Providing water quality retrofit to the Lockhart-Smith Canal, the largest watershed and pollutant contributor to the Lake Monroe basin will involve the use of a proven and traditional Best Management Practice (BMP) at the extent practicable. The proposed BMP or Regional Stormwater Facility (RSF) is an existing borrow pit built in the 1960s during the road construction of Interstate 4. The borrow pit is located within the Lockhart-Smith Canal on a 39 acre parcel owned by Seminole County, which was donated by FDOT. It will be converted into a wet pond by increasing the hydraulic residence time across a combination of shallow marsh and deep pool areas to promote nutrient uptake and pollutant settling mechanisms. It receives runoff from a 2,800 acres tributary to the Lockhart-Smith Canal (aka Smith Canal, WBID 2962), of which 54% currently has no stormwater treatment. The RSF is estimated to reduce TN by 1,133 pounds per year and TP by 200 pounds per year respectively or a total of 13% annual reduction of nutrients. The RSF will be open to the public for park-like trail amenities with a learning center to educate visitors about the benefits of the project and enhance their understanding of the basin goals.			
<b>PROJECT LOCATION AND WATERSHED CHARACTERISTICS:</b>	The RSF is located on section map S20-T19S-R30E, approximately 500 feet west of Interstate 4 and half a mile north of State Road 46. The borrow pit is in Lockhart-Smith Canal, a sub-basin of the Lake Monroe watershed (HUC 03080101) and a major tributary to the St. Johns River with 7.2 square miles in total drainage area.			
<b>Watershed Name:</b>	Upper St. Johns (Lake Monroe)			
<b>Latitude:</b>	81° 20' 9" West			
<b>Longitude:</b>	28° 49' 22" North			
<b>Hydrologic Unit Code(HUC):</b>	03080101			
<b>Land Uses within the Watershed</b> (acres and percentages of total):				

<b>Land Use</b>	<b>Acres</b>	<b>%</b>
Low Density Residential	157.81	5.63
Medium Density Residential	208.84	7.45
Mobile Home Units – High Density	14.9	0.53
Multiple Dwelling Units – Low Rise	11.75	0.42
Commercial	168.49	6.01
Professional Services	2.04	0.07
Cemetery	8.07	0.29
Industrial	86.97	3.10
Extractive	7.42	0.26
Educational Facilities	10.89	0.39
Religious Facility	9.13	0.33
Recreational	38.28	1.37
Agriculture	285.02	10.17
Shrub and Brushland	476.77	17.02
Upland Forest	492.36	17.57
Water Bodies	121.83	4.35
Wetlands	295.47	10.55
Transportation	13.05	0.47
Railroad	24.19	0.86
Roads/Highways	351.66	12.55
Utility	16.69	0.60
<b>Land Use Totals (Acreage and %)</b>	<b>2801.61</b>	<b>100.00</b>

**POLLUTION REDUCTION STRATEGY:** Seminole County in partnership with the St. Johns River Water Management District (SJRWMD) completed the Monroe Basin Engineering Study and Drainage Inventory Update in October 2001. The goal was to develop a long-term stormwater management plan to meet the County's desired level-of-service goals for flooding and water quality protection. The study was also used to estimate relative annual and seasonal pollutant loads from each of the subbasin. Nonpoint source pollutant loads were estimated using the Camp, Dresser & McKee, Inc. (CDM's) Water Management Model (WMM). This was used to develop the County's National Pollution Discharge Elimination System (NPDES) permit application. WMM was also used to conceptually evaluate the 12 USEPA indicator pollutants (BOD5, COD, TSS, TDS, TP, DP, TKN, NO3 and NO2, Pb, Cu, Zn, and Cd) for each of the eight major sub basins in the Monroe Basin including the Lockhart-Smith Canal. The purpose of the evaluation was to identify relative changes in nonpoint source pollutant loadings due to changes in land use, septic tank areas, and existing BMPs. This allows the County to conceptually screen and identify areas suitable for water quality retrofit.

The land use for 2,800 acres tributary area is a mix of residential and commercial land uses. The major sources of water in the tributary area include rainfall-runoff from the basin surface and seepage into streams from groundwater sources. At the present time, the major sources of pollutants in this region include the adjacent residential, commercial and road areas (old development) with no BMPs in place (non-point source pollution).

The proposed RSF also meets the objectives of the Middle St. Johns River Basin Initiative and the Surface Water Improvement and Management (SWIM) Plan developed by the SJRWMD. The Lockhart-Smith Canal is listed as an impaired waterbody based on FDEP's adopted 2001 Impaired Waters Rule. For water bodies exceeding water quality standards, the SJRWMD and FDEP will establish pollutant load reduction goals (PLRGs) and/or TMDLs to reduce pollutant loads from discharges to these impaired waters.

The proposed RSF is one of the recommendations and the top priority in the 2001 Basin Study. This

inline pond system has an annual estimated pollutant removal of 200 lbs per year of total phosphorus (TP), 381 lbs per year of dissolved phosphorus (DP), 880 lbs per year of total kjeldahl nitrogen (TKN) and 253 lbs per year of nitrate + nitrite (NO<sub>3</sub> + NO<sub>2</sub>) or a total reduction of 1,714 lbs of pollutant loads per year. Due to the size of the tributary area, the proposed treatment facility has an estimated residence time of 2 days. Since this residence time is less than the optimal threshold of 21 days, the Walker equation was used to estimate the percent reduction in TP and TN loads. The Walker equation is an empirical approach to nutrients removal in impoundments and takes into account the actual residence time of the pond. This approach is typically used when a proposed facility has a residence time of less than the optimum 21 day threshold. The Walker equations can be found in: "Empirical Methods for predicting Eutrophication in Impoundments", Corps of Engineers, U.S. Army Washington, Technical Report E-81-5 Environ. Lab, Waterways Exp. Sta. Vicksburg, MS, 1985.

The estimated cost to construct the proposed improvements is \$2.25 million. Seminole County has invested \$808,000 in the master plan and design for the Monroe Basin. Additionally, the County has invested \$135,000 for the design and permitting of this specific project. The total estimated project cost excluding land acquisition is \$3,527,510 wherein 50% or \$1,738,755 is the needed assistance to complete the proposed improvements. Since this project has already been designed and permitted, various public information activities have been completed including public participation during the design phase. This project has received all of the required permits last year and it is ready for construction, once the additional project funding has been secured.

Seminole County has been collecting ambient water quality samples upstream and downstream of the proposed project on a quarterly basis. Parameters include nutrients, biological oxygen demand, total suspended solids, total dissolved solids, fecal coliform, chlorophyll a, conductivity, dissolved oxygen, pH, turbidity, and temperature. Also, heavy metals are measured approximately on an annual basis. These results will establish a base line that can be used to compare the performance of the proposed RSF, once constructed, as sampling continues.

**PROJECT OBJECTIVE(S):** The Lockhart-Smith Canal is included on the FDEP's 2004 Group 2 Middle St. Johns 303(d) verified list of impaired waterbodies for fecal coliforms, dissolved oxygen, and iron (WBID 2962). Its receiving water body, the St. Johns River (WBID 2893C) is also listed for dissolved oxygen, and nutrients. Both listed impaired waterbodies are projected for TMDL development in 2008.

The RSF was designed to remove nutrients, heavy metals, BOD and total suspended solids and will provide the highest amount of reduction from any of the problem areas identified in the study for the 12 indicator pollutants evaluated.

