

Social learning and the creation of Communities of Understanding in collaborative natural resource planning



Rachel F. Brummel, Kristen C. Nelson, Stephanie A. Grayzeck
University of Minnesota, St. Paul

Pamela J. Jakes, and Daniel R. Williams
USDA Forest Service Research

ISSRM
June, 2007

Research Context: HFRA and CWPPs



- 2003 Healthy Forest Restoration Act (HFRA)
 - Community Wildfire Protection Plans (CWPPs)
 - Collaborative process for “at-risk” communities
 - Fire Department
 - State Forestry Department
 - Local Government



- 15 case studies nationwide
 - Collaborative context, process, and outcomes



A Call for Inclusive Planning



Coming From

- Political Science: Deliberative Democracy (Habermas, 1998)
- Public Policy: New Governance (Bingham, 2005)
- Natural Resources: Collaboration (Yaffee and Wondolleck, 2000)
- Conservation Biology: Co-management/CBC (Berkes, 2005)

Collaborative Environmental Planning

Why plan collaboratively?

- Innovative solutions in complex contexts
- Create durable decisions
- Deal with uncertainty



Source: S. Grayzeck and V. Sturtevant

“Collaboration can lead to better decisions that are more likely to be implemented, and at the same time, better prepare agencies and communities for future challenges.” (Yaffee and Wondolleck, 2000).

Collaborative Planning: Challenges



- Addressing diverse interests
- Considering and evaluating relevant science
- Navigating multiple agency directives
- Coming to a shared understanding of the problem at hand

How can groups overcome these challenges?

One Option: Social Learning?

What is Social Learning?

“...learning that occurs when people engage one another, **sharing diverse perspectives** and experiences to develop a **common framework** of understanding and **basis for joint action**” (Schusler et al. 2003).

Social learning as Process

Shared Understanding/Knowledge as Outcome

Action follows Collective Understanding



Collaboration & Social Learning

What process elements enhance social learning potential?

Schusler, et al 2003

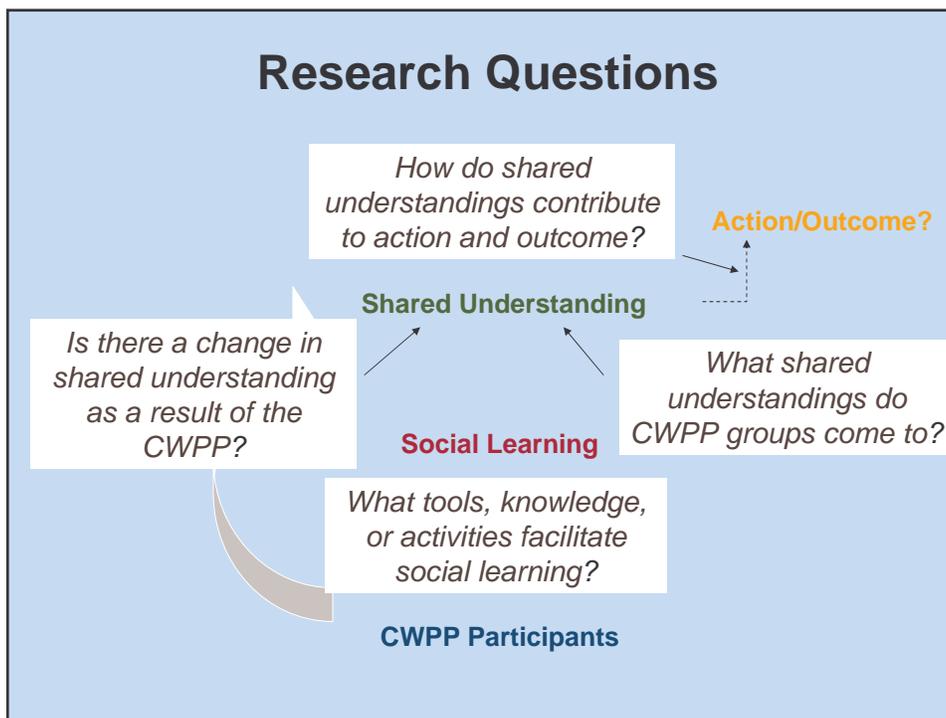
- Open communication
- Diverse participation
- Unrestrained thinking
- Constructive Conflict
- Democratic structure
- Multiple sources of knowledge
- Extended engagement
- Facilitation

Bowen & Taillieu, 2004

- Problem solving activities
- Relational activities



Research Questions

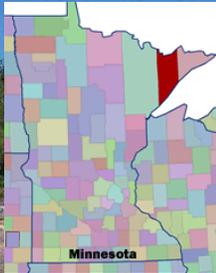


Methods



- **Multiple Case Study Design**
 - Minnesota, Wisconsin, Virginia, and Florida
- **Sampling**
 - Based on meeting attendance and organization representation
 - Avg. \approx 85% of primary participants
- **Data Collection**
 - Semi-structured interviews (N = 57), digitally recorded
 - Transcribed audio to text
- **Data Analysis**
 - Focused coding for social learning themes on selected questions

Lake County, MN County-wide CWPP



- 1.3 million acres
- USFS, Superior
- MN DNR
- **Lake County Government**
 - County Commissioners
 - Sherriff/EM
 - Land Commissioner
- **Volunteer Fire Departments**
 - 8 VFDs

Photo: S. Grayzeck

Barnes & Drummond, WI

Two-Community CWPP



- 175,000 acres
- USFS, Chequamegon
- WI DNR
- NWRPC
- Bayfield County Forestry
- Drummond Town Board
- Barnes Town Board
- VFDs



High Knob, VA

Sub-division CWPP

- 400+ homes
- Virginia, DOF
- High Knob, HOA
- Linden Fire Department
- Community Members





Findings

Is there a change in the group understanding of wildfire as a result of the CWPP process?

