

**PROFESSIONAL CONSULTANT SERVICES AGREEMENT
MEIOFAUNA BASELINE STUDY
SPECIFICATION NO. CS-2021-1266BD**

This AGREEMENT is made and entered into as of the date fully executed below, by and between Orange County Sanitation District, with a principal place of business at 10844 Ellis Avenue, Fountain Valley, CA 92708 (hereinafter referred to as "OC San") and Florida State University Sponsored Research Administration with a principal place of business at 874 Traditions Way, Tallahassee, FL 32306-4166 (hereinafter referred to as "Consultant") collectively referred to as the "Parties".

WITNESSETH

WHEREAS, based on Consultant's expertise and experience, OC San desires to temporarily engage Consultant to provide services for a Meiofauna Baseline Study ("Services") as described in Exhibit "A"; and

WHEREAS, Consultant submitted its Proposal, dated December 1, 2021, which is attached hereto as Exhibit "B"; and

WHEREAS, on March 23, 2022, the Board of Directors of OC San, by minute order, authorized execution of this Agreement between OC San and Consultant; and

WHEREAS, OC San has chosen Consultant to conduct Services in accordance with Ordinance No. OC SAN-56; and

NOW, THEREFORE, in consideration of the mutual promises and mutual benefits exchanged between the Parties, the Parties mutually agree as follows:

1. Introduction

1.1 This Agreement and all exhibits hereto (called the "Agreement") are made by OC San and the Consultant. The terms and conditions herein exclusively govern the purchase of Services as described in Exhibit "A".

1.2 Exhibits to this Agreement are incorporated by reference and made a part of this Agreement as though fully set forth at length herein.

Exhibit "A" Scope of Work
Exhibit "B" Proposal and Cost Proposal Form
Exhibit "C" Determined Insurance Requirement Form
Exhibit "D" Contractor Safety Standards
Exhibit "E" Human Resources Policies

1.3 In the event of any conflict or inconsistency between the provisions of this Agreement and any of the provisions of the exhibits hereto, the provisions of this Agreement shall in all respects govern and control.

1.4 This Agreement may not be modified, changed, or supplemented, nor may any obligations hereunder be waived or extensions of time for performance granted, except by written instrument signed by both Parties.

1.5 The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any section or provision hereof.

- 1.6 The term “days”, when used in the Agreement, shall mean calendar days, unless otherwise noted as workdays.
- 1.7 The term “workday”. Workdays are defined as all days that are not Saturday, Sunday, or OC San observed holidays. Meetings with OC San staff shall be scheduled from Monday through Thursday between the hours of 8 a.m. and 4 p.m. (exception is Operations staff who maintain plant operations 24/7 and work a rotated 12-hour shift) and shall conform to OC San work schedules.
- 1.8 OC San holidays (non-working days) are as follows: New Year’s Day, Lincoln’s Birthday, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.
- 1.9 Work Hours: The work required under this Agreement may include normal business hours, evenings, and weekends. OC San will not pay for travel time.
- 1.10 Work Hours: All work shall be scheduled with OC San staff Monday through Thursday, between the hours of 7:00 a.m. and 5:30 p.m.
- 1.11 OC San will not be held responsible for any overtime or premium workday payments. Additionally, OC San will not be held responsible for paying any amount over the agreed-upon project total.
- 1.12 Except as expressly provided otherwise, OC San accepts no liability for any expenses, losses, or action incurred or undertaken by Consultant as a result of work performed in anticipation of purchases of said Services by OC San.
2. **Scope of Work** Subject to the terms of this Agreement, Consultant shall perform the Services identified in Exhibit “A”. Consultant warrants that all of its Services shall be performed in a competent, professional, and satisfactory manner.
3. **Modifications to Scope of Work** Requests for modifications to the Scope of Work hereunder can be made by OC San at any time. All modifications must be made in writing and signed by both Parties. A review of the time required for the modification will be made by OC San and Consultant and the Agreement period adjusted accordingly.
4. **Compensation**
Compensation to be paid by OC San to Consultant for the Services provided under this Agreement shall be a total amount not to exceed Two Hundred Seventy-seven Thousand, Nine Hundred Forty-six Dollars (\$277,946.00).
5. **California Department of Industrial Relations (DIR) Registration and Record of Wages**
 - 5.1 To the extent Consultant’s employees and/or subconsultants who will perform work for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, Consultant and subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.
 - 5.2 The Consultant and subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

