

Recommendation re: Task Authorization WSP-25-02 with WSP for the Lake Hollingsworth EutroSORB®G Sediment Treatment Project

The Florida Department of Environmental Protection (FDEP) identified Lake Hollingsworth as a Verified Impaired Surface Waterbody due to high nutrient levels exceeding regulatory surface water quality Numeric Nutrient Criteria (NNC). In 2018, FDEP issued a Total Maximum Daily Load (TMDL) which requires reducing nutrients in Lake Hollingsworth. Based on previous studies completed by WSP, sediment flux represents 96% of the nutrient loads in Lake Hollingsworth. Inactivation of sediment flux using chemical amendments is the most cost-effective means of reducing nutrient loads and achieving compliance with the regulatory NNC and delisting Lake Hollingsworth from Verified Impaired Surface Waters list. A feasibility study conducted on lake bottom sediments revealed EutroSORB®G was an effective treatment product.

WSP provided a proposal for a lake wide application of EutroSORB®G aimed at improving water clarity, reducing water column nutrient concentrations, and inactivating sediment flux within Lake Hollingsworth. The treatment is intended to reduce algal growth, increase water clarity and light transmission, and stimulate the growth of beneficial aquatic plants that will further improve water quality conditions.

The scope of work for this sediment treatment project includes:

- Project management, permit pre-application meeting with FDEP, and contractor oversight
- Environmental resource permitting
- Pre-application and post-application surface water field monitoring, water sample collection and laboratory analysis
- EutroSORB®G application
- Final report summarizing the treatment operation and pre- and post-application water quality conditions

WSP is a current firm on the June 2022 Professional Lakes & Watershed Management Services CCNA. They have provided assessment and feasibility consulting services on lakes in Lakeland since 2012 and on Lake Hollingsworth since 2014. WSP has subcontracted with EutroPhix to provide the EutroSORB®G Sediment Treatment application. EutroPhix is considered a sole source in the industry.

Funding for this project in the not-to-exceed amount of \$911,230 is provided in the Fiscal Year 2025 Lake Hollingsworth TMDL line item of the Stormwater Fund Capital Improvement Plan.

Staff recommends the City Commission authorize the appropriate City officials to execute the Task Authorization WSP-25-02 with WSP for the Lake Hollingsworth EutroSORB®G Sediment Treatment Project in the not-to-exceed amount of \$911,230.



550 Northlake Boulevard,
Ste 1000
Altamonte Springs, FL 32701

wsp.com

August 7, 2025

Ms. Laurie Smith
Lakes & Stormwater Manager
City of Lakeland
407 Fairway Avenue
Lakeland, FL 33801

Via Email: Laurie.Smith@lakelandgov.net

Re: Lake Hollingsworth EutroSORB[®]G Treatment
WSP Opportunity No. 2025US446239

Dear Ms. Smith,

WSP USA Inc. (WSP) is pleased to provide the following proposal for the Lake Hollingsworth lake-wide EutroSORB[®]G Treatment:

INTRODUCTION

The City of Lakeland (City) requested a proposal from WSP to provide a lakewide EutroSORB[®]G treatment application aimed at inactivating sediment phosphorus, reducing algal growth, and improving water clarity within Lake Hollingsworth. This project was the top-ranked alternative in WSP's 2023 Lake Hollingsworth Internal Source Evaluation and Feasibility Assessment.

EutroSORB[®]G works to reduce release of phosphorus from sediments which results in a gradual improvement in water clarity and reduction in algal growth. Over time, this will stimulate growth of submerged aquatic vegetation which should further improve water quality conditions and provide fish habitat. The City may elect to implement additional projects involving planting of beneficial native vegetation to accelerate this process. This proposal includes the first of a three-year treatment program for Lake Hollingsworth. EutroSORB[®]G will provide sediment phosphorus inactivation without decreasing pH or alkalinity (buffering capacity) and does not pose a risk for fish kills often associated with use of aluminum sulfate.