**PROJECT DESCRIPTION:** The Monroe basin has a tributary area of approximately 15,196 acres with 35% developed under the existing land use condition generating an estimated annual pollutant load of 12,900,000 pounds of the 12 NPDES indicators. If all new development (72%) is treated by BMPs, as would be required by permitting agencies, the total amount of pollutants reaching Lake Monroe would still increase by approximately 3,046,000 lbs per year or 27% over existing land use. The Lockhart-Smith Canal sub-basin shows the largest percent increase (53%), resulting in an additional 192,000 lbs/year reaching the St. Johns River.

The RSF at this location will provide direct water quality improvements based upon designed natural treatment processes for the listed Lockhart-Smith Canal, and provide several upstream improvements that have insufficient land area available for stormwater ponds. The borrow pit will be re-configured to increase the hydraulic residence time across a combination of shallow marsh and deep pool areas to promote nutrient uptake and pollutant settling mechanisms. The additional benefit will be slight flow attenuation through the facility, which will provide limited flood control improvements. The design will include public access and educational opportunities. The current permitted project design does not include the learning center.

The proposed treatment volume provided over the 700.4 acres Retrofit Project Area (25% of the tributary area) is approximately 0.7-inch over the project area or 1.1-inch over the impervious area. The pre-existing condition of the borrow pit has a total permanent pool volume of 4.7 acre-feet and a 0.2 day residence time. The total treatment volume for the system is 39 acre-feet and provided between elevations 15.0 feet and 16.5 feet. One half of this volume (19.5 ac-ft) will be released between 24 to 30 hours per SJRWMD rules. The facility increases the permanent pool volume to 45.9 acre-ft and the residence time to 2 days. Details of the improvements include excavation of the project site to just within the extent of the parcel limits to construct the pond, which will be 25.7 acres at normal water level (NWL). Two control structures will be installed, one to control storm flows and the other one to provide water quality drawdown to the system. The outfall weir will be constructed at 20 feet NGVD to control stage and flow.

Implementation of the stormwater detention facility provides the opportunity to convey treated flows to enhance the onsite wetland and to reduce the oxygen demand and phosphorus and nitrogen loads discharging to the St. Johns River. The construction of perimeter berms were proposed for maintenance purposes, and the construction of two internal berms were proposed to maximize the flow path while minimizing wetland impacts.

Due to existing wetlands with the project area, the proposed facility has been designed to mimic the existing hydrology of the borrow pit marsh. The canal passes through the project area and during large storm events the water in the canal currently overflows into the adjacent wetland. Establishment of the RSF provides an opportunity to restore the hydrology to the existing wetland. The facility has been designed to maximize the flow path and detention time of stormwater runoff, maximize stormwater treatment, minimize wetland impacts, and provide hydrologic enhancement of the wetland. The internal berms were located to either minimize wetland impacts or to impact the poor quality shrub wetlands to the maximum extent possible.

The 39-acre property was donated by FDOT and now owned by Seminole County. The proposed project has received all the necessary permits for construction, and awaits only the two final tasks for completion, the construction phase and post-construction water quality monitoring phase.

**ESTIMATED POLLUTANT LOAD REDUCTION:**

<b>BMP's Installed</b>		<b>TSS kg/yr</b>	<b>TP kg/yr</b>	<b>TN kg/yr</b>	<b>Sediment kg/yr</b>	<b>BOD kg/yr</b>	<b>Other kg/yr</b>	<b>Other kg/yr</b>
Lockhart-Smith RSF							<b>DP</b>	
<b>Pollutant Loads</b>	Pre-Project	N/A	456	4,940	N/A	N/A	469	N/A
	Post-Project	N/A	364	4,425	N/A	N/A	296	N/A
	Load Reduction	N/A	91	515	N/A	N/A	173	N/A
	% Reduction	N/A	20	11	N/A	N/A	37	N/A

**MODEL USED:** The estimated pollutant load reductions listed above were taken from the project’s design and permit application report prepared by CDM. A copy of one of the sections of the permit application report is enclosed as supporting documentation for this grant application.

**OUTPUTS/DELIVERABLES:**

**Task 1 – Construction**

Construction task will begin immediately after the grant is approved by advertising the request for bids. Actual construction will initiate upon selection and contract approval of a qualified, cost effective contractor. Seminole County will provide construction administration and inspection services throughout the duration of the project. Digital photos will be taken and regular construction inspections will be conducted from the beginning of the project until its completion to document the project.

**Task 2 – Effectiveness Evaluation: Monitoring to Determine Treatment Effectiveness**

In order to measure the effectiveness of the new RSF, Seminole County will prepare a stormwater monitoring plan and submit it to DEP for approval. The plan shall be based on the generic sampling plan set forth in Attachment 3. A SOP/QAPP will also be prepared and submitted to DEP. The final project report will include the results of the stormwater monitoring program and document the load reduction from the project.

**Task 3 – Project Administration**

Seminole County staff will perform (or retain consultants to perform) all project management, construction administration (including construction contractor selection and construction inspection) and effectiveness evaluation duties. Seminole County will also be responsible for ensuring that all reports are submitted to FDEP including construction progress reports, annual monitoring reports and final project report.

**PROJECT MILESTONES:**

Task	Activity	Start	Complete
0	Land Acquisition		Completed
0	Master Basin Engineering Study		Completed
0	Construction Plan Preparation and Permitting		Completed
1	Construction	Month 2	Month 10
2	Pre-Construction Monitoring	On-Going	Month 10
2	Monitoring Plan and QAPP for Post-Implementation Monitoring	Month 2	Month 10
2	Post-Implementation Monitoring	Month 10	Month 34
3	Quarterly Report	Month 1	Month 10
3	Final Project Report	Month 31	Month 34

**PROJECT BUDGET:**

As clarification of and notwithstanding anything else contained in the foregoing State Financial Assistance Agreement, DEP Agreement No. S0261, the Parties agree that the total project cost estimate of \$6,875,190.00 includes \$3,397,680 for land acquisition which has already been completed. The balance of \$3,477,510 includes \$943,000 for engineering services and preparation and permitting of construction plans which have already been completed that has already been paid by Seminole County. The balance of the project includes the actual construction of the project (estimated to cost \$2,249,510) plus effectiveness evaluation (estimated to cost \$125,000) and project evaluation (estimated to cost \$160,000). Seminole County’s payment of \$943,000 for engineering services, plan preparation and permitting is expressly recognized as a part of the County’s 50% match under this agreement.

Project Funding Activity	Grant Amount	Matching Contribution	Match Source *
Staff			
Travel			
Equipment			
Supplies			
Contractual		\$ 1,103,000	Seminole County
BMP Implementation	\$ 1,613,755	\$ 635,755	Seminole County
Monitoring	\$ 125,000	0	Seminole County
Public Education			
Other:		\$ 3,397,680	FDOT/Seminole County
<b>Total:</b>	<b>\$ 1,738,755</b>	<b>\$ 5,136,435</b>	
<b>Total Project Cost:</b>		<b>\$ 6,875,190</b>	

\*If a stormwater utility or other dedicated recurring fee is contributing, put that information in the following table.

**MATCH SOURCE INFORMATION:**

Match Source Name	Description	ERU/Fee	

**BUDGET BY TASK:**

Project Funding Activity	Grant Amount	Matching Contribution	Match Source
Task 0 - Master Basin Engineering Study		\$ 808,000	Seminole County
Task 0 - Construction Plan Preparation and Permitting		\$ 135,000	Seminole County
Task 1 – Construction	\$ 1,613,755	\$ 635,755	Seminole County
Task 2 – Effectiveness Evaluation	\$ 125,000	0	Seminole County
Task 3 – Project Evaluation		\$ 160,000	Seminole County
<b>Total:</b>	<b>\$ 1,738,755</b>	<b>\$ 1,738,755</b>	
<b>Total Project Cost:</b>		<b>\$ 3,477,510</b>	

**OTHER FUNDING (Not Match – such as land acquisition or other federal grants):**

Agency	Activity	Amount
FDOT	Task 0 – Land Acquisition	\$ 3,397,680 (Unit Cost Based on Adjacent Parcel)
<b>Total:</b>		<b>\$ 3,397,680</b>

**REFERENCES CITED:**

1. Monroe Basin Engineering Study and Drainage Inventory by CDM.
2. I-4 Borrow Pit Environmental Resource Permit Application by CDM.

