PUBLIC PERCEPTIONS OF FOREST CONDITIONS AND MANAGEMENT IN THE ASHLAND CREEK WATERSHED: RESULTS FROM AN OPINION SURVEY

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Rogue Basin Fire Learning Network, Fall Meeting
October 11, 2012

Ashland Creek Watershed

Photo by Sean Bagshaw

AFR Multiparty Monitoring:
The Context for a Public Opinion Survey

- Evidence of support for AFR among a diverse group of stakeholders (AFR Stakeholder Opinion Survey, 2009), but what about public support more generally?

- AFR Monitoring Plan (April 2011)
  - Measure effectiveness of public outreach
  - Measure level of public support for AFR

- TNC (Collins Grant, 2011)
 - Measure change in public support for forest restoration based on the development and use of ecological references.

Study Design

- Cross-sectional public opinion survey (n=1,800); recruited sub-sample panel for longitudinal research.

- Mail questionnaire using Dillman's (2008) Tailored Design Method

- Administered February/March 2012; four contacts.

- Coding and data entry with 10-20% verification; March-April

The Questionnaire Measured…

- Forest values and beliefs about the Ashland Creek watershed.

- Knowledge of AFR and attitudes toward management.

- The meaning of forest restoration and support for the use of ecological references.

Forests in the Ashland Creek Watershed:
A Public Opinion Survey
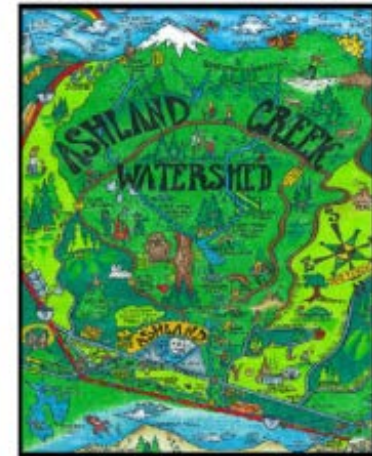
What do you value about these forests?
Your response is important!

Administered by Southern Oregon University Research Center, 2012

Population, Sample and Bias

- Sampling Frame –- Jackson Co. voter registration records (Precincts 2, 4, 7, 10, 13 and 18), Nov. 2011

- Simple random sample (n=1800); 34% response rate (25-45% is typical).

- Margin of error for sample statistics is +/- 4%

- Sampling Error
  - No bias on gender, income and residence
  - Positive bias on age and education. *Our sample is somewhat older and more highly educated than the population.*

Research Question #1

What do residents of Ashland and the surrounding area value most about forests in the Ashland Creek watershed, and what do they believe about forest conditions and fire ecology?

Q 5.4 How important is each reason to you contentment in the Ashland area?

Reasons of living the in Ashland area	Not Important	Somewhat Important	Very Important
Natural Environment (e.g., forests, water)	0	9	**91**
Public Safety (e.g., low crime)	2	30	**68**
Recreational Opportunities	3	28	**69**
Civic Institutions (e.g., schools, libraries)	5	41	**54**
The Arts (e.g., theater, music, galleries)	6	40	**54**
Services for the Elderly (e.g., medical)	19	**47**	34
Alternative Cultural Values	22	36	**42**
Economic Opportunities	23	**46**	31
To be closer to family	**45**	22	33

How often do people visit the watershed?

Q1.2 About how many times during the last 12 months have you entered the forest in the Ashland Watershed, beyond Lithia Park?	Percent
None	24
1 to 10 times	43
More than 10 times	33

Highly Ranked Forest Values

Q1.4 Percent of $100 that individuals budgeted to maintain specific forest values	Mean Percent
Life Sustaining Value "I value these forests because they help produce, preserve, clean, and renew air, soil, and water."	**21**
Aesthetic Value "I value these forests because I enjoy the scenery, sights, sounds, smells, etc."	**13**
Biological Diversity Value "I value these forests because they provide a variety of fish, wildlife, plant life, etc."	**12**
Recreation Value "I value these forests because they provide a place for my favorite outdoor recreation activities."	**11**

Moderately Ranked Forest Values

Q1.4 Percent of $100 that individuals budgeted to maintain specific forest values	Mean Percent
Intrinsic Value "I value these forests in and of themselves, whether people are present or not."	8
Future Value "I value these forests because they allow future generations to know and experience the forests as they are now."	8
Therapeutic Value "I value these forests because they make me feel better, physically or mentally."	7
Economic Value "I value these forests because they provide timber, fisheries, minerals, or tourism opportunities such as outfitting or guiding."	6

