

Overview

- Rural Sustainability
 - Definitions, rural context, indicators
- Sustainability Transitions
- Example: Klamath Basin
- Humanistic Perspectives
 - Sense of place
 - Emotions
 - Decisionmaking
 - Collective action
- Concluding Thoughts

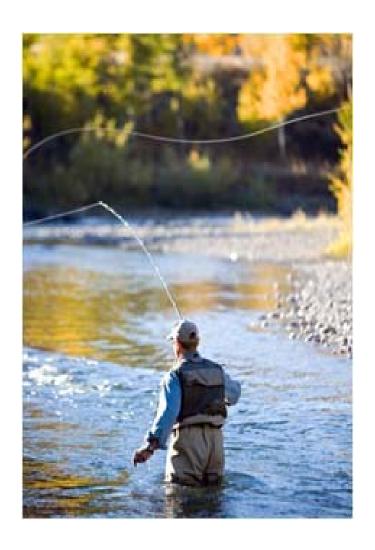
Rural Sustainability

- Sustainability
 - □ Triple bottom line "people, planet, profits"
 - Resilience ability to withstand disturbance
- □ Rural context SESs in transition
 - Working landscapes (ag, forestry, mining)
 - De-emphasis of material production relative to other objectives (e.g. consumption, restoration, ecosystem services)
 - Drivers of change
 - Economic marginalization of small and mid-sized ag and forestry operations due to globalization
 - □ Alternative amenity-oriented uses
 - Changing societal values in re: value of ES on ag lands





"Multifunctional" Rural Landscapes



Indicators of Sustainability/Resilience/Strong Multifunctionality

- Strong social, economic, cultural and environmental capital
- Strong adaptive governance structures that facilitate
 - new income and employment opportunities for the ag sector (e.g. PES)
 - informal arenas for establishing trust, common understandings, social learning, and different forms of cooperation and conflict mgmt among diverse, inclusive stakeholder groups
- High environmental sustainability functional ecosystems
- "Strong multifunctionality implies that substantial mental changes have taken place among various stakeholder groups."
 - e.g. expanded view of legitimate land uses and which groups have the right to access resources; expanded sense of community/place
 - Triple loop learning openness to new rules, assumptions
 - Wilson 2008, Armitage et al. 2007

The Challenge of Transitioning

- "I feel like my entire life has been defined by a ranching community that is transitioning from whatever it may have been to something different. I don't know a different reality."
- "We'll have to keep adapting. I think we don't even know where we're headed. What I'd like to believe is that we could keep rural people connected to land. And have them steward it into the future. And have some kind of a meaningful connection to that land. Like this land feeds us, it shelters us. So it's not just pretty land...."
- "I mean I'd love to believe that we could morph into that, but God, what a painful ... just take all the people and put them through the meat grinder, you know? I just feel like right now we're undergoing a giant ripping sound in this place."



Klamath River Basin OR Lake Ewauna Bonanza Gerber Reservoir Medford \Box Ø Oregon Φ California S acific 60 Miles Eureka Redding Compiled by M. Neuman, USBR Klamath Basin Area Office.

"America's
Aquatic
Jerusalem"
- Simmons 2008

2001 Drought

Biological Opinions

- Suckers in Upper Basin
- Coho in Lower Basin

Water curtailment

- •90% of farms dependent on water from Klamath Lake
- \$35m lost farm income

Social and political conflict

2001 Crisis

"Death threats reported in Klamath conflict"

Klamath Herald News,August 2001









Beyond Zero Sum Games:

Klamath Basin Restoration Agreement (2008)

- Whole Basin Settlement Talks grew out of FERC "alternative" dam relicensing process, 2006-2008
- Formal monthly meetings between 28 key Basin stakeholders
 re: dam removal vs. retrofitting for fish passage
- Hundreds of informal "side meetings" facilitated by local collaborative group
- □ Goal: address <u>all</u> the major conflicts in one document
 - Water, power, dams, endangered species, tribal claims, etc.
- Draft 2008, final signed in February 2010

Toward a More Sustainable Rural SES?