**NOTE: PLEASE SUBMIT ALL APPENDICES IN A SEPARATE WORD DOCUMENT. THIS MAY INCLUDE MAPS, FIGURES OR ANY OTHER INFORMATION YOU WOULD LIKE TO INCLUDE WITH YOUR APPLICATION**

**ATTACHMENT B  
PAYMENT REQUEST SUMMARY FORM**

**GRANTEE: Seminole County Board of  
County Commissioners**

**GRANTEE'S GRANT MANAGER:  
Eric Livingston  
PAYMENT REQUEST NO.: \_\_\_\_\_**

**DEP AGREEMENT NO.: S0261  
DATE OF REQUEST: \_\_\_\_\_**

**PERFORMANCE  
PERIOD: \_\_\_\_\_**

**AMOUNT  
REQUESTED:\$ \_\_\_\_\_**

**PERCENT MATCHING  
REQUIRED: \_\_\_\_\_**

**GRANT EXPENDITURES SUMMARY SECTION**

[Effective Date of Grant through End-of-Grant Period]

<b>CATEGORY OF EXPENDITURE</b>	<b>AMOUNT OF THIS REQUEST</b>	<b>TOTAL CUMULATIVE PAYMENTS</b>	<b>MATCHING FUNDS</b>	<b>TOTAL CUMULATIVE MATCHING FUNDS</b>
Salaries	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Fringe Benefits	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Travel (if authorized)	\$ N/A	\$ N/A	\$ N/A	\$ N/A
<b>Subcontracting:</b>			\$	
BMP Implementation	\$	\$ N/A	\$	\$ N/A
Monitoring	\$	\$ N/A	\$ N/A	\$ N/A
Equipment Purchases	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Supplies/Other Expenses	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Land	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Overhead	\$ N/A	\$ N/A	\$ N/A	\$ N/A
<b>TOTAL REQUESTED</b>	<b>\$</b>	<b>\$ N/A</b>	<b>\$</b>	<b>\$ N/A</b>
<b>TOTAL GRANT AGREEMENT</b>		<b>\$ N/A</b>		<b>\$ N/A</b>
Less Total Cumulative Payments of:				
<b>TOTAL REMAINING IN GRANT</b>				

**GRANTEE CERTIFICATION**

The undersigned certifies that the amount being requested for reimbursement above was for items that were charged to and utilized only for the above cited grant activities.

_____	_____
Grantee's Grant Manager's Signature	Grantee's Fiscal Agent
_____	_____
Print Name	Print Name
_____	_____
Telephone Number	Telephone Number

**INSTRUCTIONS FOR COMPLETING  
ATTACHMENT B  
PAYMENT REQUEST SUMMARY FORM**

**GRANTEE:** Enter the name of the grantee's agency.

**DEP AGREEMENT NO.:** This is the number on your grant agreement.

**DATE OF REQUEST:** This is the date you are submitting the request.

**AMOUNT REQUESTED:** This should match the amount on the "TOTAL AMOUNT" line for the "AMOUNT OF THIS REQUEST" column.

**GRANTEE'S GRANT MANAGER:** This should be the person identified as grant manager in the grant agreement.

**PAYMENT REQUEST NO.:** This is the number of your payment request, not the quarter number.

**PERFORMANCE PERIOD:** This is the beginning and ending date of the invoice period.

**PERCENT MATCHING REQUIRED:** Enter your match requirement here.

***GRANT EXPENDITURES SUMMARY SECTION:***

**"AMOUNT OF THIS REQUEST" COLUMN:** Enter the amount that was paid out during the invoice period. This must be by budget category as in the currently approved budget in the current Grant Work Plan of your grant Agreement. Do not claim expenses in a budget category that does not have an approved budget. Do not claim items that are not specifically identified in the current Budget Narrative section of the current Grant Work Plan. Enter the column total on the "TOTALS" line. Enter the budget amount on the "AGREEMENT AMOUNT" line. Enter the total cumulative amount of this request and all previous payments on the "LESS TOTAL CUMULATIVE PAYMENTS OF" line. Deduct the "LESS TOTAL CUMULATIVE PAYMENTS OF" from the "AGREEMENT AMOUNT" for the amount to enter on the "TOTAL REMAINING IN GRANT" line.

**"TOTAL CUMULATIVE PAYMENTS" COLUMN:** Enter the cumulative amounts that have been paid to date for expenses by budget category. The final report should show the total of all payments, first through the final payment, etc. Enter the column total on the "TOTALS" line. **Do not enter anything in the shaded areas.**

**"MATCHING FUNDS" COLUMN:** Enter the amount to be claimed as match for the invoice period. This needs to be shown under specific budget categories according to the currently approved Grant Work Plan. Enter the total on the "TOTALS" line for this column. Enter the match budget amount on the "AGREEMENT AMOUNT" line for this column. Enter the total cumulative amount of this and any previous match claimed on the "LESS TOTAL CUMULATIVE PAYMENTS OF" line for this column. Deduct the "LESS TOTAL CUMULATIVE PAYMENTS OF" from the "AGREEMENT AMOUNT" for the amount to enter on the "TOTAL REMAINING IN GRANT" line.

**"TOTAL CUMULATIVE MATCHING FUNDS" COLUMN:** Enter the cumulative amount you have claimed to date for match by budget category. Put the total of all on the line titled "TOTALS." The final report should show the total of all claims, first claim through the final claim, etc. **Do not enter anything in the shaded areas.**

**GRANTEE CERTIFICATION:** Must be signed by both the Grantee's Grant Manager as identified in the grant agreement and the Grantee's Fiscal Agent.

**NOTE:** If claiming reimbursement for travel, you must include copies of receipts and a copy of the travel reimbursement form approved by the Department of Financial Services, Chief Financial Officer.

## ATTACHMENT C

### SPECIAL AUDIT REQUIREMENTS

The administration of resources awarded by the Department of Environmental Protection (*which may be referred to as the "Department", "DEP", "FDEP" or "Grantor", or other name in the contract/agreement*) to the recipient (*which may be referred to as the "Contractor", "Grantee" or other name in the contract/agreement*) may be subject to audits and/or monitoring by the Department of Environmental Protection, as described in this attachment.

#### MONITORING

In addition to reviews of audits conducted in accordance with OMB Circular A-133 and Section 215.97, F.S., as revised (see "AUDITS" below), monitoring procedures may include, but not be limited to, on-site visits by Department staff, limited scope audits as defined by OMB Circular A-133, as revised, and/or other procedures. By entering into this Agreement, the recipient agrees to comply and cooperate with any monitoring procedures/processes deemed appropriate by the Department of Environmental Protection. In the event the Department of Environmental Protection determines that a limited scope audit of the recipient is appropriate, the recipient agrees to comply with any additional instructions provided by the Department to the recipient regarding such audit. The recipient further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Chief Financial Officer or Auditor General.

#### AUDITS

##### **PART I: FEDERALLY FUNDED**

This part is applicable if the recipient is a State or local government or a non-profit organization as defined in OMB Circular A-133, as revised.