- 5.3 Pursuant to Labor Code Section 1776, the Consultant and subconsultants shall furnish a copy of all certified payroll records to OC San and/or general public upon request, provided the public request is made through OC San, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations.
- 5.4 The Consultant and subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).
- 6. Payment and Invoicing**
- 6.1 OC San shall pay, net thirty (30) days, upon receipt and approval, by OC San's Project Manager or designee, of itemized invoices submitted for Milestones completed as identified in Exhibit B.
- 6.2 OC San, at its sole discretion, shall be the determining party as to whether the Milestones have been satisfactorily completed.
- 6.3 Invoices shall be emailed by Consultant to OC San Accounts Payable at APStaff@OCSan.gov and "INVOICE" with the Purchase Order Number and CS-2021-1266BD shall be referenced in the subject line.
- 7. Audit Rights** Consultant agrees that, during the term of this Agreement and for a period of three (3) years after its termination, OC San shall have access to and the right to examine any directly pertinent books, documents, and records of Consultant relating to the invoices submitted by Consultant pursuant to this Agreement.
- 8. Commencement and Term** The Services provided under this Agreement shall be completed within 730 calendar days from the effective date of the Notice to Proceed.
- 9. Extensions** The term of this Agreement may be extended only by written instrument signed by both Parties.
- 10. Performance** Consultant agrees to use its best efforts in the performance of the provisions hereof.
- 11. Termination**
- 11.1 Either party may terminate this Agreement without cause upon thirty (30) business days' written notice of the intent to do so, and such action shall in no event be deemed a breach of contract. In the event this Agreement is so terminated, Consultant will be paid for all costs incurred and non-cancelable obligations made up to the date of termination.
- 11.2 OC San reserves the right to terminate this Agreement immediately upon OC San's determination that Consultant is not complying with the Scope of Work requirements, if the level of service is inadequate, or any other default of this Agreement.
- 11.3 OC San may also immediately terminate for default of this Agreement in whole or in part by written notice to Consultant:
- if Consultant becomes insolvent or files a petition under the Bankruptcy Act; or
 - if Consultant sells its business; or
 - if Consultant breaches any of the terms of this Agreement; or
 - if total amount of compensation exceeds the amount authorized under this Agreement.

11.4 All OC San property in the possession or control of Consultant shall be returned by Consultant to OC San on demand, or at the termination of this Agreement, whichever occurs first.

12. **Indemnification and Hold Harmless Provision** Consultant shall, to the limits of Two Hundred Thousand (\$200,000) per person, with a cumulative total of Three Hundred Thousand (\$300,000) per occurrence, indemnify, save and hold harmless from any and all actions, obligations, claims, damages, expenses, costs of any kind, debts, negligence, and liabilities arising from, or in any way relate to, acts or omissions of Consultant, its employees, volunteers, subcontractors, or clientele, in performance of or failure to perform under, this Agreement.

13. **Insurance** Consultant will maintain, during the term of the Agreement, comprehensive general liability insurance with limits for bodily injury and property damage combined in the amount of Two Hundred Thousand (\$200,000) per person, Three Hundred Thousand (\$300,000) per occurrence, for the protection of Consultant against any and all claims arising out of this Agreement.

14. **Key Personnel** Personnel, as provided in Exhibit "B", are considered "key" to the work under this Agreement and will be available for the term of the Agreement. No person designated as key under this Agreement shall be removed or replaced without prior written consent of OC San. If OC San asks Consultant, by written notice, to remove a person designated as key under this Agreement, Consultant agrees to do so regardless of the reason for OC San's request. Consultant shall assign only competent personnel to perform Services pursuant to this Agreement.

15. **Confidentiality and Non-Disclosure**

15.1 Consultant acknowledges that in performing the Services hereunder, OC San may have to disclose to Consultant orally and in writing certain confidential information that OC San considers proprietary and has developed at great expense and effort.

15.2 Consultant agrees to maintain in confidence and not disclose to any person, firm, or corporation, without OC San's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of OC San.

15.3 Consultant further agrees to maintain in confidence and not to disclose to any person, firm, or corporation any data, information, technology, or material developed or obtained by Consultant during the term of this Agreement.

15.4 Consultant agrees as follows:

- To use the confidential information only for the purposes described herein; to not reproduce the confidential information; to hold in confidence and protect the confidential information from dissemination to and use by anyone not a party to this Agreement; and to not use the confidential information to benefit itself or others.
- To restrict access to the confidential information to its subconsultant or personnel of Consultant who (1) have a need to have such access and (2) have been advised of and have agreed in writing to treat such information in accordance with the terms of this Agreement.
- To return all confidential information in Consultant's possession upon termination of this Agreement or upon OC San's request, whichever occurs first.

- To hold in confidence information and materials, if any, developed pursuant to the Services hereunder.

15.5 The provisions of this section shall survive termination or expiration of this Agreement and shall continue for so long as the material remains confidential.

