DEPARTMENT OF THE ARMY
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS
ENVIRONMENTAL LABORATORY
WATERWAYS EXPERIMENT STATION, 3909 HALLS FERRY ROAD
VICKSBURG, MISSISSIPPI 39180-6199

REPLY TO
ATTENTION OF

CEERD-EZS

April 5, 2019

Brendan Harmon
Assistant Professor
Robert Reich School of Landscape Architecture
College of Art & Design
Louisiana State University
309 Design Building, Baton Rouge, 70803

To whom it may concern:

I am writing this letter in support of the Louisiana State University Faculty Research Grant proposal **Robots in Nature: Human-Robot-Environment Interaction for Advanced Ecosystem Services** by Professors Harmon, Nam, de Queiroz, Gilbert, and Quirk. The proposed research promises novel approaches that combine robotics with natural ecological processes to address environmental challenges such as coastal land and habitat loss. This aligns closely with the U.S. Army Corps of Engineers (USACE) Engineering With Nature® (EWN®) Initiative mission to enable more sustainable delivery of economic, social, and environmental benefits associated with water resources infrastructure through the coordination of natural and engineering processes. Effective integration of natural and nature-based landscapes with the human-built environment is critical to developing more resilient and sustainable systems. The development of robotic systems for planting and environmental restoration would advance the vision of Engineering With Nature® in achieving such integration, by developing innovative and affordable methods to implement large-scale design, engineering and restoration. In summary, I strongly support Prof. Harmon et al.'s proposal and urge Louisiana State University's review panel to give it serious funding consideration.

Sincerely,

Todd S. Bridges, Ph.D.
Senior Research Scientist (ST), Environmental Science
National Lead, USACE Engineering With Nature®

U.S. Army Corps of Engineers
U.S. Army Engineer Research and Development Center
Todd.S.Bridges@usace.army.mil
Office phone: 601-634-3636