

# ECOSYSTEM MANAGEMENT AND RESTORATION RESEARCH PROGRAM

## FY25 Q2 WEBINAR SERIES

**JAN. 22**      **Oyster reef population dynamics and assessing**  
**11:00 AM (CT)**      **environmental impacts**



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Reef-building organisms, such as oysters, provide ecosystem services including wave attenuation, water quality improvements, increased biodiversity, among many others. Reef-building species have suffered global population losses and have been the focus of extensive restoration efforts throughout their distributions. As manmade oyster reef projects proliferate as part of numerous oyster restoration efforts and essential components of nature-based solutions such as living shorelines, the sustainability of oyster populations is essential to the success of these efforts. Oysters have a complex life history. Planning for oyster restoration, deployment of manmade reefs as a nature-based solution, or implementation of a population dynamics model for use in management requires each life history stage be considered in an integrated way. Ongoing changes driven by the environment and development will affect oyster population dynamics in various ways across all life stages. While some effects can be generalized, the net impact of environmental and development pressure will be localized and site-specific. This presentation will summarize the current state of the science regarding environmental effects on oyster populations and provide a framework for planners to help assess the impacts on a project and plan for site-specific modeling.

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