16. Ownership of Documents All drawings, specifications, reports, records, documents, memoranda, correspondence, computations, and other materials prepared by Consultant, its employees, subconsultants, and agents in the performance of this Agreement shall be the property of OC San and shall be promptly delivered to OC San upon request of OC San's Project Manager or designee, or upon the termination of this Agreement, and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by OC San of its full rights of ownership of the documents and materials hereunder. Any use of such completed documents for other projects and/or use of incomplete documents without specific written authorization by the Consultant will be at OC San's sole risk and without liability to Consultant. Consultant shall ensure that all its subconsultants shall provide for assignment to OC San of any documents or materials prepared by them.

17. Ownership of Intellectual Property

17.1 Consultant agrees that all designs, plans, reports, specifications, drawings, schematics, prototypes, models, inventions, and all other information and items made during the course of this Agreement and arising from the Services (hereinafter referred to as "New Developments") shall be and are assigned to OC San as its sole and exclusive property.

17.2 Consultant agrees to promptly disclose to OC San all such New Developments. Upon OC San's request, Consultant agrees to assist OC San, at OC San's expense, to obtain patents or copyrights for such New Developments, including the disclosure of all pertinent information and data with respect thereto, the execution of all applications, specifications, assignments, and all other instruments and papers which OC San shall deem necessary to apply for and to assign or convey to OC San, its successors and assigns, the sole and exclusive right, title and interest in such New Developments. Consultant agrees to obtain or has obtained written assurances from its employees and contract personnel of their agreement to the terms hereof with regard to New Developments and confidential information.

17.3 Consultant warrants that Consultant has good title to any New Developments, and the right to assign New Developments to OC San free of any proprietary rights of any other party or any other encumbrance whatever.

17.4 The originals of all computations, drawings, designs, graphics, studies, reports, manuals, photographs, videotapes, data, computer files, and other documents prepared or caused to be prepared by Consultant or its subconsultants in connection with these Services shall be delivered to and shall become the exclusive property of OC San. OC San may utilize these documents for OC San applications on other projects or extensions of this project, at its own risk.

18. No Solicitation of Employees Consultant agrees that it shall not, during the term of this Agreement and for a period of one (1) year immediately following termination of this Agreement, or any extension hereof, call on, solicit, or take away any of the employees whom Consultant became aware of as a result of Consultant's Services to OC San.

19. Independent Contractor Capacity

- 19.1 The relationship of Consultant to OC San is that of an independent contractor and nothing herein shall be construed as creating an employment or agency relationship.
- 19.2 Consultant shall act independently and not as an officer or employee of OC San. OC San assumes no liability for Consultant's action and performance, nor assumes responsibility for taxes, funds, payments or other commitments, implied or expressed, by or for Consultant.
- 19.3 Consultant shall not be considered an agent of OC San for any purpose whatsoever, nor shall Consultant have the right to, and shall not, commit OC San to any agreement, contract or undertaking. Consultant shall not use OC San's name in its promotional material or for any advertising or publicity purposes without expressed written consent.
- 19.4 Consultant shall not be entitled to any benefits accorded to those individuals listed on OC San's payroll as regular employees including, without limitation, worker's compensation, disability insurance, vacation, holiday or sick pay. Consultant shall be responsible for providing, at Consultant's expense, disability, workers' compensation or other insurance as well as licenses and permits usual or necessary for conducting the Services hereunder.
- 19.5 Consultant shall be obligated to pay any and all applicable Federal, State and local payroll and other taxes incurred as a result of fees hereunder. Consultant hereby indemnifies OC San for any claims, losses, costs, fees, liabilities, damages or penalties suffered by OC San arising out of Consultant's breach of this provision.
- 19.6 Consultant shall not be eligible to join or participate in any benefit plans offered to those individuals listed on OC San's payroll as regular employees. Consultant shall remain ineligible for such benefits or participation in such benefit plans even if a court later decides that OC San misclassified Consultant for tax purposes.

20. Licenses, Permits Consultant represents and warrants to OC San that it has obtained all licenses, permits, qualification and approvals of whatever nature that are legally required to engage in this work. Any and all fees required by Federal, State, County, City and/or municipal laws, codes and/or tariffs that pertain to work performed under the terms of this Agreement will be paid by Consultant.

21. Consultant's Representations In the performance of duties under this Agreement, Consultant shall adhere to the highest fiduciary standards, ethical practices and standards of care and competence for their trade/profession. Consultant agrees to comply with all applicable Federal, State and local laws and regulations.

22. Familiarity with Work By executing this Agreement, Consultant warrants that: 1) it has investigated the work to be performed; 2) it has investigated the site of the work and is aware of all conditions there; and 3) it understands the facilities, difficulties and restrictions of the work under this Agreement. Should Consultant discover any latent or unknown conditions materially differing from those inherent in the work or as represented by OC San, it shall immediately inform OC San of this and shall not proceed, except at Consultant's risk, until written instructions are received from OC San.