The product application will be provided by EutroPhix (a division of SePRO) with oversight from WSP. SePRO has performed similar applications on Pine Lake and Lake Prima Vista using Phoslock[®] which resulted in a significant decrease in total phosphorus concentration in both cases. Phoslock[®] is similar to EutroSORB[®]G but is less concentrated and requires more effort to apply since it requires twice as much dry product.

EutroSORB[®]G is a dry bentonite clay granule powder containing lanthanum (10% of product mass) to selectively bind free phosphate ions. EutroSORB[®]G is not a flocculant so its application has no direct impact on algae or other suspended particles that are abundant in Lake Hollingsworth. Instead, the product is designed to prevent the release (flux) of orthophosphate from the sediment which feeds algae. Unlike

alum, the selective nature of EutroSORB®G also leaves beneficial zooplankton in the water column where it continues to provide an important role in lake ecology. Dry EutroSORB®G is applied to the lake as a slurry after mixing the product with water in a specialized container. EutroSORB®G will cause an initial cloudy appearance to the water which will settle over time (generally less than 24 hours).

TASK 1 - ATTEND PROJECT KICK-OFF MEETING

WSP and EutroPhix will attend a project kickoff meeting with representatives of the City to review the scope of services, the project implementation plan, and the project schedule.

TASK 2 – PERMITTING, PROJECT MANAGEMENT, AND REPORTING

The Florida Department of Environmental Protection (FDEP) has recently indicated a willingness to review Environmental Resource Permits (ERPs) involving use of EutroSORB®G to address internal phosphorus loading on lakes with sovereign submerged land. WSP will coordinate a pre-application meeting with FDEP to discuss the proposed Lake Hollingsworth sediment nutrient inactivation plan and request permitting guidance. Based on previous experience, WSP anticipates an exemption or Letter of Concurrence (LOC) from the US Army Corps of Engineers (USACE) as it pertains to 404 Dredge & Fill permitting once FDEP issues the ERP. The City will be responsible for any required permit application fees. The permit applications will include a request for the proposed treatment as well as two subsequent treatments over three years (pending approval by City Council).

The permitting effort, water quality monitoring, and reporting tasks included in this proposal are based on previous experience with similar project permits which include submittal of a post-treatment report. However, the information required by the regulatory agencies may vary from previous experience and may require additional effort. WSP has assumed one response to a Request for Additional Information (RAI) as part of this scope. It is assumed that the City will continue its current water quality monitoring program on Lake Hollingsworth and will provide a water quality summary report to the FDEP summarizing water quality one year following treatment. Alternatively, WSP can prepare this report for an additional fee.

WSP will provide project management and contractor coordination during all phases of the EutroSORB®G application operations which will consist of a weekly status memo and routine phone calls and/or emails describing progress. WSP will provide a final report summarizing the treatment operations and the pre and post water quality conditions based on the three sets of water quality data collected by WSP as described in **Task 3**.

TASK 3 – EutroSORB®G APPLICATION AND MONITORING

WSP will sub-contract with EutroPhix for the lakewide EutroSORB®G application required for this project. Following receipt of the ERP from FDEP, an exemption or Letter of Concurrence from USACE, and authorization from the City project manager, WSP will instruct EutroPhix to mobilize the application operation. One week prior to the EutroSORB®G application, WSP will collect water quality field parameters to include Secchi depth, pH, dissolved oxygen, temperature, specific conductance, and oxidation/reduction potential and surface water samples from Lake Hollingsworth. Water quality samples will be delivered to Southern Research Laboratories for analysis of the following parameters:

- | | |
|-----------------------------------|----------------------------------|
| (1) Total Kjeldahl Nitrogen (TKN) | (2) Total Ammonia Nitrogen (TAN) |
| (3) NOx (nitrite + nitrate) | (4) Total Nitrogen (TKN+TAN) |
| (5) Orthophosphate | (6) Total Phosphorus |
| (7) Chl-a | (8) TSS |
| (9) Lanthanum (total) | |

WSP anticipates EutroPhix will utilize the public boat ramp at Lake Hollingsworth Boat Ramp located on Lake Hollingsworth Drive and staging areas adjacent to the ramp as shown in **Figure 1**. Contractors will work with WSP and the City to identify suitable locations for overnight storage of vehicles and trailers. Proposed staging areas for Lake Hollingsworth are shown in **Figure 2**. The City will provide traffic and pedestrian control if necessary.