Ecosystems

- 4 PacifiCorps dams removed on Klamath River in 2020
- Salmon to be reintroduced to Upper Basin (extirpated in 1917)
- Guaranteed instream flows in UKB for sucker recovery

Irrigators

- Certainty for Project irrigators
 - Guaranteed flows, reductions during drought years, earlier notification
 - Safe Harbor agreement to avoid liability for salmon recovery after reintroduction
- Retirement of irrigated ag on off-Project lands
 - Irrigators to be bought out on voluntary basis -30,000 af, $\sim 18,000$ acres of land

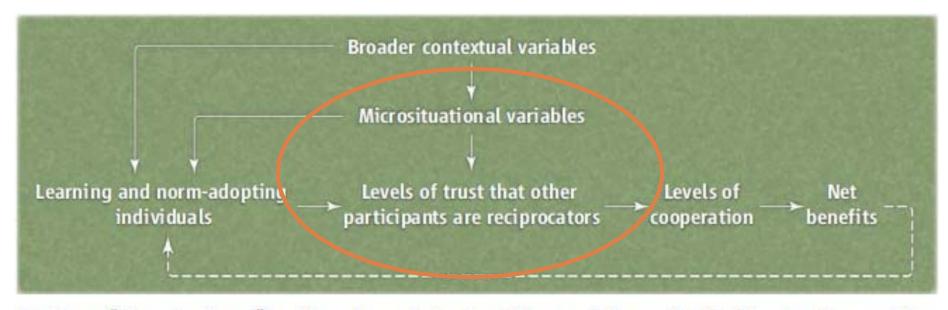
Tribes

- Land for Tribes 90,000 acres of former reservation
- \$ for economic development, including small scale forestry, biomass plant
- Governance Klamath Basin Coordinating Council

Explaining the 2001-2010 Transition

- Laws in place
 - Endangered Species Act
 - Tribal trust responsibility
 - □ Federal Power Act
- Formal process for bringing people together
 - Federal Energy Regulatory Commission (FERC) dam relicensing process
- Shifting tribal/nontribal power relations
- Relationship building at local/regional scales

Microsituational Variables Trust and Cooperation



Trust me. "Microsituational" and broader contextual variables can influence levels of trust and cooperation in managing common resources such as forests. [Adapted from (18)]

- Vollan and Ostrom, Science 2010

Shared Sense of Place

- □ Topophilia "love of place" (Tuan 1974)
- "The emotional identification of activists with particular places is frequently of strategic importance to the construction and maintenance of personal bonds among activists and of larger trans-local networks" (Ettlinger & Bosco 2004)
- "Networks of collective action can be mobilized by creating feelings of proximity, solidarity, and shared identities, often in spite of social distance and territorial separation" (Bosco 2007)
- How have emotional interactions and shifting senses of community and place catalyzed collective action, new forms of governance, and overall social-ecological resiliency in the Klamath Basin?

Yainix Project: Collaborative Restoration

"So they want water [for fish], right? But they also want restoration. And to me, part of what they want is to be included back in lands that have belonged to them for thousands of years. So that's the point that always gets missed, is a lot of this is about being included, and it's a real need. Just to be included." (UKB rancher, Yainix Partnership)

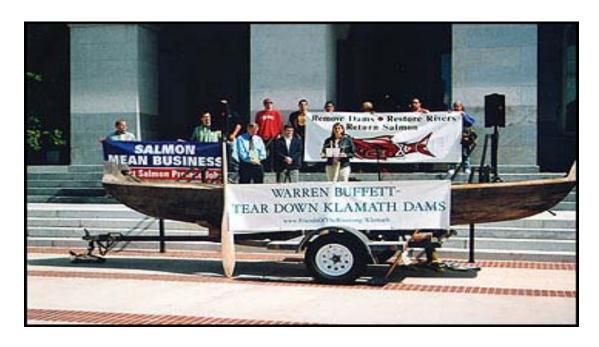






Expanding Sense of Place/Community

"What's my space? Is it my ranch or is it the Sprague, is it the Sprague plus the Wood, Williamson? You know, I think true success for the environment is going to be when I start as a land manager understanding, oh my God, the salmon are running now. What does that mean?" (UKB rancher)



"When farmers wrote letters of support for the fishermen, something changed. It can work here."