23. Right to Review Services, Facilities, and Records

- 23.1 OC San reserves the right to review any portion of the Services performed by Consultant under this Agreement, and Consultant agrees to cooperate to the fullest extent possible.
- 23.2 Consultant shall furnish to OC San such reports, statistical data, and other information pertaining to Consultant's Services as shall be reasonably required by OC San to carry out

its rights and responsibilities under its agreements with its bondholders or noteholders and any other agreement relating to the development of the project(s) and in connection with the issuance of its official statements and other prospectuses with respect to the offering, sale, and issuance of its bonds and other obligations.

- 23.3 The right of OC San to review or approve drawings, specifications, procedures, instructions, reports, test results, calculations, schedules, or other data that are developed by Consultant shall not relieve Consultant of any obligation set forth herein.
24. **Force Majeure** Neither party shall be liable for delays caused by accident, flood, acts of God, fire, labor trouble, war, acts of government or any other cause beyond its control, but said party shall use reasonable efforts to minimize the extent of the delay. Work affected by a Force Majeure condition may be rescheduled by mutual consent or may be eliminated from the Agreement.
25. **Severability** If any section, subsection, or provision of this Agreement, or any agreement or instrument contemplated hereby, or the application of such section, subsection, or provision is held invalid, the remainder of this Agreement or instrument in the application of such section, subsection or provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby, unless the effect of such invalidity shall be to substantially frustrate the expectations of the Parties.
26. **Waiver** The waiver of either party of any breach or violation of, or default under, any provision of this Agreement, shall not be deemed a continuing waiver by such party of any other provision or of any subsequent breach or violation of this Agreement or default thereunder. Any breach by Consultant to which OC San does not object shall not operate as a waiver of OC San's rights to seek remedies available to it for any subsequent breach.
27. **Remedies** In addition to other remedies available in law or equity, if the Consultant fails to make delivery of the goods or Services or repudiates its obligations under this Agreement, or if OC San rejects the goods or Services or revokes acceptance of the goods or Services, OC San may terminate the Agreement.
28. **Governing Law** This Agreement shall be governed by applicable state law, in the event any action is brought in connection with this Agreement or the performance thereof.
29. **Environmental Compliance** Consultant shall, at its own cost and expense, comply with all Federal, State, and local environmental laws, regulations, and policies which apply to the Consultant, its sub-consultants, and the Services, including, but not limited to, all applicable Federal, State, and local air pollution control laws and regulations.
30. **Attorney's Fees** In the event of litigation arising out of this Agreement, each party agrees to be responsible for their own attorney's fees and costs, regardless of outcome.
31. **Dispute Resolution**
- 31.1 In the event of a dispute as to the construction or interpretation of this Agreement, or any rights or obligations hereunder, the Parties shall first attempt, in good faith, to resolve the dispute by mediation. The Parties shall mutually select a mediator to facilitate the resolution of the dispute. If the Parties are unable to agree on a mediator, the mediation shall be conducted in accordance with the Commercial Mediation Rules of the American Arbitration Agreement, through the alternate dispute resolution procedures of Judicial Arbitration through Mediation Services of Orange County ("JAMS"), or any similar organization or entity conducting an alternate dispute resolution process.

