



PRESIDENTIAL DREAM COURSE  
The UNIVERSITY of OKLAHOMA

# Engineering the Nature of Change

Featuring: Dr. William J. Mitsch

6:30 PM April 25, 2023  
David L. Boren Auditorium  
National Weather Center

Troubled Waters and  
Troubled Planet: Five Decades  
Since the First Earth Day

Public attendance encouraged. Free parking available.

Earth Day was organized in part because the Cuyahoga River in Cleveland, Ohio, burned in June 1969. I became interested in protecting the environment from water and air pollution as I was employed by a large electric utility in Chicago. So in 1971, I made the decision to go to graduate school to learn about the environment at the University of Florida's Environmental Engineering Sciences Department, where I linked up with Professor Howard T. Odum, one of the world's most famous ecologists, and morphed from an environmental engineer to systems ecologist under Odum. I founded the fields of ecological engineering and wetland ecology, partially by writing textbooks on these subjects and teaching in formal university courses, short courses, and hundreds of guest lectures around the world. I have also influenced the next generations by advising more than 100 graduate students at four universities, some of whom are now teaching in higher education around the world. I concluded from my career as an environmental scientist and ecological engineer that the burning Cuyahoga River was only the first warning that there was something seriously wrong with our urban environments, and as we negotiate our current environmental situation, things have only become more complicated. Our overcrowded, climatically challenged, and the poorly managed planet is now threatened even more than it was 5 decades ago. There is hope that we can continue to develop sustainable methods, sometimes called "ecological engineering" or "nature-based solutions," to heal our planet's waterways and landscapes. We need Mother Nature and Father Time to help us this time.

**Engineering the Nature of Change** is an in-depth exploration of Ecological Engineering, Engineering With Nature, Nature-Based Solutions, and Natural Infrastructure with world-renowned experts from academia, industry, government, and other sectors.

<https://www.ou.edu/dreamcourse/current-courses/engineering-the-nature-of-change>

## Dr. William J. Mitsch

Until his retirement in September 2022, Dr. William J. Mitsch was an Eminent Scholar and Director of Everglades Wetland Research Park, The Water School, and Juliet C. Sproul Chair for Southwest Florida Habitat Restoration at Florida Gulf Coast University. Before moving to Florida in October 2012, he was at The Ohio State University for 27 years including 20 years as Director of the Olentangy River Wetland Research Park that he founded and 15 years as Distinguished Professor in the School of Environment and Natural Resources.



**CREW**

Center for Restoration of  
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GALLOGLY COLLEGE OF ENGINEERING  
SCHOOL OF CIVIL ENGINEERING  
AND ENVIRONMENTAL SCIENCE  
The UNIVERSITY of OKLAHOMA

For more information or accommodations, please contact Dayton M'Kenzie Dorman (dayton.m.dorman-1@ou.edu)