

*Division of Biology and Prof. Ton Damman Distinguished Lectureship
in Ecology Presents:*

**The View from up Here! A Landscape Approach for Conserving
and Managing Stream Habitats**

Monday, March 9th, 2026 • 3:30 PM • 232 Ackert Hall



Dana Infante

Professor and Chair
Department of Fisheries and Wildlife
Michigan State University

In the early 2000's, using a landscape approach for understanding stream ecosystems was an emerging subdiscipline in the field of aquatic ecology. Early research focused on understanding meaningful spatial units for analyses, characterizing effects of urban and agricultural land use on both stream habitats and organisms, and accounting for natural vs. anthropogenic controls on streams. Today, enhancements in large-scale spatial datasets, greater availability of biological data, and advances in analytical approaches for disentangling complex relationships have expanded the landscape approach. This has not only furthered our understanding of aquatic ecology, it has been increasingly incorporated into efforts to conserve and manage stream habitats and the organisms they support. This presentation briefly covers core concepts of the landscape approach along with insights into how and why our understanding has evolved. We will also showcase examples of how a landscape approach can be used to support conservation and management of stream habitats and fishes, including a condition assessment of all streams in the U.S., a study showing fish species dependence on headwater streams, and a large-scale analysis of the effects of dam-induced stream network fragmentation on fishes. With a primary focus on benefits of the landscape approach, this presentation will conclude by identifying remaining knowledge gaps and outlining potential paths forward to enhance its utility for conserving and managing streams from current and future threats.

If you would like to visit with Dr. Dana Infante, please contact Dr. Keith Gido at kgido@ksu.edu.

This seminar is sponsored by the Prof. Ton Damman Distinguished Lectureship in Ecology

Coffee & snacks served preceding the seminar in Ackert Hall, Room 225