1. In the event that the recipient expends \$300,000 or more in Federal awards in its fiscal year, the recipient must have a single or program-specific audit conducted in accordance with the provisions of OMB Circular A-133, as revised. EXHIBIT 1 to this Agreement indicates Federal funds awarded through the Department of Environmental Protection by this Agreement. In determining the Federal awards expended in its fiscal year, the recipient shall consider all sources of Federal awards, including Federal resources received from the Department of Environmental Protection. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by OMB Circular A-133, as revised. An audit of the recipient conducted by the Auditor General in accordance with the provisions of OMB Circular A-133, as revised, will meet the requirements of this part.
2. In connection with the audit requirements addressed in Part I, paragraph 1., the recipient shall fulfill the requirements relative to auditee responsibilities as provided in Subpart C of OMB Circular A-133, as revised.
3. If the recipient expends less than \$300,000 in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, is not required. In the event that the recipient expends less than \$300,000 in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from recipient resources obtained from other than Federal entities).
4. The recipient may access information regarding the Catalog of Federal Domestic Assistance (CFDA) via the internet at <http://aspe.os.dhhs.gov/cfda>.

##### **PART II: STATE FUNDED**

This part is applicable if the recipient is a nonstate entity as defined by Section 215.97(2)(1), Florida Statutes.

1. In the event that the recipient expends a total amount of State financial assistance equal to or in excess of \$300,000 in any fiscal year of such recipient, the recipient must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, Florida Statutes; applicable rules of the Executive Office of the Governor and the Chief Financial Officer; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. EXHIBIT 1 to this Agreement indicates State financial assistance awarded through the Department of Environmental Protection by this Agreement. In determining the State financial assistance expended in its fiscal year, the recipient shall consider all sources of State financial assistance, including State financial assistance received from the Department of Environmental Protection, other state agencies, and other nonstate entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.
2. In connection with the audit requirements addressed in Part II, paragraph 1, the recipient shall ensure that the audit complies with the requirements of Section 215.97(7), Florida Statutes. This includes submission of a financial reporting package as defined by Section 215.97(2)(d), Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.
3. If the recipient expends less than \$300,000 in State financial assistance in its fiscal year, an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, is not required. In the event that the recipient expends less than \$300,000 in State financial assistance in its fiscal year and elects to have an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, the cost of the audit must be paid from the non-State entity's resources (i.e., the cost of such an audit must be paid from the recipient's resources obtained from other than State entities).
4. For information regarding the Florida Catalog of State Financial Assistance (CSFA), a recipient should access the Florida Single Audit Act website located at <http://sun6.dms.state.fl.us/fsaa/catalog.htm> or the Governor's Office of Policy and Budget website located at <http://www.eog.state.fl.us/> for assistance. In addition to the above websites, the following websites may be accessed for information: Legislature's Website <http://www.leg.state.fl.us/>, Governor's Website <http://www.flgov.com/>, Department of Financial Services' Website <http://www.dbf.state.fl.us/> and the Auditor General's Website <http://www.state.fl.us/audgen>.

### **PART III: OTHER AUDIT REQUIREMENTS**

*(NOTE: This part would be used to specify any additional audit requirements imposed by the State awarding entity that are solely a matter of that State awarding entity's policy (i.e., the audit is not required by Federal or State laws and is not in conflict with other Federal or State audit requirements). Pursuant to Section 215.97(7)(m), Florida Statutes, State agencies may conduct or arrange for audits of State financial assistance that are in addition to audits conducted in accordance with Section 215.97, Florida Statutes. In such an event, the State awarding agency must arrange for funding the full cost of such additional audits.)*

### **PART IV: REPORT SUBMISSION**

1. Copies of reporting packages for audits conducted in accordance with OMB Circular A-133, as revised, and required by PART I of this Agreement shall be submitted, when required by Section .320 (d), OMB Circular A-133, as revised, by or on behalf of the recipient directly to each of the following:
  - A. The Department of Environmental Protection at the following address:

**Audit Director**  
Florida Department of Environmental Protection  
Office of the Inspector General, MS 40  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

- B. The Federal Audit Clearinghouse designated in OMB Circular A-133, as revised (the number of copies required by Sections .320 (d)(1) and (2), OMB Circular A-133, as revised, should be submitted to the Federal Audit Clearinghouse), at the following address:

Federal Audit Clearinghouse  
Bureau of the Census  
1201 East 10th Street  
Jeffersonville, IN 47132

- C. Other Federal agencies and pass-through entities in accordance with Sections .320 (e) and (f), OMB Circular A-133, as revised.
2. Pursuant to Section .320(f), OMB Circular A-133, as revised, the recipient shall submit a copy of the reporting package described in Section .320(c), OMB Circular A-133, as revised, and any management letters issued by the auditor, to the Department of Environmental Protection the following address:

**Audit Director**  
Florida Department of Environmental Protection  
Office of the Inspector General, MS 40  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

3. Copies of financial reporting packages required by PART II of this Agreement shall be submitted by or on behalf of the recipient directly to each of the following:

- A. The Department of Environmental Protection at the following address:

**Audit Director**  
Florida Department of Environmental Protection  
Office of the Inspector General, MS 40  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

- B. The Auditor General's Office at the following address:

State of Florida Auditor General  
Room 401, Claude Pepper Building  
111 West Madison Street  
Tallahassee, Florida 32399-1450

4. Copies of reports or management letters required by PART III of this Agreement shall be submitted by or on behalf of the recipient directly to the Department of Environmental Protection at the following address:

**Audit Director**  
Florida Department of Environmental Protection  
Office of the Inspector General, MS 40  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

5. Any reports, management letters, or other information required to be submitted to the Department of Environmental Protection pursuant to this Agreement shall be submitted timely in accordance with OMB Circular A-133, Florida Statutes, or Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.
6. Recipients, when submitting financial reporting packages to the Department of Environmental Protection for audits done in accordance with OMB Circular A-133, or Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date

that the reporting package was delivered to the recipient in correspondence accompanying the reporting package.

**PART V: RECORD RETENTION**

The recipient shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of **5** years from the date the audit report is issued, and shall allow the Department of Environmental Protection, or its designee, Chief Financial Officer, or Auditor General access to such records upon request. The recipient shall ensure that audit working papers are made available to the Department of Environmental Protection, or its designee, Chief Financial Officer, or Auditor General upon request for a period of **3** years from the date the audit report is issued, unless extended in writing by the Department of Environmental Protection.

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**EXHIBIT – 1**

FUNDS AWARDED TO THE RECIPIENT PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

<b>Federal Funds Awarded to the Recipient Pursuant to this Agreement Consist of the Following:</b>					
Federal Program Number	Federal Agency	CFDA Number	CFDA Title	Funding Amount	State Appropriation Category

<b>State Funds Awarded to the Recipient Pursuant to this Agreement Consist of the Following Matching Funds for Federal Programs:</b>					
Federal Program Number	Federal Agency	CFDA	CFDA Title	Funding Amount	State Appropriation Category

<b>State Funds Awarded to the Recipient Pursuant to this Agreement Consist of the Following Funds Subject of Section 215.97, F.S.:</b>						
State Program Number	Funding Source	State Fiscal Year	Catalog of State Financial Assistance Number	CSFA Title or Funding Source Description	Funding Amount	State Appropriation Category
Original Agreement	GAA Line Item 1700	2004-2005	37.039	Need to get title before approving	\$1,738,755	140076

Total Award				Specify Total Amount	<b>\$1,738,755</b>
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For each program identified above, the recipient shall comply with the program requirements described in the Catalog of Federal Domestic Assistance (CFDA) [<http://aspe.os.dhhs.gov/cfda>] and/or the Florida Catalog of State Financial Assistance (CSFA) [<http://sun6.dms.state.fl.us/fsaa/catalog.htm>]. The services/purposes for which the funds are to be used are included in the Contract scope of services/work. Any match required by the recipient is clearly indicated in the Contract.

