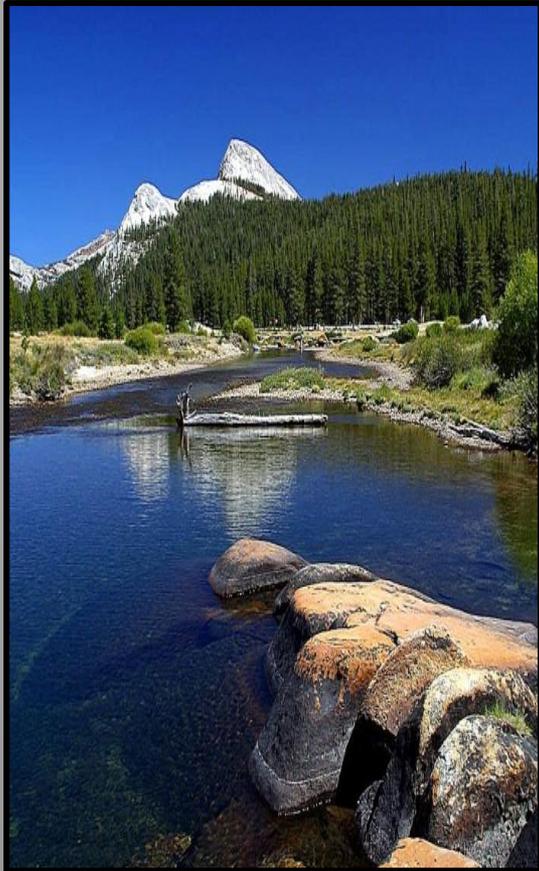


USGS Science and Decisions Center

Advancing science-based decisions about natural resource management

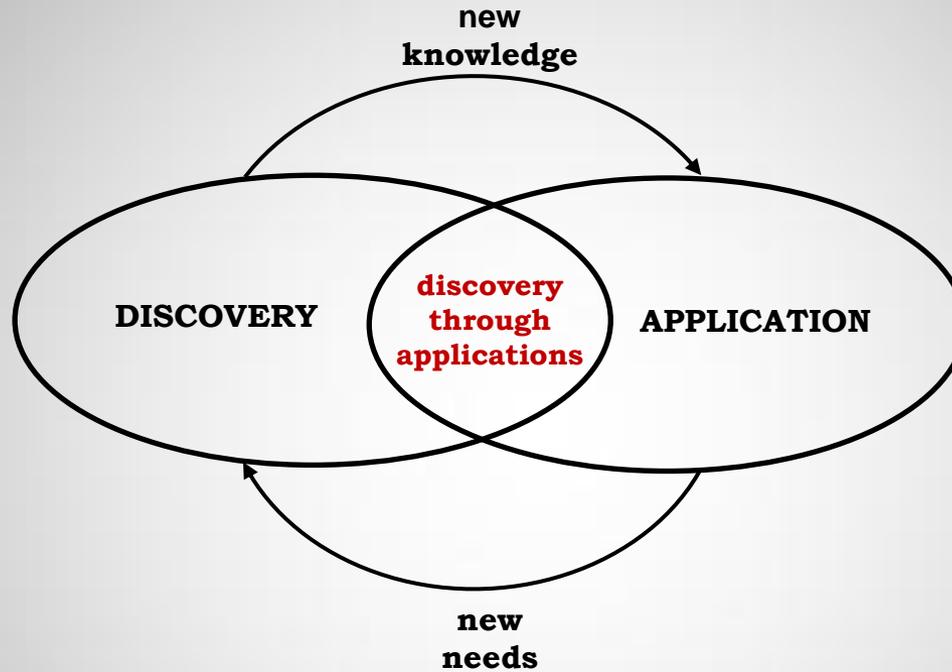


USGS Science and Decisions Center

- Strategic focus on science-based decision making
- Foundation in two USGS mission areas
- Resides at the interface of the mission areas
- Staffing from both mission areas
- Managed by directors in both mission areas
- Co-leadership by two USGS senior executives, one in each mission area
- Open and interdisciplinary organizational architecture