(LKB fisherman)

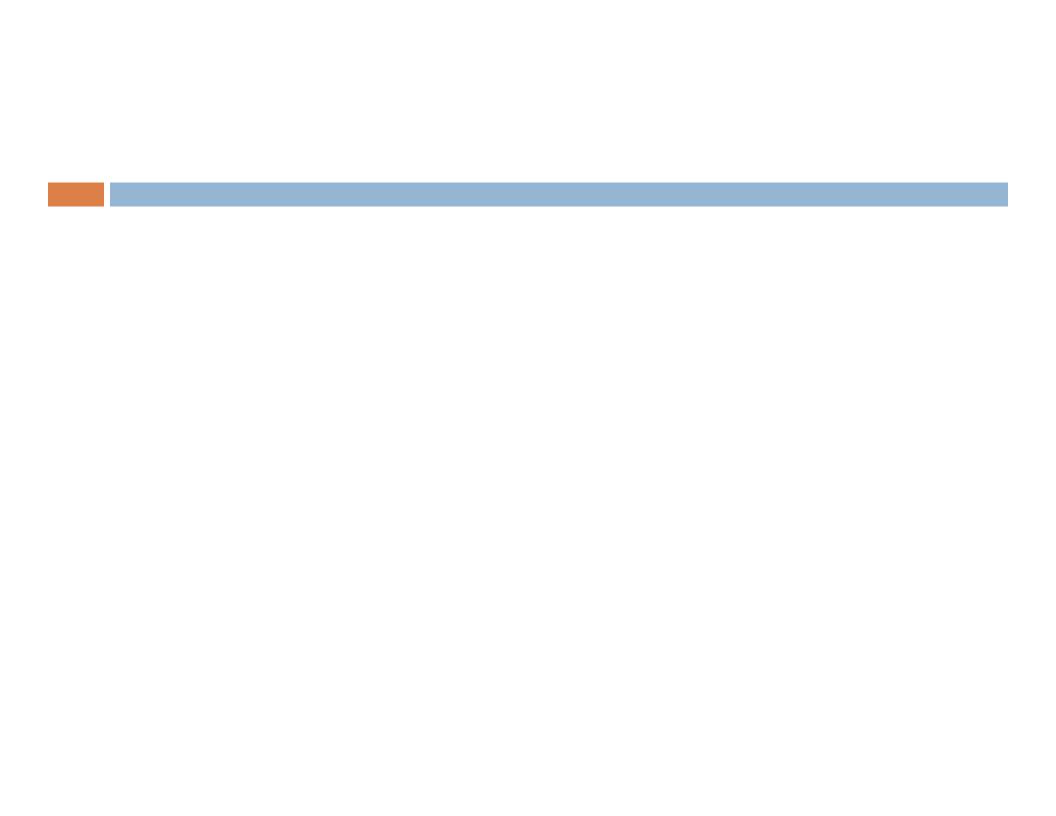
Toward Collective Action

- "The other thing was we sat down and started working on those issues of trust... Sit down and talk about things that here to date you've been very cautious talking to people about. Some of your fears when it comes to water flows, or why is it we felt fish needed particular amounts of water at particular times of the year."
- "And it is very challenging for the irrigation community to start talking about some of their fears, and where there might actually be savings of water, on both sides."
- "Those kinds of discussions where you have to let your guards down are particularly sensitive... because you put your issues on the table, your bargaining chips, but you're not gaining anything at that moment... But what you are doing is gaining the trust that's going to enable you to get down to that final solution."

