



You might say the theme of yesterday's break-outs was about why we do what we do.

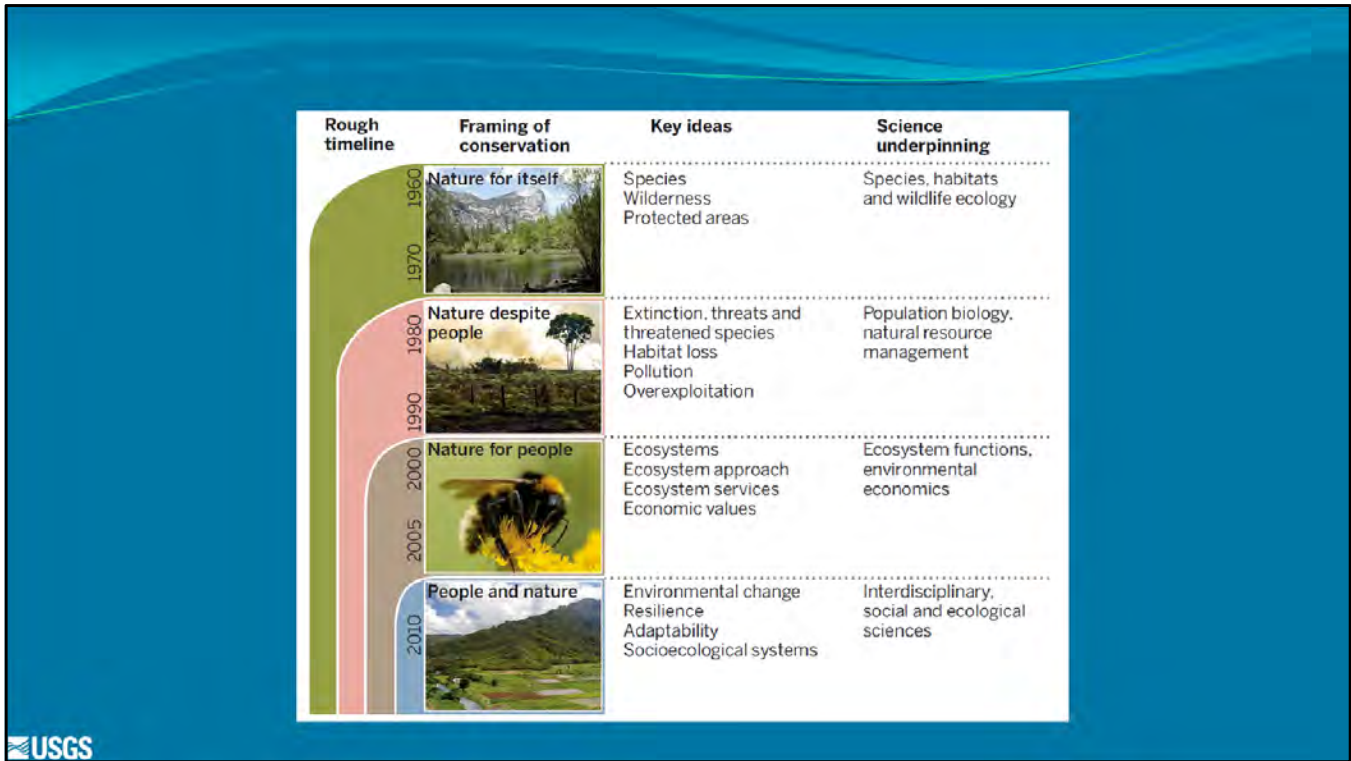
Today's theme is about how we do what we do.

“The era of management is over.”

Donald Ludwig 2001



- I had spent 20 years working in waterfowl management at the time I read an article by this title. I remember not fully understanding, nor appreciating, the argument it made. Perhaps because it was challenging my view of the world and my professional role in it.
- Yet it is now clear that perspectives about conservation and resource management are changing rapidly. To some, the term management has come to imply domination of nature, efficiency, and expert-knows-best approaches.
- In contrast, emerging conservation philosophy emphasizes stewardship, pluralism, partnerships, and adaptive capacity.



- In many ways, waterfowl management is still very much rooted in the conservation philosophies of the 1970's and 80's, in which the focus was on threats to species and their habitats, and on strategies to mitigate those threats.
- We still spend a great deal of time and energy attempting to understand population biology, and on developing species' habitat management plans and sustainable harvesting strategies.
- We still rely a lot on scientists and top-down solutions to problems that are increasingly characterized by fundamental conflicts in values, multiple scales of space and time, and deep, irreducible uncertainties.
- And like an investor with a limited portfolio, we are now learning the risks of relying on a single user-group for financial and political support.
- The emerging philosophy is more aware of the two-way relationship between people and nature. This philosophy emphasizes the importance of human culture and institutions, and how they shape, and in turn are shaped by, the natural environment.



- Environmental or resource governance refers to the broad processes and institutions through which society makes decisions about stewardship of the commons. The most notable manifestation of the new “people and nature” perspective has been the emergence of more bottom-up governance processes.
- Resource governance is gradually shifting away from centralized government institutions, which may have limited capacity to address complex environmental problems.
- It is bringing citizens, local groups, and non-governmental organizations into the policy and decision-making process.
- And this requires a shift in focus from a static concept of management to a more dynamic one, shaped by human interactions, learning, and adaptation over time.