Application-oriented science

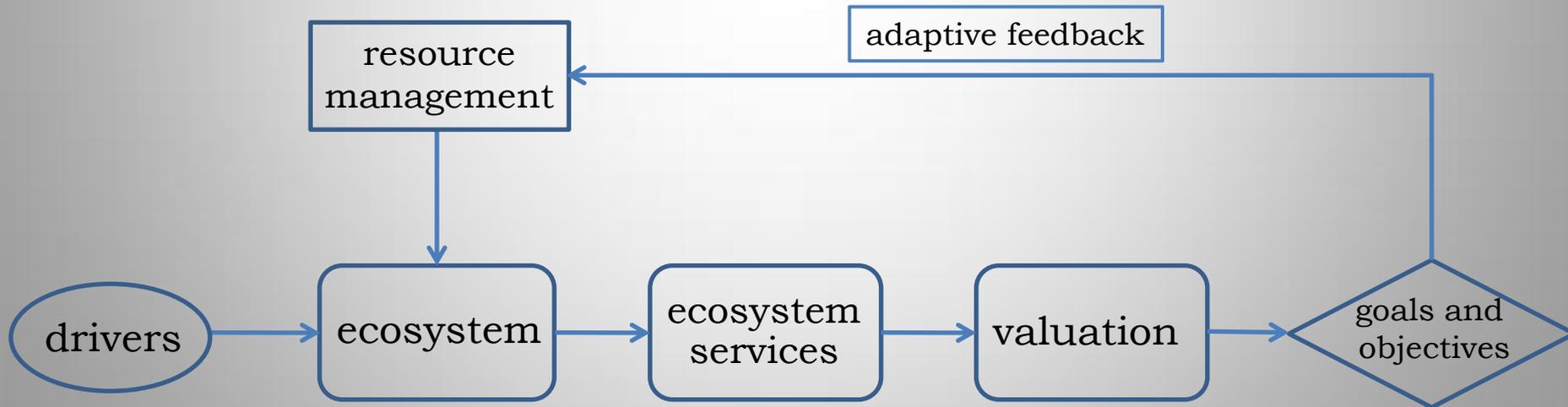


- Discovery and application can coincide
- The application of science itself to produce new knowledge, e.g., by the use of management experiments
- Extends scientific enterprise to include basic science, applied science, science through the application of new knowledge, etc

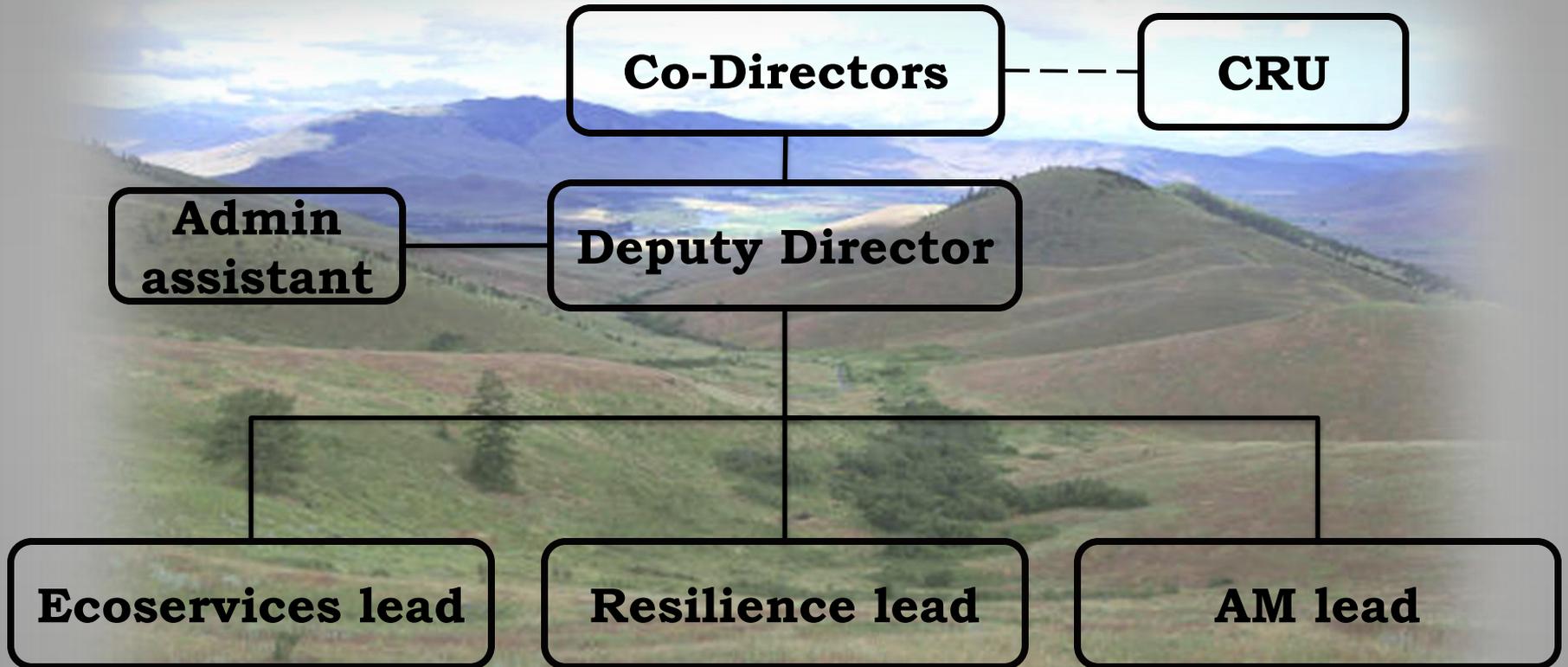
Framework for science-based decision making

