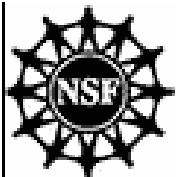


CNH: Dynamics of Coupled Natural & Human Systems

Promoting multi-disciplinary research (*social & natural sciences and engineering*)

Transforming environmental research and education



National Science Foundation

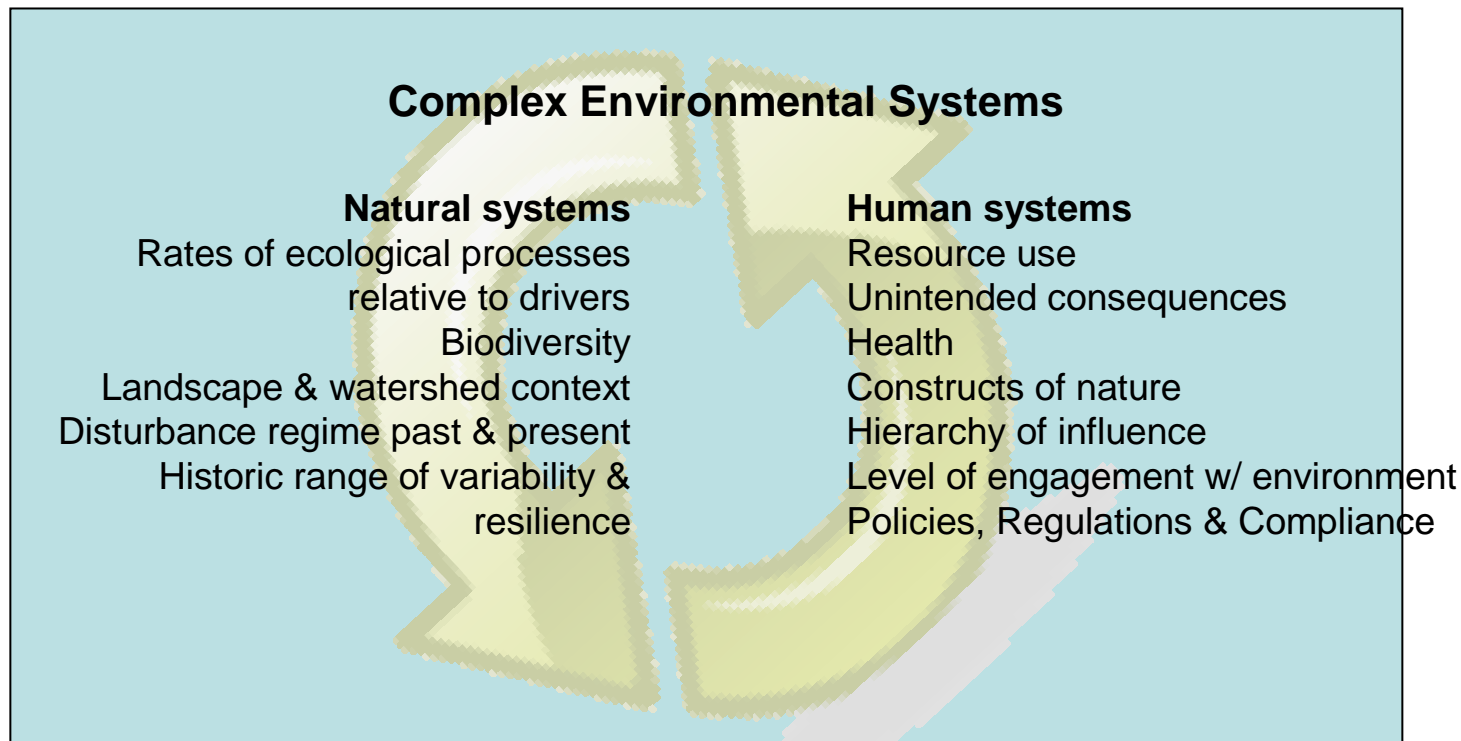


USDA Forest Service

Coupled Natural & Human Systems

Joint partnership between: National Science Foundation USDA Forest Service

- Successor of Biocomplexity & the Environment (BE) competition, 2001-05.
- Directly relates human activity with the natural environment
- Epitomizes high degree of complexity and integration central to CES [complex environmental systems].
- Transformative: pushes transdisciplinary research frontiers central to research to enhance global sustainability



Program for 2008+ the Dynamics of Coupled Natural Human Systems

Supports quantitative, interdisciplinary analyses of processes and interactions among human and natural systems at diverse scales.