- 31.2 In the event the Parties are unable to timely resolve the dispute through mediation, the issues in dispute shall be submitted to arbitration pursuant to California Code of Civil Procedure, Part 3, Title 9, Sections 1280 et seq. For such purpose, an agreed arbitrator shall be selected, or in the absence of agreement, each party shall select an arbitrator, and those two (2) arbitrators shall select a third. Discovery may be conducted in connection with the arbitration proceeding pursuant to California Code of Civil Procedure Section 1283.05. The arbitrator, or three (3) arbitrators acting as a board, shall take such evidence and make such investigation as deemed appropriate and shall render a written decision on the matter in question. The arbitrator shall decide each and every dispute in accordance with applicable state law. The arbitrator's decision and award shall be subject to review for errors of fact or law in a court of competent jurisdiction, with a right of appeal from any judgment issued therein.
32. **Damage to OC San's Property** Any OC San property damaged by Consultant will be subject to repair or replacement by Consultant at no cost to OC San.
33. **Contractor Safety Standards and Human Resources Policies** OC San requires Consultant and its subconsultants to follow and ensure their employees follow all Federal, State and local regulations as well as Contractor Safety Standards while working at OC San locations. If during the course of the Agreement it is discovered that Contractor Safety Standards do not comply with Federal, State or local regulations, then the Consultant is required to follow the most stringent regulatory requirement at no additional cost to OC San. Consultant and all of its employees and subconsultants, shall adhere to all applicable Contractor Safety Standards attached hereto in Exhibit "D" and the Human Resources Policies in Exhibit "E".
34. **Freight (F.O.B. Destination)** Consultant assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Agreement.
35. **Assignments** Consultant shall not delegate any duties nor assign any rights under this Agreement without the prior written consent of OC San. Any such attempted delegation or assignment shall be void.
36. **Conflict of Interest and Reporting**
- 36.1 Consultant shall at all times avoid conflicts of interest or appearance of conflicts of interest in performance of this Agreement.
- 36.2 Consultant affirms that to the best of its knowledge there exists no actual or potential conflict between Consultant's families, business or financial interest or its Services under this Agreement, and in the event of change in either its private interests or Services under this Agreement, it will raise with OC San any question regarding possible conflict of interest which may arise as a result of such change.
37. **Third Party Rights** Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OC San and Consultant.
38. **Non-Liability of OC San Officers and Employees** No officer or employee of OC San shall be personally liable to Consultant, or any successor-in-interest, in the event of any default or breach by OC San or for any amount which may become due to Consultant or to its successor, or for breach of any obligation of the terms of this Agreement. However, OC San would be liable in the event of a default or breach even if its officers and employees are not personally liable.

39. **Authority to Execute** The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the Parties are formally bound.
40. **Read and Understood** By signing this Agreement, Consultant represents that it has read and understood the terms and conditions of the Agreement.
41. **Entire Agreement** This Agreement constitutes the entire agreement of the Parties and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations between the Parties with respect to the subject matter hereof.
42. **Notices** All notices under this Agreement must be in writing. Written notice shall be delivered by personal service or sent by registered or certified mail, postage prepaid, return receipt requested, or by any other overnight delivery service which delivers to the noticed destination and provides proof of delivery to the sender. Any facsimile notice must be followed within three (3) days by written notice. Rejection or other refusal to accept or the inability to deliver because of changed address for which no notice was given as provided hereunder shall be deemed to be receipt of the notice, demand or request sent. All notices shall be effective when first received at the following addresses:

OC San: Jackie Lagade, Principal Buyer
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708-7018

Consultant: Laurel Fulkerson
Interim Vice President for Research
Florida State University
Sponsored Research Administration
874 Traditions Way
Tallahassee, FL 32306-4166

Each party shall provide the other party written notice of any change in address as soon as practicable.

[Intentionally left blank. Signatures follow on the next page.]

IN WITNESS WHEREOF, intending to be legally bound, the Parties hereto have caused this Agreement to be signed by the duly authorized representatives.

ORANGE COUNTY SANITATION DISTRICT

Dated: _____

By: _____
John B. Withers
Chair, Board of Directors

Dated: _____

By: _____
Kelly A. Lore
Clerk of the Board

Dated: _____

By: _____
Ruth Zintzun
Purchasing & Contracts Manager

**FLORIDA STATE UNIVERSITY
SPONSORED RESEARCH ADMINISTRATION**

Dated: _____

By: _____

Print Name and Title of Officer

CMM

EXHIBIT A
SCOPE OF WORK
For
Meiofauna Baseline Study

EXHIBIT A
SCOPE OF WORK
MEIOFAUNA BASELINE STUDY
SPECIFICATION NO. CS-2021-1266BD

EXECUTIVE SUMMARY/OVERVIEW

The Orange County Sanitation District (OC San) operates the third largest wastewater agency west of the Mississippi River. Since 1954, we have safely collected, treated, and disposed of and/or reclaimed the wastewater generated by 2.6 million people living and working in central and northwestern Orange County, California.

Each day we treat approximately 185 million gallons of wastewater, enough water to fill the Anaheim stadium over two and a quarter times. About 80 percent of the wastewater comes from homes – sinks, toilets, showers, laundry, and dishwashers. The remaining come from businesses – retail stores, restaurants, manufacturers, hotels, offices, and other industries.

1 Purpose

Meiofauna are animals ranging from 63 to 500 micrometers in size and are generally considered to be more sensitive than macrofauna to environmental change, because they have non-planktonic larvae and shorter generation times. OC San is seeking a qualified Consultant to participate in one (1) meiofauna sample collection cruise, process and analyze meiofauna samples from sites within OC San's coastal monitoring area, and provide a report on the findings.

