MEMORANDUM OF UNDERSTANDING BETWEEN THE UNITED STATES ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER ENVIRONMENTAL LABORATORY (ERDC-EL) AND RESTORE AMERICA'S ESTUARIES (RAE)

This Memorandum of Understanding (MOU) documents agreement between the US Army Engineer Research and Development Center's Environmental Laboratory, herein referred to as "ERDC-EL", and the Restore America's Estuaries, herein referred to as "RAE", to collaborate and cooperate on mutually beneficial projects related to promotion, dissemination and advancement of Engineering with Nature® (EWN) initiatives. Hereinafter, ERDC-EL and RAE are referred to collectively as the "PARTIES".

ARTICLE 1 - BACKGROUND

The US Army Corps of Engineers (USACE)'s Engineering with Nature® (EWN®) initiative seeks to intentionally align engineering and natural processes to deliver economic, environmental, and social benefits efficiently and sustainably through collaboration. EWN, led by ERDC, seeks to increase the range of benefits associated with USACE projects, which requires new methods and tools to support how planners develop and assess project alternatives. A benefit that currently goes unaccounted for by the USACE is the value of natural and nature-based features (NNBF) on individual and community well-being. USACE's EWN is also partnering across organizational sectors to develop tools and techniques for quantifying social benefits. In turn, these innovations can be leveraged to further support and justify integration of NNBF into a variety of landscapes to reduce risk from natural hazards as well as create projects with multi-purpose benefits.

Founded in 1995, Restore America's Estuaries is dedicated to the protection and restoration of bays and estuaries as essential resources for our nation. RAE and its partner organizations restore coastal habitats nationwide. RAE has unmatched national reach and effectiveness, and our local projects restore coastal wetlands, open fish passages, remove invasive species, build living shorelines, transplant seagrasses, replant salt marshes, and restore shellfish habitat.

RAE leverages its national footprint to convene the coastal restoration sector and advance nature-based solutions such as living shorelines and blue carbon. We are

among the largest conveners in the sector in print, online and in-person. RAE's biennial National Coastal and Estuarine Summit is the largest conference in the field.

ARTICLE 2: AUTHORITIES - Non-Applicable

ERDC-EL and RAE have synergistic goals to:

- Advance our understanding of EWN and the broad category of nature-based solutions
- Disseminate knowledge and foster knowledge sharing communities around EWN
- Foster collaborative opportunities across federal, state and local governments and the private sector, NGOs and academic institutions

This MOU establishes a partnership between ERDC-EL and RAE to promote Engineering with Nature and the range of activities that fall under nature-based solutions. Together, ERDC-EL and RAE may:

- Develop web-based on-demand training and academic materials related to nature-based solutions, including living shorelines, blue carbon, dredging and dredged material management including areas covered by RSM and EWN.
- Sponsor and promote webinars and short courses on all topics related to naturebased solutions, including living shorelines, blue carbon, dredging and dredged material management including RSM and EWN. Webinars and short courses may be live-streamed, recorded, or both.
- Encourage the development and availability of continuing education credits that advance EWN. A variety of methods may be used to distribute and promote these academic offerings.
- Foster shared expertise and learning across USACE jurisdictions, federal and state regulatory agencies to accelerate the sharing of expertise; facilitate connections among project designers and project regulators.
- Coordinate collaborations such as "Living Shorelines: From Barriers to Opportunities" that can provide guidance and generate support for EWN.
- Facilitate the wide-spread distribution of published documents related to EWN.
- Develop and promote other mutually beneficial educational opportunities as they are identified.
- Plan briefings to key federal stakeholders about the work and partnerships around EWN

ARTICLE 4: UNDERSTANDINGS

The PARTIES agree to the following understandings in principle:

- 1. ERDC-EL and RAE may work cooperatively to identify specific educational projects to pursue pursuant to this agreement. Only projects agreed upon by both parties will be subject to this agreement.
- 2. ERDC-EL and RAE understand that some projects may require financial support for development, editing, production, distribution, travel, and other important activities. In the event ERDC-EL and RAE choose to pursue projects that will require ERDC-EL financial support, a new agreement will be created using appropriate authorizations.
- 3. Products will be freely available to the public. However, some products (e.g., short courses) may involve project-specific costs such as instructor salary, travel, and facility.
- 4. Revenue from each project that produces revenue may be used to offset project costs incurred by the party creating the project. Additional revenue, if any, may be used to produce additional projects under this agreement.
- 5. Each product of this agreement may be branded by the party creating the product. Products may be created to interact with other products, but each product will be solely produced by one party.
- 6. Each party will own the product(s) it creates.
- 7. Either party can reproduce or distribute products resulting from this agreement without garnering permission from the other party so long as the branding of the product remains unmodified.

ARTICLE 5: RESPONSIBILITY OF PARTIES; PERSONNEL RELATIONSHIPS

Each Party is responsible for all costs of its personnel, including pay and benefits, support, and travel. Each Party is responsible for supervision and management of its personnel.

ARTICLE 6: GENERAL PROVISION

6.1 POINTS OF CONTACT: The following points of contact will be used by the PARTIES to communicate in the implementation of this MOU. Each Party may change its point of contact upon reasonable notice to the other Party.

