

Under what conditions might ecologists provide evidence that influences decision making?

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Walter Lippman, 1932



“the will of the people”
was “a highly variable
and incalculable factor
... at the point where
knowledge is to be
applied to action”.

May 2011



Despite scientific evidence, Congress delists the Northern Rocky Mountain Population of the Grey Wolf.

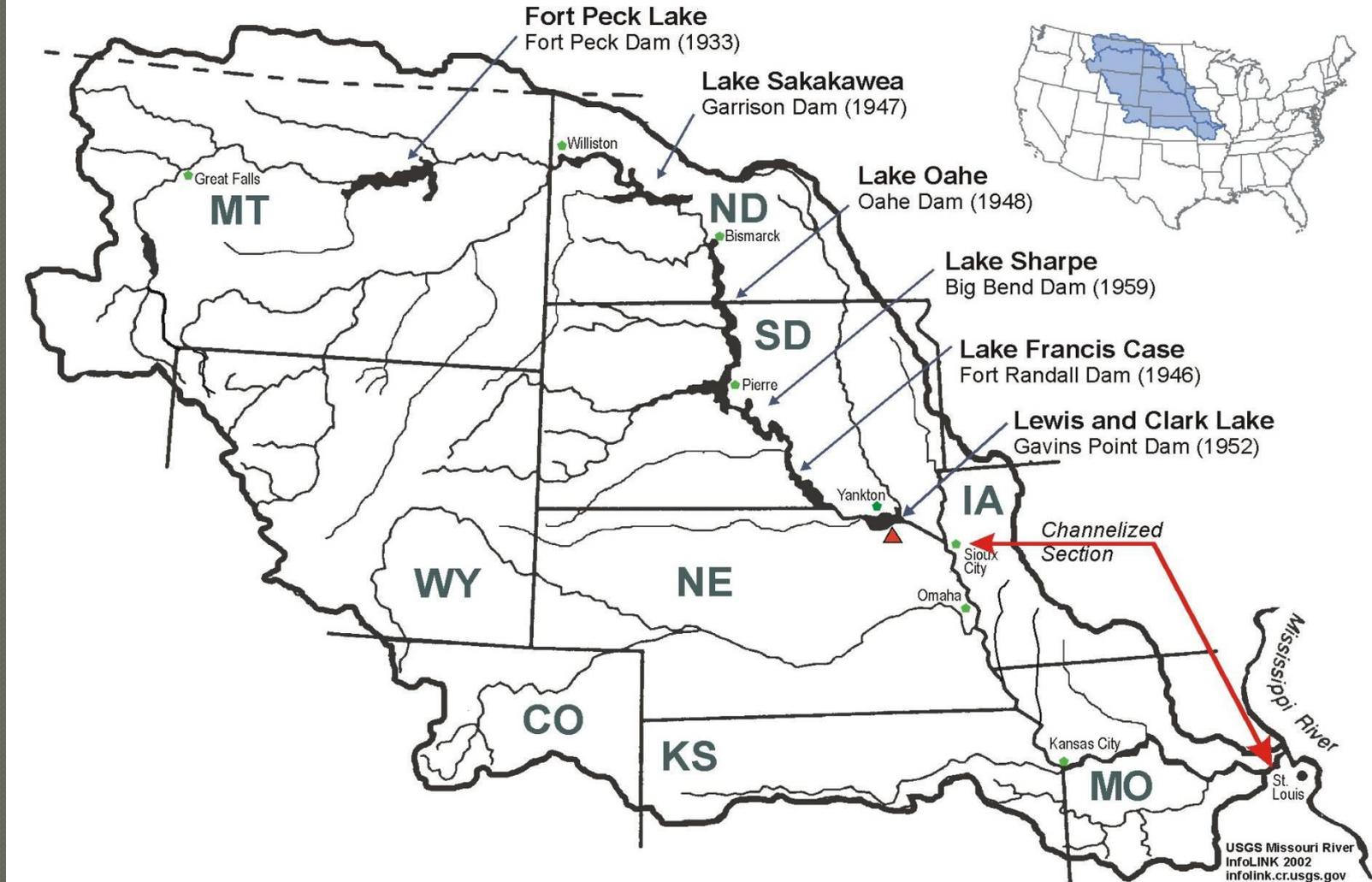
What matters most?