2 Description

Secondary effluent from Plant No. 1 at OC San is diverted to the Orange County Water District (OCWD) for the Green Acres Project (GAP) and the Groundwater Replenishment System (GWRS) for water reclamation purposes. By contrast, secondary effluent from OC San's Plant No. 2 is blended with other treated waste streams from the GWRS, GAP, and both Plants to form the final effluent, which in turn is discharged into the Pacific Ocean at a depth of 60 meters. OC San began diverting 35 million gallons per day (MGD) of secondary effluent to the GWRS (for Phase I) in 2007-2008. Over time, the average water reclamation diversions increased to 68 MGD in 2008-2009, 84 MGD in 2013-2014 (for Phase II), and 130 MGD in 2017-2018. The increased water reclamation diversions, combined with reduced influent flows, have dramatically reduced ocean discharge flows in recent years. Ocean discharge flows are projected to further decrease as OC San and OCWD are presently working jointly on the GWRS Final Expansion project (Phase III) to divert 170 MGD of secondary effluent to OCWD by 2023 to produce 130 MGD of reclaimed water.

Although the reclamation efforts are beneficial to the Orange County residents, there is a concern that the increase of reverse osmosis concentrate in the final effluent from the GWRS Final Expansion project may impact organisms in the receiving environment. While OC San has been monitoring benthic macrofauna since the 1970s as part of its Ocean Monitoring Program, OC San is interested in the utility of meiofauna as a bioindicator of anthropogenic stressors. As such, the Consultant will collect, process, and characterize meiofauna samples in OC San's monitoring area to address the following questions:

- 1) Are there spatial and temporal differences in meiofauna assemblages among the sampling sites?
- 2) What are the environmental drivers of meiofauna community structure in the study area?

3 Project Elements

This project consists of collecting, sorting, identifying, analyzing, and reporting on the meiofauna from three replicate core samples that will be collected at five outfall-depth stations (Figure 1), once in the Spring quarter (April-June) and once in the Fall quarter (October-December) of 2022. Replicate core samples also will be collected simultaneously for chemistry and granulometric analyses. The Consultant is expected to have expert level knowledge of meiofauna collection, identification, biology, and ecology.

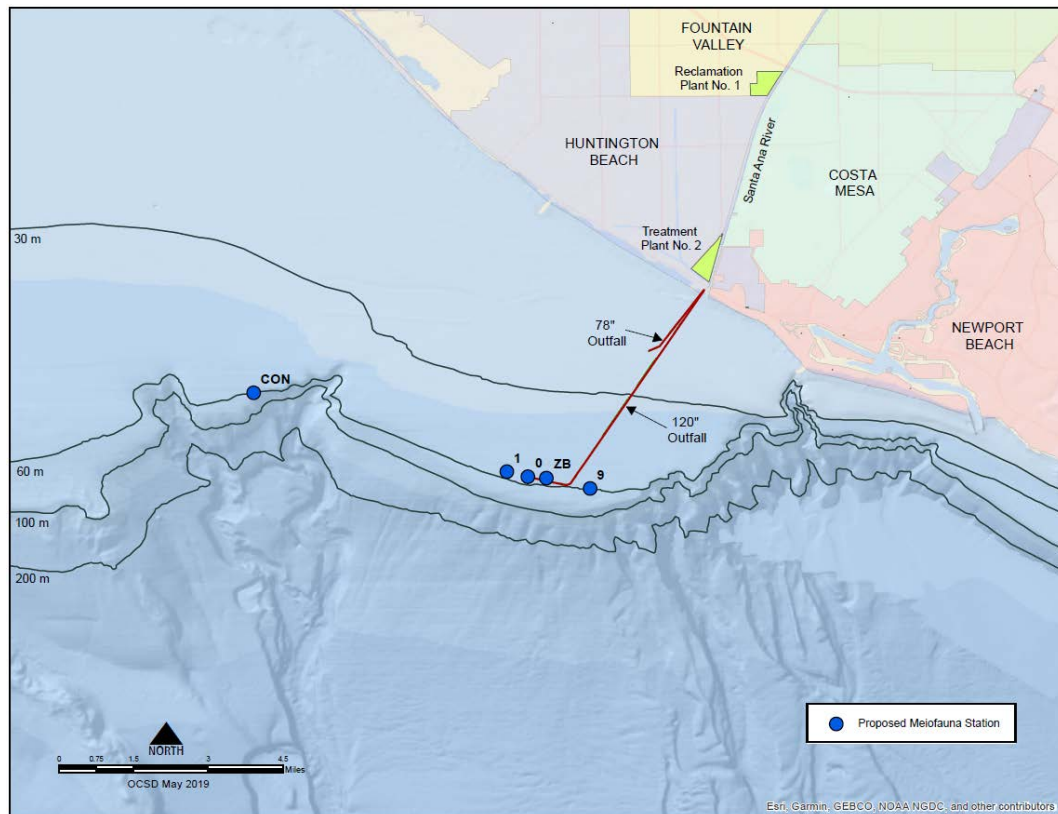


Figure 1. Location of proposed sampling sites.

