Agenda Item: 3L-3

PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date:	October 3, 2023	(X) Consent () Workshop	•) Regular) Public Hearing
Department:	Environmental Resources	Management		

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to:

A) approve Contract for Consulting/Professional Services between Palm Beach County and Inwater Research Group (IRG) (Contract) for sea turtle monitoring in an amount notto-exceed \$44,308.00, commencing upon execution and terminating January 5, 2025; and

B) authorize the County Administrator, or designee, to sign all future time extensions, task assignments, certifications and other forms associated with the Contract, and any necessary minor amendments that do not substantially change the scope of work, terms or conditions of the Contract.

Summary: This Contract provides for a continuation of monitoring and assessment of sea turtle populations in the Lake Worth Lagoon (LWL) and Jupiter Inlet sites by IRG, a not-for-profit corporation based in Martin County. IRG is an organization that focuses on conservation efforts of key coastal species through unique in-water sampling and data collection techniques. IRG conducted the first ever in-water assessment of sea turtles in the LWL in 2005, and has continued to assess populations and collect data utilized for management strategies related to restoration and enhancement efforts within the lagoon and adjacent waterways. The LWL Management Plan recommends assessing sea turtle populations as a means of evaluating the success of environmental restoration efforts and overall lagoon health. The monitoring is funded by the Manatee Protection Fund. District 1 (SS)

Background and Justification: Juvenile sea turtles are considered an indicator species of habitat quality and previous studies have found that LWL and adjacent areas are an important developmental habitat for green sea turtles. This eighteen-year data set is used to evaluate changes in sea turtle population and health, which correlate to LWL health, seagrass density, and water quality.

Attachment: 1. Contract			
Recommended by	Beborch Sun	9-1-2023	SAS 8/3
······	Department Director	Date	
Approved by:	Pa	9/5/23	
		D - A -	

Assistant County Administrator

Date

31/23

II. FISCAL IMPACT ANALYSIS

Α. Five Year Summary of Fiscal Impact:

Fiscal Years	2023	2024	2025	2026	2027
Capital Expenditures	<u></u>		·		
Operating Costs		<u>\$22,154</u>	<u>\$22,154</u>		
External Revenues			*************		
Program Income (Count	y)	<u></u>			
In-Kind Match (County)			444 ⁻⁴ - 1999 -		
NET FISCAL IMPACT		<u>\$22,154</u>	<u>\$22,154</u>		
No. ADDITIONAL FTE POSITIONS (Cumulativ	/e)				
Is item included in Curro	ent Budget?		Yes <u>X</u>	No _	
Does this item include t	he use of feo	leral funds?	Yes	No <u>X</u>	
Budget Account No.:	Fund <u>1232</u>	Department <u>3</u>	<u>80</u> Unit <u>3057</u>	Object <u>340</u>	<u>1</u>
Deporting Cotogon					

Reporting Category ____

Recommended Sources of Funds/Summary of Fiscal Impact: Β.

Manatee Protection Fund

Department Fiscal Review:___ C.

hmasis

III. REVIEW COMMENTS

OFMB Fiscal and /or Contract Dev. and Control Comments: Α.

ma Marta 9/8/2003

19/13123 uplan OFMBOA 917 DB917 Contract Dev. and Control 9/13/29

Legal Şufficiency: Β. 9/14/23

Assistant County Attorney

C. **Other Department Review:**

Department Director

CONTRACT FOR CONSULTING/PROFESSIONAL SERVICES

This Contract is made as of the ______ day of _____, 20__, by and between Palm Beach County, a Political Subdivision of the State of Florida, by and through its Board of County Commissioners, hereinafter referred to as the COUNTY, and Inwater Research Group, Inc. a corporation authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal I.D. is 65-1090322.

In consideration of the mutual promises contained herein, the COUNTY and the CONSULTANT agree as follows:

ARTICLE 1 - SERVICES

The CONSULTANT'S responsibility under this Contract is to provide professional/consultation services in the area of in water sea turtle monitoring, as more specifically set forth in the Scope of Work detailed in Exhibit "A".

The COUNTY'S representative/liaison during the performance of this Contract shall be Deborah Drum, Director of the Palm Beach County Department of Environmental Resources Management, telephone no. 561-233-2400.

The CONSULTANT'S representative/liaison during the performance of this Contract shall be Michael Bresette, telephone no. 772-349-5905.

ARTICLE 2 - SCHEDULE

The CONSULTANT shall commence services upon execution of this contract and complete all services by January 5, 2025

Reports and other items shall be delivered or completed in accordance with the detailed schedule set forth in Exhibit "A".

ARTICLE 3 - PAYMENTS TO CONSULTANT

A. The total amount to be paid by the COUNTY under this Contract for all services and materials including, if applicable, "out of pocket" expenses (specified in paragraph C below) shall not exceed a total contract amount of Forty Four Thousand, Three Hundred Eight Dollars (\$44,308.00). The CONSULTANT shall notify the COUNTY's representative in writing when 90% of the "not to exceed amount" has been reached. The CONSULTANT will bill the COUNTY on a monthly basis, or as otherwise provided, at the amounts set forth in Exhibit "B" for services rendered toward the completion of the Scope of Work. Where incremental billings for partially completed items are permitted, the total billings shall not exceed the estimated percentage of completion as of the billing date. In the event that a survey day cannot be completed due to weather and the CONSUTANT is unable to reschedule, the invoice for that period will be reduced by a total of Two Thousand, Four Hundred Thirteen Dollars and Twenty Five Cents (\$2,413.25) per missed day.

- B. Invoices received from the CONSULTANT pursuant to this Contract will be reviewed and approved by the COUNTY's representative, to verify that services have been rendered in conformity with the Contract. Approved invoices will then be sent to the Finance Department for payment. Invoices will normally be paid within thirty (30) days following the COUNTY representative's approval.
- C. "Out-of-pocket" expenses including, but not limited to, mailing charges, copying fees, telephone charges and miscellaneous supplies shall not be reimbursed under this Contract. Any travel, per diem, mileage, meals, or lodging expenses which may be reimbursable under the terms of this Contract will be paid in accordance with the rates and conditions set forth in Section 112.061, Florida Statutes.
- D. <u>Final Invoice</u>: In order for both parties herein to close their books and records, the CONSULTANT will clearly state "final invoice" on the CONSULTANT'S final/last billing to the COUNTY. This shall constitute CONSULTANT'S certification that all services have been properly performed and all charges and costs have been invoiced to Palm Beach County. Any other charges not properly included on this final invoice are waived by the CONSULTANT.
- E. In order to do business with Palm Beach County, CONSULTANTS are required to create a Vendor Registration Account OR activate an existing Vendor Registration Account through the Purchasing Department's Vendor Self Service (VSS) system, which can be accessed at <u>https://pbcvssp.co.palm-beach.fl.us/webapp/vssp/AltSelfService</u>. If CONSULTANT intends to use sub-consultants, CONSULTANT must also ensure that all sub-consultants are registered as consultants in VSS. All subcontractor agreements must include a contractual provision requiring that the sub-consultant register in VSS. COUNTY will not finalize a contract award until the COUNTY has verified that the CONSULTANT and all of its sub-consultants are registered in VSS.

ARTICLE 4 - TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Contract by the CONSULTANT shall also act as the execution of a truth-innegotiation certificate certifying that the wage rates, over-head charges, and other costs used to determine the compensation provided for in this Contract are accurate, complete and current as of the date of the Contract and no higher than those charged the CONSULTANT'S most favored customer for the same or substantially similar service.

The said rates and costs shall be adjusted to exclude any significant sums should the COUNTY determine that the rates and costs were increased due to inaccurate, incomplete or noncurrent wage rates or due to inaccurate representations of fees paid to outside consultants. The COUNTY shall exercise its rights under this Article 4 within three (3) years following final payment.

ARTICLE 5 - TERMINATION

This Contract may be terminated by the CONSULTANT upon sixty (60) days' prior written notice to the COUNTY in the event of substantial failure by the COUNTY to perform in accordance with the terms of this Contract through no fault of the CONSULTANT. It may also be terminated, in whole or in part, by the COUNTY, with cause upon five (5) business days written notice to the CONSULTANT or without cause upon ten (10) business days written notice to the CONSULTANT. Unless the

CONSULTANT is in breach of this Contract, the CONSULTANT shall be paid for services rendered to the COUNTY'S satisfaction through the date of termination. After receipt of a Termination Notice, except as otherwise directed by the COUNTY, in writing, the CONSULTANT shall:

- A. Stop work on the date and to the extent specified.
- B. Terminate and settle all orders and subcontracts relating to the performance of the terminated work.
- C. Transfer all work in process, completed work, and other materials related to the terminated work to the COUNTY.
- D. Continue and complete all parts of the work that have not been terminated.

ARTICLE 6 - PERSONNEL

The CONSULTANT represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the COUNTY.

All of the services required herein under shall be performed by the CONSULTANT or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under state and local law to perform such services.

Any changes or substitutions in the CONSULTANT'S key personnel, as may be listed in Exhibit "A", must be made known to the COUNTY'S representative and written approval must be granted by the COUNTY'S representative before said change or substitution can become effective.

The CONSULTANT warrants that all services shall be performed by skilled and competent personnel to the highest professional standards in the field.

All of the CONSULTANT'S personnel (and all Subcontractors), while on COUNTY premises, will comply with all COUNTY requirements governing conduct, safety and security.

ARTICLE 7 - SUBCONTRACTING

The COUNTY reserves the right to accept the use of a subcontractor or to reject the selection of a particular subcontractor and to inspect all facilities of any subcontractors in order to make a determination as to the capability of the subcontractor to perform properly under this Contract. The CONSULTANT is encouraged to seek additional small business enterprises for participation in subcontracting opportunities. If the CONSULTANT uses any subcontractors on this project the following provisions of this Article shall apply:

If a subcontractor fails to perform or make progress, as required by this Contract, and it is necessary to replace the subcontractor to complete the work in a timely fashion, the CONSULTANT shall promptly do so, subject to acceptance of the new subcontractor by the COUNTY.

ARTICLE 8 - FEDERAL AND STATE TAX

The COUNTY is exempt from payment of Florida State Sales and Use Taxes. The COUNTY will sign an exemption certificate submitted by the CONSULTANT. The CONSULTANT shall <u>not</u> be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the COUNTY, nor is the CONSULTANT authorized to use the COUNTY'S Tax Exemption Number in securing such materials.

The CONSULTANT shall be responsible for payment of its own and its share of its employees' payroll, payroll taxes, and benefits with respect to this contract.

ARTICLE 9 - AVAILABILITY OF FUNDS

The COUNTY'S performance and obligation to pay under this contract for subsequent fiscal years are contingent upon annual appropriations for its purpose by the Board of County Commissioners.

ARTICLE 10 - INSURANCE

The CONSULTANT shall maintain at its sole expense, in force and effect at all times during the term of this Contract, insurance coverage and limits (including endorsements) as described herein. Failure to maintain at least the required insurance shall be considered default of the Contract. The requirements contained herein, as well as COUNTY's review or acceptance of insurance maintained by CONSULTANT, are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by CONSULTANT under the Contract. CONSULTANT agrees to notify the COUNTY at least ten (10) days prior to cancellation, non-renewal or material change to the required insurance coverage. Where the policy allows, coverage shall apply on a primary and non-contributory basis.

A. Commercial General Liability: CONSULTANT shall maintain Commercial General Liability at a limit of liability not less than \$500,000 combined single limit for bodily injury and property damage each occurrence. Coverage shall not contain any endorsement(s) excluding Contractual Liability or Cross Liability.

Additional Insured Endorsement: The Commercial General Liability policy shall be endorsed to include, "Palm Beach County Board of County Commissioners, a Political Subdivision of the State of Florida, its Officers, Employees, and Agents" as an Additional Insured. A copy of the endorsement shall be provided to COUNTY upon request.