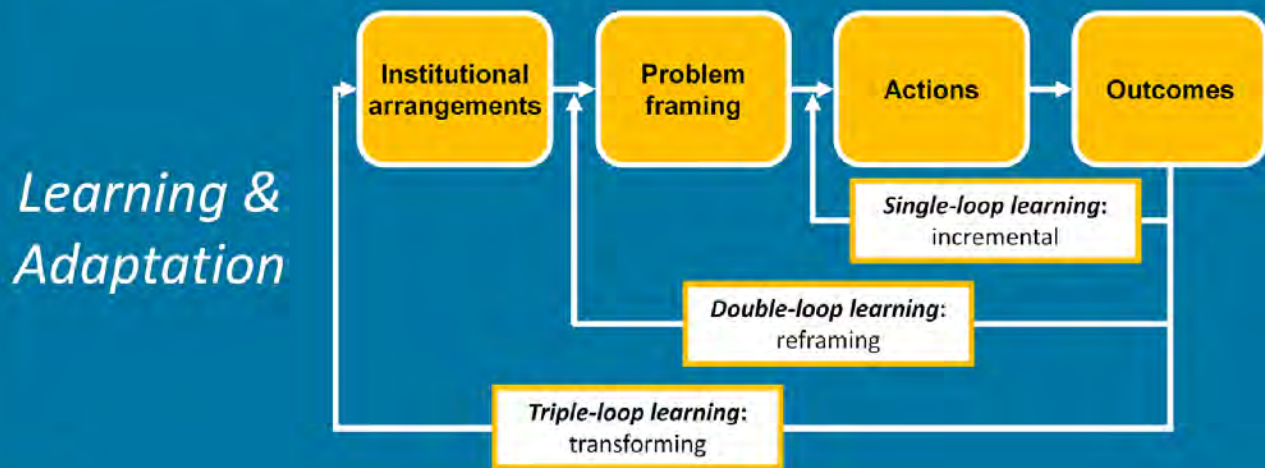
Improving governance

The problem of “fit”



- There are several key concepts in the search for improved governance.
- First, the scale of the environmental problem must be matched by the scale at which people can act. An example of poor fit would be a coastal wildlife refuge attempting to maintain its contribution of ecological goods & services in the face of sea-level rise.
- Addressing the problem of fit requires flexible institutional structures, with strong vertical and horizontal linkages among scientists, managers, resource users, and civil society.
- Much of the conservation effort in the Joint Ventures already functions in this way (as was elegantly articulated yesterday by Mike Carter and Dave Smith).

Improving governance



USGS

- The conventional desire for stable & predictable institutions conflicts with the need for governance and decision-making processes that are flexible and adaptive.
- Learning from experience and responding to what is learned is vital to all levels of resource governance.
- And evidence suggests that the practice of adaptive management (single-loop learning) tends to promote an institutional culture of learning, where new problem framings and institutional arrangements become possible.
- In turn, learning at these levels of governance tends to promote more applications of adaptive management.

Improving governance

*Coproduction
of knowledge*



- Empirical studies show that drawing from multiple sources of knowledge, including not just from scientists, but from policy makers and stakeholders can lead to better social and ecological outcomes.
- The emphasis is thus on the coproduction of knowledge, highlighting the value of managers and scientists engaging with a diversity of interests to build shared understandings.
- For conservation practitioners, this means supporting decision-making processes that involve meaningful stakeholder participation, and which do not privilege formal western science over other ways of perceiving and understanding the world.

Improving governance

*New actors,
new roles*



- The new governance admits new and diverse players and sometimes changes the role of traditional ones. An example is the role of the state transitioning from holder of expertise and decision maker, to facilitator of knowledge and decision broker.
- Greater inclusiveness increases legitimacy, provides for more effective and fair allocation of costs and benefits, and improves access to a diversity of knowledge and expertise.
- Bridging organizations have emerged as one way to build links between communities and the state, and between science and policy.
- Bridging organizations provide the context for different actors to make sense of information, to learn about conservation challenges, and to work together to build knowledge in a collaborative manner.
- JVs often play this role very effectively.

Improving governance

*Accountability
and legitimacy*



- Accountability and legitimacy traditionally have been determined by legislation and supporting regulations, and through agency mandates.
- However, in networked models of governance with dispersed power, the sources of accountability and legitimacy may be less clear.
- Yet accountability and legitimacy can be enhanced by reasonable clarity about roles & responsibilities, by transparency in decision making, and by the free flow of information.



- In recent years collaborative efforts and participatory approaches have become increasingly popular in conservation practice.
- The advantages of these approaches include a better fitting of solutions to problems, more development & experimentation with novel approaches, and greater accountability and legitimacy among civil society.
- An important conclusion from these efforts is that more adaptive forms of governance often self-organize, with actors that draw on various knowledge systems, experiences, and authorities. That is they evolve in response to selective pressures, rather than being designed from the top-down.
- The shifting perspective in resource governance thus values institutional arrangements that are less rigid, less hierarchical, and more aware of the adaptive capacity that resides in the diversity of contexts in local decision making.

Synthesis



- Traditional, hierarchical forms of governance will continue to play an important role.
- Yet we also need more dynamic forms of governance, shaped by social interactions, learning, and adaptation.
- Adaptive capacity, in turn, depends on a reservoir of diversity.



- Traditional, hierarchical forms of governance will continue to play an important role in waterfowl & wetlands conservation.
- Yet a rapidly changing social & ecological world suggests the need for more dynamic forms of governance, shaped by social interactions, learning, and adaptation over time.
- But without diversity, adaptation is not possible. Therefore, we should consider celebrating
 - the diversity of stakeholders whose values and objectives may not always align
 - the diversity of ways people have of perceiving and understanding the natural world, and
 - the diversity of decision-making contexts, and the myriad ways in which government and civil society can seek responsible stewardship of the commons.

Acknowledgements

- Key references:

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Thank you.