The Lake Hollingsworth EutroSORB[®]G whole-lake application will require 178,695 pounds of product applied over approximately 5 days. WSP will conduct a second sampling event including the parameters described above one day following application. WSP will perform a third sampling parameters and surface water quality samples for analyses as described above within one month following the completion of EutroSORB[®]G application.

SCHEDULE, DELIVERABLE, & BUDGET

WSP can commence work on the above scope of services immediately upon receipt of a purchase order. The treatment application start date will be determined once WSP receives an ERP and Dredge & Fill LOC/exemption, but it is anticipated that mobilization will begin within two weeks following receipt of the ERP and Dredge & Fill permit/LOC, weather permitting. Application is expected to be completed within three weeks of start. The final water quality sample will be collected within one week of the end EutroSORB[®]G application. WSP will submit the final report within one month of the final water quality sample collection.

Deliverables will consist of weekly progress report memos and a final summary report memo which will include all water quality analytical reports.

The total time and materials budget for this project is not to exceed **\$911,230**. Budget details are attached and rates are consistent with the City's Continuing Contract for Professional Lakes and Watershed Management Services. The project will be invoiced monthly. WSP will not exceed the proposed total budget without advance approval from the City. This proposal is valid for 60 days.

Sincerely,

WSP USA Inc.



Lance Lumbard, MS, MBA
Vice President / Water Quality Management Team Lead



Crissy Mehle, PE, CFM
Vice President, Local Business Lead

LL/CM/spp

Attachments

- Figures
- Budget
- Quotes

ATTACHMENTS

FIGURES

Figure 2 – Lake Hollingsworth Staging Areas



BUDGET

WSP USA		Client: City of Lakeland - Public Works									
		Date: 8/7/2025 Rev.		WSP Opp No. 2025US446239							
		Scope: Crystal Lake EutroSORB G Treatment									
		Reference: Continuing Contract and Agreement for Professional Lakes and Watershed Management Services, dated July 15, 2022									
		Task 1 Kickoff meeting		Task 2 EutroSORB G Application and Monitoring		Task 3 Permitting, Project Management and Reporting		Total			
I. WSP Labor Classifications		Hourly Rate									
		HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST		
Senior Principal	\$234.00		\$ -	6	\$ 1,404.00	6	\$ 1,404.00	12	\$ 2,808.00		
Principal	\$214.00	6	\$ 1,284.00	30	\$ 6,420.00	60	\$ 12,840.00	96	\$ 20,544.00		
Senior Associate	\$193.00	4	\$ 772.00	65	\$ 12,545.00	80	\$ 15,440.00	149	\$ 28,757.00		
Senior II/ Project Manager	\$162.00	4	\$ 648.00		\$ -	50	\$ 8,100.00	54	\$ 8,748.00		