- B. Workers' Compensation Insurance & Employer's Liability: CONSULTANT shall maintain Workers' Compensation & Employer's Liability in accordance with Chapter 440 of the Florida Statutes.
- C. Professional Liability: CONSULTANT shall maintain Professional Liability, or equivalent Errors & Omissions Liability, at a limit of liability not less than \$1,000,000 each occurrence, and \$2,000,000 per aggregate. When a self-insured retention (SIR) or deductible exceeds \$10,000, COUNTY reserves the right, but not the obligation, to review and request a copy of CONSULTANT's most recent annual report or audited financial statement. For policies written on a "claims-made" basis, CONSULTANT warrants the Retroactive Date

equals or precedes the effective date of this Contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced, or any other event triggering the right to purchase a Supplement Extended Reporting Period (SERP) during the term of this Contract, CONSULTANT shall purchase a SERP with a minimum reporting period not less than three (3) years after the expiration of the contract term. The requirement to purchase a SERP shall not relieve the CONSULTANT of the obligation to provide replacement coverage. The Certificate of Insurance providing evidence of the purchase of this coverage shall clearly indicate whether coverage is provided on an "occurrence" or "claims-made" form. If coverage is provided on a "claims-made" form the Certificate of Insurance must also clearly indicate the "retroactive date" of coverage.

- D. Waiver of Subrogation: Except where prohibited by law, CONSULTANT hereby waives any and all rights of Subrogation against the COUNTY, its officers, employees and agents for each required policy except Professional Liability. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then CONSULTANT shall notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy that includes a condition to the policy specifically prohibiting such an endorsement or voids coverage should CONSULTANT enter into such an agreement on a pre-loss basis.
- E. Certificates of Insurance: On execution of this contract, renewal, within forty-eight (48) hours of a request by COUNTY, and upon expiration of any of the required coverage throughout the term of this Agreement, the CONSULTANT shall deliver to the COUNTY or COUNTY's designated representative a signed Certificate(s) of Insurance evidencing that all types and minimum limits of insurance coverage required by this Contract have been obtained and are in force and effect. Certificates shall be issued to:

Palm Beach County Board of County Commissioners

And may be addressed:

Palm Beach County c/o Deborah Drum, Director Department of Environmental Resources Management 2300 North Jog Road, 4th Floor West Palm Beach, FL 33411-2743

F. Right to Revise or Reject: COUNTY, by and through its Risk Management Department in cooperation with the contracting/monitoring department, reserves the right to review, modify, reject, or accept any required policies of insurance, including limits, coverage, or endorsements.

ARTICLE 11 - INDEMNIFICATION

CONSULTANT shall protect, defend, reimburse, indemnify and hold COUNTY, its agents, employees and elected officers harmless from and against all claims, liability, expense, loss, cost,

damages or causes of action of every kind or character, including attorney's fees and costs, whether at trial or appellate levels or otherwise, arising during and as a result of their performance of the terms of this Contract or due to the acts or omissions of CONSULTANT.

ARTICLE 12 - SUCCESSORS AND ASSIGNS

The COUNTY and the CONSULTANT each binds itself and its partners, successors, executors, administrators and assigns to the other party and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract. Except as above, neither the COUNTY nor the CONSULTANT shall assign, sublet, convey or transfer its interest in this Contract without the prior written consent of the other.

ARTICLE 13 - REMEDIES

This Contract shall be governed by the laws of the State of Florida. Any legal action necessary to enforce the Contract will be held in a court of competent jurisdiction located in Palm Beach County, Florida. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity, by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

No provision of this Contract is intended to, or shall be construed to, create any third party beneficiary or to provide any rights to any person or entity not a party to this Contract, including but not limited to any citizen or employees of the COUNTY and/or CONSULTANT.

ARTICLE 14 - CONFLICT OF INTEREST

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder, as provided for in Chapter 112, Part III, Florida Statutes, and the Palm Beach County Code of Ethics. The CONSULTANT further represents that no person having any such conflict of interest shall be employed for said performance of services.

The CONSULTANT shall promptly notify the COUNTY's representative, in writing, by certified mail, of all potential conflicts of interest of any prospective business association, interest or other circumstance which may influence or appear to influence the CONSULTANT'S judgement or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the CONSULTANT may undertake and request an opinion of the COUNTY as to whether the association, interest or circumstance would, in the opinion of the COUNTY, constitute a conflict of interest if entered into by the CONSULTANT. The COUNTY agrees to notify the CONSULTANT of its opinion by certified mail within thirty (30) days of receipt of notification by the CONSULTANT. If, in the opinion of the COUNTY, the prospective business association, interest or circumstance would not constitute a conflict of interest by the CONSULTANT, the COUNTY shall so state in the notification and the CONSULTANT shall, at its option, enter into said association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the COUNTY by the CONSULTANT under the terms of this Contract.

ARTICLE 15 - EXCUSABLE DELAYS

The CONSULTANT shall not be considered in default by reason of any failure in performance if such failure arises out of causes reasonably beyond the control of the CONSULTANT or its subcontractors and without their fault or negligence. Such causes include, but are not limited to, acts of God, force majeure, natural or public health emergencies, labor disputes, freight embargoes, and abnormally severe and unusual weather conditions.

Upon the CONSULTANT'S request, the COUNTY shall consider the facts and extent of any failure to perform the work and, if the CONSULTANT'S failure to perform was without it or its subcontractors fault or negligence, the Contract Schedule and/or any other affected provision of this Contract shall be revised accordingly, subject to the COUNTY'S rights to change, terminate, or stop any or all of the work at any time.

ARTICLE 16 - ARREARS

The CONSULTANT shall not pledge the COUNTY'S credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgement, lien, or any form of indebtedness. The CONSULTANT further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

ARTICLE 17 - DISCLOSURE AND OWNERSHIP OF DOCUMENTS

The CONSULTANT shall deliver to the COUNTY's representative for approval and acceptance, and before being eligible for final payment of any amounts due, all documents and materials prepared by and for the COUNTY under this Contract.

To the extent allowed by Chapter 119, Florida Statutes, all written and oral information not in the public domain or not previously known, and all information and data obtained, developed, or supplied by the COUNTY or at its expense will be kept confidential by the CONSULTANT and will not be disclosed to any other party, directly or indirectly, without the COUNTY'S prior written consent unless required by a lawful court order. All drawings, maps, sketches, programs, data base, reports and other data developed, or purchased, under this Contract for or at the COUNTY'S expense shall be and remain the COUNTY'S property and may be reproduced and reused at the discretion of the COUNTY.

All covenants, agreements, representations and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Contract and the consummation of the transactions contemplated hereby.

Notwithstanding any other provision in this Contract, all documents, records, reports and any other materials produced hereunder shall be subject to disclosure, inspection and audit, pursuant to the Palm Beach County Office of the Inspector General, Palm Beach County Code, Sections 2-421 - 2-440, as amended.

ARTICLE 18 - INDEPENDENT CONTRACTOR RELATIONSHIP

The CONSULTANT is, and shall be, in the performance of all work services and activities under this Contract, an Independent Contractor, and not an employee, agent, or servant of the COUNTY. All



persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the CONSULTANT'S sole direction, supervision, and control. The CONSULTANT shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the CONSULTANT'S relationship and the relationship of its employees to the COUNTY shall be that of an Independent Contractor and not as employees or agents of the COUNTY.

The CONSULTANT does not have the power or authority to bind the COUNTY in any promise, agreement or representation.

ARTICLE 19 - CONTINGENT FEES

The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Contract and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract.

ARTICLE 20 - ACCESS AND AUDITS

The CONSULTANT shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the work for at least five (5) years after completion or termination of this Contract. The COUNTY shall have access to such books, records, and documents as required in this section for the purpose of inspection or audit during normal business hours, at the CONSULTANT'S place of business.

Palm Beach County has established the Office of the Inspector General in Palm Beach County Code, Section 2-421 - 2-440, as may be amended. The Inspector General's authority includes but is not limited to the power to review past, present and proposed County contracts, transactions, accounts and records, to require the production of records, and to audit, investigate, monitor, and inspect the activities of the CONSULTANT, its officers, agents, employees, and lobbyists in order to ensure compliance with contract requirements and detect corruption and fraud.

Failure to cooperate with the Inspector General or interfering with or impeding any investigation shall be in violation of Palm Beach County Code, Section 2-421 - 2-440, and punished pursuant to Section 125.69, Florida Statutes, in the same manner as a second degree misdemeanor.

ARTICLE 21 - NONDISCRIMINATION

The COUNTY is committed to assuring equal opportunity in the award of contracts and complies with all laws prohibiting discrimination. Pursuant to Palm Beach County Resolution R2017-1770, as may be amended, the CONSULTANT warrants and represents that throughout the term of the Contract, including any renewals thereof, if applicable, all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status, familial status, sexual orientation, gender identity or expression, or genetic information. Failure to meet this requirement shall be considered default of the Contract.



As a condition of entering into this Contract, the CONSULTANT represents and warrants that it will comply with the COUNTY'S Commercial Nondiscrimination Policy as described in Resolution 2017-1770, as amended. As part of such compliance, the CONSULTANT shall not discriminate on the basis of race, color, national origin, religion, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity or expression, disability, or genetic information in the solicitation, selection, hiring or commercial treatment of subcontractors, vendors, suppliers, or commercial customers, nor shall the CONSULTANT retaliate against any person for reporting instances of such discrimination. The CONSULTANT shall provide equal opportunity for subcontractors, vendors and suppliers to participate in all of its public sector and private sector subcontracting and supply opportunities, provided that nothing contained in this clause shall prohibit or limit otherwise lawful efforts to remedy the effects of marketplace discrimination that have occurred or are occurring in the COUNTY'S relevant marketplace in Palm Beach County. The CONSULTANT understands and agrees that a material violation of this clause shall be considered a material breach of this Contract and may result in termination of this Contract, disqualification or debarment of the company from participating in COUNTY contracts, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party. CONSULTANT shall include this language in its subcontracts.

ARTICLE 22 - AUTHORITY TO PRACTICE

The CONSULTANT hereby represents and warrants that it has and will continue to maintain all licenses and approvals required to conduct its business, and that it will at all times conduct its business activities in a reputable manner. Proof of such licenses and approvals shall be submitted to the COUNTY's representative upon request.

ARTICLE 23 - SEVERABILITY

If any term or provision of this Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Contract, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.

ARTICLE 24 - PUBLIC ENTITY CRIMES

As provided in F.S. 237.132-133, by entering into this contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the convicted vendor list maintained by the State of Florida Department of Management Services within the 36 months immediately preceding the date hereof. This notice is required by F.S. 287.133(3)(a).

ARTICLE 25 - MODIFICATIONS OF WORK

The COUNTY reserves the right to make changes in Scope of Work, including alterations, reductions therein or additions thereto. Upon receipt by the CONSULTANT of the COUNTY'S notification of a contemplated change, the CONSULTANT shall, in writing: (1) provide a detailed

estimate for the increase or decrease in cost due to the contemplated change, (2) notify the COUNTY of any estimated change in the completion date, and (3) advise the COUNTY if the contemplated change shall affect the CONSULTANT'S ability to meet the completion dates or schedules of this Contract.

If the COUNTY so instructs in writing, the CONSULTANT shall suspend work on that portion of the Scope of Work affected by a contemplated change, pending the COUNTY'S decision to proceed with the change.

If the COUNTY elects to make the change, the COUNTY shall initiate a Contract Amendment and the CONSULTANT shall not commence work on any such change until such written amendment is signed by the CONSULTANT and approved and executed on behalf of Palm Beach County.

ARTICLE 26 - NOTICE

All notices required in this Contract shall be sent by certified mail, return receipt requested, hand delivery or other delivery service requiring signed acceptance. If sent to the COUNTY, notices shall be addressed to:

Palm Beach County Attn. Deborah Drum, Director of Department of Environmental Resources Management 2300 N. Jog Road - 4th Floor West Palm Beach, FL 33411-2743 Fax: (561) 233-2414

Copy to: Palm Beach County Attn: Scott A. Stone, Assistant County Attorney 301 North Olive Avenue, Suite 601 West Palm Beach, FL 33401

If sent to the CONSULTANT, notices shall be addressed to:

Michael Bresette Inwater Research Group, Inc. 4160 NE Hyline Drive Jensen Beach, Florida 34957

ARTICLE 27 - ENTIRETY OF CONTRACTUAL AGREEMENT

The COUNTY and the CONSULTANT agree that this Contract sets forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to, modified,

superseded or otherwise altered, except by written instrument executed by the parties hereto in accordance with Article 25- Modifications of Work.

ARTICLE 28 - CRIMINAL HISTORY RECORDS CHECK

The CONSULTANT, CONSULTANT'S employees, subcontractors of CONSULTANT and employees of subcontractors shall comply with Palm Beach County Code, Section 2-371 - 2-377, the Palm Beach County Criminal History Records Check Ordinance ("Ordinance"), for unescorted access to critical facilities ("Critical Facilities") or criminal justice information facilities ("CJI Facilities") as identified in Resolutions R2013-1470 and R2015-0572, as amended. The CONSULTANT is solely responsible for the financial, schedule, and/or staffing implications of this Ordinance. Further, the CONSULTANT acknowledges that its Contract price includes any and all direct or indirect costs associated with compliance with this Ordinance, except for the applicable FDLE/FBI fees that shall be paid by the COUNTY.

