



COMMON FACTORS AFFECTING THE SOCIAL ACCEPTANCE OF FUEL MANAGEMENT TECHNIQUES

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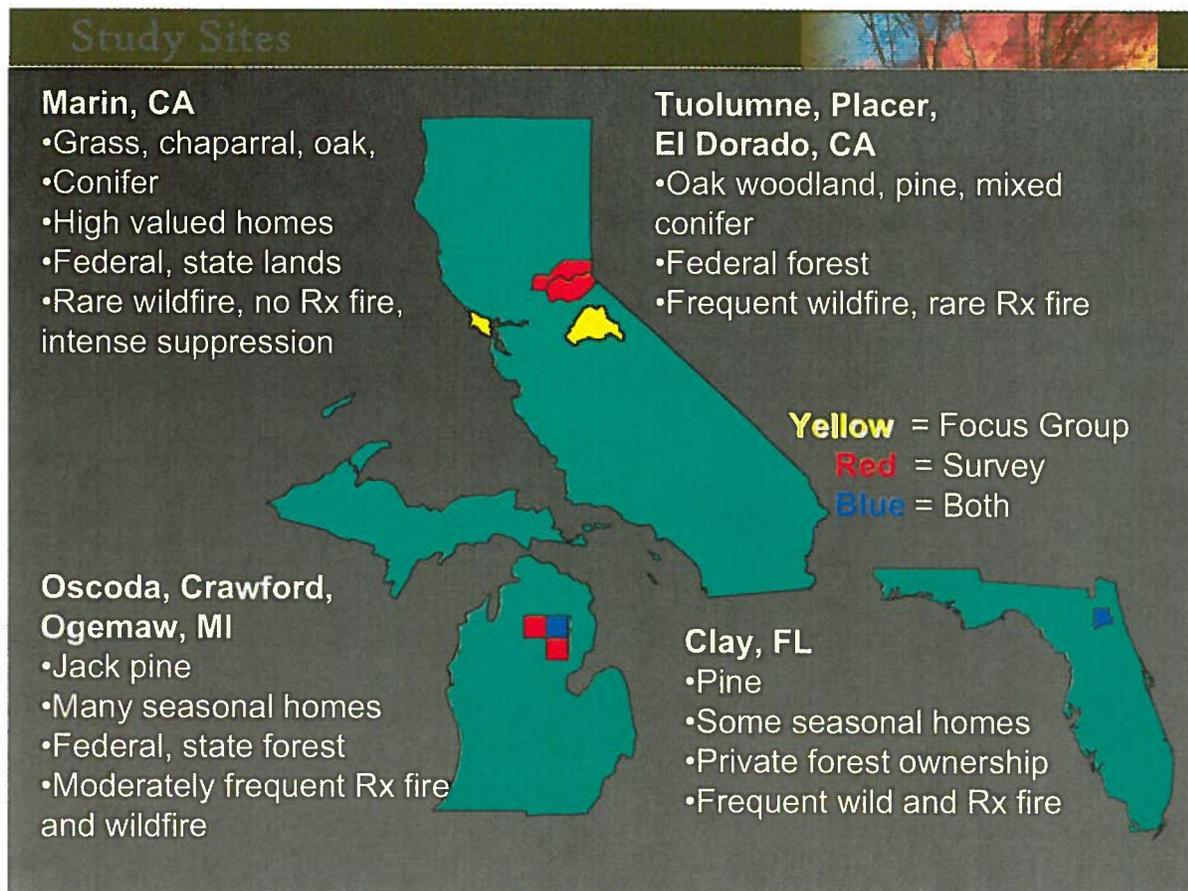
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Presentation Outline

- Overview and objectives of the study
- Key findings
- Application of the findings

Objectives

- Design and test a survey instrument that measures homeowner acceptance of fuel treatment approaches at wildland-urban interface
 - Prescribed burning
 - mechanical treatment
 - defensible space ordinance
- Explore fuel treatment acceptance factors
- Construct models of fuel treatment acceptance



Hypothesized predictors of approval

- Theory of Reasoned Action
 - Beliefs predicting attitude
 - Attitude predicting approval
- Other factors.....
 - Personal experience with fire and fuel treatment
 - Trust in agency
 - Personal importance of fuel treatments
- Demographic factors

Respondent Fuel Treatment Experiences

Over lifetime	FL site	CA site	MI site
Prescribed burning near my home	31%	25%	21%
Smoke discomfort	61	68	17
Mechanical fuel reduction near home	5	21	9
Required to remove flammable vegetation	2	32	2
Actually removed flammable vegetation	44	91	42

Note: Same color percentages indicate results that are not statistically different