**ATTACHMENT D**  
**Quality Assurance Requirements**

- ▶ All sampling and analyses performed under this Agreement must conform to the requirements set forth in Chapter 62-160, Florida Administrative Code (F.A.C.) and “Requirements for Field and Analytical Work performed for the Department of Environmental Protection under Contract” (DEP-QA-002/02), February 2002.
- ▶ **LABORATORIES**
  - The GRANTEE shall ensure that all laboratory testing activities are performed by laboratories certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP) for all applicable matrix/method/analyte combinations to be measured.
  - If the laboratory is not certified for some or all of the proposed test measurements, the laboratory shall apply for certification within one month of Agreement execution. Within six months of Agreement execution, the laboratory shall be fully certified for all applicable matrix/method/analyte combinations to be performed. Regardless of when the laboratory receives certification, the laboratory must implement all applicable standards of the National Environmental Laboratory Accreditation Conference (NELAC) upon Agreement execution.
  - Laboratories shall maintain certification as specified in item 2.a above during the life of the Agreement. Should certification for an analyte or test method be lost, all affected tests shall be immediately sub-contracted to a laboratory with current DoH ELCP certification in the appropriate matrix/method/analyte combination(s). The GRANTEE shall notify the DEP project manager in writing before any change to a sub-contracted laboratory is made.
  - A copy of the DoH ELCP Certificate and the associated list of specific fields of accreditation for each contracted or sub-contracted laboratory shall be provided to the DEP project manager upon Agreement execution or upon receiving DoH certification (see items 2.a and 2.b above).
  - The GRANTEE shall ensure that an acceptable initial demonstration of capability (IDOC), as described in Appendix C of Chapter 5 of the NELAC Standards is performed. Each laboratory that performs any of the proposed matrix/method/analyte combination(s) must have the requisite IDOC documentation and supporting laboratory records. IDOCs shall be performed before the test procedure is used to generate data for this Agreement. If requested by the Department, documentation that supports the IDOC shall be made available for review.
  - When performance test samples are not required by DoH ELCP for certification, the laboratory shall obtain, analyze and evaluate performance test samples, standard reference materials (SRM) or other externally assayed quality control (QC) samples, hereinafter known collectively as quality control check (QCC) samples.
    - The laboratory shall ensure that the selected QCC samples(s) represent all matrix/method/analyte combinations that are not subject to certification requirements.
    - These samples shall be analyzed at six-month intervals and the results shall be within the acceptable range established by the QCC sample provider.
    - Before providing analytical services for this Agreement, the laboratory must provide to the DEP project manager the results of the QCC sample(s) and the associated acceptable range(s) as established by the QCC sample provider. The submitted results must be from QCC samples that have been completed within the previous six months prior to the submission date.
  - Any non-standard laboratory procedures or methods that are proposed for use (i.e., those not approved by DEP for standard environmental analyses) shall be submitted for review and approval in accordance with DEP-QA-001/01, “New and Alternative Analytical Laboratory Methods,” February 1, 2004. These procedures or methods shall be approved by the DEP project manager before use under this Agreement and must be cited or described in the required planning document (see Section 6).
  - The GRANTEE shall ensure that Practical Quantitation Limits (PQLs) and Method Detection Limits (MDLs) required by the Agreement are listed in the planning document (see Section 6).
  - The GRANTEE shall ensure that the selected laboratory test methods listed in the planning document can provide results that meet the Agreement data quality objectives.
  - The GRANTEE shall ensure that all laboratory testing procedures follow the analytical methods as approved in the planning document (see Section 6).

- The GRANTEE shall ensure that the all laboratory quality control measures are consistent with Chapter 5 of the NELAC standards.
- In addition, the GRANTEE shall ensure that the quality control requirements specified in the attached addenda are followed.
- The GRANTEE shall ensure that all sample results are calculated according to the procedures specified in the analytical methods approved in the planning document.

▶ FIELD ACTIVITIES

- “Sample” refers to samples that have been either collected or analyzed under the terms of this Agreement.
- The GRANTEE shall ensure that all sample collection and field testing activities are performed in accordance with the Department’s “Standard Operating Procedures for Field Activities” (DEP-SOP-001/01, February 1, 2004). The specific standard operating procedures (SOPs) to be used for this Agreement shall be cited in the planning document (see Section 6).
- Any non-standard field procedure shall be submitted for review and approval to the DEP project manager in accordance with section FA 2000 of DEP-SOP-001/01. All non-standard procedures and methods must be approved by the DEP project manager before use under this Agreement and must be cited or described in the planning document.
- Per the quality control measures outlined in the DEP SOPs (FQ 1000 and the calibration requirements of the FT-series for field testing), the GRANTEE shall ensure that the following field quality controls (and any additional quality control measures specified in the addenda) are incorporated into the project design:
  - Matrix-Related Quality Controls - The GRANTEE shall ensure that the laboratory is provided with sufficient sample volume to analyze at least one set of matrix spikes and either matrix spike duplicates or laboratory duplicates as follows:
    - (1) The first time a sample from a sample collection matrix (see Table FA 1000-1) is collected;
    - (2) One in each additional 20 samples of the sample collection matrix, after the first 20 samples; and
    - (3) The last time samples are collected for the sample collection matrix.
  - Field-generated Quality Control duplicates or replicates (not to be confused with laboratory duplicates) shall be collected and analyzed at a frequency of 5% of the total number of samples collected for each matrix/analyte combination (see FQ 1220).
    - (1) All field duplicate results greater than the contracted PQL should agree within 20% RPD for each measured analyte. In the event that the field duplicate agreement is not observed, the GRANTEE shall investigate and attempt to determine the cause of poor precision. The outcome of these investigations shall be reported, including the corrective measures taken to minimize future problems.
  - Field-Generated Quality Control (QC) Blanks – Blanks associated with field activities as defined in FQ 1210 of the DEP SOPs shall be collected according to the requirements of FQ 1230.
    - (1) If an analyte detected in the sample is also found in any field-generated QC blank that is associated with the sample, the GRANTEE shall investigate and attempt to determine the cause of the QC blank contamination. The outcome of this investigation shall be reported and shall include a discussion of the corrective measures taken to minimize future occurrences of QC blank contamination.
    - (2) If an analyte detected in the sample is also found in any field-generated QC blank that is associated with the sample, the GRANTEE shall ensure that the analyte in the affected sample is reported as estimated (“J” with a narrative explanation) unless the analyte concentration in the affected sample is at least 10 times the reported QC blank value concentration.
  - The GRANTEE shall identify a second laboratory that meets the requirements in Section 1 and shall arrange to have split samples collected using the sampling procedures specified in the Agreement and analyzed by the primary and secondary laboratories. Split samples shall be collected at least once during the project and at least annually thereafter. The GRANTEE shall specify the procedure for splitting the samples in the planning document.
    - (1) The results from the two laboratories shall be assessed using a precision criterion of no greater than 20% RPD as an initial guide to assessment of the split sample results.
    - (2) All differences between split sample results from the two laboratories shall be investigated and resolved.

