



# Public Priorities for Rangeland Management

## A Regional Survey of Citizens in the Great Basin

Healthy sagebrush communities in the Great Basin are rapidly disappearing due to invasion of non-native plants, catastrophic wildfires, and encroachment of pinyon-juniper woodlands. Land management options, including the use of prescribed fire, mechanical thinning, and herbicides can reduce the potential for wildfire and restore healthy plant communities. Public acceptance of management actions is a critical component of developing and implementing successful long-term land management plans. This study examined citizens' opinions and perceptions about rangeland management in the Great Basin.

### Objectives

- Identify perceived threats to healthy rangelands and support for rangeland restoration activities.
- Evaluate the public's trust in land management agencies to plan and implement restoration activities.
- Examine the effectiveness of agency outreach methods for addressing the information and communication needs of community members.
- Characterize differences in opinion between rural and urban residents.
- Provide feedback to agency personnel for use in developing management plans.

### Preliminary Results

A total of 1345 individuals responded to surveys sent to households in the Great Basin between September and November 2006. Households were randomly selected from the following communities: Boise, Reno, Salt Lake City, Lake and Harney Counties, OR, White Pine and Elko Counties, NV, and Millard and Beaver Counties, UT. For comparison purposes, respondents were identified as urban or rural based on their community of residence. Differences in the response between urban and rural residents are noted when significantly different at  $p \leq 0.05$ . All values are reported as a percent unless noted otherwise. In some cases scores do not total 100 percent because "don't know" responses were omitted. *These are preliminary results from a study in progress; do not cite without permission of the authors.*



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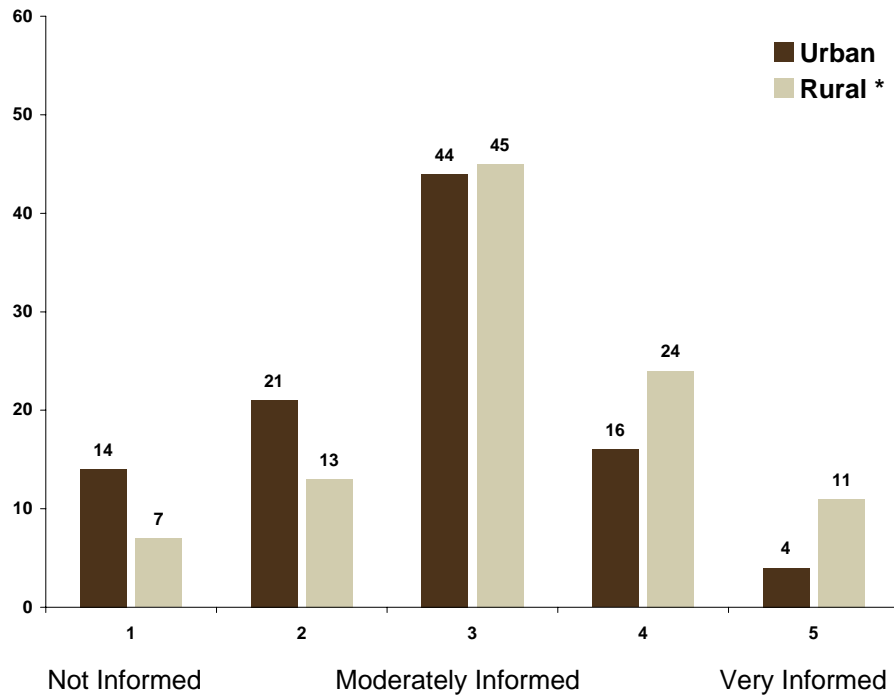


This is contribution number 06 of the Sagebrush Steppe Treatment Evaluation Project (SageSTEP), supported by funds from the U.S. Joint Fire Science Program.