Findings: Change in Shared Understanding?



- **Change towards having the same shared understanding (MN, WI, VA)**

"I think everybody had a heightened sense of awareness on an issue that [before]...no one would even give much thought to."
- Virginia

- **Pre-existing common understanding, CWPP reinforced relationships (FL)**

"I think [the shared understanding] was probably already there. Because we've had so much experience in the past with it."
- Florida

Findings

What tools, knowledge, or activities facilitate social learning?

Findings: Facilitating Learning

- Planning processes varied across cases

Common learning elements

- Group data collection, analysis, or discussion
- Deliberative, relational aspects



Findings: Facilitating Learning

- **Risk assessments** as important in creating site-specific data
- Helped position planning within the local social and ecological context

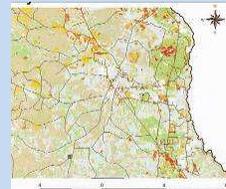
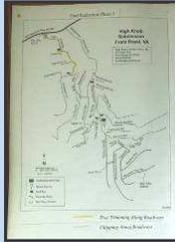


"I think what really helped was...doing the assessment. Because then...we had a current history and we actually saw it – after learning how this process worked – now took this tool out to the field and say, well dad-gum! Look at this!"

– Florida

Findings: Facilitating Learning

- **Mapping the landscape** as important in all cases
 - Role: - creating a shared conception of the landscape
 - visualizing “hazards” and landscape values
 - basis for decision-making and future action



“There was a point where the light bulbs turned on, when you showed the final map and everybody looks at it and goes, well yeah...” - Wisconsin

Findings: Facilitating Learning

Relational aspects enhance social learning



- Meetings themselves
- Open atmosphere
- Discussion and dialogue
- Facilitation

“And, it’s important that the facilitator come from the outside...they just know how to keep everybody on track, and that in itself was a big help.” - Wisconsin

Findings

What shared understandings do CWPP groups come to?

Findings: Shared Understandings

- Two functional types emerge
 - **Substantive:** understandings on *what* to act and *why*
 - Ecological understanding of wildfire causes, consequences, and management
 - **Relational:** understandings of *how* to act
 - Social and institutional systems around wildfire



Findings: Substantive Understandings

- Wildfire is a problem in the east

“...it’s not a Western problem or a Southern problem it’s a nationwide [problem].” – Wisconsin

“...We hear California’s on fire, Florida’s on fire. But, because it’s more isolated, we don’t understand the collective magnitude. But I think people are more aware of it.” – Virginia



Findings: Substantive Understandings

- Understanding specific wildfire risks/hazards



- Hazardous Fuels
- Human Causes
- Railroad Fires
 - Lightening
- Escaped Prescribed Fires

Findings: Relational Understandings

- Roles, limitations, and capabilities of other agencies



“I think that in Lake County [the planning process] really helped the partners come together and understand what everybody’s role is as a whole. Looking at the big picture ... ‘cause everybody was just working on their own before.” - Minnesota

Findings: Relational Understandings

- Action should happen collaboratively



Within the CWPP...

“Well, the [understanding was that the] project was needed and cooperation was needed from all the government units in order for it to be a success.” - Wisconsin

And Beyond the CWPP...

“My understanding of that whole process was, we have to work closer – and I already felt we worked close with the DNR – but I think we have to work closer yet now.”

– Minnesota

Findings: Shared Understandings

- Participants extended learning to home organizations

“...I had a much better understanding of [wildfire] after the process. And I tried to bring that back to the fire departments...and give them the information.” - Fire Chief, Minnesota



Findings

How does social learning contribute to action and outcome in CWPPs?

Findings: Action and Outcome

- Lake County, Minnesota
 - Group identified weakness in VFD coordination
 - Created political will to address the issue
 - Outcome:** Creation of a new fire coordinator position
- High Knob, Virginia
 - Tension between “naturalness” and fuels reduction
 - Community identified hazardous fuels as an issue
 - Outcome:** Community-wide fuel reduction project
- Taylor, Florida
 - CWPP group identified Taylor as at-risk
 - Created political will to collectively act
 - Outcome:** Fuel break put in around the community



Findings: Action and Outcome

Benefits beyond the scope of the CWPP

- Continued contact and collaboration (MN, VA)
- Improved landscape level planning & coordination across ownership boundaries (MN, WI, FL)
- Strengthened organizational infrastructure (MN)
- Improved management *within* agencies (MN)



Communities of Understanding

- Enhanced social and ecological understanding of wildfire
- Learning beyond the immediate CWPP group



Communities of Understanding

- persists beyond CWPP
- benefits beyond the scope of the CWPP
 - across agencies and scales
 - fosters continued collaboration around wildfire and forest management

Conclusions



- CWPPs as a forum for social learning around wildfire
 - A capacity building outcome
- Process elements
 - Collective reasoning activities
 - Relational activities
- Communities of understanding
 - At different organizational levels
 - Inter-organizational (MN, WI)
 - Local level (VA)
 - Can bring concrete outcomes
 - Can persist beyond the CWPP



Thanks!

JFSP CWPP Research Team

Support

- Joint Fire Science Program USDA Forest Service
- University of Minnesota
 - Graduate School
 - Mark and Judy Yudof Fellowship
 - Conservation Biology Program
 - Department of Forest Resources



Questions?