SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center

NEW APPROACHES | Designing Research To Enact Change

Actionable Research – What Is It and How Do We Do It?

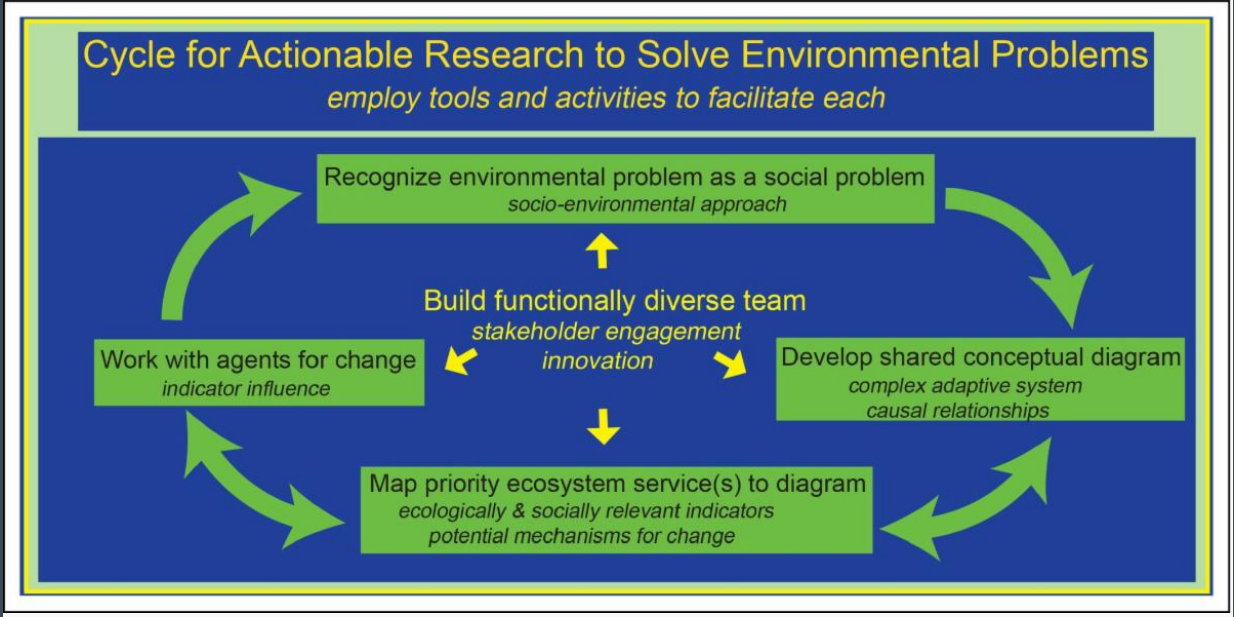
Everyone wants their research to go further and incite action—whether it be mitigating the effects of climate change on coastal communities; improving urban planning to increase equitable access to resources; or preserving the habitats and food sources of endangered species, like the sea otter.

Actionable Research has been a buzzword for many years now, but what exactly does it mean? And how does one successfully plan and conduct research that's not only actionable but truly useful for implementing change?

As a center that primarily focuses on such research, SESYNC defines it as solutions-oriented environmental research that informs decisions, behaviors, and discourse outside academia.

Recently, our Director Margaret A. Palmer and former Director of Science & Policy James Boyd drew upon SESYNC's 12+ years of experience to lay out **clear-cut steps** for conducting actionable research. In the article, they explain how to implement this process to solve problems at the social-environmental interface, and they identify useful tools at each step to aid users in successful completion of the cycle. You can learn more about this four-step process below.

NEW | Guide for Conducting Actionable Research



In this new article published in ***Frontiers in Ecology and the Environment***, authors Margaret A. Palmer and James Boyd lay out a four-step process for conducting actionable research. Drawing upon 12+ years of experience working with teams at SESYNC, they explain that the actionable research cycle (shown in the figure above) is a full-circle process that begins with accepting that environmental problems are social problems.

They emphasize that the process requires teamwork with diverse participants, reflexive collaboration, and strong stakeholder engagement. And they explain why a critical step is developing a shared conceptual diagram that identifies problematic causal relationships—ideally already linked to a valued ecosystem service—as these relationships may be potential levers for change. Potential change agents such as policy makers and influencers play a key role in identifying how to influence social processes that break or weaken problematic relationships.

At each step, the authors identify useful tools and methodologies to help researchers successfully complete each step. At the end, the authors explain how the four steps presented in the research process are usually iterative, and the team typically must revisit them one or more times. **Learn more about the process here**.