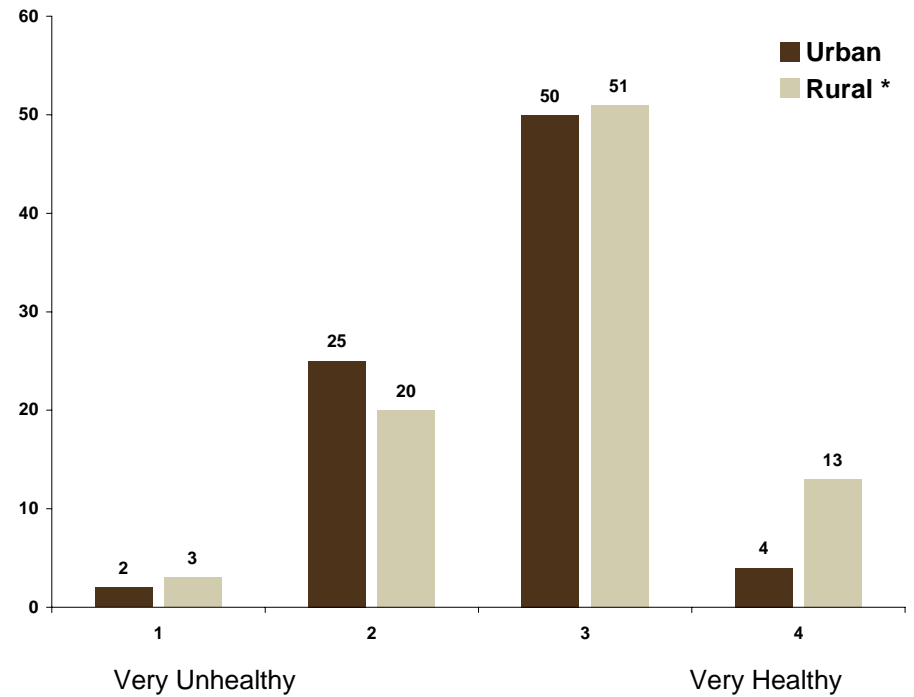
SageSTEP Study Region

➤ Question: How well informed would you consider yourself to be about the management and condition of natural environments in the Great Basin?



