

John Bunker Sands Wetland Center Research Proposal Application

Background Information

The East Fork Wetland Project was funded and constructed by the North Texas Municipal Water District (NTMWD) and designed by Alan Plummer and Associates Incorporated. The East Fork Wetland Project was built on the Seagoville-Rosewood Ranch in Kaufman County. The project site is about 25 miles southeast of Dallas, Texas. This project is a unique and cutting edge process that begins each day as NTMWD measures the inflow of water that is flowing to reservoirs in the East Fork of the Trinity River from various sources. Once the inflow is measured, NTMWD determines the percentage of the inflows that can be diverted to the wetland for removal of sediment and nutrients. Environmental flows are maintained in the East Fork of the Trinity River to sustain a steady supply of water for the environment and downstream users. The daily percentage of water is then diverted from the East Fork of the Trinity River into a 1,840 acre man made wetland where the water is cleansed by nature, through phytoremediation. After 7 to 10 days in the wetland, a pump station then transports the cleansed water underground through a 43 mile pipeline north to Lavon Lake for storage, blending, treatment, disinfection, and delivery for municipal water supply. The East Fork Wetland has increased the diversity of waterfowl and wildlife along the East Fork of the Trinity River corridor.

The John Bunker Sands Wetland Center opened in October of 2010 to educate the public and provide research opportunities in the areas of water quality and supply, wildlife management and wetland systems. Research conducted at the wetland will focus on the details of this general mission.

Thank you for your interest in performing research at the John Bunker Sands Wetland Center. Proposals can be submitted on an ongoing basis throughout the year. Once received, the Advisory Committee will review submitted proposals and make recommendations to the Board of Directors. Principal Investigators will be contacted within 90 days of submission regarding the disposition of their proposal.

Research proposals are encouraged in the following areas:

1. Temporal, spatial, biological, chemical and physical kinetics of nutrient removal in constructed wetland systems.
2. Hydrology of constructed wetland systems.
3. Wildlife management and conservation methods of the East Fork Wetland Project.
4. Other categories deemed by the Center Director and Board of Directors to be within the mission of the John Bunker Sands Wetland Center.

Proposals should be submitted electronically to:

Dr. Bryan W. Brooks
Co-Chair, Advisory Committee
John Bunker Sands Wetlands Center
E: Bryan_Brooks@Baylor.edu

and

Mr. John DeFillipo
Director
John Bunker Sands Wetland Center
E: jdefillipo@wetlandcenter.com

For more information, please contact Dr. Brooks bryan_brooks@baylor.edu and/or Mr. John DeFillipo jdefillipo@wetlandcenter.com



I. Project Demographics

Principal Investigator(s):

Project Title:

Project Period:

Name of Organization (e.g., college):

Email:

Phone:

Non-technical Abstract: Please provide an abstract free of topic- or discipline-specific jargon and understandable to readers not familiar with the topic. Please do not exceed the remaining space provided on this page.



II. Project Narrative (not to exceed 10 pages)

1. Background and Rationale

2. Specific Objectives

3. Potential Significance

4. Plan of Work (procedures and methods, specific facilities necessary to complete the proposed study)

5. Project Timeline

6. Source of Funding for Proposed Studies (provide evidence of support, letters of support as attachments)

7. Plans for Publication/Dissemination of Project Results

8. Educational and Extension Components

9. Animal Use, Human Subjects, Hazardous Materials (provide approved IACUC / IRB protocols, state wildlife sampling permit, list of hazardous materials as attachments)



III. References (not to exceed 2 pages): Please include sufficient bibliographic references to demonstrate familiarity with scholarship in the field and to document the integration of prior research into the narrative portion of the proposal, supplying citations where appropriate.



IV. Biographical Sketch (not to exceed two pages): In the following space, please include relevant biographical information in lieu of a complete curriculum vita for each proposed investigator. Please be sure to address, at a minimum, subheadings numbered 1 through 5 below.

1. Degrees:

(e.g., Univ. of Wisconsin; Madison, WI; Chemistry; Ph.D.; 1994)

2. Professional Appointments: (please provide in reverse chronological order)

(e.g., 08/2000 – present; Professor; Department; University)

3. Major Research Interests:

4. Five Most Recent Publications:

5. Other Publications Relevant to This Proposal:

6. Other Information Relevant to this Proposal (optional):



V. Review Process

The figure below depicts the process by which potential research projects are reviewed and approved at the John Bunker Sands Wetland Center and East Fork Wetlands Project.

Step 1. Research pre-proposal is submitted to the Research Subcommittee Chair and the Director of the John Bunker Sands Wetland Center.

Step 2. Research pre-proposals are reviewed by the Research Subcommittee of the Advisory Board for relevance to the mission of the Wetland Center and identified research priorities (see above for areas in which research is encouraged). If a potential for a full proposal is identified the research sub-committee will ask the investigators to submit a full proposal. If the pre-proposal originates from the home institution of a Research Subcommittee member, they are recused from reviewing this proposal.

Step 3. Research proposals are submitted to the Research Subcommittee Chair and the Director of the John Bunker Sands Wetland Center.

Step 4. Research proposals are reviewed by the Research Subcommittee of the Advisory Board for relevance to the mission of the Wetland Center and identified research priorities (see above for areas in which research is encouraged). If a proposal originates from the home institution of a Research Subcommittee member, they are recused from reviewing this proposal.

Step 5. If relevant, revisions are requested, if relevant, and a revised proposal is resubmitted by the investigators.

Step 6. Pending successful review of the proposal or revised proposal by the Research Subcommittee, the proposal is recommended by the Research Subcommittee to the Advisory Board for recommendation to the Board of Directors.

Step 7. The Board of Directors reviews and approves the proposal, consults with the Advisory Board and Director, and / or requests a revised proposal.

Step 8. The investigator(s) signs an agreement with the Wetlands Center.

Step 9. The proposal is then routed by a university or college for submission to a potential funding agency, or is initiated if support is secured.