▶ REPORTING, DOCUMENTATION AND RECORDS RETENTION

- The GRANTEE shall ensure that all laboratory and field records as outlined in Rules 62-160.240 and .340, F.A.C. are retained for a minimum of five years after the project completion.
- All field and laboratory records that are associated with work performed under this Agreement shall be organized so that any information can be quickly and easily retrieved for inspection, copying or distribution.
- The GRANTEE shall ensure that all laboratory reports are issued in accordance with NELAC requirements. These reports shall be submitted to the DEP project manager and shall include the following information:
  - ▶ Laboratory sample identification (ID) and associated Field ID
  - ▶ Analytical/test method
  - ▶ Parameter/analyte name
  - ▶ Analytical result (including dilution factor)
  - ▶ Result unit
  - ▶ Applicable DEP Qualifiers per Table 1 of Chapter 62-160, F.A.C.
  - ▶ Result comment(s) to include corrective/preventive actions taken for any failed QC measure (e.g., QC sample, calibration failure, etc.) or other problem related to the analysis of the samples
  - ▶ Date and time of sample preparation (if applicable)
  - ▶ Date and time of sample analysis
  - ▶ Results of laboratory verification of field preservation
  - ▶ Sample matrix
  - ▶ DoH ELCP certification number for each laboratory (must be associated with the test result(s) generated by the laboratory)
  - ▶ MDL
  - ▶ PQL
  - ▶ Sample type (such as blank type, duplicate type, etc.)
  - ▶ Field and laboratory QC blank results:
    - Laboratory QC blank analysis results as required by the method, NELAC Chapter 5 and the planning document (see Section 6 below);
    - Field quality control results including trip blanks, field blanks, equipment blanks, and field duplicates (or replicates) as specified in the planning document (see Section 6)
  - ▶ Results of sample matrix spikes, laboratory duplicates or matrix spike duplicates, as applicable
  - ▶ Results of surrogate spike analyses (if performed)
  - ▶ Results of laboratory control samples (LCS)
  - ▶ Link between each reported quality control measure (e.g., QC blanks, matrix spikes, LCS, duplicates, calibration failure, etc.) and the associated sample result(s)
  - ▶ Acceptance criteria used to evaluate each reported quality control measure
- The GRANTEE shall ensure that the following field-related information is reported to the DEP project manager:
  - ▶ Site and/or facility name, address and phone number
  - ▶ Field ID for each sample container and the associated analytes (test methods) for which the container was collected
  - ▶ Date and time of sample collection
  - ▶ Sample collection depth
  - ▶ Sample collection method identified by the DEP SOP number, where applicable
  - ▶ If performed, indicate samples that were filtered
  - ▶ Field test measurement results:
    - DEP SOP number (FT-series), where applicable
    - Parameter name
    - Result
    - Result unit
    - Applicable Data Qualifiers per Table 1 of Chapter 62-160, F.A.C.
  - ▶ Narrative comments discussing corrective/preventive actions taken for any failed QC measure (e.g., blank contamination, meter calibration failure, split sample results, etc.), unacceptable field measurement or other problems related to the sampling event.
- The Department reserves the right to request some or all of the laboratory or field information in an electronic format.

▶ AUDITS

- AUDITS BY THE DEPARTMENT – Pursuant to Rule 62-160.650, F.A.C., the Department may conduct audits of field and/or laboratory activities. In addition to allowing Department representatives to conduct onsite audits, the GRANTEE, upon request by the Department, must provide all field and laboratory records pertinent to the contracted field and laboratory activities. If an audit by the Department results in a determination that the reported data are not usable for the purpose(s) or do not meet the data quality objectives specified by the Agreement, the DEP project manager shall pursue remedies available to the Department, including those outlined in Section 8 below.
- PLANNING REVIEW AUDITS –
  - Initial: Prior to the completion of the sampling and analysis events and as specified in Addendum 1, the GRANTEE and all associated subcontractors shall review the planning document (see Section 6 below) relative to the completed field and laboratory activities to determine if the data quality objectives are being met, identify any improvements to be made to the process, and refine the sampling and/or analytical design or schedule. Within one month of the review, a summary of the review, including any corrective action plans or amendments to the planning document, shall be sent to the DEP project manager and a copy shall be maintained with the permanent project records.
  - Ongoing: Planning reviews as described in item (i) above shall occur annually.
- QUALITY SYSTEMS AUDITS – The GRANTEE and all subcontractors shall ensure that any required laboratory and field quality system and management systems audits are performed according to the respective Quality Manuals for each contracted and sub-contracted entity. These audits shall be documented in the GRANTEE's and subcontractors' records.
- STATEMENTS OF USABILITY – As a part of the audit process and the final report, the GRANTEE shall provide statements about data usability relative to the Agreement Data Quality Objectives and Data Quality Indicators specified in the planning document, this attachment and the addenda.
  - The GRANTEE shall ensure that all acceptance and usability criteria required by this Agreement not specified above are listed in the planning document.
  - The GRANTEE shall ensure that the results of all quality control measures described above are evaluated according to the acceptance criteria listed in this attachment, the addenda and the planning document.
  - The GRANTEE shall ensure that all sample results are evaluated according to the additional usability criteria specified in the planning document.

▶ PLANNING DOCUMENT

- The GRANTEE shall submit the planning document identified below to the DEP project manager no later than 120 days prior to the commencement of field and laboratory activities. Failure to submit the planning document in this required timeframe shall result in a delay of approval to begin work until the document has been submitted to the Department and approved by the DEP project manager. The document shall be submitted as a *Quality Assurance Project Plan (QAPP)*. The plan shall be consistent with the EPA Document EPA-QA/R-5, EPA Requirements for Quality Assurance Project Plans, dated March 2001.
- The GRANTEE and subcontractors may submit a version of the planning document to the Department for approval no more than three times. If the GRANTEE fails to obtain approval for the planning document after the third (final) submission to the Department, the DEP project manager may suspend or terminate the Agreement.
- The DEP Agreement number shall appear on the title page of the submitted planning document. Within forty-five (45) days of receipt of the properly identified planning document by the Department, the Department shall review and either approve the planning document or provide comments to the GRANTEE and affected subcontractors as to why the planning document is not approved. If further revisions are needed, the GRANTEE shall then have fifteen (15) days from the receipt of review comments to respond. The Department shall respond to all revisions to the planning document within thirty (30) days of receipt of any revisions.
- If the review of the planning document by the Department is delayed, through no fault of the GRANTEE, beyond sixty (60) days after the planning document is received by the Department, the GRANTEE shall have the option, after the planning document is approved, of requesting and receiving an extension in the

term of the Agreement for a time period not to exceed the period of delayed review and approval. This option must be exercised at least sixty (60) days prior to the current termination date of the Agreement.

- Work may not begin for specific Agreement tasks until approval has been received by the GRANTEE from the DEP project manager. Sampling and analysis for the Agreement may not begin until the planning document has been approved.
- Once approved, the GRANTEE shall follow the protocols specified in the approved planning document including, but not limited to:
  - ▶ Ensuring that all stated quality control measures are collected, analyzed and evaluated for acceptability;
  - ▶ Using only the protocols approved in the planning document; and
  - ▶ Using only the equipment approved in the planning document.
- If any significant changes in procedures or test methods, changes in equipment, changes in subcontractor organizations or changes in key personnel occur, the GRANTEE shall submit appropriate revisions of the planning document to the DEP project manager for review. The proposed revisions may not be implemented until they have been approved by the DEP project manager. If the GRANTEE fails to submit the required revisions, the DEP project manager may suspend or terminate the Agreement.

▶ DELIVERABLES

- The following lists the expected schedule for the deliverables that are associated with the Quality Assurance requirements of this Agreement:
  - Copy of DoH ELCP Certificate(s) and the associated list(s) of specific fields of accreditation, per item 2.d above.
  - Copies of the QCC sample results per item 2.f. above.
  - Non-standard laboratory or field procedures – The GRANTEE shall submit to the DEP project manager all required information necessary for review of non-standard procedures per items 2.h. and 3.b. above.
  - Reports of planning review audits as specified in item 5.b. above.
  - Statements of Usability as specified in item 5.d. above.
  - Planning document per Section 6, above.