Engineer/Scientist/Surveyor Professional III	\$130.00		\$ -	16	\$ 2,080.00	46	\$ 5,980.00	62	\$ 8,060.00		
Engineer/Scientist/Surveyor Professional II	\$115.00		\$ -		\$ -	50	\$ 5,750.00	50	\$ 5,750.00		
Engineer/Scientist/Surveyor Professional I	\$99.00		\$ -	50	\$ 4,950.00	16	\$ 1,584.00	66	\$ 6,534.00		
Senior Technician	\$94.00		\$ -	50	\$ 4,700.00		\$ -	50	\$ 4,700.00		
Project Coordinator	\$89.00	4	\$ 356.00	8	\$ 712.00	8	\$ 712.00	20	\$ 1,780.00		
Administrative Staff II	\$68.00		\$ -	8	\$ 544.00	12	\$ 816.00	20	\$ 1,360.00		
LABOR SUBTOTAL BY SUBTASK		18	\$3,060	233	\$33,355	328	\$52,626	579	\$89,041		
III. Subcontractors and Optional Services		COST PER		Task 1 Kickoff meeting		Task 2 EutroSORB G Application and Monitoring		Task 3 Permitting, Project Management and Reporting		Total	
		UNIT		UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST
EutroPhix (Product and Application)	\$ 819,741.00		\$ -	1	\$ 819,741.00		\$ -	1	\$819,741.00		\$ -
SRL (per event)	\$ 353.00			3	\$ 1,059.00				\$ 1,059.00		
SUBCONTRACTOR/OPTIONAL SUBTOTAL			\$ -		\$ 820,800.00		\$ -		\$820,800.00		
SUBTOTAL BY SUBTASK AND TASK			\$ 3,060.00		\$ 854,155.00		\$ 52,626.00		\$ 909,841.00		
II. Direct Expenses		COST PER									
		UNIT		UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST
Boat	\$165.00			6	\$990.00						
Filters	\$33.00			3	\$99.00						
YSI	\$100.00			3	\$300.00						
DIRECT EXPENSES SUBTOTAL BY SUBTASK					\$1,389.00						
SUBTOTAL BY SUBTASK AND TASK			\$ 3,060.00		\$ 855,544.00		\$ 52,626.00		\$911,230.00		

QUOTES



EutroPHIX
11550 N. Meridian Street, Suite 600
Carmel, Indiana 46032-4565
(317) 580-8282

Quote

Document Date:

August 1, 2025

Effective For:

WSP

Lake Hollingsworth, Florida

Pricing Valid:

August 1, 2025 - September 30, 2026

Item	Year 1
Materials (\$)	\$ 607,564
Application (\$)	\$ 202,319
Monitoring (\$)	\$ 9,858
1-Year Total (\$)	\$ 819,741

***prices exclude any applicable taxes, assuming tax exempt**

Terms: Due Net 60 Days

Ordering Procedure: Provide written communication of items, order date, shipping address, and billing address.

To accept this proposal please sign and date:

Please contact Pamela Dugan for any questions:

Phone: (317) 495-5657

E-mail: pamelad@eutrophix.com

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OR DISTRIBUTION**

ESTIMATE

**SOUTHERN RESEARCH
LABORATORIES, INC.**

279 Douglas Ave
Ste 1110
Altamonte Springs, FL 32714-3324

controller@srlab.com
+1 (305) 924-2787

Bill to

Mr. Lance Lumbard
WSP USA E&I
550 Northlake Blvd., Suite 1000
FL.
Altamonte Springs, FL 32701

Ship to

Mr. Lance Lumbard
WSP USA E&I
Wood Env & Infrastructure Solutions, Inc.
110-5 Sanctuary Parkway Suite 300
Alpharetta, GA 30004
ATTN: A/P Department