Lower Ranked Forest Values

Q1.4 Percent of $100 that individuals budgeted to maintain specific forest values	Mean Percent
Spiritual Value "I value these forests because they are a sacred, religious, or spiritually special place to me or because I feel reverence and respect for nature there."	5
Learning Value "I value these forests because we can learn about the environment."	3
Cultural Value "I value these forests because they are a place for me to continue to pass down the wisdom, knowledge, traditions and way of life of my ancestors."	2
Historic Value "I value these forests because they have places and things of natural and human history that matter to me, others, or the nation."	2

Stakeholder vs. Public Beliefs about Forest Conditions in the Watershed

Percent of sample believing that…	Stakeholders	Public
Q2.1 The overall condition of the forest land in the Ashland watershed is *very* or *somewhat unhealthy*.	**73%**	**10%**
Q2.2 The chances of a large-scale, high severity fire occurring in the Ashland watershed in the next five years is *very* or *somewhat likely*.	85%	83%

Terminology Used By
Natural Resource Professionals

Q2.3 "There has been much public discussion lately about forest ecology and management in the Ashland watershed, but some terms used by resource professionals may not be familiar to many people. Please tell us how familiar you are with the following terms used to describe forest conditions and management."

Natural Resource Terminology, Rank-ordered Familiarity

"I *know the meaning* of the term…"	Percent
Threatened & Endangered Species	98
Fuel Reduction	91
Prescribed Fire	86
Ecosystem Management	82
Forest Resilience	65
Fire-adapted Ecosystem	52
Disturbance	43
Succession	41
Legacy Tree	**38**
Historic Range of Variability	**24**
Ecological Reference Condition	**12**

Knowledge about Wildfire

Q2.4: "We're interested in learning more about what you think about wildfires in southwest Oregon forests, including the Ashland Creek watershed. Please respond to each statement to the best of your ability by indicating whether you believe it is generally false, generally true, or that you are not sure."

Knowledge about wildfire in southwest Oregon

"I believe the statement is *generally true.*"	Percent
Many plants require occasional fires so that new seeds or seedlings can sprout.	87
Fires play an important role in controlling insect and disease in forests.	87
Years of fire suppression has increased the risk of severe wildfire in our region's forests.	74
Fires are important for maintaining wildlife habitat.	73
Fires in one year are influenced by fires in previous years.	60
Some trees, like ponderosa pine, grow better in open, sunny areas than in shaded ones.	60
Prior to European settlement, forests were generally more open than they are today.	**40 (48DK)**

Research Question #2

What forest management goals and practices are supported by residents of Ashland and the surrounding area?

Management Priorities for
the Ashland Creek Watershed

Q2.5 "U.S. Forest Service managers are faced with numerous concerns in the Ashland Creek watershed. How important are the following management issues to you?"

(These next several items are about management preferences in the Ashland watershed, without specific reference to AFR.)

Management Priorities, Rank-ordered

"The following management issues are *very important.*"	Percent
Protecting Ashland's municipal water supply	90
Reducing wildfire risk	77
Preserving old growth forests	72
Providing adequate habitat for sensitive wildlife species	68
Creating more designated wilderness area	48
Restoring forests to conditions that existed before fire suppression	35
Limiting access by closing roads	31
Managing for increased recreation use	25

Fire Suppression and Fuel Loads

Q2.6-2.8 "For nearly a century, natural resource managers put out all wildfires. However, scientists have learned in recent years that wildfires are an important part of how nature works. Conditions in many forests, including the Ashland Creek watershed, now differ substantially from how they looked and functioned a century ago. Fire suppression has allowed leaves, dead branches, other debris, and small trees to build up over time, increasing "fuel" that promotes hotter and larger fires. In many parts of the Ashland watershed, trees are more numerous than before but also smaller, so they are more likely to burn in a fire."