This Contract may include sites and/or buildings which have been designated as either "critical facilities" or "criminal justice information facilities" pursuant to the Ordinance and above referenced Resolutions, as amended. COUNTY staff representing the COUNTY department will contact the CONSULTANT(S) and provide specific instructions for meeting the requirements of this Ordinance. Individuals passing the background check will be issued a badge. The CONSULTANT shall make every effort to collect the badges of its employees and its subcontractors' employees upon conclusion of the contract and return them to the COUNTY. If the CONSULTANT or its subcontractor(s) terminates an employee who has been issued a badge, the CONSULTANT must notify the COUNTY within two (2) hours. At the time of termination, the CONSULTANT shall retrieve the badge and shall return it to the COUNTY in a timely manner.

The COUNTY reserves the right to suspend the CONSULTANT if the CONSULTANT 1) does not comply with the requirements of County Code Section 2-371 - 2-377, as amended; 2) does not contact the COUNTY regarding a terminated CONSULTANT employee or subcontractor employee within the stated time; or 3) fails to make a good faith effort in attempting to comply with the badge retrieval policy.

ARTICLE 29 - REGULATIONS; LICENSING REQUIREMENTS

The CONSULTANT shall comply with all laws, ordinances and regulations applicable to the services contemplated herein, to include those applicable to conflict of interest and collusion. CONSULTANT is presumed to be familiar with all federal, state and local laws, ordinances, codes and regulations that may in any way affect the services offered.

ARTICLE 30 - SCRUTINIZED COMPANIES

A. As provided in F.S. 287.135, by entering into this Contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the Scrutinized Companies that boycott Israel List, or is engaged in a boycott of Israel, pursuant to F.S. 215.4725. Pursuant to F.S. 287.135(3)(b), if



CONSULTANT is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel, this Contract may be terminated at the option of the COUNTY.

B. When contract value is greater than \$1 million: As provided in F.S. 287.135, by entering into this Contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the Scrutinized Companies With Activities in Sudan List or Scrutinized Companies With Activities in Sudan List or Scrutinized Dursuant to F.S. 215.473 or is engaged in business operations in Cuba or Syria.

If the COUNTY determines, using credible information available to the public, that a false certification has been submitted by CONSULTANT, this Contract may be terminated and a civil penalty equal to the greater of \$2 million or twice the amount of this Contract shall be imposed, pursuant to F.S. 287.135. Said certification must also be submitted at the time of Contract renewal, if applicable.

ARTICLE 31 - PUBLIC RECORDS

Notwithstanding anything contained herein, as provided under Section 119.0701, F.S., if the CONSULTANT: (i) provides a service; and (ii) acts on behalf of the COUNTY as provided under Section 119.011(2) F.S., the CONSULTANT shall comply with the requirements of Section 119.0701, Florida Statutes, as it may be amended from time to time The CONSULTANT is specifically required to:

- A. Keep and maintain public records required by the COUNTY to perform services as provided under this Contract.
- B. Upon request from the COUNTY'S Custodian of Public Records, provide the COUNTY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law. The CONSULTANT further agrees that all fees, charges and expenses shall be determined in accordance with Palm Beach County PPM CW-F-002, Fees Associated with Public Records Requests, as it may be amended or replaced from time to time.
- C. Ensure that public records that are exempt, or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the Contract, if the CONSULTANT does not transfer the records to the public agency.
- D. Upon completion of the Contract the CONSULTANT shall transfer, at no cost to the COUNTY, all public records in possession of the CONSULTANT unless notified by COUNTY'S representative/liaison, on behalf of the COUNTY'S Custodian of Public Records, to keep and maintain public records required by the

COUNTY to perform the service. If the CONSULTANT transfers all public records to the COUNTY upon completion of the Contract, the CONSULTANT shall destroy any duplicate public records that are exempt, or confidential and exempt from public records disclosure requirements. If the CONSULTANT keeps and maintains public records upon completion of the Contract, the CONSULTANT shall meet all applicable requirements for retaining public records. All records stored electronically by the CONSULTANT must be provided to COUNTY, upon request of the COUNTY'S Custodian of Public Records, in a format that is compatible with the information technology systems of COUNTY, at no cost to COUNTY.

Failure of the CONSULTANT to comply with the requirements of this article shall be a material breach of this Contract. COUNTY shall have the right to exercise any and all remedies available to it, including but not limited to, the right to terminate for cause. CONSULTANT acknowledges that it has familiarized itself with the requirements of Chapter 119, F.S., and other requirements of state law applicable to public records not specifically set forth herein.

IF THE CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, PLEASE CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT RECORDS REQUEST, PALM BEACH COUNTY PUBLIC AFFAIRS DEPARTMENT, 301 N. OLIVE AVENUE, WEST PALM BEACH, FL 33401, BY E-MAIL AT <u>RECORDSREQUEST@PBCGOV.ORG</u> OR BY TELEPHONE AT 561-355-6680.

ARTICLE 32 - COUNTERPARTS

This Contract, including the exhibits referenced herein, may be executed in one or more counterparts, all of which shall constitute collectively but one and the same Contract. The COUNTY may execute the Contract through electronic or manual means. CONSULTANT shall execute by manual means only, unless the COUNTY provides otherwise.

ARTICLE 33 - E-VERIFY - EMPLOYMENT ELIGIBILITY

CONSULTANT warrants and represents that it is in compliance with section 448.095, Florida Statutes, as may be amended, and that it: (1) is registered with the E-Verify System (E-Verify.gov), and uses the E-Verify System to electronically verify the employment eligibility of all newly hired workers; and (2) has verified that all of CONSULTANT's subconsultants performing the duties and obligations of this CONTRACT are registered with the E-Verify System, and use the E-Verify System to electronically verify the employment eligibility of all newly hired.

CONSULTANT shall obtain from each of its subconsultants an affidavit stating that the subconsultant does not employ, contract with, or subcontract with an Unauthorized Alien, as that term is defined in section 448.095(1)(k), Florida Statutes, as may be amended. CONSULTANT shall maintain a copy of any such affidavit from a subconsultant for, at a minimum, the duration of the subcontract and any extension thereof. This provision shall not supersede any provision of



this CONTRACT which requires a longer retention period.

COUNTY shall terminate this CONTRACT if it has a good faith belief that CONSULTANT has knowingly violated Section 448.09(1), Florida Statutes, as may be amended. If COUNTY has a good faith belief that CONSULTANT's subconsultant has knowingly violated section 448.09(1), Florida Statutes, as may be amended, COUNTY shall notify CONSULTANT to terminate its contract with the subconsultant and CONSULTANT shall immediately terminate its contract with the subconsultant. If COUNTY terminates this CONTRACT pursuant to the above, CONSULTANT shall be barred from being awarded a future contract by COUNTY for a period of one (1) year from the date on which this CONTRACT was terminated. In the event of such contract termination, CONSULTANT shall also be liable for any additional costs incurred by COUNTY as a result of the termination.

Attachments:

Exhibit A: Scope of Work Exhibit B: Schedule of Payments

(Remainder of Page Intentionally Left Blank)

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida has made and executed this Contract on behalf of the COUNTY and CONSULTANT has hereunto set its hand the day and year above written.

ATTEST: JOSEPH ABRUZZO CLERK OF THE CIRCUIT COURT AND COMPTROLLER:

By:_ **Deputy Clerk** WITNESS: Signature Jeffrey Guerki Name (Ope or print) <u>Guertin</u>

Signature Ryein We/sl

Name (type or print)

PALM BEACH COUNTY **BOARD OF COUNTY COMMISSIONERS:**

By: Gregg K. Weiss, Mayor

CONSULTANT:

(corp. seal)

Inwaker Nesearch Group, Inc. **Company Name**

ignature

Michael Bresette Typed Name

President Title

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

By:

Scott A. Stone, Assistant County Attorney

APPROVED AS TO TERMS AND CONDITIONS

By:

Deborah Drum, Department Director **Environmental Resources Management**

PROPOSAL FOR:

ASESSMENT OF MARINE TURTLES IN THE NORTHERN LAKE WORTH LAGOON – 2023-2025



PREPARED FOR:

Palm Beach County Department Of Environmental Resources Management 2300 Jog Road, 4th Floor West Palm Beach, FL 33411

PREPARED BY:

Inwater Research Group 4160 NE Hyline Drive Jensen Beach, FL 34957

August 2023

INTRODUCTION

Since March of 2005, Inwater Research Group, Inc. (IRG) has been conducting marine turtle population assessments in the Lake Worth Lagoon on behalf of the Palm Beach County Department of Environmental Resources Management (PBCERM). The primary objectives of these prior studies were to:

1) Obtain baseline data on species abundance, size frequencies, and sex ratios. These baseline data consist of quantitative measurements that can be used to determine stage-specific abundance, and in the future, determine recoveries or declines in these populations.

2) Determine Catch per Unit Effort (CPUE) at specific sites in Lake Worth Lagoon. This measurement allows for direct comparisons over time within Lake Worth Lagoon and with other ongoing research projects throughout the state.

3) Document the prevalence of fibropapillomatosis (FP), a potentially deadly disease that occurs at a high frequency among sea turtles in Indian River Lagoon and Florida Bay.

4) Obtain blood samples for genetic, sex ratio, and disease analysis.

5) Determine spatial distribution of sea turtles within Lake Worth Lagoon by collecting GPS waypoints for sightings and captures.

The above objectives have been met and confirmed that sea turtles are present in the lagoon year-round, identified specific areas of particularly high abundance, and provided baseline data on the abundance, size class structure, genetic origin, and disease incidence of marine turtles in the lagoon.

In order to take advantage of and build upon the baseline information gathered in the prior work and to gather current information on the population levels, health, and habitat use of turtles in a particularly important and vulnerable part of the lagoon, additional efforts are proposed to gather data in the northern segment of Lake Worth Lagoon near Little Munyon Island and Jupiter Inlet. This proposal includes sea turtle abundance surveys as well as continued capture and tagging efforts that will include an assessment of rates and severity of FP. It will also further investigate recently observed differences in diet between seasons and study site. The primary objectives of the proposed work are to:

- 1) Conduct seasonal sea turtle monitoring efforts in the area near Little Munyon Island and in the vicinity of the Jupiter Inlet in 2023-2025.
- Collect sea turtle abundance data on a permanently established monitoring transect near Little Munyon Island that will serve as an accurate index in-water abundance monitoring site for the area.
- 3) Conduct capture and tagging efforts in the Little Munyon Island and Jupiter Inlet areas to gather and document data on size class distribution and FP incidence and severity.
- 4) Examine dietary preferences of captured green turtles by season and study site.

5) Attach acoustic tags to up to ten juvenile green turtles near Little Munyon Island to assess green turtle movement in the area.

Sea turtles are viewed as an indicator species of the health of the lagoon. Long-term efforts to monitor the sea turtle population residing in the Lake Worth Lagoon is a valuable addition to the comprehensive program to restore the Lake Worth Lagoon being conducted by PBCERM. Local, state, and federal restoration plans include altering the amount of freshwater discharged to the lagoon, improving water quality, and constructing habitat restoration projects, all of which will lead to an increase in the amount of seagrass and other habitats in the lagoon and improve developmental habitat for juvenile green turtles. This project will help determine how sea turtles respond to these changes.

In addition, there was a recent deployment of multiple acoustic receivers as part of the cooperative Florida Atlantic Coastal Telemetry (FACT) at strategic points throughout LWL. This allows for the deployment of acoustic tags on sea turtles as a cost-effective method for monitoring movements of turtles within the area. Since recapture and tag return data for turtles captured at the Little Munyon study site are sparse, this potentially allows for a better understanding of habitat utilization by individual turtles. Additionally, researchers studying other marine species within the lagoon are also deploying acoustic tags and use the same receivers to study movements of their target species within the lagoon. Being a partner with FACT is a cost-effective solution to tracking turtles, elasmobranchs, and fish, and to assist in monitoring the effects of lagoon restoration.

