





# **SESYNC Feedbacks**

**News from the National Socio-Environmental Synthesis Center** 



# **YOUR STATION FOR COLLABORATION | Tips & Tricks for Teams**

#### Resources on Collaborative, Interdisciplinary Team Science

Interested in strengthening your collaboration skills across disciplines? Wanting to find some tips for engaging with stakeholders? Needing to learn more about creating shared mental models? Then check out SESYNC's resources on **Team Science and Inter-/Trans-disciplinary Science**. Examples include:

- What Is Interdisciplinary Team Research? Are There Best Practices? Explainer
- Who Are Stakeholders? What Is the Role of Stakeholders in Convergent Research? Explainer
- What Is a Shared Mental Model? Why Are Mental Models Useful for Interdisciplinary Research? Explainer
- Measuring Societal Impact for Convergent Research Explainer
- Best Practices for Interdisciplinary Team Research: Shaping a Team's Social Environment Explainer



- Science of Team Science Video Series
- Knowledge Integration Across Disciplines Video Series
- Creating Interdisciplinary Research Teams Lesson

See the full list of Team Science, Transdisciplinary, and Interdisciplinary resources.



# **NEW AUDIO INTERVIEW | Talking Socio-Environmental Resilience**

## **Bridging Engineering & Ecology to Meet Water Demands**

Are you looking for some climate hope? Check out the latest Succinct Science interview from SESYNC's Erin Duffy. In the interview, she speaks with Dr. John Matthews, Executive Director of the Alliance for Global Water Adaptation, about his work in sustainable water management and the adaptive capacities of both people and the planet. Together, they discuss the idea of "eco-engineering" and its interdisciplinary basis.



#### Socio-Environmental Resilience

SESYNC Audio Interviews • Apr 28, 2023





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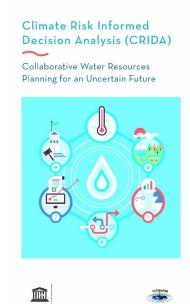
Learn more about the Climate Risk Informed Decision Analysis (CRIDA) framework mentioned in the audio interview below.

## SESYNC Team Develops Sustainable Water-Management Framework Adopted by UNESCO

It's not every day that the United Nations takes notice of your research, but that's exactly what's happened for one research team supported by the National Socio-Environmental Synthesis Center (SESYNC).

Since its publication by the United Nations Educational Scientific and Cultural Organization (UNESCO), the Climate Risk Informed Decision Analysis (CRIDA) methodology has come to embody "actionable science"—with its adoption and implementation by decision makers around the world.

The CRIDA methodology is a framework developed for water resource managers and policy makers to integrate the uncertain effects of climate change into water resource management and adaptation. It emerged from the SESYNC project **EcoEngineering Resilience**, led by Drs. LeRoy Poff and John Matthews, with co-development from the U.S. Army Corps of Engineers. **Read more**.



# **MODELING TUTORIALS | From the Experts**

#### **Quick Tutorials Available on Socio-Environmental Modeling**

Check out some of these SESYNC videos on common questions and topics related to modeling socio-environmental systems! See all of our resources here.



Incorporating Behavior in Socio-Environmental Systems Modeling





Participatory Modeling: Reshape How You Collaborate



**Use of Systems Thinking Archetypes in Socio-Environmental Modeling** 

### **NEW PUBLICATIONS | SESYNC in the Journals**

"Setting a reference for wetland carbon: the importance of accounting for hydrology, topography, and natural variability." Published in *Environmental Research Letters* by Graham A. Stewart, Anna I. Kottkamp, Michael R. Williams, and SESYNC Director Margaret A. Palmer

"The color of environmental noise in river networks." Published in *Nature Communications* by Tongbi Tu, Lise Comte, and Albert Ruhi. This paper resulted from the Pursuit Causality in Water Systems.

"Photovoltaic Systems through the Lens of Material-Energy-Water Nexus." Published in *Energies* by Megan Belongeay, Gabriela Shirkey, Marina Monteiro Lunardi, Gonzalo Rodriguez-Garcia, Parikhit Sinha, Richard Corkish, Rodney A. Stewart, Annick Anctil, Jiquan Chen and Ilke Celik. This paper resulted from the Pursuit <u>Energy-Water Nexus of Solar Industry</u>.

"Factors associated with preemptive conservation of imperiled species under the U.S. Endangered Species Act." Published in *Conservation Biology* by Tyler Treakle, Rebecca Epanchin-Niell, and Gwenllian D. Iacona. This paper resulted from the Pursuit Modeling Stewardship Decisions.

"Flood Risk as Legacy Vulnerability: Reading the past into the present for environmental justice." Published in *Geoforum* by former SESYNC postdoc Dean Hardy.

"Dead or alive: carbon as a currency to integrate disease and ecosystem ecology theory." Published in *Oikos* by Eric W. Seabloom, Angela Peace, Lale Asik, Rebecca A. Everett, Thijs Frenken, Angélica L. González, Alexander T. Strauss, Dedmer B. Van de Waal, former SESYNC postdoc Lauren A. White, and Elizabeth T. Borer. This paper resulted from the Pursuit Disease, Ecosystem Processes, and Humans.

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