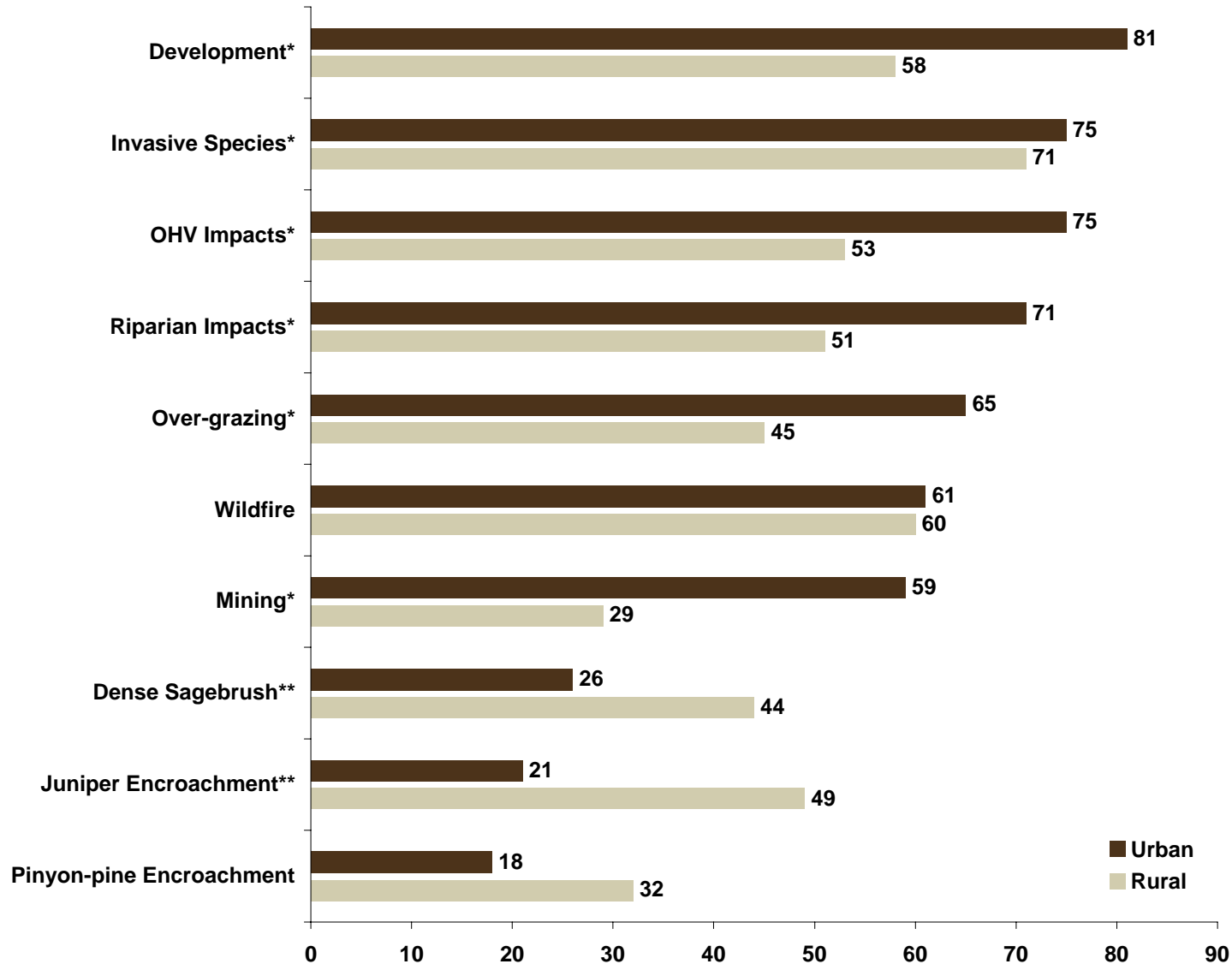
\* Ratings significantly higher

➤ Question: In general, how would you rate the overall condition of natural environments in the Great Basin?