SCOPE OF WORK

Materials and Methods

Sixteen (16) days of field work to gather sea turtle data will be conducted. Field work will include eight (8) days of quantitative visual transects and capture effort focused on the area in the northern lagoon near Little Munyon Island and eight (8) days of field work focused on the area near Jupiter Inlet. Effort will be divided into quarterly sampling periods spread throughout a 15-month period, dependent on favorable field conditions.

<u>Visual Surveys</u>

Sea turtle abundance and species composition will be evaluated using Haphazard Unmarked Nonlinear Transect (HUNT) surveys and permanently established grid transects.

HUNT transects will be conducted at both sites using the methodology employed in the previous phases of the project. The abundance data collected (observations per transect kilometer) will be directly comparable with data collected in the previous phases, allowing for a long-term assessment of sea turtle abundance at the selected sites. Data collected for all observations will include species, size class (juvenile, subadult, or adult), position in the water column (surface or underwater), and the GPS waypoint of the observation. Attempts will be made to conduct 40 kilometers of HUNT transects at the Little Munyon Island site based upon favorable environmental conditions. The turtles near Jupiter Inlet are clustered in such a small geographical area that a turtle is usually sighted so quickly that it likely biases abundance estimates at this site. HUNTs will only be used at the Jupiter Inlet study site when conducting exploratory visual surveys outside the main capture location.

A permanent transect grid has been established at the Little Munyon Island site. The layout of the transect grid was established to encompass the entire area of high-density turtle sightings in the Little Munyon Island area. The permanent transect grid covers a total of 10 km and will be run at least twice during the contract period when and if conditions are suitable for meeting the assumptions of density estimation (most importantly, when tide level, cloud cover, and water visibility allow for top to bottom visibility across the entire transect grid). Data collected for all observations will include species, size class (juvenile, subadult, or adult), position in the water column (surface or underwater), and the GPS waypoint of the observation. Large amounts of variability in the results of these surveys over the last few years have raised the possibility that the transect grid lines may be too closely spaced, resulting in oversampling (the possibility the same turtle is being counted more than once in a survey run). In this proposal, we use a revised transect grid utilized in 2019 and sample on that grid at least twice.

<u>Captures</u>

Capture efforts will also be conducted at both the Little Munyon Island and Jupiter inlet sites. Captures by dip net and hand captures by the "rodeo" technique will be used to safely and efficiently capture turtles. Dip net captures shall be conducted using a large mesh nylon net with a three-foot diameter hoop mounted on a twelve-foot long handle. Observers in the tower guide the boat into position for the net operator in the bow to quickly "scoop" a resting or slowly swimming turtle. The boat then slowly follows the turtle until a dip net capture attempt can be made. If conditions of water depth and/or clarity or the behavior of the turtle are such that a capture cannot be easily and safely accomplished, the pursuit is terminated.

Hand captures (rodeo) consist of the boat closely following a turtle at slow speed until a diver is able to jump from the boat to capture the turtle by hand. Rodeo captures will be employed for turtles which are too large, in water too deep, or swimming too actively for the dip net capture method. Rodeo captures will be limited to waters greater than one meter deep for diver safety and to avoid impacts to seagrasses. The boat slowly follows the turtle until a rodeo capture attempt can be made. If conditions of water depth and/or clarity or the behavior of the turtle are such that a capture cannot be easily and safely accomplished, the pursuit is terminated.

When environmental conditions do not allow for captures to be conducted by dip net and rodeo methods, tangle nets will be used. Tangle net captures utilize a large-mesh tangle net 150 meters long by 5 meters deep, consisting of 40 centimeter stretch (knot to knot) multi-filament mesh suspended from a foam core braided polyethylene top (float) line with fixed buoys spaced 3.5 meters apart. The bottom (lead) line consists of small diameter lead core line. Each end of the net is secured with a small Danforth-type anchor. When turtles encounter the net and become entangled, they are quickly removed and placed on the deck of the boat. Using tangle nets increases the likelihood of bycatch for non-target species such as marine mammals and elasmobranchs, and therefore are only to be used when environmental conditions are not sufficient for preferred capture methods.

A minimum of 48 hours of capture effort will be conducted annually. All captured turtles will be measured, weighed, photographed, and tagged with flipper and implanted tags prior to release. Tumors associated with fibropapillomatosis (FP) will be measured and recorded on a standardized tumor score sheet.

Morphometric data will be collected for each turtle captured using forestry calipers and a flexible tape. Measurements include straight standard carapace length, straight minimum carapace length, straight carapace width, straight plastron length, curved carapace length, curved carapace width, and head width. Inconel #681 tags are applied to the trailing edge of each front flipper and a passive integrated transponder (PIT) tag is subcutaneously applied to the right front flipper. Before insertion of any tags, all flippers are scanned for the presence of any pre-existing PIT tags. Turtles are also weighed and photographed before they are released.

Tumors associated with FP will be measured and recorded at both sites on a standardized tumor score sheet. The total tumor score is used to assign turtles to severity categories. Throughout the processing period, the turtle is kept moist with wet towels and pads on the deck of the boat. Turtles with FP are kept

separate from other turtles and separate sets of measuring and tagging gear are used. After all samples and measurements are taken (approximately 25 minutes), the turtle is released near the original capture site. After the release, tagging and measuring equipment is disinfected with a bleach solution. The rate and severity of FP incidence will be compared with data gathered since 2005 in the previous phases, with the goal of establishing any long term trends in Lake Worth Lagoon.

<u>Diet</u>

Dietary samples will be extracted from captured green turtles at both sites using a technique called "lavage." The lavage process flushes food items from the esophagus and mouth areas. During this procedure turtles are held on their back with their posterior slightly elevated. A soft plastic veterinarian's stomach tube is lubricated with vegetable oil and cautiously inserted into the mouth and throat area. Seawater is then pumped through the tube using a veterinarian's double action pump. The tube is gently moved back and forth along the length of the esophagus and dietary items are collected in a bucket positioned under the turtle's head. The extracted diet sample are strained through a fine mesh net (mesh ~1mm) and placed into a collection jar. A 4% formalin-seawater solution is used to preserve the sample for future analysis. Date, location, tag numbers of the turtle, and absence/presence of FP tumors are recorded on the collection jar. Dietary lavage samples from both sites will be sorted under a dissecting microscope and identified to the lowest practicable taxon by Karen Holloway-Adkins of East Coast Biologists in Indialantic, Florida. Due to the high number of recapture events at the Jupiter Inlet site, dietary samples will only be collected twice per individual turtle per contract.

<u>Acoustic Trackina</u>

A subset of turtles will be tagged with acoustic transmitters to document temporal and spatial distribution, habitat utilization, and potential movement of individuals within the lagoon and possibly into adjacent waters. Innovasea V13 or similar coded transmitters weighing less than 25 g will be attached to the carapace by using a two-part cool-setting epoxy and fishing wire.

To prepare the carapace application site (posterior left or right marginal scutes) for tag attachment, the desired area on the posterior carapace will be cleared of epibionts using a scrubbing pad and light sandpaper. The carapace will then be lightly wiped with an acetone-dampened cloth and re-examined for any damage not previously visible. If the area is still appropriate as a tag attachment site, the drill site will be further prepared with a betadine solution. Local anesthetic (lidocaine) will also be administered prior to drilling. A chlorohexadine solution will be used to sterilize the 3mm diameter drill bit used to drill two holes approximately 15mm from the carapace marginal edge. If bleeding occurs during the drilling process, the procedure will cease, and sterile gauze will be applied with pressure to the area of bleeding until it stops. The acoustic transmitter will be tested before it is fitted with fishing wire and sunk into the putty-like two-part epoxy. Vigilant care will be made to avoid epoxy or drilling coming into contact with marginal seams (sutures) and/or the turtle's soft tissue. The wire will be secured evenly around the transmitter, and carefully pressed into the soft epoxy. Sources of potential heat are minimal during the drilling process as they will be monitored throughout the process and the two-part epoxy cures at a very low heat in less than an hour. All of the edges and corners of the tag application will be smoothed to

minimize any potential for entanglement and to help maintain as much of a hydrodynamic surface as possible. Turtles will be released close to the point of capture.

As green turtles tend to rub their carapace on rough surfaces to keep themselves free of epibionts, tag retention can be an issue as turtles tend to shed the acoustic tags before their batteries have been depleted. In an attempt to lengthen tag retention, half of the Innovasea V13 coded transmitters will be fitted with a cap which should serve as an additional place to secure the tag and therefore increase tag retention times even if the epoxy layer is shed. If tag retention time with the capped transmitters is greater than the un-capped transmitters, future tagging will be completed with only capped transmitters.

The tags will send a signal to a series of receivers strategically placed within the lagoon. The receivers will allow the team to monitor the movement of turtles within the northern Lake Worth Lagoon. Data from the receivers are typically downloaded every 8 - 10 months and uploaded to a central node with the Florida Atlantic Coastal Telemetry (FACT) network. Data from this node is then disseminated to individual researchers at least twice a year.

<u>Analysis</u>

Two separate but complementary methods will be employed to provide quantitative data on relative abundance. The HUNT method visual transects that are associated with capture efforts at both sites generate an index of abundance expressed in terms of sightings per transect kilometer, which is used for comparisons of abundance between different sites and habitat types, and to discern seasonal and annual fluctuations in population levels within a site. The permanently established transect conducted at the Little Munyon Island site can be analyzed using Distance 6.0 to provide abundance data expressed as observations per kilometer and thus be comparable to previous HUNT transects. Using Distance 6.0 allows for the variability in surface weather conditions and water clarity that occur between survey days to be accounted for in the determination of effective transect swath width, which produces lower variable estimates of abundance and also allows for calculation of turtle density, since the actual effective area of each transect run is calculated.

DELIVERABLES

A summary report will be provided following completion of the first eight (8) field days. The report will summarize the completed field work and provide a status update of data analysis. After the completion of an additional eight (8) field days, a final report will be compiled. The final report will include all results from the work and will contain data, maps, and analysis described above. The report will include:

- Results from HUNT and grid transects
- Number of turtles observed and abundance estimates
- Capture locations, tag numbers, and morphometric data from captured turtles.
- Species and size class distribution
- Maps showing capture and sighting locations (accompanying GIS files)
- FP incidence and severity
- Dietary analysis results
- Comparisons to previous LWL data and other nearby lagoon and nearshore reef populations
- Presentation to Lake Worth Lagoon stakeholders
- Weather Conditions
- Acoustic tagging data

The final report will be provided no later than 60 days after completion of the last field day. Reports will be submitted electronically (Word, Excel, PDF, digital photos).

Cost: \$44,308.00*

*Includes the cost of acoustic tags which would require additional written approval from PBCERM, as described in Exhibit B.

COST PROPOSAL

Item	Units	Unit Cost	Total Cost
Expendables (Biopsy kit, tags, PIT tags, acoustic supplies)	1	\$900.00	\$900.00
Vessel (fuel, dockage, insurance)	16	\$450.00	\$7,200.00
Field labor (4 biologists x 8 h/day x 16 days)	512	\$48.00	\$24,576.00
Travel (90 miles/day @ \$0.65/mile)	16	\$58.50	\$936.00
Diet analysis	50	\$100.00	\$5,000.00
Innovasea V13 Acoustic tags*	10	400.00	\$4,000.00*
Report Preparation (1 senior biologist x 8 h/day x 4 days)	32	\$53.00	\$1,696.00

Total Project Cost

\$44,308.00

*Requires additional written approval from PBCERM to proceed with this task, as described in Exhibit B.

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SCHEDULE OF PAYMENTS

The Scope of Work to be completed by CONSULTANT as defined in Exhibit "A" consists of specific completion phases which shall be clearly identified on a phase-by-phase basis upon submission to the COUNTY of certain "deliverables"* as expressly indicated below. Compensation for the work tasks stated herein shall be in accordance with the following Schedule of Payments:

FIRST SESSION (First Eight (8) Field Days)

Task(s) to be completed: Field work and summary report of field work and status of data analysis

Completion Time: Dependent upon conditions; Summary Report – 30 days after the completion of the eighth (8th) field day.

Compensation for First Session: \$20,154.00 – To be paid upon receipt and approval by PBC ERM of summary report

Deliverable(s) Required: First Session Summary Report

SECOND SESSION (Second Eight (8) Field Days)

Task(s) to be completed: Field work and final report compiling results and analysis of work completed in first and second sessions

Completion Time: Dependent upon conditions; Final Report – 60 days after the completion of the sixteenth (16^{th}) field day.

