

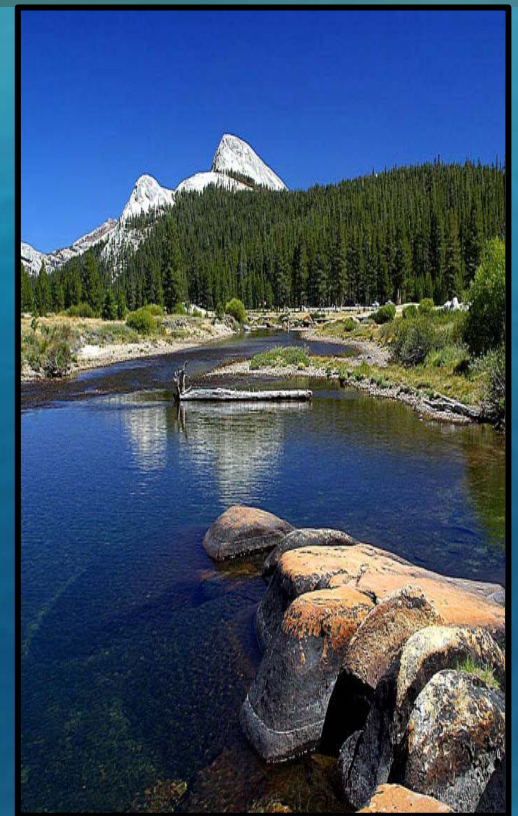


Ecosystem Restoration as a Tool for Enhancing Resiliency and Ecosystem Services

National Conference on Ecosystem Restoration
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Context

“The nation behaves well if it treats the natural resources as **assets** which it must turn over to the next generation increased and not impaired in value.”

President Theodore Roosevelt, 1907,
American Museum of Natural History,
Washington, DC



Source: The White House,
Washington, DC

Restoration, Ecosystem Services, and Resiliency

Restoration – “...the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.” (Society for Ecological Restoration International Primer on Ecological Restoration, 2004).

Ecosystem Services – the benefits people obtain from ecosystems (Millennium Ecosystem Assessment, 2005)

Resiliency -- the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions” White House Executive Order 13653 (Section 8c), November 1, 2013.

Natural Capital

Natural Capital consists of the physical and biological systems that support life and produce ecosystem services.

“We think of the natural environment, and the ecosystems of which it consists, as natural capital – a form of capital asset that, along with physical, human, social, and intellectual capital, is one of society’s important assets.”
National Research Council, Water Science and Technology Board, 2005.

Hypothesis – Restoration needs to be considered in concert with ecosystem services and resiliency to obtain successful outcomes.

Ecosystem services and resiliency provide an analytical framework and metrics for planning, implementing, and recognizing success for restoration.

Restoration provides an opportunity to enhance ecosystem services and resiliency.

Key questions

1. To what extent are we synthesizing restoration, ecosystem services, and resiliency?
2. Has this synthesis been developed conceptually and in practice?
3. What are some key opportunities that we have in the short and mid-term timeframe?
4. What are some continuing challenges and obstacles that we need to deal with?
5. What next steps should we be pursuing?

Expert Panel

Lisa Wainger -- Research Professor, Center for Environmental Science, University of Maryland

Sarah Ryker – Acting Deputy Assistant Secretary for Water and Science, Department of the Interior

Susan Wachter – Albert Sussman Professor of Real Estate and Finance, The Wharton School, University of Pennsylvania

David Waggoner -- President, Waggoner and Ball, New Orleans, LA



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for an interdisciplinary forum to share experiences, methods, and tools for assessing and incorporating ecosystem services into public and private decisions.

www.conference.ifas.ufl.edu/aces

USGS Science and Decisions Center

SDC provides an interdisciplinary focus with a goal of increasing the use and value of scientific information in decision making. The emphasis is on research and applications to more effectively use scientific information rather than the development of new scientific information.

Five science focus areas:

1. Ecosystem services
2. Decision science
3. Resilience
4. Participatory science
5. Natural resource economics

usgs.gov/sdc



Establishing the Foundation: *Studying Ecosystem Services and Providing Scientific Information for Decision Making*

USGS Organic Act (1879)

“...classification of the public lands and examination of the geological structure, mineral resources, and *products of the national domain.*”

USGS Mission

To serve the Nation by providing reliable scientific information to:

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Minimize loss of life and property from natural disasters

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Enhance and protect our quality of life