\* Rated conditions significantly higher

### Perceived Threats to Healthy Rangelands (percent agreement)

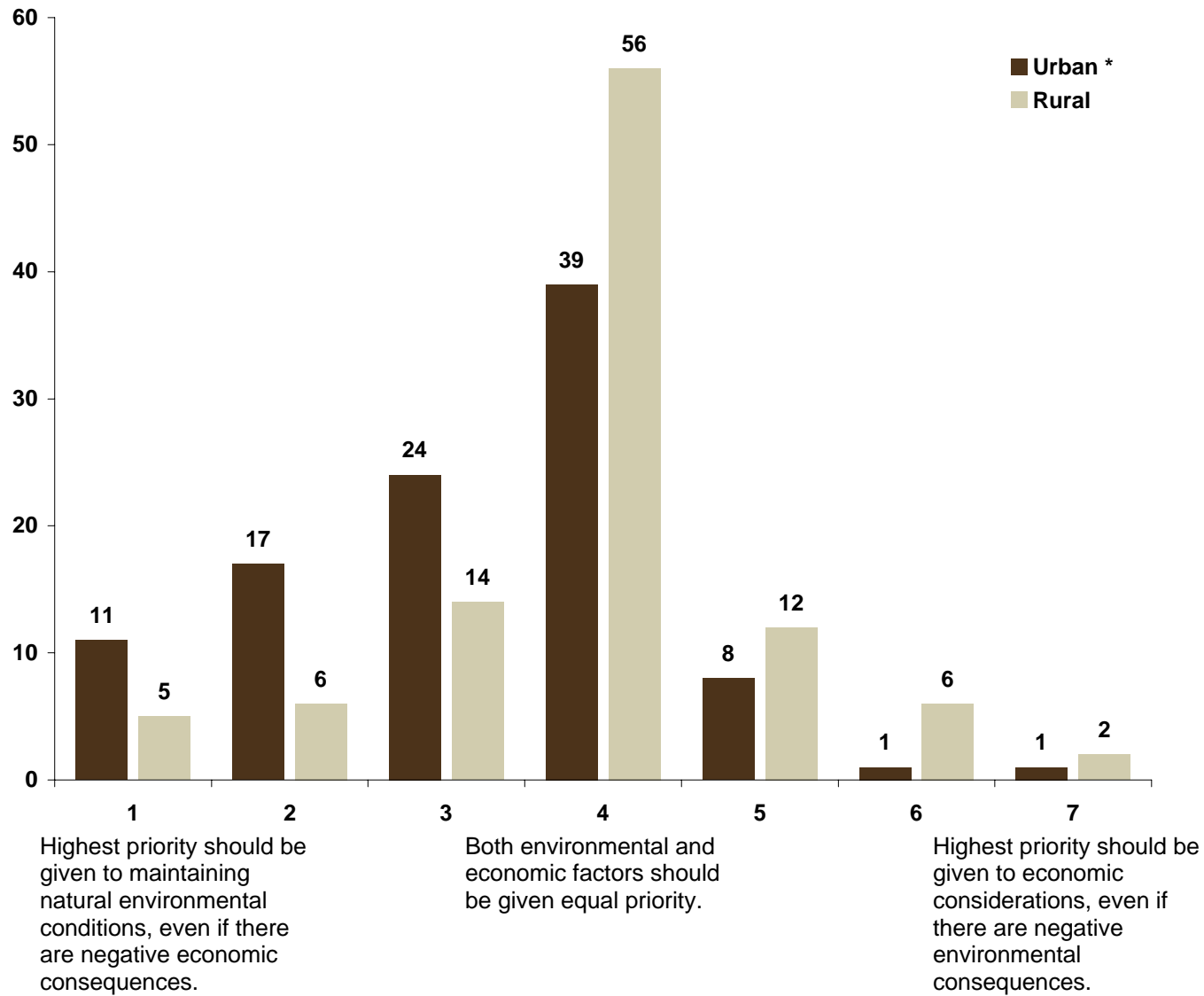


\* Significantly more urban residents believe this item to be a threat

\*\* Significantly more rural residents believe this item to be a threat

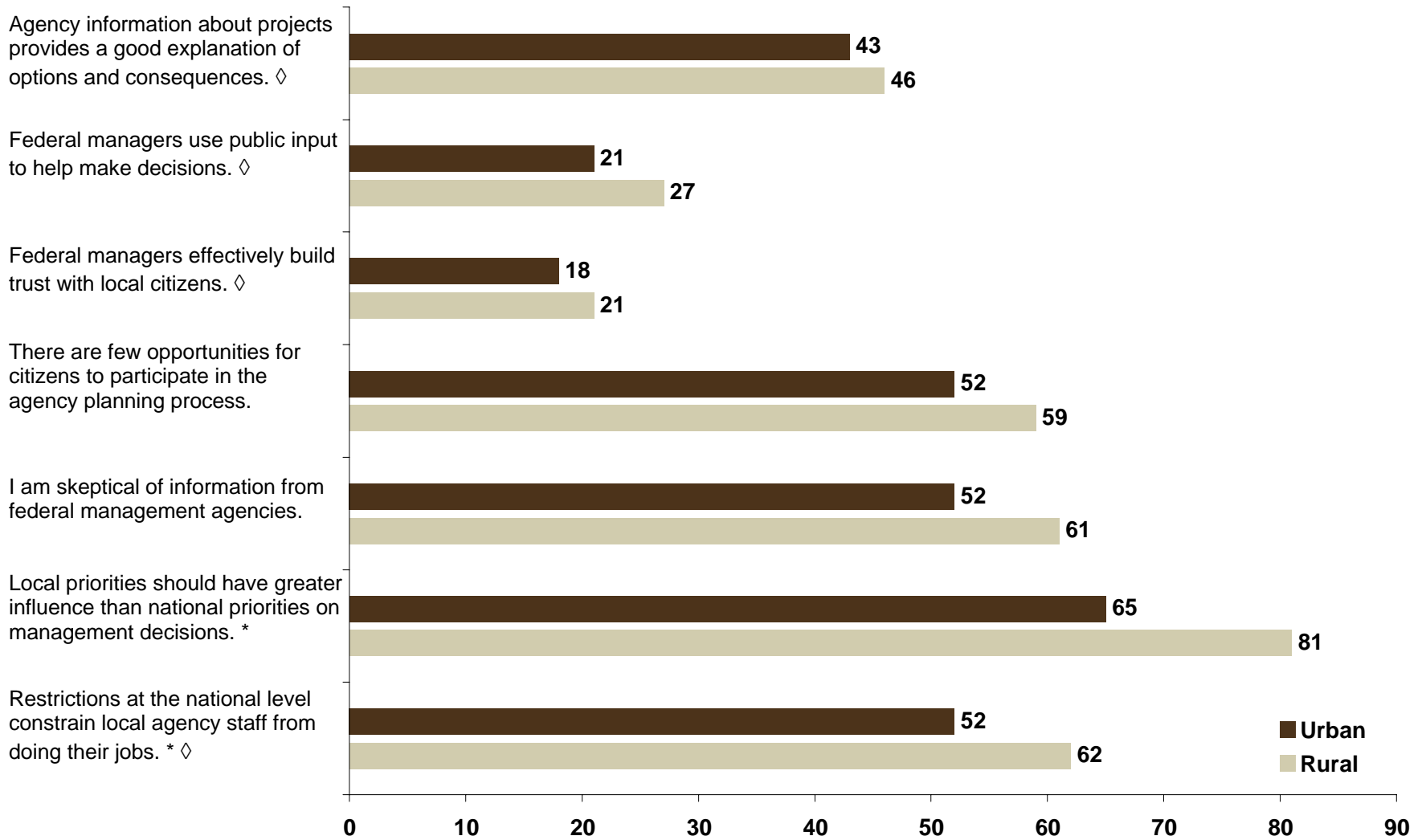
Note: Over 50% of urban residents responded “don’t know” for juniper and Pinyon-pine encroachment