Compensation for Second Session: \$20,154.00 - To be paid upon receipt and approval by PBC ERM of Final Report

Deliverable(s) Required: Final Report

ADDITIONAL OPTIONAL TASK (Acoustic Tagging)

Task(s) to be completed: Upon written approval with a Notice To Proceed from PBC ERM, up to ten (10) sea turtles in the Munyon Island area of Lake Worth Lagoon will be tagged with acoustic transmitters. Tagging shall be completed during the First Session and/or Second Session.

Completion Time: Dependent upon conditions; Must be completed during the First Session and/or Second Session.

Compensation for Acoustic Tags: Not to exceed \$4,000.00 (\$400 per tag, not to exceed 10 tags)—Each tag shall be paid according to the Session during which the tagging occurred, upon receipt and approval by PBC ERM of tagging data and summary of effort included in the First Session Summary Report and/or Final Report, as applicable.

Deliverable(s) Required: Tagging data and summary of effort to be included in First Session Summary Report and/or Final Report, as applicable. Moreover, all tagging data and summary of effort from both Sessions shall be included in the Final Report, regardless of which Session(s) the acoustic tag(s) were deployed.

Total (including compensation for Additional Optional Task) = \$44,308.00

* "Deliverables" shall be defined as progress reports, prepared maps, bid documents, completed drawings, specific reports, work plans, documentation of meetings attended, assessment study reports, analysis reports, summary reports, recommendation reports and related draft reports and verifiable deliverables.

** In the event that a survey day cannot be completed due to weather and the CONSULTANT is unable to reschedule, the invoice for that period will be reduced by a total of Two Thousand, Four Hundred Thirteen Dollars and Twenty Five Cents (\$2,413.25) per missed day.

CONTRACT FOR CONSULTING/PROFESSIONAL SERVICES

This Contract is made as of the ______ day of ______, 20___, by and between Palm Beach County, a Political Subdivision of the State of Florida, by and through its Board of County Commissioners, hereinafter referred to as the COUNTY, and Inwater Research Group, Inc. a corporation authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal I.D. is 65-1090322.

In consideration of the mutual promises contained herein, the COUNTY and the CONSULTANT agree as follows:

ARTICLE 1 - SERVICES

The CONSULTANT'S responsibility under this Contract is to provide professional/consultation services in the area of in water sea turtle monitoring, as more specifically set forth in the Scope of Work detailed in Exhibit "A".

The COUNTY'S representative/liaison during the performance of this Contract shall be Deborah Drum, Director of the Palm Beach County Department of Environmental Resources Management, telephone no. 561-233-2400.

The CONSULTANT'S representative/liaison during the performance of this Contract shall be Michael Bresette, telephone no. 772-349-5905.

ARTICLE 2 - SCHEDULE

The CONSULTANT shall commence services upon execution of this contract and complete all services by January 5, 2025

Reports and other items shall be delivered or completed in accordance with the detailed schedule set forth in Exhibit "A".

ARTICLE 3 - PAYMENTS TO CONSULTANT

A. The total amount to be paid by the COUNTY under this Contract for all services and materials including, if applicable, "out of pocket" expenses (specified in paragraph C below) shall not exceed a total contract amount of Forty Four Thousand, Three Hundred Eight Dollars (\$44,303.00). The CONSULTANT shall notify the COUNTY's representative in writing when 90% of the "not to exceed amount" has been reached. The CONSULTANT will bill the COUNTY on a monthly basis, or as otherwise provided, at the amounts set forth in Exhibit "B" for services rendered toward the completion of the Scope of Work. Where incremental billings for partially completed items are permitted, the total billings shall not exceed the estimated percentage of completion as of the billing date. In the event that a survey day cannot be completed due to weather and the CONSULTANT is unable to reschedule, the invoice for that period will be reduced by a total of Two Thousand, Four Hundred Thirteen Dollars and Twenty Five Cents (\$2,413.25) per missed day.

- B. Invoices received from the CONSULTANT pursuant to this Contract will be reviewed and approved by the COUNTY's representative, to verify that services have been rendered in conformity with the Contract. Approved invoices will then be sent to the Finance Department for payment. Invoices will normally be paid within thirty (30) days following the COUNTY representative's approval.
- C. "Out-of-pocket" expenses including, but not limited to, mailing charges, copying fees, telephone charges and miscellaneous supplies shall not be reimbursed under this Contract. Any travel, per diem, mileage, meals, or lodging expenses which may be reimbursable under the terms of this Contract will be paid in accordance with the rates and conditions set forth in Section 112.061, Florida Statutes.
- D. <u>Final Invoice</u>: In order for both parties herein to close their books and records, the CONSULTANT will clearly state "<u>final invoice</u>" on the CONSULTANT'S final/last billing to the COUNTY. This shall constitute CONSULTANT'S certification that all services have been properly performed and all charges and costs have been invoiced to Palm Beach County. Any other charges not properly included on this final invoice are waived by the CONSULTANT.
- E. In order to do business with Palm Beach County, CONSULTANTS are required to create a Vendor Registration Account OR activate an existing Vendor Registration Account through the Purchasing Department's Vendor Self Service (VSS) system, which can be accessed at <u>https://pbcvssp.co.palm-beach.fl.us/webapp/vssp/AltSelfService</u>. If CONSULTANT intends to use sub-consultants, CONSULTANT must also ensure that all sub-consultants are registered as consultants in VSS. All subcontractor agreements must include a contractual provision requiring that the sub-consultant register in VSS. COUNTY will not finalize a contract award until the COUNTY has verified that the CONSULTANT and all of its sub-consultants are registered in VSS.

ARTICLE 4 - TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Contract by the CONSULTANT shall also act as the execution of a truth-innegotiation certificate certifying that the wage rates, over-head charges, and other costs used to determine the compensation provided for in this Contract are accurate, complete and current as of the date of the Contract and no higher than those charged the CONSULTANT'S most favored customer for the same or substantially similar service.

The said rates and costs shall be adjusted to exclude any significant sums should the COUNTY determine that the rates and costs were increased due to inaccurate, incomplete or noncurrent wage rates or due to inaccurate representations of fees paid to outside consultants. The COUNTY shall exercise its rights under this Article 4 within three (3) years following final payment.

ARTICLE 5 - TERMINATION

This Contract may be terminated by the CONSULTANT upon sixty (60) days' prior written notice to the COUNTY in the event of substantial failure by the COUNTY to perform in accordance with the terms of this Contract through no fault of the CONSULTANT. It may also be terminated, in whole or in part, by the COUNTY, with cause upon five (5) business days written notice to the CONSULTANT or without cause upon ten (10) business days written notice to the CONSULTANT. Unless the

CONSULTANT is in breach of this Contract, the CONSULTANT shall be paid for services rendered to the COUNTY'S satisfaction through the date of termination. After receipt of a Termination Notice, except as otherwise directed by the COUNTY, in writing, the CONSULTANT shall:

- A. Stop work on the date and to the extent specified.
- B. Terminate and settle all orders and subcontracts relating to the performance of the terminated work.
- C. Transfer all work in process, completed work, and other materials related to the terminated work to the COUNTY.
- D. Continue and complete all parts of the work that have not been terminated.

ARTICLE 6 - PERSONNEL

The CONSULTANT represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the COUNTY.

All of the services required herein under shall be performed by the CONSULTANT or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under state and local law to perform such services.

Any changes or substitutions in the CONSULTANT'S key personnel, as may be listed in Exhibit "A", must be made known to the COUNTY'S representative and written approval must be granted by the COUNTY'S representative before said change or substitution can become effective.

The CONSULTANT warrants that all services shall be performed by skilled and competent personnel to the highest professional standards in the field.

All of the CONSULTANT'S personnel (and all Subcontractors), while on COUNTY premises, will comply with all COUNTY requirements governing conduct, safety and security.

ARTICLE 7 - SUBCONTRACTING

The COUNTY reserves the right to accept the use of a subcontractor or to reject the selection of a particular subcontractor and to inspect all facilities of any subcontractors in order to make a determination as to the capability of the subcontractor to perform properly under this Contract. The CONSULTANT is encouraged to seek additional small business enterprises for participation in subcontracting opportunities. If the CONSULTANT uses any subcontractors on this project the following provisions of this Article shall apply:

If a subcontractor fails to perform or make progress, as required by this Contract, and it is necessary to replace the subcontractor to complete the work in a timely fashion, the CONSULTANT shall promptly do so, subject to acceptance of the new subcontractor by the COUNTY.

ARTICLE 8 - FEDERAL AND STATE TAX

The COUNTY is exempt from payment of Florida State Sales and Use Taxes. The COUNTY will sign an exemption certificate submitted by the CONSULTANT. The CONSULTANT shall <u>not</u> be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the COUNTY, nor is the CONSULTANT authorized to use the COUNTY'S Tax Exemption Number in securing such materials.

The CONSULTANT shall be responsible for payment of its own and its share of its employees' payroll, payroll taxes, and benefits with respect to this contract.

ARTICLE 9 - AVAILABILITY OF FUNDS

The COUNTY'S performance and obligation to pay under this contract for subsequent fiscal years are contingent upon annual appropriations for its purpose by the Board of County Commissioners.

ARTICLE 10 - INSURANCE

The CONSULTANT shall maintain at its sole expense, in force and effect at all times during the term of this Contract, insurance coverage and limits (including endorsements) as described herein. Failure to maintain at least the required insurance shall be considered default of the Contract. The requirements contained herein, as well as COUNTY's review or acceptance of insurance maintained by CONSULTANT, are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by CONSULTANT under the Contract. CONSULTANT agrees to notify the COUNTY at least ten (10) days prior to cancellation, non-renewal or material change to the required insurance coverage. Where the policy allows, coverage shall apply on a primary and non-contributory basis.

A. Commercial General Liability: CONSULTANT shall maintain Commercial General Liability at a limit of liability not less than \$500,000 combined single limit for bodily injury and property damage each occurrence. Coverage shall not contain any endorsement(s) excluding Contractual Liability or Cross Liability.

Additional Insured Endorsement: The Commercial General Liability policy shall be endorsed to include, "Palm Beach County Board of County Commissioners, a Political Subdivision of the State of Florida, its Officers, Employees, and Agents" as an Additional Insured. A copy of the endorsement shall be provided to COUNTY upon request.

- B. Workers' Compensation Insurance & Employer's Liability: CONSULTANT shall maintain Workers' Compensation & Employer's Liability in accordance with Chapter 440 of the Florida Statutes.
- C. Professional Liability: CONSULTANT shall maintain Professional Liability, or equivalent Errors & Omissions Liability, at a limit of liability not less than \$1,000,000 each occurrence, and \$2,000,000 per aggregate. When a self-insured retention (SIR) or deductible exceeds \$10,000, COUNTY reserves the right, but not the obligation, to review and request a copy of CONSULTANT's most recent annual report or audited financial statement. For policies written on a "claims-made" basis, CONSULTANT warrants the Retroactive Date

equals or precedes the effective date of this Contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced, or any other event triggering the right to purchase a Supplement Extended Reporting Period (SERP) during the term of this Contract, CONSULTANT shall purchase a SERP with a minimum reporting period not less than three (3) years after the expiration of the contract term. The requirement to purchase a SERP shall not relieve the CONSULTANT of the obligation to provide replacement coverage. The Certificate of Insurance providing evidence of the purchase of this coverage shall clearly indicate whether coverage is provided on an "occurrence" or "claims-made" form. If coverage is provided on a "claims-made" form the Certificate of Insurance must also clearly indicate the "retroactive date" of coverage.

- D. Waiver of Subrogation: Except where prohibited by law, CONSULTANT hereby waives any and all rights of Subrogation against the COUNTY, its officers, employees and agents for each required policy except Professional Liability. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then CONSULTANT shall notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy that includes a condition to the policy specifically prohibiting such an endorsement or voids coverage should CONSULTANT enter into such an agreement on a pre-loss basis.
- E. Certificates of Insurance: On execution of this contract, renewal, within forty-eight (48) hours of a request by COUNTY, and upon expiration of any of the required coverage throughout the term of this Agreement, the CONSULTANT shall deliver to the COUNTY or COUNTY's designated representative a signed Certificate(s) of Insurance evidencing that all types and minimum limits of insurance coverage required by this Contract have been obtained and are in force and effect. Certificates shall be issued to:

Palm Beach County Board of County Commissioners

And may be addressed:

Palm Beach County c/o Deborah Drum, Director Department of Environmental Resources Management 2300 North Jog Road, 4th Floor West Palm Beach, FL 33411-2743

F. Right to Revise or Reject: COUNTY, by and through its Risk Management Department in cooperation with the contracting/monitoring department, reserves the right to review, modify, reject, or accept any required policies of insurance, including limits, coverage, or endorsements.