3.1 Field Collection

The Consultant is required to participate in the first field survey to oversee sample collection at the five stations. Samples from the first and second field surveys will be collected by OC San and shipped to the Consultant for processing. See Section 4.1 for resources available for field collection.

The three replicate meiofauna samples at each station will be vertically sectioned into three aliquots (0-1 cm, 1-3 cm, and 3-5 cm depths) in the field. This equates to 45 sample jars per sampling cruise, and a total of 90 sample jars for the two sampling cruises.

3.2 Sorting

The Consultant shall sieve and sort the samples using standard methods to extract the meiofauna. A minimum of 10% of the core samples shall be re-sorted by the Consultant to monitor sorter performance and to determine achievement of the measurement quality objective (MQO) of 95%.

3.3 Identification

The Consultant shall enumerate and identify all organisms, particularly nematodes and/or copepods, to the lowest possible taxonomic level in each sample. A

re-identification of a minimum of 5% of the core samples shall be conducted to determine achievement of the MQO of 90%.

DNA barcoding as an additional and complementary identification tool is preferred, but it is not required for this project.

3.4 Data analysis and reporting

OC San will provide sediment geochemistry data to the Consultant for data analysis, as well as maps and metadata (e.g., sampling information) for reporting.

The Consultant shall submit the QC results in either Microsoft Word or Excel formats along with the specimen identification data in Microsoft Excel format by the end of the 2023 Winter quarter for the first set of samples and by the end of the 2023 Summer quarter for the second set of samples. The specimen identification data file shall contain station, sampling date, depth, phylum, class, order, family, genus, species, and count fields.

A draft report shall be submitted electronically to OC San by the end of the 2023 Fall quarter for review. The draft report shall record all data as required in this scope of work (SOW), assembled in Microsoft Word format, and include at least the basic elements of a professional report (e.g., Table of Contents, Page Numbers, References, Tables, Graphs) as necessary to present the data in a clear and concise manner.

The final report shall be submitted electronically to OC San by the end of the 2024 Winter quarter.

4 Resources Available

4.1 Field Collection

OC San's Ocean Monitoring team will deploy a 4-sample tube multicorer (tube size is 10 cm x 58 cm) from the M/V *Nerissa* to collect all core samples (Figure 2). The Consultant must follow OC San's COVID-19 protocols when onboard the *Nerissa*.



Figure 2. OC San's M/V *Nerissa* (left photo) and multicorer (right photo).

4.2 Laboratory facility

OC San's Taxonomy Laboratory, located at Plant No.1 in Fountain Valley, is available for sieving the core samples if needed. The Consultant must follow OC San's COVID-19 protocols when on-site.

4.3 Sediment geochemistry analyses

OC San's analytical chemistry team and contractors will measure the grain size, total organic carbon, metals, and persistent organic pollutants in select core samples.

5 Project Schedule

The project will commence in April 2022 (beginning of the Spring quarter) and end in March 2024 (end of the Winter quarter).

Consultant shall adhere to the following deadlines in creating its schedule and work breakdown structure for accomplishing the SOW. Consultant shall coordinate all meetings and presentations with the assigned OC San Project Manager. All meetings and presentations will be held virtually.

<u>MILESTONE</u>	<u>ACTIVITY</u>	<u>DEADLINE</u>
1	Kick-Off Meeting	NTP = Effective Date
	Project Schedule Submitted	NTP + 7 Calendar Days
2	Sample Collection	NTP + 90 Calendar Days
3	Sorting and Identification of 1 st Set of Samples	NTP + 365 Calendar Days
4	Sorting and Identification of 2 nd Set of Samples	NTP + 548 Calendar Days
5	Draft Report	NTP + 640 Calendar Days
6	Final Report	NTP + 730 Calendar Days

6 Project Management

6.1 Project Kick-Off Meeting

Prior to the commencement of work, a virtual kick-off meeting with OC San staff shall be held to establish appropriate contacts and review the Consultant's plan to implement this work.

6.2 Additional Meetings

After the commencement of work, there shall be virtual meetings between OC San staff and the Consultant every six months until the completion of the contract. The Consultant shall provide an update on the work in progress during each meeting.

6.3 Changes to Approved Project Assignment

OC San may order changes by issuance of a written revision to the project. If such changes impact the price, expenditure limitations, or schedule, then an equitable adjustment and schedule shall be negotiated and shall be set forth in an amendment to the Agreement.

7 Deliverables

There are a total of six (6) milestones for payment associated with the deliverables herein. Payments for milestones are a percentage of the not to exceed amount of the Agreement as described in the individual deliverables herein.