➤ **Question: Many range management issues involve difficult trade-offs between natural environmental conditions and economic considerations. Please indicate your preference on the following scale.**



\* Significantly higher preference for maintaining natural conditions

➤ **Question:** Please evaluate the following statements about your experiences with federal agencies (BLM, Forest Service) in your area. *Values reported indicate percent of respondents who agree with the statement.*



\* Significantly more rural residents agree with this statement

◇ More than 30% of urban residents indicate they don't know enough to make a judgment about the statement

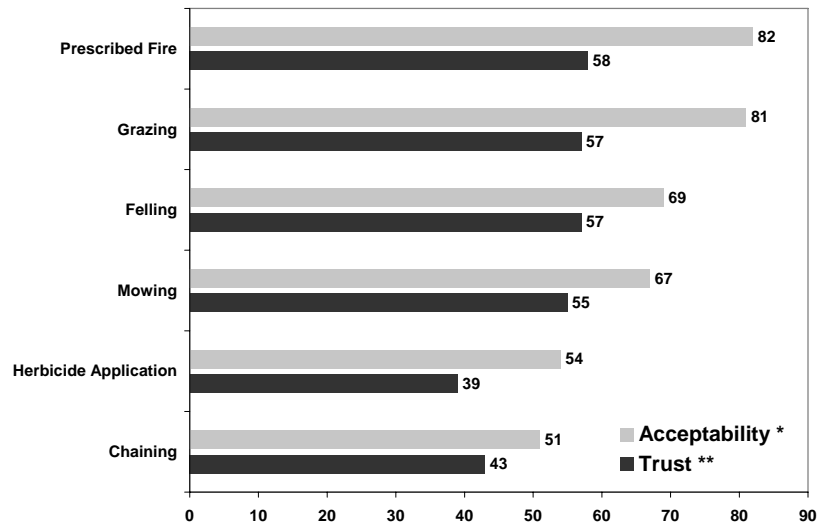
## Acceptability of Management Practices and Trust in Land Management Agencies

(Urban and rural scores combined for presentation purposes)

Acceptability of management practices ◇	Prescribed Fire	Grazing to Reduce Fuel	Thinning	Mowing	Herbicide Application	Chaining
This practice is a legitimate tool land managers should be able to use whenever they see fit	40	57	34	32	18	22
Practice should be done infrequently in carefully selected areas	42	24	35	35	36	29
Practice should not be considered because it creates too many negative impacts	7	6	11	9	19	17
This is an unnecessary practice	5	4	9	10	16	17
I know too little to make a judgment about this practice	6	9	11	15	11	15