ARTICLE 11 - INDEMNIFICATION

CONSULTANT shall protect, defend, reimburse, indemnify and hold COUNTY, its agents, employees and elected officers harmless from and against all claims, liability, expense, loss, cost,

damages or causes of action of every kind or character, including attorney's fees and costs, whether at trial or appellate levels or otherwise, arising during and as a result of their performance of the terms of this Contract or due to the acts or omissions of CONSULTANT.

ARTICLE 12 - SUCCESSORS AND ASSIGNS

The COUNTY and the CONSULTANT each binds itself and its partners, successors, executors, administrators and assigns to the other party and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract. Except as above, neither the COUNTY nor the CONSULTANT shall assign, sublet, convey or transfer its interest in this Contract without the prior written consent of the other.

ARTICLE 13 - REMEDIES

This Contract shall be governed by the laws of the State of Florida. Any legal action necessary to enforce the Contract will be held in a court of competent jurisdiction located in Palm Beach County, Florida. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity, by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

No provision of this Contract is intended to, or shall be construed to, create any third party beneficiary or to provide any rights to any person or entity not a party to this Contract, including but not limited to any citizen or employees of the COUNTY and/or CONSULTANT.

ARTICLE 14 - CONFLICT OF INTEREST

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder, as provided for in Chapter 112, Part III, Florida Statutes, and the Palm Beach County Code of Ethics. The CONSULTANT further represents that no person having any such conflict of interest shall be employed for said performance of services.

The CONSULTANT shall promptly notify the COUNTY's representative, in writing, by certified mail, of all potential conflicts of interest of any prospective business association, interest or other circumstance which may influence or appear to influence the CONSULTANT'S judgement or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the CONSULTANT may undertake and request an opinion of the COUNTY as to whether the association, interest or circumstance would, in the opinion of the COUNTY, constitute a conflict of interest if entered into by the CONSULTANT. The COUNTY agrees to notify the CONSULTANT of its opinion by certified mail within thirty (30) days of receipt of notification by the CONSULTANT. If, in the opinion of the COUNTY, the prospective business association, interest or circumstance would not constitute a conflict of interest by the CONSULTANT, the COUNTY shall so state in the notification and the CONSULTANT shall, at its option, enter into said association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the COUNTY by the CONSULTANT under the terms of this Contract.

ARTICLE 15 - EXCUSABLE DELAYS

The CONSULTANT shall not be considered in default by reason of any failure in performance if such failure arises out of causes reasonably beyond the control of the CONSULTANT or its subcontractors and without their fault or negligence. Such causes include, but are not limited to, acts of God, force majeure, natural or public health emergencies, labor disputes, freight embargoes, and abnormally severe and unusual weather conditions.

Upon the CONSULTANT'S request, the COUNTY shall consider the facts and extent of any failure to perform the work and, if the CONSULTANT'S failure to perform was without it or its subcontractors fault or negligence, the Contract Schedule and/or any other affected provision of this Contract shall be revised accordingly, subject to the COUNTY'S rights to change, terminate, or stop any or all of the work at any time.

ARTICLE 16 - ARREARS

The CONSULTANT shall not pledge the COUNTY'S credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgement, lien, or any form of indebtedness. The CONSULTANT further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

ARTICLE 17 - DISCLOSURE AND OWNERSHIP OF DOCUMENTS

The CONSULTANT shall deliver to the COUNTY's representative for approval and acceptance, and before being eligible for final payment of any amounts due, all documents and materials prepared by and for the COUNTY under this Contract.

To the extent allowed by Chapter 119, Florida Statutes, all written and oral information not in the public domain or not previously known, and all information and data obtained, developed, or supplied by the COUNTY or at its expense will be kept confidential by the CONSULTANT and will not be disclosed to any other party, directly or indirectly, without the COUNTY'S prior written consent unless required by a lawful court order. All drawings, maps, sketches, programs, data base, reports and other data developed, or purchased, under this Contract for or at the COUNTY'S expense shall be and remain the COUNTY'S property and may be reproduced and reused at the discretion of the COUNTY.

All covenants, agreements, representations and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Contract and the consummation of the transactions contemplated hereby.

Notwithstanding any other provision in this Contract, all documents, records, reports and any other materials produced hereunder shall be subject to disclosure, inspection and audit, pursuant to the Palm Beach County Office of the Inspector General, Palm Beach County Code, Sections 2-421 - 2-440, as amended.

ARTICLE 18 - INDEPENDENT CONTRACTOR RELATIONSHIP

The CONSULTANT is, and shall be, in the performance of all work services and activities under this Contract, an Independent Contractor, and not an employee, agent, or servant of the COUNTY. All

persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the CONSULTANT'S sole direction, supervision, and control. The CONSULTANT shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the CONSULTANT'S relationship and the relationship of its employees to the COUNTY shall be that of an Independent Contractor and not as employees or agents of the COUNTY.

The CONSULTANT does not have the power or authority to bind the COUNTY in any promise, agreement or representation.

ARTICLE 19 - CONTINGENT FEES

The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Contract and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract.

ARTICLE 20 - ACCESS AND AUDITS

The CONSULTANT shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the work for at least five (5) years after completion or termination of this Contract. The COUNTY shall have access to such books, records, and documents as required in this section for the purpose of inspection or audit during normal business hours, at the CONSULTANT'S place of business.

Palm Beach County has established the Office of the Inspector General in Palm Beach County Code, Section 2-421 - 2-440, as may be amended. The Inspector General's authority includes but is not limited to the power to review past, present and proposed County contracts, transactions, accounts and records, to require the production of records, and to audit, investigate, monitor, and inspect the activities of the CONSULTANT, its officers, agents, employees, and lobbyists in order to ensure compliance with contract requirements and detect corruption and fraud.

Failure to cooperate with the Inspector General or interfering with or impeding any investigation shall be in violation of Palm Beach County Code, Section 2-421 - 2-440, and punished pursuant to Section 125.69, Florida Statutes, in the same manner as a second degree misdemeanor.

ARTICLE 21 - NONDISCRIMINATION

The COUNTY is committed to assuring equal opportunity in the award of contracts and complies with all laws prohibiting discrimination. Pursuant to Palm Beach County Resolution R2017-1770, as may be amended, the CONSULTANT warrants and represents that throughout the term of the Contract, including any renewals thereof, if applicable, all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status, familial status, sexual orientation, gender identity or expression, or genetic information. Failure to meet this requirement shall be considered default of the Contract.

As a condition of entering into this Contract, the CONSULTANT represents and warrants that it will comply with the COUNTY'S Commercial Nondiscrimination Policy as described in Resolution 2017-1770, as amended. As part of such compliance, the CONSULTANT shall not discriminate on the basis of race, color, national origin, religion, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity or expression, disability, or genetic information in the solicitation, selection, hiring or commercial treatment of subcontractors, vendors, suppliers, or commercial customers, nor shall the CONSULTANT retaliate against any person for reporting instances of such discrimination. The CONSULTANT shall provide equal opportunity for subcontractors, vendors and suppliers to participate in all of its public sector and private sector subcontracting and supply opportunities, provided that nothing contained in this clause shall prohibit or limit otherwise lawful efforts to remedy the effects of marketplace discrimination that have occurred or are occurring in the COUNTY'S relevant marketplace in Palm Beach County. The CONSULTANT understands and agrees that a material violation of this clause shall be considered a material breach of this Contract and may result in termination of this Contract, disqualification or debarment of the company from participating in COUNTY contracts, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party. CONSULTANT shall include this language in its subcontracts.

ARTICLE 22 - AUTHORITY TO PRACTICE

The CONSULTANT hereby represents and warrants that it has and will continue to maintain all licenses and approvals required to conduct its business, and that it will at all times conduct its business activities in a reputable manner. Proof of such licenses and approvals shall be submitted to the COUNTY's representative upon request.

ARTICLE 23 - SEVERABILITY

If any term or provision of this Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Contract, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.

ARTICLE 24 - PUBLIC ENTITY CRIMES

As provided in F.S. 287.132-133, by entering into this contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the convicted vendor list maintained by the State of Florida Department of Management Services within the 36 months immediately preceding the date hereof. This notice is required by F.S. 287.133(3)(a).

ARTICLE 25 - MODIFICATIONS OF WORK

The COUNTY reserves the right to make changes in Scope of Work, including alterations, reductions therein or additions thereto. Upon receipt by the CONSULTANT of the COUNTY'S notification of a contemplated change, the CONSULTANT shall, in writing: (1) provide a detailed

estimate for the increase or decrease in cost due to the contemplated change, (2) notify the COUNTY of any estimated change in the completion date, and (3) advise the COUNTY if the contemplated change shall affect the CONSULTANT'S ability to meet the completion dates or schedules of this Contract.

If the COUNTY so instructs in writing, the CONSULTANT shall suspend work on that portion of the Scope of Work affected by a contemplated change, pending the COUNTY'S decision to proceed with the change.

If the COUNTY elects to make the change, the COUNTY shall initiate a Contract Amendment and the CONSULTANT shall not commence work on any such change until such written amendment is signed by the CONSULTANT and approved and executed on behalf of Palm Beach County.

ARTICLE 26 - NOTICE

All notices required in this Contract shall be sent by certified mail, return receipt requested, hand delivery or other delivery service requiring signed acceptance. If sent to the COUNTY, notices shall be addressed to:

Palm Beach County Attn. Deborah Drum, Director of Department of Environmental Resources Management 2300 N. Jog Road - 4th Floor West Palm Beach, FL 33411-2743 Fax: (561) 233-2414

Copy to: Palm Beach County Attn: Scott A. Stone, Assistant County Attorney 301 North Olive Avenue, Suite 601 West Palm Beach, FL 33401

If sent to the CONSULTANT, notices shall be addressed to:

Michael Bresette Inwater Research Group, Inc. 4160 NE Hyline Drive Jensen Beach, Florida 34957

ARTICLE 27 - ENTIRETY OF CONTRACTUAL AGREEMENT

The COUNTY and the CONSULTANT agree that this Contract sets forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to, modified,

superseded or otherwise altered, except by written instrument executed by the parties hereto in accordance with Article 25- Modifications of Work.

ARTICLE 28 - CRIMINAL HISTORY RECORDS CHECK

The CONSULTANT, CONSULTANT'S employees, subcontractors of CONSULTANT and employees of subcontractors shall comply with Palm Beach County Code, Section 2-371 - 2-377, the Palm Beach County Criminal History Records Check Ordinance ("Ordinance"), for unescorted access to critical facilities ("Critical Facilities") or criminal justice information facilities ("CJI Facilities") as identified in Resolutions R2013-1470 and R2015-0572, as amended. The CONSULTANT is solely responsible for the financial, schedule, and/or staffing implications of this Ordinance. Further, the CONSULTANT acknowledges that its Contract price includes any and all direct or indirect costs associated with compliance with this Ordinance, except for the applicable FDLE/FBI fees that shall be paid by the COUNTY.

This Contract may include sites and/or buildings which have been designated as either "critical facilities" or "criminal justice information facilities" pursuant to the Ordinance and above referenced_Resolutions, as amended. COUNTY staff representing the COUNTY department will contact the CONSULTANT(S) and provide specific instructions for meeting the requirements of this Ordinance. Individuals passing the background check will be issued a badge. The CONSULTANT shall make every effort to collect the badges of its employees and its subcontractors' employees upon conclusion of the contract and return them to the COUNTY. If the CONSULTANT or its subcontractor(s) terminates an employee who has been issued a badge, the CONSULTANT must notify the COUNTY within two (2) hours. At the time of termination, the CONSULTANT shall retrieve the badge and shall return it to the COUNTY in a timely manner.

The COUNTY reserves the right to suspend the CONSULTANT if the CONSULTANT 1) does not comply with the requirements of County Code Section 2-371 - 2-377, as amended; 2) does not contact the COUNTY regarding a terminated CONSULTANT employee or subcontractor employee within the stated time; or 3) fails to make a good faith effort in attempting to comply with the badge retrieval policy.

ARTICLE 29 - REGULATIONS; LICENSING REQUIREMENTS

The CONSULTANT shall comply with all laws, ordinances and regulations applicable to the services contemplated herein, to include those applicable to conflict of interest and collusion. CONSULTANT is presumed to be familiar with all federal, state and local laws, ordinances, codes and regulations that may in any way affect the services offered.