**Risk acceptance,
not science,
determine what
happens.**

Outline

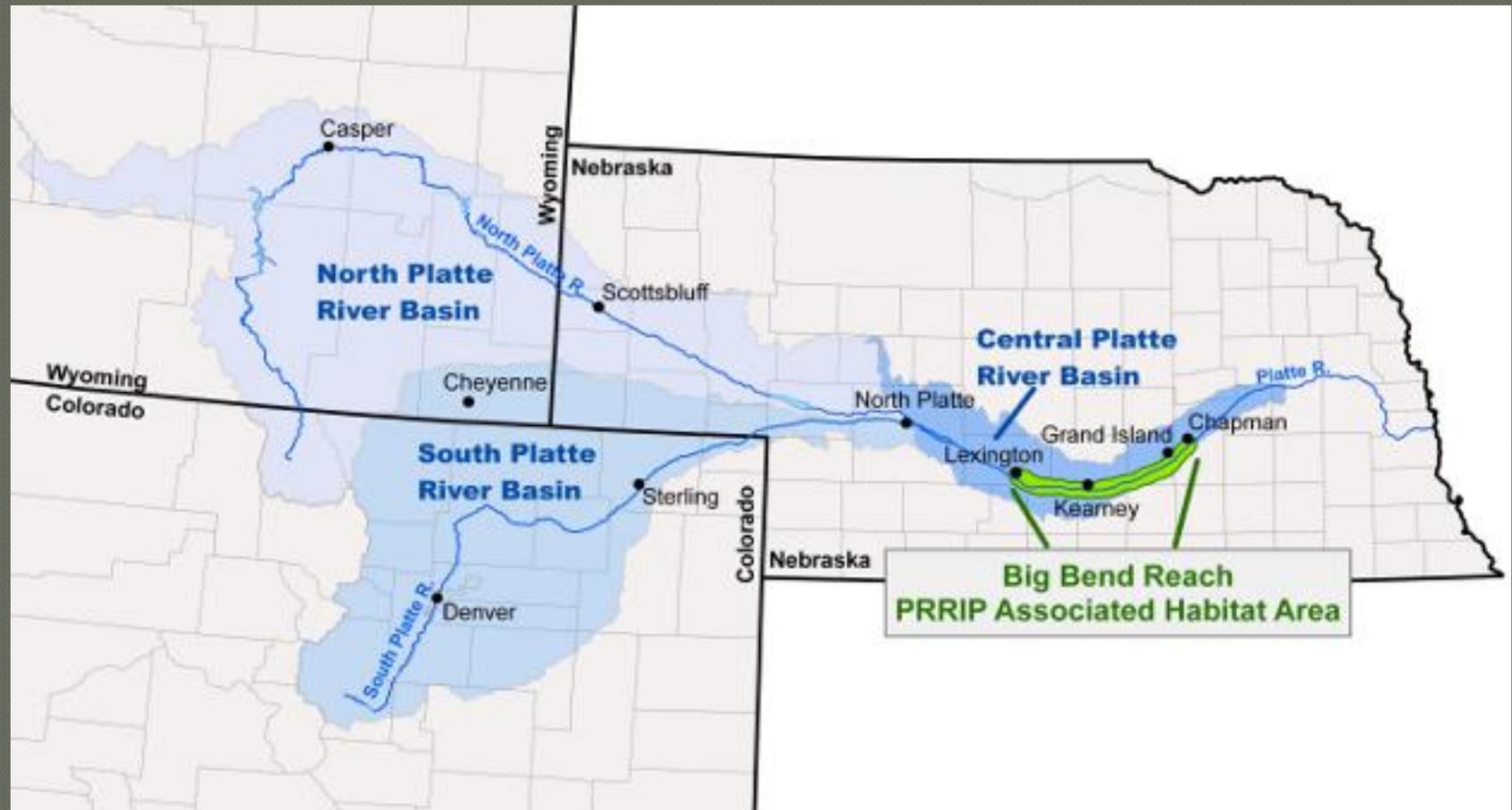
- When can ecological science help?
 - What questions to ask
- Sample answers from the Missouri and Platte Rivers

The Missouri River Mainstem System





Platte River Recovery Implementation Program



Map from

<https://www.platteriverrecovery.com/About/PRRIP/Program/Program-Information>

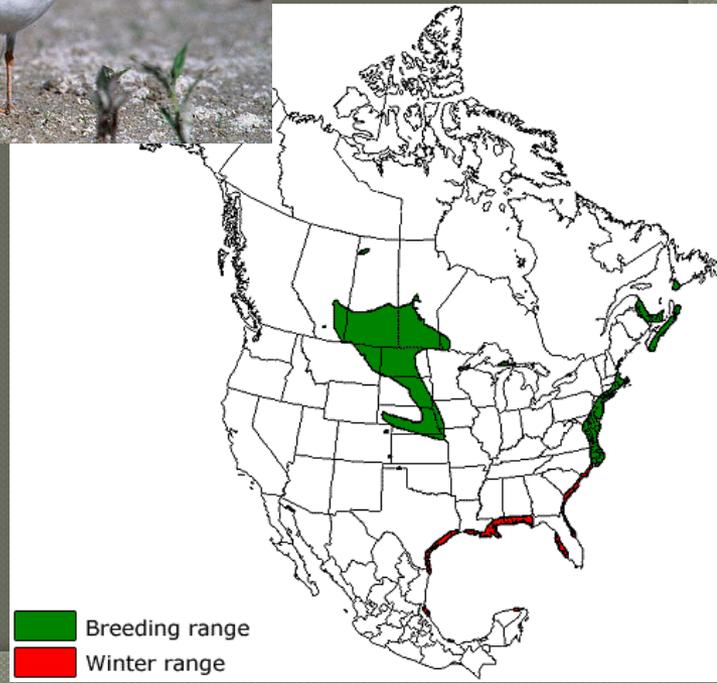


Terns and Plovers

Interior Least Tern
population: endangered
(1985)



