



SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center



RESEARCH SPOTLIGHT | Article Selected as Editor's Choice

SESYNC Researchers' Study on Marine Spatial Planning Selected as Editor's Choice Article

A new paper, resulting from SESYNC-supported research, was recently selected as an Editor's Choice article in *ICES Journal of Marine Science*. The article "**Narrowing the gap between marine spatial planning aspirations and realities**" explores the mismatch between marine spatial planning aspirations and real-world social and ecological objectives. The authors identify possible solutions to close this gap in the future. Former SESYNC postdoc Rachel Zuercher and former SESYNC staff member Nicole Motzer are authors on this paper. Learn more about the paper below.

IJMS Editor's Choice: The gap between current marine spatial planning objectives and reality

With the increasing industrialization of our oceans, many governments are turning to marine spatial planning (MSP) to protect ecosystems and the services they provide for people, empower stakeholders, coordinate across levels of government and sectoral interests, and deliver environmental, social, and economic benefits. Many countries are currently revising their marine spatial plans or developing new ones, creating a pressing need to understand how successful these plans are in achieving their ambitious and diverse goals.

MSP monitoring and evaluation is, however, commonly underfunded and underprioritized. Although assessments are underway with available methods, data, and resources, challenges remain in understanding MSP outcomes. One of the fundamental challenges is determining the

set of metrics best suited to evaluate a plan. Should a plan be evaluated against its stated goals or a more general list of social and ecological outcomes aspired to by the wider body of MSP literature? Do the outcomes of these approaches differ? To explore this debate, the authors of the latest [Editor's Choice paper](#) conducted a comprehensive literature review to identify MSP aspirations and reviewed 50+ marine spatial plans to quantify MSP realities. [Read more.](#)

SEMINAR | Ecological Networks & Decision Making



THE NATIONAL SOCIO-ENVIRONMENTAL SYNTHESIS CENTER

SEMINAR SERIES

APRIL 13, 2022 AT 3:00 P.M. ET

Dr. Katie Peterson, SESYNC

"Ecological Networks & Structured Decision Making for Ecosystem Management"

VIRTUAL SERIES

Seminars are free and open to the public. Registration required.

Join us at 3 p.m. EDT on April 13 for our next virtual SESYNC Seminar!

Dr. Katie Peterson will present "Ecological Networks & Structured Decision Making for Ecosystem Management" based on her postdoctoral work at SESYNC.

Abstract: Ecological communities are frequently subject to natural and human-induced additions of species, as species shift their ranges under climate change, invasions occur, and species are re-introduced for conservation. Because species interact in complex networks, the outcomes of gaining new species for ecological communities are difficult to predict. In particular, the addition of new species produces novel interactions and has the potential to modify the interactions between extant species. Due to high uncertainty in how these novel or modified interactions within a community will affect the persistence and abundances of species, practitioners need quantitative methods to help predict potential outcomes of changes to communities. Here, we review existing quantitative methods that predict how ecological communities will respond to the addition of species and demonstrate how these methods can be combined with a structured decision making framework in order to support conservation and management. Thus, we show how ecological models can be used in applied contexts, and how these applied contexts provide underutilized opportunities to validate predictions from ecological network theory. [Read more.](#)

Talks are free and open to the public. Registration is required. [Register here.](#)

SESYNC VIDEOS | Role of Law in Managing S-E Systems

SESYNC Lecture Series: Law and Socio-Ecological Problems



Law and Socio-Ecological Problems: Barriers and Bridges to Change

Presented by Barbara Cosens, a University Distinguished Professor Emerita at the University of Idaho, College of Law

In this lecture on the role of law in managing social-ecological systems, Barbara Cosens first presents a summary of the role that law has played in social change throughout the history of the United States. She notes that law is often seen as an unchangeable institution that can help or hinder change, and links this observation to historical cases where law was used to support and enforce social changes. She highlights the role that environmental law can play in building resilience in social-ecological systems because of this flexibility. She notes that adaptive governance and the laws that support it must support institutional decision-making at scales that are appropriate to the system being managed, and much also link across scales with other relevant governance systems. She draws on the example of water law in the Columbia River basin, and the role that law has played in ongoing watershed management and development in the basin. The Native American tribes that live in the basin have drawn on existing law to exercise their rights to water and fisheries, and the tribes and many other stakeholders in the basin have worked together to generate new legal propositions for dam control and flood management. She concludes by highlighting a framework for understanding law in socio-ecological systems, which includes understanding the structures, capacities and participation in adaptive governance systems.

Be sure to **subscribe** to SESYNC's YouTube channel to receive notifications whenever we add new videos!

NEW PUBLICATIONS | SESYNC in the Journals

"Social associations in common carp (*Cyprinus carpio*): Insights from induced feeding aggregations for targeted management strategies." Published in *Ecology and Evolution* by Peter J. Hundt, former SESYNC postdoc Lauren A. White, Meggan E. Craft, and Przemyslaw G. Bajer.

"Tracing the inclusion of health as a component of the food-energy-water nexus in dam management in the Senegal River Basin." Published in *Environmental Science & Policy* by Andrea J. Lunda, Elise Harrington, Tamee R. Albrecht, Tejasvi Hora, Rebecca E. Wall, and Tihitina Andarge. This paper resulted from the SESYNC Pursuit: [Integrating Health Impacts and Policy Considerations into Food-Energy-Water Systems](#).

"Learning from the Past: Pandemics and the Governance Treadmill." Published in *Sustainability* by D.G. Webster, Semra A. Aytur, Mark Axelrod, Robyn S. Wilson, Joseph A. Hamm, Linda Sayed, Amber L. Pearson, Pedro Henrique C. Torres, Alero Akporiaye and Oran Young. This paper resulted from the Pursuit: [Risk Perception in Provision of Aquatic Ecosystem Services](#).