BACK TO BASICS | What Is Actionable Research?

If you're looking to get started at the beginning, consider exploring our **original collection** of introductory resources. Inspired by SESYNC's decade working with interdisciplinary teams, these resources aim to help researchers better understand the concept of actionable research and how to apply it to their own work.

Get started by defining what actionable research is (and isn't) in our introductory explainer and video below. Then check out the rest of our resources in this collection.

What Is Actionable Research?

This brief explainer article defines actionable research and provides an overview of this solutions-oriented scientific exploration. It explains how actionable research differs from applied research and advocacy and why it requires interdisciplinary approaches. It also provides examples of actionable research and includes a visual that depicts the role of stakeholder engagement in the research process. **Learn more**.

What Is Actionable Science? This short video defines the term "actionable

science,"—often interchangeable with the term actionable research. It provides examples of the types of individuals and institutions that engage in actionable science, and it explains the role of such science in informing socio-environmental solutions. **Learn more**.

Measuring Societal Impact for Convergent Research

This brief explainer article describes the need for accurately measuring the positive social outcomes of research and its value in the eyes of stakeholders. It explains how to engage in design thinking to develop value propositions for each stakeholder. It also lists various metrics for gauging societal impact—in addition to traditional academic metrics—such as disseminated research results, practices or policies, and capacity-building activities. **Learn more**.

A Causal Approach to Actionable Research Design

Solving socio-environmental (S-E) problems requires identifying social actions that can create change. Identifying potential actions requires interdisciplinary discussion and research planning to understand how the components of an S-E system are connected in relation to the desired outcome.This document outlines a diagramming method that can guide a researcher's or research team's thinking about complex environmental systems and how their system of interest connects to policy, action, and social outcomes. **Learn more**.

Who Are Stakeholders? What Is the Role of Stakeholders in Convergent Research?

This brief explainer article defines stakeholders and explains their vital role in making sure that research has societal relevance, leads to outcomes that are useful/actionable, and integrates different disciplinary perspectives. This article provides a brief overview of how to identify and engage stakeholders, as well as key stakeholder-related questions to consider when conducting research. **Learn more.**

Actionable Research Lesson

This lesson defines actionable science for learners and relates it to concepts like basic research, applied science, and advocacy science. It illustrates the way in which actionable, solutions-oriented research typically requires interdisciplinary collaboration and analysis of

environmental and social systems. It has learners practice the skill of identifying individuals or organizations that have an interest in research that can inform decisions. **Learn more**.

Qualitative Methods for Actionable Sustainability Science Lesson

This lesson introduces two key approaches for identifying solutions for enacting change: the qualitative methods of appreciative inquiry and learning journeys. Using these methods, participants listen to others' thoughts and views and search together for sustainability solutions that challenge old assumptions. The lesson guides learns to see how such methods can lead to positive new ways of thinking that can ultimately inspire change. **Learn more**.

Creating Actionable Science on Campus

Creating collaborative interdisciplinary research teams and engaging stakeholders are important enablers to translating science into action. In this lesson, learners will practice the art of stakeholder-engaged research by developing a sustainability project in their local campus or town. Learners will not conduct new research but will use existing science, solicit and assess various stakeholder views, and strategize how to integrate the diversity of opinion into a valued, new sustainability initiative. **Learn more**.

IN THE LITERATURE | Related Publications

Below are some SESYNC-supported articles on actionable research and related topics.

- Olander et al. 2017 – So you want your research to be relevant? Building the bridge between ecosystem services research and practice. **Learn more**.
- Palmer 2012 – Socio-environmental sustainability and actionable science. **Learn more**.
- Arnott et al. 2020 – Editorial overview: The science of actionable knowledge. **Learn more**.
- Miller et al. 2013 – The future of sustainability science: A solutions-oriented research agenda. **Learn more**.
- Iverson Nassauer et al. 2014 – Actionable urban ecology in China and the world: Integrating ecology and planning for sustainable cities. **Learn more**.
- Goodrich et al. 2020 – Who are boundary spanners and how can we support them in making knowledge more actionable in sustainability fields? **Learn more**.
- Chaplin–Kramer et al. 2019 – Measuring what matters: Actionable information for conservation biocontrol in multifunctional landscapes. **Learn more**.
- Wyborn et al. 2018 – Understanding the impacts of research synthesis. **Learn more.**

CONTACT US | We Want To Hear From You!

Have updates or outcomes tied to your SESYNC research that would make for an

interesting research spotlight? Looking for a resource on a topic that we haven't covered yet? Want to share an idea? Contact us at **communications@sesync.org**.

www.sesync.org