6.1.1. For the RAE —

6.1.1.1 Primary:

Name: Elsa Schwartz

Title: Senior Director, Restoration and Administration

Phone: 206-714-7717

Email: ESchwartz@estuaries.org

6.1.1.2. Alternate:

Daniel Hayden

President and CEO

Phone: (202) 203-8075

Email: dhayden@estuaries.org

6.1.2. For the ERDC—

6.1.2.1. Primary:

Burton C. Suedel, PhD

Research Biologist and Senior Advisor to EWN

Phone: (601) 634-4578

Burton.Suedel@usace.army.mil

6.1.2.2. Alternate:

Jeffrey K. King, PhD, PE

EWN National Lead and Program Manager

Phone: (202) 706-3534

Email: Jeffrey.K.King@usace.army.mil

6.2. CORRESPONDENCE: All correspondence to be sent and notices to be given pursuant to this MOU will be addressed, if to the RAE, to—

6.2.1.

Mailing Address:

Restore America's Estuaries

601 13th Street NW

Suite 1200

Washington, DC 20005

Email: ESchwartz@estuaries.org

and, if to the ERDC, to-

6.2.2.

3909 Halls Ferry Road, Vicksburg, MS 39180 Email: Burton.Suedel@usace.army.mil

- 6.3. FUNDS AND MANPOWER: This MOU does not document nor provide for the exchange of funds or manpower between the Parties, nor does it make any commitment of funds or resources.
- 6.4. MODIFICATION OF MOU: This MOU may only be modified by the written agreement of the Parties, duly signed by their authorized representatives. This MOU will be reviewed annually on or around the anniversary of its effective date, and triennially in its entirety.
- 6.5. DISPUTES: Any disputes relating to this MOU will, subject to any applicable law, Executive order, directive, or instruction, be resolved by consultation between the Parties or in accordance with DoDI 4000.19.
- 6.6 PARTICIPATION WITH OTHER PARTIES: This MOU in no way restricts the Parties from participating with other public or private agencies, organizations, and individuals. All Parties recognize the importance of continuing cooperation and participation with the government and non-governmental organizations and institutions in programs of mutual interest.
- 6.7. TERMINATION OF UNDERSTANDING: This MOU may be terminated in writing at will by either Party.
- 6.8. TRANSFERABILITY: This MOU is not transferable except with the written consent of the Parties.
- 6.9. ENTIRE UNDERSTANDING: It is expressly understood and agreed that this MOU embodies the entire understanding between the Parties regarding the MOU's subject matter.
- 6.10. EFFECTIVE DATE: This MOU takes effect beginning on the day after the last Party signs.

- 6.11. EXPIRATION DATE: This MOU expires on December 31, 2029, unless otherwise extended.
- 6.12. CANCELLATION OF PREVIOUS MOU: This MOU cancels and supersedes the previously signed MOU between the same parties.

ARTICLE 7: LIABILITY

Each PARTY shall be responsible for the action of its employees or its agents. To the extent permissible by law, RAE shall indemnify and hold harmless the Government for any loss, claim, damage, expense, or liability of any kind involving an employee or agent of RAE arising in connection with the performance of work under this Agreement, except to the extent that such loss, claim, damage, or liability arises from the negligence of the Federal Laboratory or its employees. The Government's liability for the loss of property, personal injury or death, or otherwise arising out of any negligent act or omission of its employees in connection with the performance of work under this Agreement shall be governed by the Federal Tort Claims Act, 28 U.S.C. § 2671-2680.

No Warranty. Except as specifically stated herein, neither PARTY makes any express or implied warranty as to any matter whatsoever, including the conditions of the research or any INVENTION or project.

Force Majeure. Neither PARTY shall be considered in default for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such PARTY that causes such PARTY to be unable to perform its obligations under this MOU (and which it has been unable to overcome by the exercise of due diligence), including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning and other natural catastrophes, epidemic, war, riot, civic disturbance or disobedience, strikes, labor dispute or failure or threat of failure, or sabotage, or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, the PARTY unable to perform shall promptly notify the other PARTY. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

Products Liability. To the extent permissible by law, RAE agrees to indemnify and hold harmless the Government for any loss, claim, damage, expense, or liability of any kind occurring as a result of the making, using, or selling of a product, process, or service by

or on behalf of the RAE. The Government's liability for losses, claims, damages, or expenses of RAE occurring as a result of the MOU on behalf of the Government shall be governed by the provisions of the Federal Tort Claims Act.

ARTICLE 8: RESERVED ARTICLES

The following articles that are standard in User Agreements have been reserved.

- a) Export Controls
- b) Title and Administration

IN WITNESS WHEREOF, the PARTIES hereto have executed this MEMORANDUM OF UNDERSTANDING, as of the day, month and year first written above.

APPROVED: Approval authority signatures will never be alone on a blank page

For RESTORE AMERICA'S ESTUARIES	For ERDC'S ENVIRONMENTAL LABORATORY
Tanil Llees	RUSSO.EDMOND. Digitally signed by RUSSO.EDMOND.J.JR.123085173 J.JR.1230851731 1 Date: 2024.09.16 20:16:12 -05'00'
DANIEL HAYDEN	EDMOND J. RUSSO, PHD, PE,
President & CEO	SES, D.CE, D.NE, D.WRE., DIRECTOR
Date: 10/10/24	Date:16 SEP 2024