ARTICLE 30 - SCRUTINIZED COMPANIES

A. As provided in F.S. 287.135, by entering into this Contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the Scrutinized Companies that boycott Israel List, or is engaged in a boycott of Israel, pursuant to F.S. 215.4725. Pursuant to F.S. 287.135(3)(b), if

CONSULTANT is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel, this Contract may be terminated at the option of the COUNTY.

B. When contract value is greater than \$1 million: As provided in F.S. 287.135, by entering into this Contract or performing any work in furtherance hereof, the CONSULTANT certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder, have not been placed on the Scrutinized Companies With Activities in Sudan List or Scrutinized Companies With Activities in Sudan List or Scrutinized pursuant to F.S. 215.473 or is engaged in business operations in Cuba or Syria.

If the COUNTY determines, using credible information available to the public, that a false certification has been submitted by CONSULTANT, this Contract may be terminated and a civil penalty equal to the greater of \$2 million or twice the amount of this Contract shall be imposed, pursuant to F.S. 287.135. Said certification must also be submitted at the time of Contract renewal, if applicable.

ARTICLE 31 - PUBLIC RECORDS

Notwithstanding anything contained herein, as provided under Section 119.0701, F.S., if the CONSULTANT: (i) provides a service; and (ii) acts on behalf of the COUNTY as provided under Section 119.011(2) F.S., the CONSULTANT shall comply with the requirements of Section 119.0701, Florida Statutes, as it may be amended from time to time The CONSULTANT is specifically required to:

- A. Keep and maintain public records required by the COUNTY to perform services as provided under this Contract.
- B. Upon request from the COUNTY'S Custodian of Public Records, provide the COUNTY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law. The CONSULTANT further agrees that all fees, charges and expenses shall be determined in accordance with Palm Beach County PPM CW-F-002, Fees Associated with Public Records Requests, as it may be amended or replaced from time to time.
- C. Ensure that public records that are exempt, or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the Contract, if the CONSULTANT does not transfer the records to the public agency.
- D. Upon completion of the Contract the CONSULTANT shall transfer, at no cost to the COUNTY, all public records in possession of the CONSULTANT unless notified by COUNTY'S representative/liaison, on behalf of the COUNTY'S Custodian of Public Records, to keep and maintain public records required by the

COUNTY to perform the service. If the CONSULTANT transfers all public records to the COUNTY upon completion of the Contract, the CONSULTANT shall destroy any duplicate public records that are exempt, or confidential and exempt from public records disclosure requirements. If the CONSULTANT keeps and maintains public records upon completion of the Contract, the CONSULTANT shall meet all applicable requirements for retaining public records. All records stored electronically by the CONSULTANT must be provided to COUNTY, upon request of the COUNTY'S Custodian of Public Records, in a format that is compatible with the information technology systems of COUNTY, at no cost to COUNTY.

Failure of the CONSULTANT to comply with the requirements of this article shall be a material breach of this Contract. COUNTY shall have the right to exercise any and all remedies available to it, including but not limited to, the right to terminate for cause. CONSULTANT acknowledges that it has familiarized itself with the requirements of Chapter 119, F.S., and other requirements of state law applicable to public records not specifically set forth herein.

IF THE CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONSULTANT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, PLEASE CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT RECORDS REQUEST, PALM BEACH COUNTY PUBLIC AFFAIRS DEPARTMENT, 301 N. OLIVE AVENUE, WEST PALM BEACH, FL 33401, BY E-MAIL AT <u>RECORDSREQUEST@PBCGOV.ORG</u> OR BY TELEPHONE AT 561-355-6680.

ARTICLE 32 - COUNTERPARTS

This Contract, including the exhibits referenced herein, may be executed in one or more counterparts, all of which shall constitute collectively but one and the same Contract. The COUNTY may execute the Contract through electronic or manual means. CONSULTANT shall execute by manual means only, unless the COUNTY provides otherwise.

ARTICLE 33 - E-VERIFY - EMPLOYMENT ELIGIBILITY

CONSULTANT warrants and represents that it is in compliance with section 448.095, Florida Statutes, as may be amended, and that it: (1) is registered with the E-Verify System (E-Verify.gov), and uses the E-Verify System to electronically verify the employment eligibility of all newly hired workers; and (2) has verified that all of CONSULTANT's subconsultants performing the duties and obligations of this CONTRACT are registered with the E-Verify System, and use the E-Verify System to electronically verify the employment eligibility of all newly hired workers.

CONSULTANT shall obtain from each of its subconsultants an affidavit stating that the subconsultant does not employ, contract with, or subcontract with an Unauthorized Alien, as that term is defined in section 443.095(1)(k), Florida Statutes, as may be amended. CONSULTANT shall maintain a copy of any such affidavit from a subconsultant for, at a minimum, the duration of the subcontract and any extension thereof. This provision shall not supersede any provision of

this CONTRACT which requires a longer retention period.

COUNTY shall terminate this CONTRACT if it has a good faith belief that CONSULTANT has knowingly violated Section 448.09(1), Florida Statutes, as may be amended. If COUNTY has a good faith belief that CONSULTANT's subconsultant has knowingly violated section 448.09(1), Florida Statutes, as may be amended, COUNTY shall notify CONSULTANT to terminate its contract with the subconsultant and CONSULTANT shall immediately terminate its contract with the subconsultant. If COUNTY terminates this CONTRACT pursuant to the above, CONSULTANT shall be barred from being awarded a future contract by COUNTY for a period of one (1) year from the date on which this CONTRACT was terminated. In the event of such contract termination, CONSULTANT shall also be liable for any additional costs incurred by COUNTY as a result of the termination.

Attachments:

Exhibit A: Scope of Work Exhibit B: Schedule of Payments

(Remainder of Page Intentionally Left Blank)

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida has made and executed this Contract on behalf of the COUNTY and CONSULTANT has hereunto set its hand the day and year above written.

ATTEST: JOSEPH ABRUZZO CLERK OF THE CIRCUIT COURT AND COMPTROLLER:

By:

Deputy Clerk WITNESS: Signature Jeffrey bueckn Name (ope or print)

Signature

Ry We/SI Name (type or print)

PALM BEACH COUNTY **BOARD OF COUNTY COMMISSIONERS:**

By: Gregg K. Weiss, Mayor

CONSULTANT:

Inwater Nesearch Group, Inc. **Company Name**

Signature

Michael Bresette Typed Name

President Title

(corp. seal)

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

By:

Scott A. Stone, Assistant County Attorney

APPROVED AS TO TERMS AND CONDITIONS

By:

Deborah Drum, Department Director **Environmental Resources Management**

PROPOSAL FOR:

ASESSMENT OF MARINE TURTLES IN THE NORTHERN LAKE WORTH LAGOON – 2023-2025



PREPARED FOR:

Palm Beach County Department Of Environmental Resources Management 2300 Jog Road, 4th Floor West Palm Beach, FL 33411

PREPARED BY:

Inwater Research Group 4160 NE Hyline Drive Jensen Beach, FL 34957

August 2023

INTRODUCTION

Since March of 2005, Inwater Research Group, Inc. (IRG) has been conducting marine turtle population assessments in the Lake Worth Lagoon on behalf of the Palm Beach County Department of Environmental Resources Management (PBCERM). The primary objectives of these prior studies were to:

1) Obtain baseline data on species abundance, size frequencies, and sex ratios. These baseline data consist of quantitative measurements that can be used to determine stage-specific abundance, and in the future, determine recoveries or declines in these populations.

2) Determine Catch per Unit Effort (CPUE) at specific sites in Lake Worth Lagoon. This measurement allows for direct comparisons over time within Lake Worth Lagoon and with other ongoing research projects throughout the state.

3) Document the prevalence of fibropapillomatosis (FP), a potentially deadly disease that occurs at a high frequency among sea turtles in Indian River Lagoon and Florida Bay.

4) Obtain blood samples for genetic, sex ratio, and disease analysis.

5) Determine spatial distribution of sea turtles within Lake Worth Lagoon by collecting GPS waypoints for sightings and captures.

The above objectives have been met and confirmed that sea turtles are present in the lagoon year-round, identified specific areas of particularly high abundance, and provided baseline data on the abundance, size class structure, genetic origin, and disease incidence of marine turtles in the lagoon.

In order to take advantage of and build upon the baseline information gathered in the prior work and to gather current information on the population levels, health, and habitat use of turtles in a particularly important and vulnerable part of the lagoon, additional efforts are proposed to gather data in the northern segment of Lake Worth Lagoon near Little Munyon Island and Jupiter Inlet. This proposal includes sea turtle abundance surveys as well as continued capture and tagging efforts that will include an assessment of rates and severity of FP. It will also further investigate recently observed differences in diet between seasons and study site. The primary objectives of the proposed work are to:

- 1) Conduct seasonal sea turtle monitoring efforts in the area near Little Munyon Island and in the vicinity of the Jupiter Inlet in 2023-2025.
- Collect sea turtle abundance data on a permanently established monitoring transect near Little Munyon Island that will serve as an accurate index in-water abundance monitoring site for the area.
- 3) Conduct capture and tagging efforts in the Little Munyon Island and Jupiter Inlet areas to gather and document data on size class distribution and FP incidence and severity.
- 4) Examine dietary preferences of captured green turtles by season and study site.

5) Attach acoustic tags to up to ten juvenile green turtles near Little Munyon Island to assess green turtle movement in the area.

Sea turtles are viewed as an indicator species of the health of the lagoon. Long-term efforts to monitor the sea turtle population residing in the Lake Worth Lagoon is a valuable addition to the comprehensive program to restore the Lake Worth Lagoon being conducted by PBCERM. Local, state, and federal restoration plans include altering the amount of freshwater discharged to the lagoon, improving water quality, and constructing habitat restoration projects, all of which will lead to an increase in the amount of seagrass and other habitats in the lagoon and improve developmental habitat for juvenile green turtles. This project will help determine how sea turtles respond to these changes.

In addition, there was a recent deployment of multiple acoustic receivers as part of the cooperative Florida Atlantic Coastal Telemetry (FACT) at strategic points throughout LWL. This allows for the deployment of acoustic tags on sea turtles as a cost-effective method for monitoring movements of turtles within the area. Since recapture and tag return data for turtles captured at the Little Munyon study site are sparse, this potentially allows for a better understanding of habitat utilization by individual turtles. Additionally, researchers studying other marine species within the lagoon are also deploying acoustic tags and use the same receivers to study movements of their target species within the lagoon. Being a partner with FACT is a cost-effective solution to tracking turtles, elasmobranchs, and fish, and to assist in monitoring the effects of lagoon restoration.

SCOPE OF WORK

Materials and Methods

Sixteen (16) days of field work to gather sea turtle data will be conducted. Field work will include eight (8) days of quantitative visual transects and capture effort focused on the area in the northern lagoon near Little Munyon Island and eight (8) days of field work focused on the area near Jupiter Inlet. Effort will be divided into quarterly sampling periods spread throughout a 15-month period, dependent on favorable field conditions.

Visual Surveys

Sea turtle abundance and species composition will be evaluated using Haphazard Unmarked Nonlinear Transect (HUNT) surveys and permanently established grid transects.

HUNT transects will be conducted at both sites using the methodology employed in the previous phases of the project. The abundance data collected (observations per transect kilometer) will be directly comparable with data collected in the previous phases, allowing for a long-term assessment of sea turtle abundance at the selected sites. Data collected for all observations will include species, size class (juvenile, subadult, or adult), position in the water column (surface or underwater), and the GPS waypoint of the observation. Attempts will be made to conduct 40 kilometers of HUNT transects at the Little Munyon Island site based upon favorable environmental conditions. The turtles near Jupiter Inlet are clustered in such a small geographical area that a turtle is usually sighted so quickly that it likely biases abundance estimates at this site. HUNTs will only be used at the Jupiter Inlet study site when conducting exploratory visual surveys outside the main capture location.

A permanent transect grid has been established at the Little Munyon Island site. The layout of the transect grid was established to encompass the entire area of high-density turtle sightings in the Little Munyon Island area. The permanent transect grid covers a total of 10 km and will be run at least twice during the contract period when and if conditions are suitable for meeting the assumptions of density estimation (most importantly, when tide level, cloud cover, and water visibility allow for top to bottom visibility across the entire transect grid). Data collected for all observations will include species, size class (juvenile, subadult, or adult), position in the water column (surface or underwater), and the GPS waypoint of the observation. Large amounts of variability in the results of these surveys over the last few years have raised the possibility that the transect grid lines may be too closely spaced, resulting in oversampling (the possibility the same turtle is being counted more than once in a survey run). In this proposal, we use a revised transect grid utilized in 2019 and sample on that grid at least twice.