- Research central to all NSF environmental initiatives
- Multi-directorate: GEO – BIO – SBE \$ commitment

Budget 2004-2008 (\$ millions):

2004-05	\$14.6
2004-06	\$10.8
2005-07	\$14.5
2006-08	\$9 Anticipated



Projects Awarded: Example #1

Biodiversity and Land-Use in the Amazon:
Resource-Use Decisions by Indigenous Peoples.

P.I.: Jose Fragoso and Kirsten Silvius, University of Hawaii

Goal: Determine if retention of traditional practices and informal ways of managing resources is sustainable in

- Social factors that determine hunting practices of the Macuxi may have low impacts on biodiversity in the Amazonian forest of Brazil
- Once indigenous peoples in the Amazon integrate themselves into the non-indigenous national socio-economic system, do they exert unsustainable pressure on natural resources?
- Can this information be used to contribute to the development of effective development policies and biodiversity conservation? Very germane for debate on “People in Parks.”

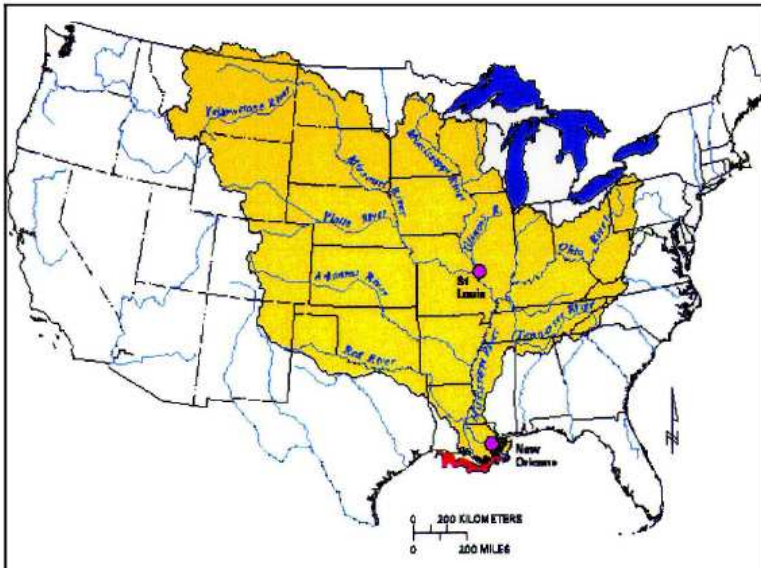


Projects Awarded: Example #2

Understanding Linkages among Humans and Biogeochemical Processes in Agricultural Landscapes.