7.1 Milestone No. 1 – Project Schedule

The Consultant shall provide a detailed schedule for this project (see Table 1) in Microsoft Word or Adobe PDF format via email to the OC San Project Manager no later than 7 business days prior to the virtual kick-off meeting. This schedule includes neither all aspects nor intricacies of the required project reporting requirements. Rather, it is provided as a convenient reference for the Consultant to use as a basis for the required Deliverable—Overall Project Schedule.

Table 1. Proposed project schedule.

Study milestone	Spring 2022	Summer 2022	Fall 2022	Winter 2023	Spring 2023	Summer 2023	Fall 2023	Winter 2024
Kick-off meeting and Project schedule								
Sample collection								
Process and ID 1st meiofauna samples								
Process and ID 2nd meiofauna samples								
Submission of draft report								
Submission of final report								

Payment for Milestone No. 1 shall be ten percent (10%) of the not to exceed amount of the Agreement. Payment for Milestone No. 1 is contingent upon the OC San Project Manager's acceptance of the final version of the submittal. Payment for Milestone No. 1 also includes the Consultant's attendance at the virtual kick-off meeting.

7.2 Milestone No. 2 – Sample Collection

Milestone No. 2 includes the Consultant's participation in the first field survey as described in Project Element 3.1 herein.

Payment for Milestone No. 2 shall be fifteen percent (15%) of the not to exceed amount of the Agreement.

7.3 Milestone No. 3 – Sorting and Identifying First Set of Meiofauna Samples

Milestone No. 3 includes the Consultant's submittal of (1) sorting and identification QC results as described, respectively, in Project Elements 3.2 & 3.3 herein, and (2) specimen identification data as described in Project Element 3.4 for the first set of samples.

Payment for Milestone No. 3 shall be twenty percent (20%) of the not to exceed amount of the Agreement. Payment for Milestone No. 3 is contingent upon the OC San Project Manager's acceptance of the submittal as complete.

7.4 Milestone No. 4 – Sorting and Identifying Second Set of Meiofauna Samples

Milestone No. 4 includes the Consultant's submittal of (1) sorting and identification QC results as described, respectively, in Project Elements 3.2 & 3.3 herein, and (2) specimen identification data as described in Project Element 3.4 for the second set of samples.

Payment for Milestone No. 4 shall be twenty percent (20%) of the not to exceed amount of the Agreement. Payment for Milestone No. 4 is contingent upon the OC San Project Manager's acceptance of the submittal as complete.

7.5 Milestone No. 5 – Draft Report

Milestone No. 5 includes the Consultant's submittal of a draft report as described in Project Element 3.4 herein.

Payment for Milestone No. 5 shall be fifteen percent (15%) of the not to exceed amount of the Agreement. Payment for Milestone No. 5 is contingent upon the assigned OC San Project Manager's acceptance of the submittal as complete.

7.6 Milestone No. 6 – Final Report

Milestone No. 6 includes the Consultant's submittal of a complete final report as described in Project Element 3.4 herein.

Payment for Milestone No. 6 shall be twenty percent (20%) of the not to exceed amount of the Agreement. Payment for Milestone No. 6 is contingent upon the assigned OC San Project Manager's acceptance of the submittal as complete.

8 Staff Assistance

OC San will provide the Consultant with a single point of contact, the OC San Project Manager. All communications shall go through this single point of contact and any meetings and/or correspondence related to this SOW shall be scheduled and coordinated with this Project Manager, or as otherwise stated.

The OC San Project Manager will serve as technical oversight and will help to resolve any conflicts that may arise from this contract or the details herein.

9 Safety and Health Requirements

The Consultant and any Subcontractors shall comply with all applicable provisions of the OC San Contractor Safety Standards, Federal OSHA, California OSHA, and Local regulations, whichever is most stringent.

9.1 Injury and Illness Prevention Program

The Consultant shall submit a copy of their written, Injury and Illness Prevention Program (IIPP). The IIPP must address responsibility, compliance, communication, hazard assessment, incident investigation, hazard correction, and training as required by Title 8, California Code of Regulations, Section 3203.

9.2 Consultant Safety Orientation (CSO)

The Consultant shall attend a CSO meeting prior to the start of work. The CSO is an OC San safety orientation conducted between the Risk Management Division (safety and health) and the Consultant. The CSO is conducted once per year or as job conditions or SOW changes. The Consultant shall participate in these meetings by providing work plans and other requested safety deliverables described below. The Consultant shall sign the JSA documentation.

9.3 Job Safety Analysis (JSA)

The Consultant shall prepare Job Safety Analysis (JSA) for work tasks completed by the Consultant. The JSA is a procedure where each basic step of the work task has identified hazards and recommended controls for the safest way to complete the work task.