<u>Captures</u>

Capture efforts will also be conducted at both the Little Munyon Island and Jupiter Inlet sites. Captures by dip net and hand captures by the "rodeo" technique will be used to safely and efficiently capture turtles. Dip net captures shall be conducted using a large mesh nylon net with a three-foot diameter hoop mounted on a twelve-foot long handle. Observers in the tower guide the boat into position for the net operator in the bow to quickly "scoop" a resting or slowly swimming turtle. The boat then slowly follows the turtle until a dip net capture attempt can be made. If conditions of water depth and/or clarity or the behavior of the turtle are such that a capture cannot be easily and safely accomplished, the pursuit is terminated.

Hand captures (rodeo) consist of the boat closely following a turtle at slow speed until a diver is able to jump from the boat to capture the turtle by hand. Rodeo captures will be employed for turtles which are too large, in water too deep, or swimming too actively for the dip net capture method. Rodeo captures will be limited to waters greater than one meter deep for diver safety and to avoid impacts to seagrasses. The boat slowly follows the turtle until a rodeo capture attempt can be made. If conditions of water depth and/or clarity or the behavior of the turtle are such that a capture cannot be easily and safely accomplished, the pursuit is terminated.

When environmental conditions do not allow for captures to be conducted by dip net and rodeo methods, tangle nets will be used. Tangle net captures utilize a large-mesh tangle net 150 meters long by 5 meters deep, consisting of 40 centimeter stretch (knot to knot) multi-filament mesh suspended from a foam core braided polyethylene top (float) line with fixed buoys spaced 3.5 meters apart. The bottom (lead) line consists of small diameter lead core line. Each end of the net is secured with a small Danforth-type anchor. When turtles encounter the net and become entangled, they are quickly removed and placed on the deck of the boat. Using tangle nets increases the likelihood of bycatch for non-target species such as marine mammals and elasmobranchs, and therefore are only to be used when environmental conditions are not sufficient for preferred capture methods.

A minimum of 48 hours of capture effort will be conducted annually. All captured turtles will be measured, weighed, photographed, and tagged with flipper and implanted tags prior to release. Tumors associated with fibropapillomatosis (FP) will be measured and recorded on a standardized tumor score sheet.

Morphometric data will be collected for each turtle captured using forestry calipers and a flexible tape. Measurements include straight standard carapace length, straight minimum carapace length, straight carapace width, straight plastron length, curved carapace length, curved carapace width, and head width. Inconel #681 tags are applied to the trailing edge of each front flipper and a passive integrated transponder (PIT) tag is subcutaneously applied to the right front flipper. Before insertion of any tags, all flippers are scanned for the presence of any pre-existing PIT tags. Turtles are also weighed and photographed before they are released.

Tumors associated with FP will be measured and recorded at both sites on a standardized tumor score sheet. The total tumor score is used to assign turtles to severity categories. Throughout the processing period, the turtle is kept moist with wet towels and pads on the deck of the boat. Turtles with FP are kept

separate from other turtles and separate sets of measuring and tagging gear are used. After all samples and measurements are taken (approximately 25 minutes), the turtle is released near the original capture site. After the release, tagging and measuring equipment is disinfected with a bleach solution. The rate and severity of FP incidence will be compared with data gathered since 2005 in the previous phases, with the goal of establishing any long term trends in Lake Worth Lagoon.

<u>Diet</u>

Dietary samples will be extracted from captured green turtles at both sites using a technique called "lavage." The lavage process flushes food items from the esophagus and mouth areas. During this procedure turtles are held on their back with their posterior slightly elevated. A soft plastic veterinarian's stomach tube is lubricated with vegetable oil and cautiously inserted into the mouth and throat area. Seawater is then pumped through the tube using a veterinarian's double action pump. The tube is gently moved back and forth along the length of the esophagus and dietary items are collected in a bucket positioned under the turtle's head. The extracted diet sample are strained through a fine mesh net (mesh ~1mm) and placed into a collection jar. A 4% formalin-seawater solution is used to preserve the sample for future analysis. Date, location, tag numbers of the turtle, and absence/presence of FP tumors are recorded on the collection jar. Dietary lavage samples from both sites will be sorted under a dissecting microscope and identified to the lowest practicable taxon by Karen Holloway-Adkins of East Coast Biologists in Indialantic, Florida. Due to the high number of recapture events at the Jupiter Inlet site, dietary samples will only be collected twice per individual turtle per contract.

Acoustic Tracking

A subset of turtles will be tagged with acoustic transmitters to document temporal and spatial distribution, habitat utilization, and potential movement of individuals within the lagoon and possibly into adjacent waters. Innovasea V13 or similar coded transmitters weighing less than 25 g will be attached to the carapace by using a two-part cool-setting epoxy and fishing wire.

To prepare the carapace application site (posterior left or right marginal scutes) for tag attachment, the desired area on the posterior carapace will be cleared of epibionts using a scrubbing pad and light sandpaper. The carapace will then be lightly wiped with an acetone-dampened cloth and re-examined for any damage not previously visible. If the area is still appropriate as a tag attachment site, the drill site will be further prepared with a betadine solution. Local anesthetic (lidocaine) will also be administered prior to drilling. A chlorohexadine solution will be used to sterilize the 3mm diameter drill bit used to drill two holes approximately 15mm from the carapace marginal edge. If bleeding occurs during the drilling process, the procedure will cease, and sterile gauze will be applied with pressure to the area of bleeding until it stops. The acoustic transmitter will be tested before it is fitted with fishing wire and sunk into the putty-like two-part epoxy. Vigilant care will be made to avoid epoxy or drilling coming into contact with marginal seams (sutures) and/or the turtle's soft tissue. The wire will be secured evenly around the transmitter, and carefully pressed into the soft epoxy. Sources of potential heat are minimal during the drilling process as they will be monitored throughout the process and the two-part epoxy cures at a very low heat in less than an hour. All of the edges and corners of the tag application will be smoothed to



minimize any potential for entanglement and to help maintain as much of a hydrodynamic surface as possible. Turtles will be released close to the point of capture.

As green turtles tend to rub their carapace on rough surfaces to keep themselves free of epibionts, tag retention can be an issue as turtles tend to shed the acoustic tags before their batteries have been depleted. In an attempt to lengthen tag retention, half of the Innovasea V13 coded transmitters will be fitted with a cap which should serve as an additional place to secure the tag and therefore increase tag retention times even if the epoxy layer is shed. If tag retention time with the capped transmitters is greater than the un-capped transmitters, future tagging will be completed with only capped transmitters.

The tags will send a signal to a series of receivers strategically placed within the lagoon. The receivers will allow the team to monitor the movement of turtles within the northern Lake Worth Lagoon. Data from the receivers are typically downloaded every 8 - 10 months and uploaded to a central node with the Florida Atlantic Coastal Telemetry (FACT) network. Data from this node is then disseminated to individual researchers at least twice a year.

<u>Analysis</u>

Two separate but complementary methods will be employed to provide quantitative data on relative abundance. The HUNT method visual transects that are associated with capture efforts at both sites generate an index of abundance expressed in terms of sightings per transect kilometer, which is used for comparisons of abundance between different sites and habitat types, and to discern seasonal and annual fluctuations in population levels within a site. The permanently established transect conducted at the Little Munyon Island site can be analyzed using Distance 6.0 to provide abundance data expressed as observations per kilometer and thus be comparable to previous HUNT transects. Using Distance 6.0 allows for the variability in surface weather conditions and water clarity that occur between survey days to be accounted for in the determination of effective transect swath width, which produces lower variable estimates of abundance and also allows for calculation of turtle density, since the actual effective area of each transect run is calculated.



DELIVERABLES

A summary report will be provided following completion of the first eight (8) field days. The report will summarize the completed field work and provide a status update of data analysis. After the completion of an additional eight (8) field days, a final report will be compiled. The final report will include all results from the work and will contain data, maps, and analysis described above. The report will include:

- Results from HUNT and grid transects
- Number of turtles observed and abundance estimates
- Capture locations, tag numbers, and morphometric data from captured turtles.
- Species and size class distribution
- Maps showing capture and sighting locations (accompanying GIS files)
- FP incidence and severity
- Dietary analysis results
- Comparisons to previous LWL data and other nearby lagoon and nearshore reef populations
- Presentation to Lake Worth Lagoon stakeholders
- Weather Conditions
- Acoustic tagging data

The final report will be provided no later than 60 days after completion of the last field day. Reports will be submitted electronically (Word, Excel, PDF, digital photos).

Cost: \$44,308.00*

*Includes the cost of acoustic tags which would require additional written approval from PBCERM, as described in Exhibit B.



COST PROPOSAL

Item	Units	Unit Cost	Total Cost
Expendables (Biopsy kit, tags, PIT tags, acoustic supplies)	1	\$900.00	\$900.00
Vessel (fuel, dockage, insurance)	16	\$450.00	\$7,200.00
Field labor (4 biologists x 8 h/day x 16 days)	512	\$48.00	\$24,576.00
Travel (90 miles/day @ \$0.65/mile)	16	\$58.50	\$936.00
Diet analysis	50	\$100.00	\$5,000.00
Innovasea V13 Acoustic tags*	10	400.00	\$4,000.00*
Report Preparation (1 senior biologist x 8 h/day x 4 days)	32	\$53.00	\$1,696.00

Total Project Cost

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\$44,308.00

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*Requires additional written approval from PBCERM to proceed with this task, as described in Exhibit B.

SCHEDULE OF PAYMENTS

The Scope of Work to be completed by CONSULTANT as defined in Exhibit "A" consists of specific completion phases which shall be clearly identified on a phase-by-phase basis upon submission to the COUNTY of certain "deliverables"* as expressly indicated below. Compensation for the work tasks stated herein shall be in accordance with the following Schedule of Payments:

FIRST SESSION (First Eight (8) Field Days)

Task(s) to be completed: Field work and summary report of field work and status of data analysis

Completion Time: Dependent upon conditions; Summary Report – 30 days after the completion of the eighth (8th) field day.

Compensation for First Session: \$20,154.00 – To be paid upon receipt and approval by PBC ERM of summary report

Deliverable(s) Required: First Session Summary Report

SECOND SESSION (Second Eight (8) Field Days)

Task(s) to be completed: Field work and final report compiling results and analysis of work completed in first and second sessions

Completion Time: Dependent upon conditions; Final Report – 60 days after the completion of the sixteenth (16^{th}) field day.

Compensation for Second Session: \$20,154.00 - To be paid upon receipt and approval by PBC ERM of Final Report

Deliverable(s) Required: Final Report

ADDITIONAL OPTIONAL TASK (Acoustic Tagging)

Task(s) to be completed: Upon written approval with a Notice To Proceed from PBC ERM, up to ten (10) sea turtles in the Munyon Island area of Lake Worth Lagoon will be tagged with acoustic transmitters. Tagging shall be completed during the First Session and/or Second Session.

Completion Time: Dependent upon conditions; Must be completed during the First Session and/or Second Session.

Compensation for Acoustic Tags: Not to exceed \$4,000.00 (\$400 per tag, not to exceed 10 tags)—Each tag shall be paid according to the Session during which the tagging occurred, upon receipt and approval by PBC ERM of tagging data and summary of effort included in the First Session Summary Report and/or Final Report, as applicable.

Deliverable(s) Required: Tagging data and summary of effort to be included in First Session Summary Report and/or Final Report, as applicable. Moreover, all tagging data and summary of effort from both Sessions shall be included in the Final Report, regardless of which Session(s) the acoustic tag(s) were deployed.

Total (including compensation for Additional Optional Task) = \$44,308.00

* "Deliverables" shall be defined as progress reports, prepared maps, bid documents, completed drawings, specific reports, work plans, documentation of meetings attended, assessment study reports, analysis reports, summary reports, recommendation reports and related draft reports and verifiable deliverables.

** In the event that a survey day cannot be completed due to weather and the CONSULTANT is unable to reschedule, the invoice for that period will be reduced by a total of Two Thousand, Four Hundred Thirteen Dollars and Twenty Five Cents (\$2,413.25) per missed day.