▶ CONSEQUENCES

- Failure to comply with any requirement of this attachment may result in:
  - Immediate termination of the Agreement.
  - Withheld payment for the affected activities.
  - Agreement suspension until the requirement(s) has been met.
  - A request to refund already disbursed payments.
  - A request to redo work affected by the non-compliant activity.
  - Other remedies available to the Department.

**Addendum 1**  
**Modifications to Attachment H, Quality Assurance Requirements**

These modifications shall be applied to Attachment I, Quality Assurance Requirements of DEP Agreement No. G0170. The words "section" or "item" are numbered in reference to the requirements of Attachment I.

**LABORATORIES (SECTION 2)**

- ▶ The following items in Section 2 of "*Quality Assurance Requirements*", do not apply:
  - 2.f.iii. deleted
- ▶ The following items in Section 2 of "*Quality Assurance Requirements*", are amended as follows:
  - The Department has determined that certification by the DoH ELCP is not necessary for the following test measurements, however, the laboratory activities associated with these test measurements shall conform to the NELAC Quality Systems (Chapter 5) Standards.
    - N/A
- ▶ The following quality control addenda must be followed:
  - Addendum 2, "*Quality Control Requirements for Laboratories Performing Chemical Analysis*" with the following modifications:
    - (i) 1.b. deleted
    - (ii) 11. deleted
    - (iii) 12. deleted
  - Addendum 3, "*Quality Control Requirements for Laboratories Performing Microbiological Testing*" with the following modifications:
    - No modification

**FIELD ACTIVITIES (SECTION 3)**

- ▶ The GRANTEE shall ensure that these additional standard operating procedures are followed:
  - N/A
- ▶ The following items in Section 3 of "*Quality Assurance Requirements*", are amended as follows:
  - (i) 3.d.i(2) deleted
  - (ii) Field duplicates (item 3.d.ii) shall not be collected.
- ▶ The following quality control requirements (item 3.c of "*Quality Assurance Requirements*") are amended as follows:
  - N/A
- ▶ The following items in Section 3 of "*Quality Assurance Requirements*", do not apply:
  - N/A

**REPORTING, DOCUMENTATION AND RECORDS RETENTION (SECTION 4)**

- ▶ In addition to those records identified in Rules 62-160.240 and .340, F.A.C., the GRANTEE shall ensure that the following records are retained:
  - N/A
- ▶ The GRANTEE shall submit the data electronically using the following format:
  - Excel 97 file or Access 2000 file.
- ▶ The GRANTEE shall use the following format for reporting results:
  - N/A
- ▶ In addition to the information in item 4.c of "*Quality Assurance Requirements*", the GRANTEE shall ensure that the following laboratory information is reported:
  - N/A
- ▶ In addition to the information outlined in 4.d of "*Quality Assurance Requirements*", the GRANTEE shall ensure that the following information pertinent to field activities is reported:
  - N/A
- ▶ The following items in Section 4 of "*Quality Assurance Requirements*", do not apply:
  - N/A
- ▶ Legal or evidentiary chain of custody, as defined in FD 1000 of the DEP-SOP-001/01 and the NELAC Standards, shall be executed and shall be stipulated in the planning document.

AUDITS (SECTION 5)

- ▶ The initial planning review audit will be performed in accordance with Section 5.b.1 within 30 days of completion of the first sampling event.
- ▶ The following items in Section 5 of "*Quality Assurance Requirements*", do not apply:
  - N/A

PLANNING DOCUMENT (SECTION 6)

- ▶ The following items in Section 6 of "*Quality Assurance Requirements*", are amended as follows:
  - N/A
- ▶ When the approved planning document requires modification, the amendments shall be
  - Provided in a new planning document, or
  - Provided as amended sections of the current planning document, or
  - Documented through written or electronic correspondence with the DEP project manager and incorporated into the approved planning document.

DELIVERABLES (SECTION 7)

- ▶ The following deliverables are not required under the terms of this Agreement:
  - (i) 7.a.ii deleted.
- ▶ The following items in Section 7 of "*Quality Assurance Requirements*", are amended as follows:
  - N/A.

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**Addendum 2**  
**Quality Control Requirements for Laboratories Performing Chemical Analysis**

In addition to the quality control requirements outlined in Chapter 5 of the NELAC Standards, the following quality control measures shall be implemented for this Agreement. Note: "Sample" refers to samples that have been either collected or analyzed under the terms of this Agreement.

1. Matrix-Related Quality Control Samples - The GRANTEE shall ensure that samples associated with this Agreement are used for matrix spikes, and either laboratory duplicates or matrix spike duplicates. The laboratory shall analyze these samples:
  - a. The first time samples from a sample collection matrix (see Table FA 1000-1) are submitted to the laboratory under this Agreement for analysis. The laboratory shall select one or more of the received samples for use in composition of the matrix spike and duplicates.
  - b. After the first 20 samples from the sample collection matrix have been analyzed, at least one matrix spike and either laboratory duplicates or matrix spike duplicates shall be composed using a sample or samples selected from each additional 20 samples of the sample collection matrix submitted to the laboratory.
  - c. The last time samples from the sample collection matrix are received and analyzed. The laboratory shall select one or more of the received samples for use in composition of the matrix spike and duplicates.
  - d. Spike levels must be at the concentrations specified in item 3 below.
  - e. If the selected sample concentration is expected to be below the Agreement-specified practical quantitation limit (PQL) listed in the planning document, then matrix spike duplicates must be used.
2. Per NELAC Chapter 5 requirements, as least one Laboratory Control Sample (LCS; also known as Laboratory Fortified Blank) shall be prepared, analyzed and evaluated with each batch of 20 samples or less.
  - a. The acceptance criteria for the LCS shall be specified in the planning document.
  - b. If the LCS is unacceptable, the samples associated with the LCS shall be reprocessed with a new LCS. If the samples cannot be reprocessed, the data must be appropriately qualified.
3. For applicable analytes denoted in the planning document, a QC check sample, standard reference material (SRM) or other quality control sample, hereinafter identified collectively as quality control check samples (QCCS), shall be processed with each sample preparation batch and analyzed for evaluation according to the acceptance limits established for the QCCS.
  - a. Analysis of a QCCS is required for but not limited to the following analyses:
    - (i) Chlorophyll – the assay for the QCCS or its original formulation shall have been determined by an organization external to the laboratory ;
    - (ii) Biochemical oxygen demand (BOD) or carbonaceous BOD (CBOD) – the method-specified glucose/glutamic acid check solution shall be used; and,
    - (iii) Copper in seawater – the QCCS shall be any seawater-matrix SRM assayed by an organization external to the laboratory.
  - b. If the QCCS is unacceptable, the samples associated with the QCCS shall be reprocessed with a new QCCS. If the samples cannot be reprocessed, the data must be appropriately qualified for all contracted samples in the preparation batch.
4. Spiking/Fortification Requirements - All spike fortifications must take place prior to any required sample preparation steps (e.g., sample extraction, sample digestion, pH adjustment, etc.). The final concentration of any spike fortification shall be at the applicable level identified below.
  - a. If any of the samples in the preparation batch are non-detect (i.e., below the MDL specified in the planning document), the spiking level must not be greater than 2 times the Agreement-specified PQL.
  - b. The concentration of a spiked sample cannot exceed 5 times the highest concentration of any contracted sample in the preparation batch.
5. Evaluation of Matrix Spikes - The results of matrix spikes must meet the acceptance criteria specified by the Agreement and listed in the planning document or the data must be appropriately qualified.
  - a. If the failure is reported to be due to *sample* matrix interference, the laboratory shall document the process by which this conclusion is determined.