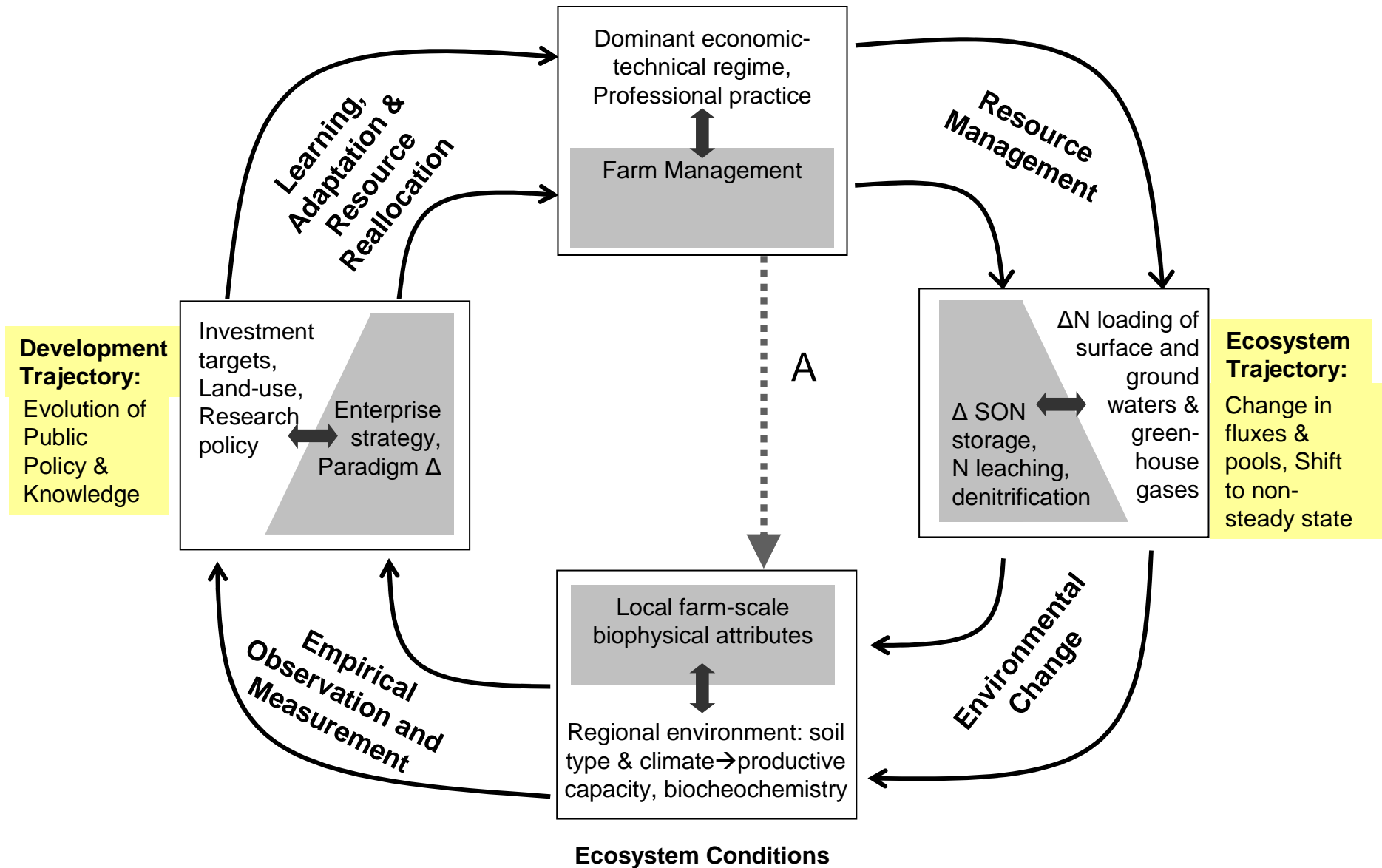
P.I. Laurie Drinkwater, Cornell University

Goal: Understand how interactions among social and biophysical subsystems in intensively managed agricultural landscapes impact C and N



- What feedbacks and linkages within and between the human-natural subsystems will promote co-evolution so that socioeconomic and ecological goals are achieved?
- Practical outcomes that are relevant to the development of agricultural and resource-management policy.

Are there linkages that can shift the Development & Ecosystem Trajectories toward feedbacks that reduce N-leakiness and support sustainability?



For more information, please visit the NSF website:

The screenshot shows a Microsoft Internet Explorer browser window displaying the NSF website. The address bar shows the URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13681&from=fund. The page features the NSF logo and the tagline "WHERE DISCOVERIES BEGIN". A navigation menu includes links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area is titled "Dynamics of Coupled Natural and Human Systems (CNH)" and includes sections for CONTACTS, PROGRAM GUIDELINES, DUE DATES, and SYNOPSIS. The CONTACTS section lists four individuals: Thomas Baerwald (SBE/BCS), Alan Tessier (BIO/DEB), Sarah Ruth (GEO/ATM), and another individual whose name is partially obscured. The DUE DATES section states the Full Proposal Deadline Date is January 8, 2008. The SYNOPSIS section describes the competition's focus on quantitative and interdisciplinary analyses of human and natural system processes.

Funding

Crosscutting/NSF-wide
Dynamics of Coupled Natural and Human Systems (CNH)

CONTACTS

Name	Dir/Div	Name	Dir/Div
Thomas Baerwald	SBE/BCS	Sarah Ruth	GEO/ATM
Alan Tessier	BIO/DEB		

PROGRAM GUIDELINES

[07-598](#) Solicitation

DUE DATES

Full Proposal Deadline Date: January 8, 2008

SYNOPSIS

The Dynamics of Coupled Natural and Human Systems competition promotes quantitative, interdisciplinary analyses of relevant human and natural system processes and complex interactions

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13681&from=fund