Trust in BLM and Forest Service to implement practices ◇◇	Prescribed Fire	Grazing to Reduce Fuel	Thinning	Mowing	Herbicide Application	Chaining
Full Trust	17	22	19	19	11	15
Moderate Trust	41	35	38	36	28	28
Limited Trust	27	23	24	22	27	25
No Trust	10	13	8	8	21	16
Don't Know	5	7	11	16	13	16

### Comparison of Acceptance of Practices and Trust in Agencies



◇ Rural residents have a significantly higher level of acceptance for grazing, thinning, herbicide application, and chaining.

◇◇ Rural residents have greater trust in federal agencies to use thinning, chaining, and herbicides. Urban residents have greater trust in federal agencies to use prescribed fire.

\* Scores are combined percentages from first two categories in acceptability table above (*practice is a legitimate tool and should be done infrequently in carefully selected areas*).

\*\* Scores are combined percentages from first two categories in trust table above (*full trust and moderate trust*).

## Influences on Public Acceptance of Agency Actions

- Agreement on 14 listed factors as being important when judging BLM or Forest Service actions and decisions (urban/rural combined response).
  - When I know the objective of a proposed management action (61%)
  - Actions will help reduce the spread of non-native plants (58%)
  - Specific characteristics of local places have higher priorities when an action is planned (57%)
  - Scientists have a role in reviewing management alternatives\* (56%)
  - The decision is based on environmental consequences\* (55%)
  - The decision maintains or restores natural conditions through active management (53%)
  - The decision is made only after open discussions in a public setting (52%)
  - The decision is based on reliable scientific information\* (50%)
  - Citizens have meaningful opportunities to contribute to the decision (45%)
  - The decision protects wildlife habitat over human uses (45%)
  - The decision maintains grazing allotments for ranchers (44%)
  - Actions help support the local economy (42%)
  - The decision is based on economic consequences (41%)
  - My trust in the decision-maker (39%)

\* Significantly more urban residents agree

## Communication and Outreach

- Respondents were asked to rate the usefulness of various agency-sponsored mechanisms for communication and outreach.

### Most Useful

- ✓ Guided Field Trips
- ✓ Visitor Centers & Interpretive Programs
- ✓ Demonstration Sites
- ✓ Interactive Workshops & Public Meetings

### Moderately Useful

- ✓ Conversations with Agency Personnel
- ✓ Brochures

### Least Useful

- ✓ Environmental Impact statements
- ✓ Newsletters/Mailings
- ✓ Agency Websites

## Management Summary

- Overall, respondents believe the most serious threats to healthy rangelands are development, invasive species, OHV's, impacts to riparian systems, overgrazing, and wildfire.
- Overall, public acceptance is high for managing rangeland conditions, particularly use of prescribed fire, grazing, thinning, and mowing.
- Despite the high levels of acceptance for certain practices, there is substantially less confidence that agency personnel can effectively implement those practices.
- Regarding experience with federal agencies, respondents:
  - are skeptical of information
  - believe local personnel are hindered by national constraints
  - feel local priorities should receive more consideration
  - gave managers low marks for their interactions with citizens, particularly for using public input and building trust with local citizens.
- Highly rated forms of agency-to-public communication are more interactive approaches (i.e. field tours, demonstration sites, small workshops) that provide opportunities for discussing local conditions.
- Many factors influence public acceptance of agency actions and decisions, particularly
  - understanding project objectives, often through open discussion.
  - activities that protect natural conditions, especially those that target local problems.
  - scientist review of management plans and alternatives.
- Numerous differences exist between urban and rural residents. Most notable are:
  - perceived threats to rangelands
  - opinions about environmental and economic priorities
  - acceptance of specific management practices
  - support for local priorities
  - the role of science in decision-making
  - levels of understanding of issues and conditions.Many of these differences present an opportunity for focused public education and outreach in local communities.
- Overall, residents lean more toward policies that protect environmental conditions than those that favor economic considerations.

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Page 8