Important points:

- Drivers and management alter the system
- Ecosystem services flow from ecosystem properties
- Valuation records the utility of ecosystem services
- Goals and objectives can include resilience and sustainability
- Adaptive feedback links science and management



Science and Decisions Center Staffing



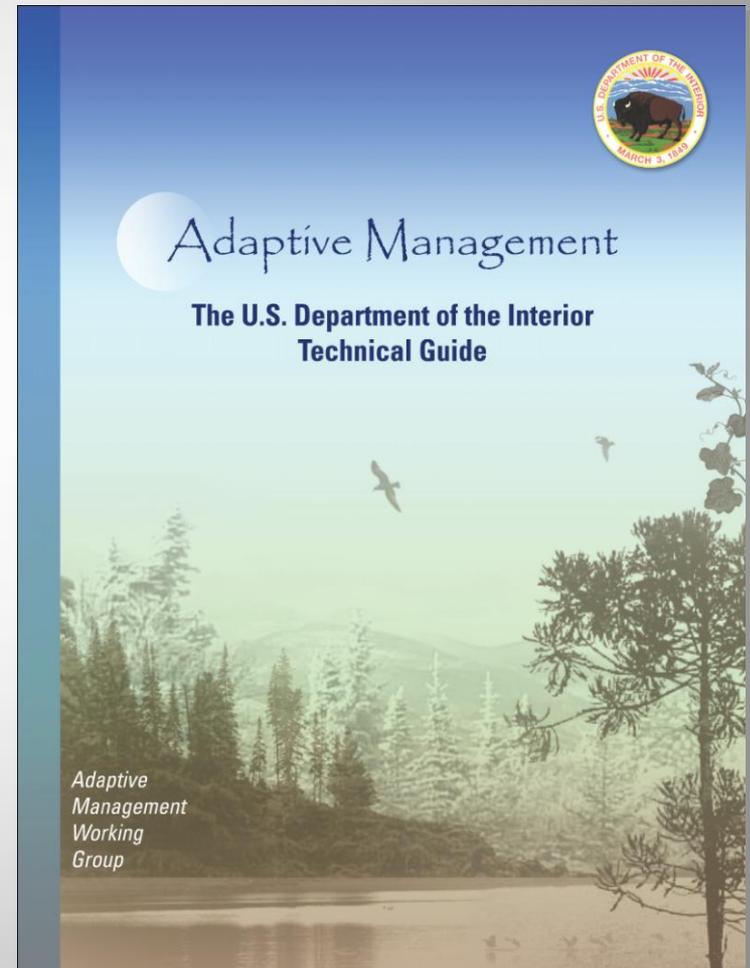
Science and Decision Center Themes

- Adaptive management
- Ecosystem services
- Resilience/sustainability
- Interconnections among themes



DOI Adaptive Management Technical and Applications Guides

- Guides developed for the Office of the Secretary under AS-PMB
- DOI AM Technical Guide completed in 2007 and revised in 2009
- DOI AM Applications Guide to be completed this summer
- Thematic focus areas for the Applications Guide
 - energy
 - water resources
 - human impacts on the landscape
 - climate change



ACES: A Community on Ecosystem Services

ACES: A Conference on Ecosystem Services – Using Science for Decision Making in Dynamic Systems (December 2008)

ACES Conference – Phoenix, AZ, (December 6-9, 2010)

SDC lead in producing Conference proceedings



<http://www.conference.ifas.ufl.edu/aces/>

SDC Theme: Resilience, Vulnerability, and Risk

- Key elements in defining and describing sustainability of coupled natural and social systems
- Contribute to the framing of the process of decision making
- Potentially important in evaluating the consequences of management



SDC Projects and Products

- Adaptive Management Technical and Applications Guides
- ACES Conferences I and II, and conference proceedings
- Research and Publications
- Commitment by National Research Council to sponsor a national roundtable on SDC and its themes
- Cooperative agreements with 4 universities to address SDC themes
- Seminar series on valuation of ecosystem services
- Multiple communications products (fact sheet, tri-fold, web site, publications, etc.)



USGS Science and Decisions Center

- Supporting science to inform resource management
- Supporting resource management to facilitate science