Northern Great Plains Piping Plover
population: threatened (1986)





**How do alterations
in available habitat
affect populations
of Piping Plover
and Interior Least
Tern?**



Missouri and Platte

- ◉ Connected populations
- ◉ What are the differences in DM arenas?

4 Key Questions

- Who is the decision maker?
- Has the decision maker *asked* for scientific input?
- Who will bear the transaction costs?
- What are the tradeoffs involved?

Who is the DM?

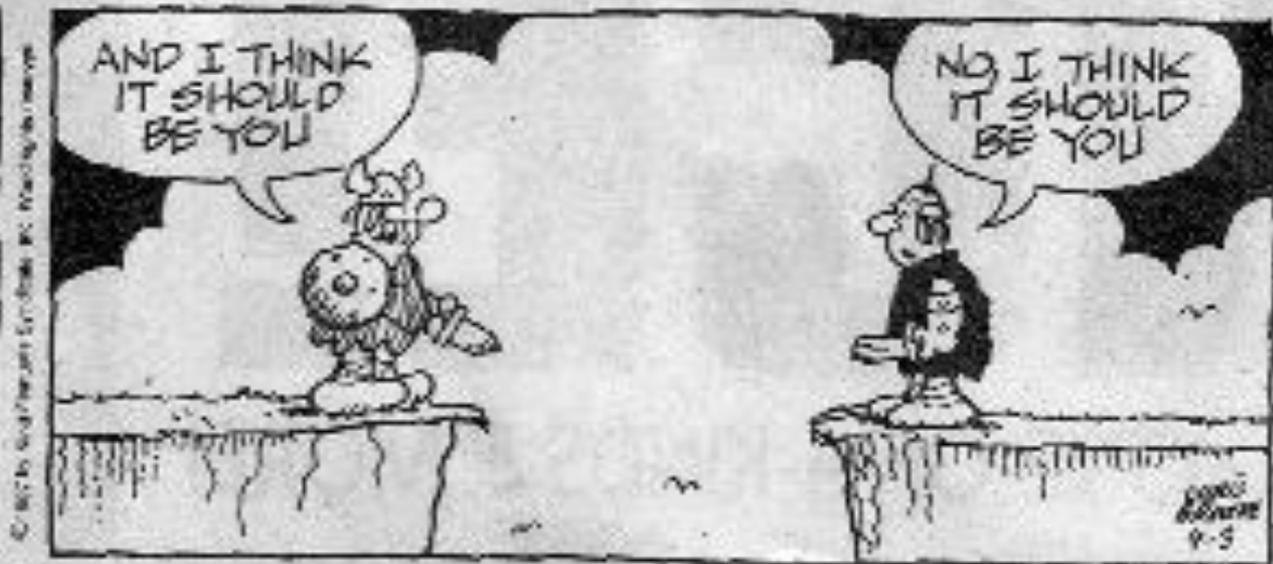
- Missouri: USACE
- Platte: many nested levels
 - FERC – ultimate decision maker
 - Platte River Recovery Implementation Program Governance Committee
 - State Agencies, Regional public water use agencies, USFWS, Bureau of Reclamation
- Political accountability more direct, players more equal on the Platte

Has the DM asked for input?

- Platte: Program has asked for help to determine the “how much is enough” question.
- Missouri: USACE was told to obtain scientific input by the USFWS BiOp.

High costs of interactions

Nagar the Horrible



Who bears transaction costs?

- Missouri – USACE – just the price of doing business
- Platte – The Program – direct federal funding.
- What information exchange is there?
 - Formally – None.
 - Informal – a trickle, getting stronger

What are the tradeoffs involved

- Missouri – (Regional issues) Floods and Navigation vs. Endangered species
 - Collective goods
- Platte – (Local issues) Floods? and Irrigation vs. Endangered species
 - Individual economics vs. collective goods
- Risk acceptance differs among stakeholders

When can ecological findings influence decision making?

	Platte	Missouri
DM has asked for input		
Transaction costs are provided for		
High degree of shared values and risk tolerance		

When can ecological findings influence decision making?

	Platte	Missouri
DM has asked for input	Yes	No
Transaction costs are provided for	Yes	Yes
High degree of shared values and risk tolerance	NO*	NO

Questions? Comments?

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Imagine...

- If US becomes less prosperous what happens to these tradeoffs?
- What if congress says “no money, and throw away BiOp”?