Need for Fuel Reduction

"Public resource managers now promote ways to allow fires to burn more naturally and less dangerously in forests like those in the Ashland Creek watershed. To do this, they reduce the amount of fuel and abundance of smaller trees to return forests to conditions more like what existed before fire suppression. Some practices that can do this are:"

Fuel Reduction Practices

Surface and ladder fuel treatment —"Managers can use chainsaws or other tools to reduce the number of shrubs and small trees where they are so numerous that they increase the size and severity of wildfires. This cut material is typically dispersed or piled and burned since it has little or no commercial value."

Commercial thinning and density management – "In overly dense forests, where competition threatens tree vigor, some smaller trees with commercial value (i.e., greater than 7 inches in diameter at the base) can be selected to be cut and removed using chainsaws and logging equipment. These sellable logs are a byproduct but not the goal of fuel reduction and restoration, which generally leaves the largest trees."

Prescribed fire – "Also called controlled burning, this practice can involve 1) intentionally setting fires in ways that can be controlled to produce desired conditions; 2) letting a naturally caused fire burn within predetermined boundaries and conditions under close and careful watch."

Support for Fuel Reduction Practices

Management Practices	Legitimate tool, use more often	Use infrequently, in selected areas	Shouldn't use, negative impacts
Surface and ladder fuel treatment	58%	18%	1%
Commercial thinning/ density management	43%	36%	5%
Prescribed fire	37%	41%	6%

Research Question #3

What do residents of Ashland and the surrounding area know about the Ashland Forest Resiliency Stewardship Project, and do they support AFR goals?

Specific knowledge of AFR

Q3.1 "Before this survey, had you heard or read about the Ashland Forest Resiliency Stewardship Project (AFR)?"	Percent
No, I've never heard of it.	60
Yes, I've heard of it but don't know what it involves.	16
Yes, I've heard of it and know a little about the project goals.	**20**
Yes, I've heard of it and know a lot about the project goals.	**4**

Q3.2 "If you heard about AFR prior to this survey, where did you hear about it?" (Top 3)	Percent
I read about AFR in the local newspaper.	**65**
I heard about AFR from friends or neighbors.	31
I read about AFR on the City of Ashland's AFR website.	14

Questionnaire Description of AFR

"Ashland Forest Resilience Stewardship Project is a fire hazard reduction plan, developed jointly by the Forest Service and the community of Ashland, to reduce the potential for large-scale, high severity fire in the Ashland watershed. The plan is designed to protect the City's water supply and to protect and enhance old growth forest ecosystems by creating a more fire resilient landscape. Along with the U.S. Forest Service, AFR partners include City of Ashland, The Nature Conservancy, and Lomakatsi Restoration Project."

Overwhelming Public Support for AFR

Q3.4 We'd like to know your opinion about the Ashland Forest Resiliency Stewardship Project as described in the paragraph above. Do you approve or disapprove of AFR's goals?	Percent
Strongly Disapprove	1
Somewhat Disapprove	1
Somewhat Approve	18
Strongly Approve	80

Who should be trusted?

One respondent said this about AFR goals (Q3.3):

➢ "There seems to be many varied and controversial opinions regarding this project. In the current political and economic climate it is difficult for the average citizen to discern which goals are motivated by special interests of various groups and which goals are truly made for the good of the environment and citizens."

So how much do citizens trust AFR interest groups?

Level of Trust in AFR Interest Groups

Q3.6 Please indicate your level of trust in the following groups to make good decisions about fuel reduction and forest restoration in the Ashland watershed.	Full Trust	Some Trust	No Trust	No Opinion
The Nature Conservancy	54	29	6	11
Lomakatsi Restoration Project	38	19	4	39
Klamath-Siskiyou Wildands Center	31	28	6	36
U.S. Forest Service	30	55	9	6
City of Ashland	19	64	9	7
S. Oregon Timber Industry Association	6	31	40	23
S. Oregon Small Diameter Collaborative	4	14	3	78

Importance of Monitoring AFR

Q3.7 "Local groups, like those listed in the previous question, are working with the U.S. Forest Service to monitor AFR's effectiveness in achieving project goals. This collaborative, community-based effort is gathering data to track AFR and inform future management decisions. We'd like to know how important it is to you that large-scale fuel reduction in the Ashland watershed has this type of public oversight."

	Percent
Very Important	76
Somewhat Important	20
Not Important	4

Research Question #4

What does the public mean by "forest restoration," and do they support restoration efforts broadly on public land in SW Oregon?