6. Evaluation of Laboratory Duplicate/Replicate Samples – All replicate samples (sample duplicates, matrix spike duplicates, LCS duplicates or other replicates) must be evaluated for a precision criterion not to exceed 20 % RPD. This criterion shall be listed in the planning document.
  - a. In the event that laboratory replicate agreement is not observed, the laboratory must investigate the poor precision and report the results with appropriate qualifiers and/or comments.
7. Instrument Calibration – In addition to calibration procedures specified in the analytical methods listed in the planning document, the GRANTEE shall ensure that the following requirements are met:
  - a. All sample results shall be chronologically bracketed between acceptable calibration verifications.
  - b. Initial Calibration Requirements
    - (i) The minimum number of calibration standards required to calibrate each instrument used for the contracted analyses shall conform to the analytical method approved in the planning document. If the minimum number of calibration standards is not specified in the method, the number must be specified in the planning document and shall be consistent with the NELAC Chapter 5 standards.
    - (ii) Unless otherwise specified by the method, all sample results shall be based on the initial calibration curve responses.
    - (iii) If linear regressions are used, the correlation coefficient shall be equal to or greater than 0.995 for all regressions.
    - (iv) Immediately after performing an initial calibration, the accuracy of the calibration shall be verified using a second source. A second source may be a standard, a Standard Reference Material (SRM), or other sample type with a verified concentration such as a QC Check Sample. Standards must have been prepared from a different lot or vendor.
    - (v) The acceptance criteria for second-source verifications shall be specified in the planning document.
    - (vi) Sample analysis cannot proceed if an initial calibration is unacceptable.
  - c. Continuing Calibration Requirements:
    - (i) When an initial calibration is not performed on the day of analysis, a continuing calibration standard shall be analyzed, evaluated and determined to be acceptable prior to analyzing samples.
    - (ii) A continuing calibration standard shall be analyzed and evaluated at the end of the analytical run.
    - (iii) The acceptance criteria for continuing calibration verifications shall be specified in the planning document.
    - (iv) For each analytical run, the analytical sensitivity must be evaluated using a continuing calibration standard prepared at the Agreement-specified PQL. The analyzed value of this standard must be within 70% – 130% of the expected value. If this PQL check fails, the blank and associated sample results must be reported as “estimated” per Chapter 62-160, F.A.C. unless the affected results are at least 10 times the absolute value of the observed bias of the PQL check.
    - (v) If a continuing calibration verification fails, samples not chronologically bracketed by acceptable calibration verifications must be reanalyzed or appropriately qualified.
  - d. Sample results below the Agreement-specified PQL and above the highest calibration standard shall be appropriately qualified.
8. Quality Control Blanks
  - a. If a Contracted analyte is detected in any analytical QC blank, the sample results that are associated with the blank must be reported with the appropriate qualifier from Chapter 62-160, F.A.C., unless the affected sample concentrations are at least 10 times higher than the calculated QC blank concentration.
  - b. Sample results must be chronologically bracketed with acceptable beginning and ending analytical QC blanks.
  - c. If a Contracted analyte is detected in the field blank, equipment blank or trip blank, the result must be confirmed by reanalyzing a new aliquot of the blank unless the sample concentration results associated with the blank are at least 10 times the calculated blank concentration. The laboratory must investigate the blank contamination to determine that positive blank results are not due to a laboratory error and report the affected samples and field-generated blank results with appropriate qualifiers and/or comments.
9. If any quality control measure or calibration verification fails (including those specified above), samples that are associated with the failure must be reanalyzed, if possible. Sample data that are associated with a failed quality control measure or calibration must be appropriately qualified as specified in Chapter 62-160, F.A.C. An explanatory comment must be attached to the final report for each result that has a qualifier code other than U, I,

or A. Any additional qualifier codes used but not explicitly listed in Chapter 62-160, F.A.C. must be identified and defined in the report.

10. The reported MDL and PQL for each sample must be adjusted for dilution factors and any relevant preparation weights and volumes.
11. Field QC duplicates or replicates - The GRANTEE shall ensure that field duplicates (not to be confused with laboratory duplicates) are analyzed. All field duplicate results greater than the contracted PQL should agree within 20% RPD for each measured analyte. In the event that field duplicate agreement is not observed, the laboratory must investigate sufficiently to determine that poor precision is not due to a laboratory error and report the results with appropriate qualifiers and/or comments.
12. For all organic analyses using either gas chromatography or HPLC, analytes with concentrations above the method detection limit shall be confirmed by at least one of the qualitative identification measures listed below. Confirmation must occur the first time an analyte is detected at a sampling point.
  - ▶ Second column/same detector
  - ▶ Second column/alternate detector
  - ▶ Same column/alternate detector
  - ▶ Mass spectrometry
  - ▶ Alternate wavelength

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**Addendum 3**  
**Quality Control Requirements for Laboratories Performing Microbiological Testing**

In addition to the quality control requirements outlined in Chapter 5 of the NELAC Standards, the following quality control measures shall be implemented for this Agreement. Note: "Sample" refers to samples that have been either collected or analyzed under the terms of this Agreement.

1. All microbiological analyses must conform to the requirements for facilities, personnel qualifications, equipment specifications and quality control measures discussed in *AWWA Standard Methods 20<sup>th</sup> edition, section 9020*.
2. Quality Control Blanks
  - a. If the membrane filter technique is used, the sample set(s) shall be associated with a beginning and ending filtration blank.
  - b. The results of any blank must be < 1 CFU/100 mL or the associated sample results must be reported with the appropriate qualifier from Chapter 62-160, F.A.C.
3. Laboratory Quality Control Duplicates
  - a. At least 10% of the samples (or one per test run) shall be duplicated.
  - b. All duplicate results shall be evaluated per method specifications using the precision criterion. The range of the transformed duplicates shall not exceed the precision criterion established by the laboratory. In the event that laboratory duplicate agreement is not observed, the laboratory must investigate the poor precision and report the results with appropriate qualifiers and/or comments.
  - c. Field Quality Control Duplicates or Replicates - In the event that agreement (less than or equal the laboratory established precision criterion) is not observed between results from field-generated replicate samples, the laboratory must investigate the replicate analyses to determine that poor precision is not due to a laboratory error and report the results with appropriate qualifiers and/or comments. The laboratory shall use the analytical method specifications for precision control as a guide to evaluation of the field-generated replicate results.
4. Colony Counts
  - a. In addition to the requirements listed below, all analytical results shall be calculated by the procedures established in the microbiological method(s) approved for the Agreement and listed in the planning document.
  - b. The laboratory shall make every attempt to ensure that colony counts are in the ideal range of 20 – 60 colonies per plate. Reported values from colony plate counts outside this range shall be qualified with a "B" (unless the reported value is from a 100 mL sample and the count is less than 20).
  - c. If all counts are above 60, the result shall be calculated and reported from the highest dilution. This result must be reported as "estimated".
  - d. The laboratory shall follow the reporting requirements specified in the method for other results that are outside the ideal range (item 5.b. above)
  - e. If the sample result is "too numerous to count (TNTC)" the laboratory shall report the filtration volume with the data qualifier "Z".
  - f. Colony counts from samples that have been verified shall be adjusted based on the verification results as specified in the analytical method approved for this Agreement and listed in the planning document.

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**BUDGET AMENDMENT REQUEST (BAR)**  
**FORTHCOMING FROM FISCAL SERVICES/BUDGET**