Estimate details

Estimate no.: Q1876
Estimate date: 07/30/2025
Expiration date: 09/30/2025

Project Manager: Lance Lumbard

#	Product or service	Description	Qty	Rate	Amount
1.		Project name: Lance's project			
2.	TKN, Water	Total Kjeldahl Nitrogen, Water (351.2)	3	\$35.00	\$105.00
3.	NO3/NO2 (NOX)	SM 4500NO3 H-201	3	\$50.00	\$150.00
4.	Ortho Phosphate, Water 365.1	Ortho Phosphate (365.1)	3	\$30.00	\$90.00
5.	Chlorophyll A	Chlorophyll A (SM 10200H) (corrected)	3	\$110.00	\$330.00
6.	Lanthanum, Water	Lanthanum (La), Water	3	\$18.00	\$54.00
7.	Ammonia, Water	Nitrogen, Ammonia (350.1)	3	\$30.00	\$90.00
8.	Nitrogen, Total	Nitrogen, Total (TKN+NOX) Calculation	3	\$0.00	\$0.00
9.	Phosphorus LL, Total, Water	Phosphorus, Total (365.4) Low-Level	3	\$37.00	\$111.00
10.	TSS	Total Suspended Solids/Non-Filterable Residue (SM2540D)	3	\$25.00	\$75.00
11.	Environmental Impact Fee	Environmental Impact Fee (Per work order)	3	\$15.00	\$45.00
12.	Disposal Fees	Sample Disposal Fees (Per sample)	3	\$3.00	\$9.00

Total

\$1,059.00

Expiry
date

09/30/2025

Accepted date

Accepted by

City of Lakeland
Consultant Expense Reimbursement Policy
Revised 6/18/2018

General

This policy governs all eligible reimbursement expenses paid to consultants hired by City Departments under professional service contracts. All reimbursable expenses must adhere to the following provisions and be verified and approved by the appropriate department head, or their designated representative administering the professional contract. An exhibit to each contract or agreement must be accepted by each professional services consultant prior to the agreement being considered fully executed. All proposed reimbursable consultant expenses must be submitted to the managing designee with matching receipts and specific documentation outlining the nature of the business conducted in association with the expenditure prior to approval by the City.

Consultant Contract Provisions

1. Reasonable expenses will be reimbursed for customary business activities deemed integral to the completion of the consulting assignment (i.e. phone calls, copies, printing, facsimile services, etc.)
2. Reasonable travel expenses will be reimbursed at a rate not-to-exceed the following:
 - Car Rental – Limited to mid-size vehicles or smaller.
 - Airline Travel – Limited to tourist or coach class fare, all efforts will be made to identify the most economical flight options available at time of scheduling.
 - Use of private automobile for administration of project related requirements may be reimbursed at the current IRS mileage reimbursement rate. (www.irs.gov)
 - Local hotel accommodations will be reimbursed at a rate not-to-exceed the GSA lodging rate for Tampa, Florida per night plus sales tax. (www.gsa.gov) Incidentals related to the hotel stay will not be reimbursed.
 - Meal expenses will be reimbursed at a rate not-to-exceed the GSA M&IE rate for Tampa, Florida. A maximum of 15% gratuity on meals will be allowed.
 - No entertainment expenses will be reimbursed, including, but not limited to, alcoholic beverages, in-room entertainment, registrations, tickets to sporting events or entertainment events, banquet and or client entertainment.
 - No reimbursement will be provided for personal expenses of any nature.
 - When representing the interest of the City outside of the Lakeland area, reimbursement of reasonable hotel accommodation costs will be provided as determined by the responsible Department Head.

Collection of Back-up Documentation

All consultant expenditures submitted for reimbursement shall be properly documented and approved by the appropriate department head or designated representative managing the agreement. Original receipts must be provided for payment, along with documentation on purpose. The department head or designated representative will be responsible for the collection of this documentation and for communicating with the consultant on issues related to reimbursable costs or back-up documentation. It will be the responsibility of the department head or designated representative to obtain the necessary approvals from the City Managers' Office for variances to the policy.

Prior to payment of invoices, the following will be required:

1. Verification that invoice references the correct professional service contract.
2. Verification that the specific contract deliverables have been met and scope of work has been satisfactorily completed.
3. Verification that all consultant reimbursable expenses were incurred in conjunction with specified services rendered and billed at cost.
4. All reimbursable expenses must be submitted with receipts documenting expenses.
5. Verify all expense calculations are correct.

Variance Approval

All variances or modifications to the provisions in this policy must be approved by the City Manager or authorized designee.