Variable Support for Large-scale Forest Restoration on Public Land

Q4.2: "We'd like to know your opinion about the broad goals of forest restoration on National Forest land in southwest Oregon. Please tell us your level of agreement with the following statements."

(12 items are grouped in three Figures.)

Figure 1: Uncertainty about the need for restoration
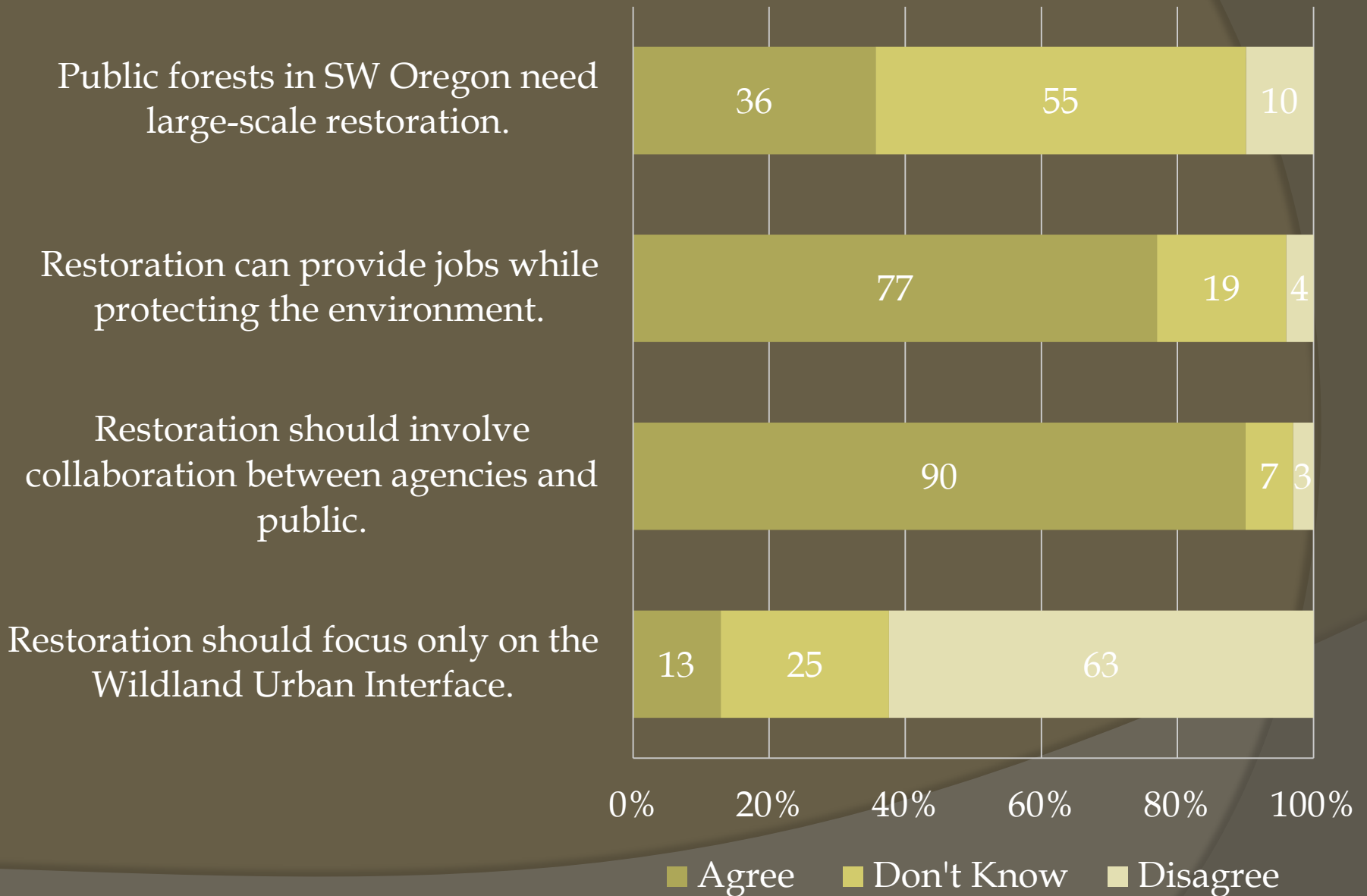
Figure 2: Support for ecological goals
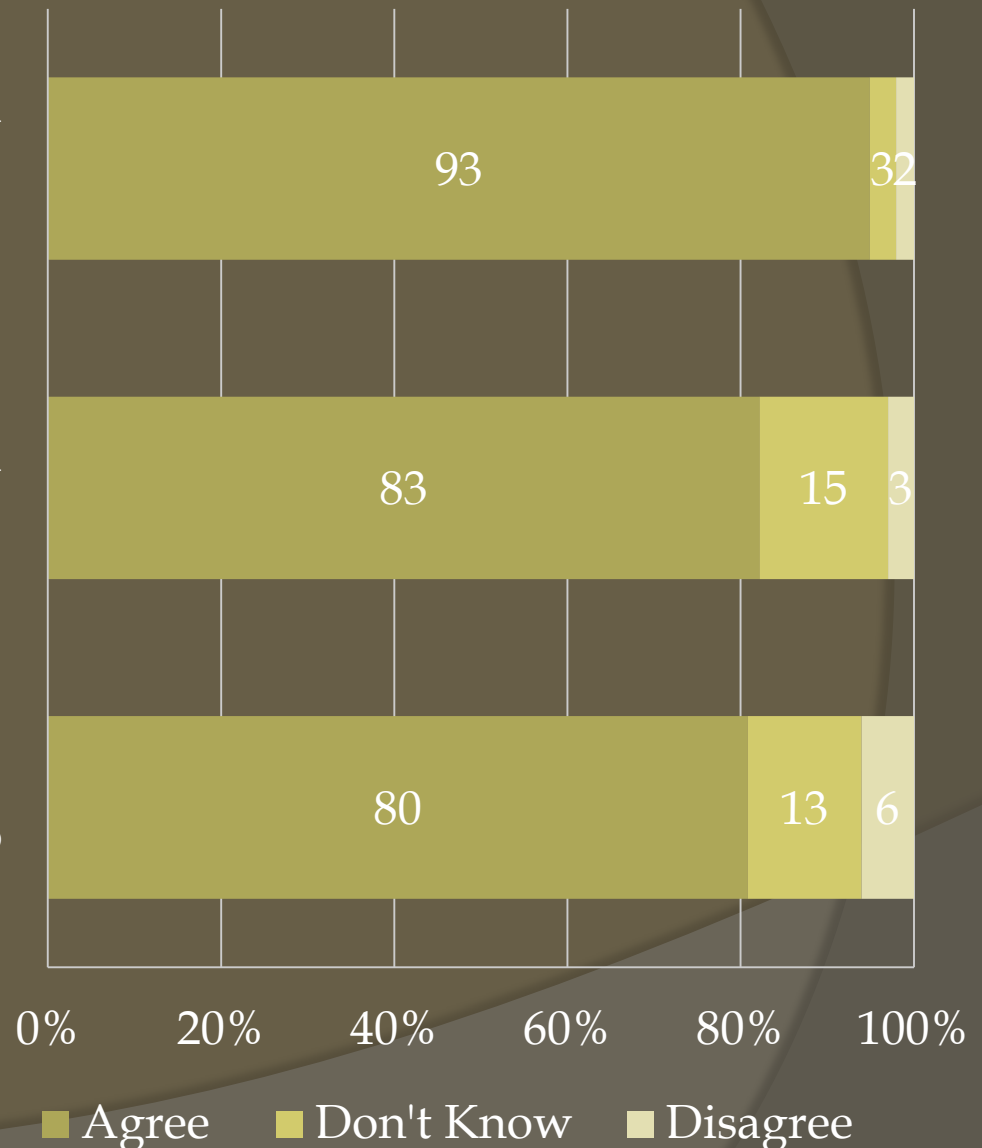
Figure 3: Less support for historical goals
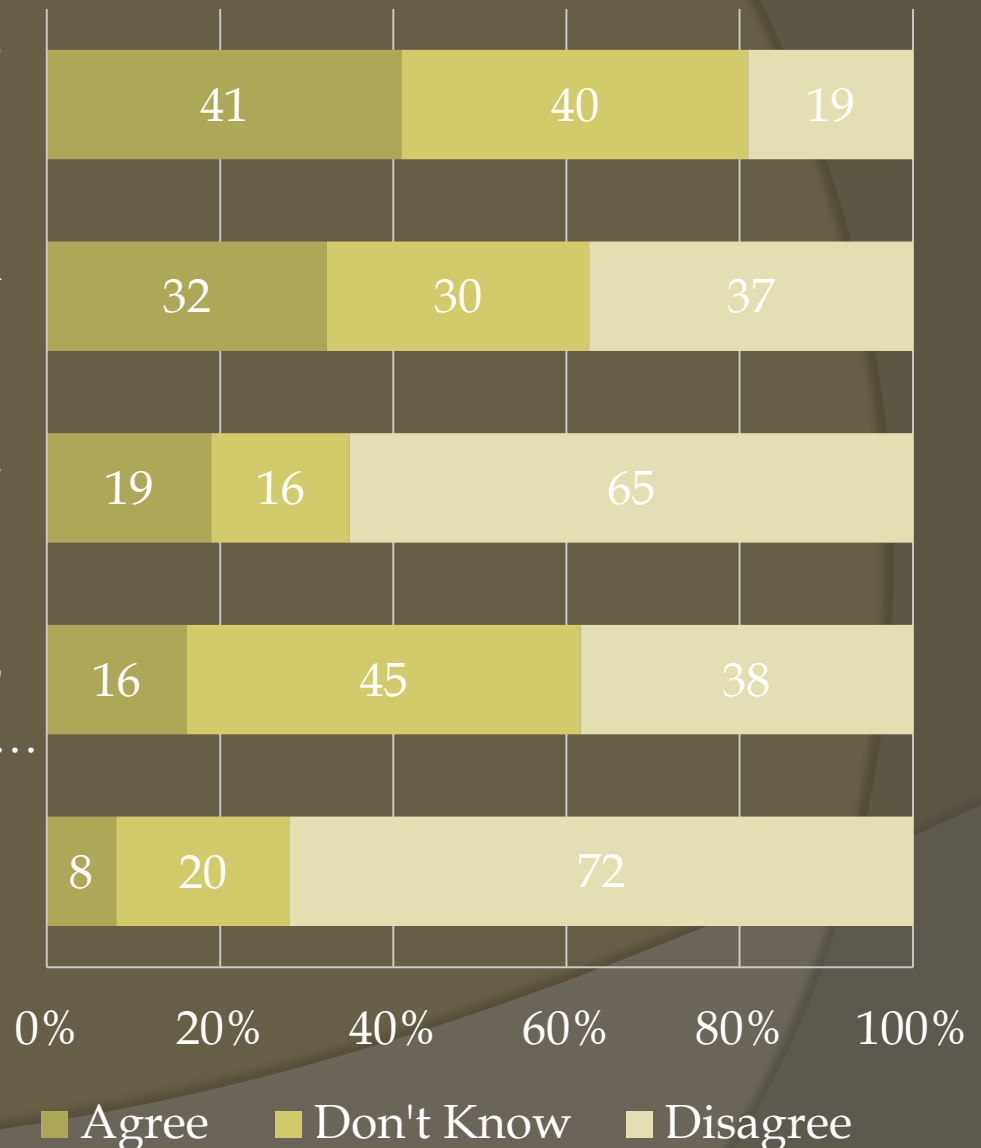
Summary of Finding on AFR

1. Residents of Ashland and surrounding area are fairly literate about fire ecology and are very concerned about the risk of high-severity fire in the watershed, though they do not view forests in the watershed as *unhealthy*; the forest is beautiful.

2. Most hadn't heard of AFR, though there is strong support for AFR's fuel reduction goals and tools, including the careful use of commercial thinning and prescribed fire. And there is strong support for public involvement in monitoring AFR.

3. Among AFR partners and potential interest groups, TNC is seen as the most trustworthy, SOTIA the least. USFS has more public trust than the CofA. Though less well known, KS Wild and Lomakatsi have substantial public trust.

Summary of Findings on Restoration

1. Residents of Ashland and the surrounding area are not sure that public forest land in the region needs large scale restoration. (Perhaps because it is hard to imagine that something considered beautiful might need fixing.)

2. Unfamiliarity with some key terms related to restoration (e.g., legacy tree; ecological reference condition); restoration is not seen as merely fuel reduction, though fuel reduction is central to restoration.

3. Where restoration is needed, goals should be more ecological (functional integrity) than historical (pre-settlement conditions), but very little support for "let-nature-take-its-course."