- Yurok Tribal Leader

Concluding Thoughts

- Rural communities undergoing shifts in traditional economic sectors are vulnerable, subject to state changes --- Goal = "graceful transition"
- Klamath case illustrates critical role that social relations play in (ongoing)transition to a more sustainable, resilient system
- Some microsituational variables that result in enhanced trust and cooperation may be difficult to quantify and model
- Role of qualitative research in CHANS scholarship
 - dynamics of transformation, key variables influencing decisionmaking
 - strategies for catalyzing collaboration, innovation, experimentation
 - institutional contexts and arenas that facilitate shared understanding
- Challenge: difficult to navigate and synthesize different bodies of knowledge, methodological approaches



Humanistic Perspectives

- Other ways of knowing and explaining the world
- Qualitative methods
 - Open-ended, semi-structured interviews allow for capture of unanticipated themes, or ideas that might emerge
- "Thick analysis" of environmental decisionmaking to understand governance for sustainability (Adger et al. 2003)
 - Context and meanings of experiences, events, and scenes can be presented in detail by those involved in it (Geertz 1976)
- Klamath research
 - Emotional aspects of transition/transformation
 - How have emotional interactions and shifting senses of community and place catalyzed collective action, new forms of governance, and overall social-ecological resiliency in the KB?

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pril 8, 2001- No. 19,740

Klamath Falls, Oregon

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Fish get water; farmers get sympathy

Dry canals will signal society's shifting values

Y TODO KEPPLE

It was a week of profound change the Klamath Basin.

Friday's announcement by federal als that no irrigation water will diverted from Upper Klamath ake this year removed all doubt hat endangered species will be pro ted at any cost.

Faced with a winter snowpack asuring less than a third of nor-l and yielding to mounting pres 700 turn out for meeting with Sen. Smith

In the wake of a decision by the In the wake of a decision by the Bureau of Reclamation to halt most water deliveries to the Klamath Project farmers, Sen. Gordon Smith came to Klamath Falls Saturday and told them it was OK to voice their anger over the decision.

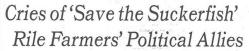
"I am here to be your whipping post," Smith told a crowd of about 700 farmers and others packed into a conference room and adjoin-ing hallways at the Shilo Inn. "I want you to vent your frustration." And yent they did.

Marty Macy of Newell told Smith he was disgusted by a









By DOUGLAS JEHL

KLAMATH FALLS, Ore., June 16 - Not since the snail darter has a creature so infuriated - and inspired - conservatives around the country. The all-but-inedible, bottomfeeding suckerfish, which makes its home in a lake that feeds this normally fertile agricultural valley, has become the latest rallying cry in the battle to rewrite the Endangered Species Act.

A federal decision to cut off irrigation water in a year of record drought to protect the endangered suckerfish has left 1,400 family farmers and ranchers here seething in resentment and reignited a debate over the federal law that conservatives most love to hate.

The region has been without irrigation water since April 7, when the Bureau of Reclamation ordered the cutoff to guarantee maximum protection to the suckerfish and to the threatened coho salmon

The silencing of the sprinklers has turned people's lives here upside down, with at least 200,000 acres of hats and boots and carried bitter, farmland parched and no clear idea when the water might flow again.

The farmers and their supporters have denounced what they call an unconscionable betrayal. And now to an extent not seen since the hattles over the snotted owl in the early



Suckerfish: suddenly a poster fish.

1990's and the snail darter before that - conservatives are embracing their cause as the best example yet of what is wrong with a law they say demands revision. Lawmakers are flocking to Klamath Falls to show common cause with its people, and conservative voices like The Wall Street Journal's editorial page are turning up the heat.

"This is ground zero in the debate over the Endangered Species Act," Representative Greg Walden, Republican of Oregon, said on Saturday, kicking off a field hearing in a fairgrounds hall where bleachers were filled with thousands of angry men and women who wore cowboy

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THE SANTA BARBARA MUSEUM OF ART HAS joined The New York Times Arts & Leisure Weekend September 14-16. Look for their listing in the July 20 program guide or call 1-866-NYT-1851 for more infor-