Theoretical Framework for Studying Human Acceptance of Fuel Reduction

Selected part of the Theory of Reasoned Action to guide and structure our inquiry

Belief Evaluation

Outcome
Good/bad

Attitude toward fuel treatments

Positive/negative

Intent to support

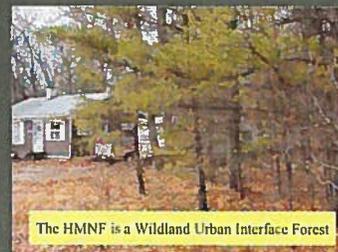
Acceptance of fuel treatment
"Vote for"

Belief Strength

Likelihood a fuel treatment will produce an outcome
Very likely/unlikely

Other Fuel Treatments Consistently predictive factors

- Mechanical treatment
 - Cost effectiveness
 - Impacts scenery (negative)
 - Personal importance
 - Trust
- Defensible space
 - Cost effectiveness
 - Impacts scenery (negative)
 - Personal importance
 - Trust

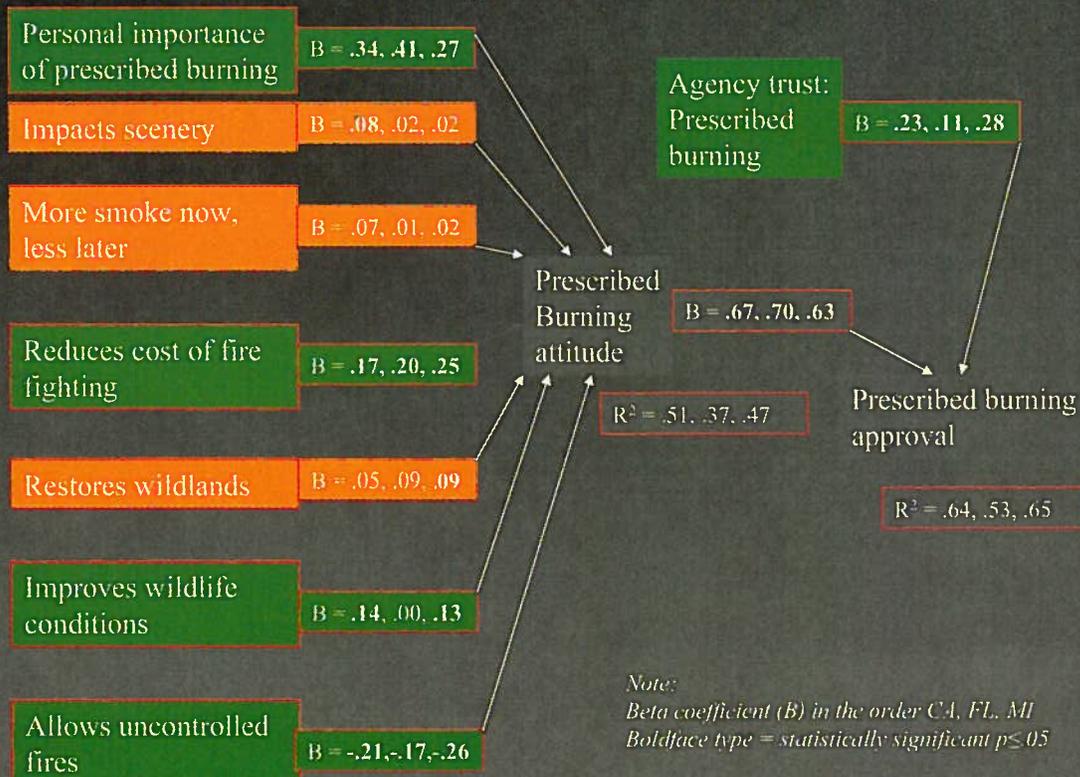


Trust Findings

"I trust the gov't....."	FL site	CA site	MI site
Use of prescribed burning	4.5	4.1	3.3
Notifying about prescribed burning	3.6	4.0	3.4
Use of mechanical fuel reduction	4.1	4.2	3.5
Enacting and enforcing defensible space	3.6	3.9	3.0
Gov't does a good job managing public land	4.1	3.9	3.5
Good job communicating about forest issues	3.7	3.6	3.0
Good job protecting private property from wildland fires	4.9	5.2	3.9

Mean of scale where "1" is strongly disagree; "7" strongly agree

Conceptual model, prescribed burning



Demographics don't predict acceptance

- Education
- Gender
- Household size
- Employment status
- Tenure
- Income
- Residential status
- Respiratory ailment status

Implications

- Find the balance of residential acceptance and environmental health
- Combine social science research, including public engagement, and the biological sciences, including forestry
- Understand the fuel reduction tools to reduce risks
- Find role for agency outreach programs
 - Continue to make public aware and educated on the impacts of their actions