

Community Trust in Natural Resource Agencies: Case Studies from Illinois

Jessica E. Leahy Mae A. Davenport Dorothy H. Anderson Pamela J. Jakes¹

Introduction

Reports of declining trust in the government are a growing concern. Two longitudinal studies have found that the American public's overall trust in government started to decline almost 40 years ago (Hart & Teeter, 1999; Putnam, 2000). Hart and Teeter's (1999) nationwide public opinion survey for the Council for Excellence in Government found that 75 percent of the American public in 1964 trusted the government "just about always or most of the time." By 1999, this percentage had plummeted to a mere 29 percent. In *Bowling Alone*, Putnam (2000) detailed a multitude of evidence – from declining bowling league participation to voting trends – to show that connections between people and levels of trust have declined from historical levels. Rahn and Rudolph (2002) listed numerous governmental benefits associated with having high levels of public trust such as the ability to implement flexible policies, compliance with government demands (tax paying, military service, etc.), and encouragement of positive beliefs about government activities. They also speculated that trust in government may be related to an individual's amount of interpersonal trust and quality of life.

There are an equal number of indications that trust is becoming a major issue in the natural resource management field. Researchers have concluded, with much support, that, "Many citizens do not trust natural resource agencies and therefore do not support their decisions or the way those decisions are made" (Shindler, Brunson, & Stankey, 2002, p.16). For example, Bengston and Fan (1999) conducted a content analysis of media accounts of the U. S. Forest Service in major newspapers and found that 40 percent of media reports had negative assessments of the U.S. Forest Service's stewardship and ethics. They concluded that trust in the Forest Service showed opportunities for improvement. Another national survey of public opinion found that only 57 percent of respondents expressed confidence in the Forest Service to contribute to good forest management decisions (Hammond, 1994). White (2001) reported that critics referred to the Wisconsin Department of Natural Resources (DNR) as, "Damn Near Russia," in reference to centralized, inflexible decisions and decision-making processes. Some experts believe that the current condition of trust in natural resource agencies is an "outgrowth" of public opinion toward federal government in general (Wondelleck & Yaffee, 2000).

Public distrust, especially local community distrust, can have severe implications for the quality and durability of natural resource policy decisions. The public has many options for influencing policy outcomes beyond using traditional public involvement processes. Agencies are mandated by the National Environmental Policy Act (NEPA) of 1969 to use public scoping sessions and meetings as part of developing environmental impact assessments. The alternative options available to citizens include filing lawsuits, lobbying politicians, using the media, or using ballot initiative processes available in some states (Shindler, Brunson, & Stankey, 2002). It is extremely difficult to plan and implement management policies with opposition from the public. Understanding the role of trust, including how to develop trusting relationships, is critical to the successful management of natural resources.

Research Goals

This research project focused on understanding the role of trust in natural resource management. Specific study objectives were to:

1. Examine community member and agency personnel perceptions of trust at resource areas in Illinois, and
2. Identify potential factors that affect community trust in natural resource agencies.

Trust

There is no agreed upon definition of trust. McKnight and Chervany (1996) highlighted the many different meanings of trust. First, they reviewed over 60 research articles with competing definitions of trust. Then they proceeded to evaluate the common, everyday use of the word trust by analyzing dictionary definitions of trust. They found a different definition of trust in nearly every single research article and dictionary they reviewed.

Despite many definitions, Barber's (1983) definition of trust is commonly used. He proposed a multi-part definition of trust based on expectations of moral and technical competence. Moral competency is demonstrated when local community members believe a resource manager puts the needs of others before his/her own needs. In natural resource management, this could be when a resource manager puts local community benefits before his/her own personal

¹ Graduate Research Assistant, University of Minnesota, Department of Forest Resources, 115 Green Hall, 1530 Cleveland Avenue North, St. Paul, MN 55108, phone: (612) 625-0298, fax: (612) 625-5212, leah0024@umn.edu; University of Minnesota, Department of Forest Resources; USDA Forest Service, North Central Research Station.

benefits. Technical competency is demonstrated when local community members believe a resource manager has the expertise to make decisions. In natural resource management, this could be when local community members trust a resource manager to use his/her professional knowledge of ecological processes to make decisions.

Hardin (2002) argued for a rational-choice model of trust, relying on Coleman (1990) for many of his points. Hardin (2002) called his version of trust “encapsulated interest” and specified that it has three parts: a trustor, a trustee, and a specific situation. Encapsulated interest is based on shared interests, where the trustee’s incentive to cooperate is based not only on this shared interest but also on the desire to maintain a cooperative, beneficial relationship with the trustor.

A less common definition of trust was proposed by Sapirito and Chen (2001). Their definition featured three stages of trust. The first stage was based on calculated trust, the second stage was based on knowledge (i.e., past experience), and the third stage was based on a shared identity similar to Hardin (2002). McKnight and Chervany (1996) also developed a synthesized trust definition that has yet to gain major use by other researchers. They collapsed the multitude of definitions they found in research articles and dictionaries into several broad categories: structural, dispositional, attitude, feeling, expectations, belief and intentions. From these categories, they proposed a final set of six trust constructs: trust intention, trust belief, trust behavior, system trust, dispositional trust, and situational trust. The definition of trust that is appropriate to apply to the relationship between local community members and natural resource agencies is unclear. Therefore, for this study, study participants were encouraged to define trust in their own words and their sense of trust was evaluated in the data analysis.

Natural Resources Trust Research

Trust in natural resource agencies is related to the concept of social acceptability, where research by environmental social scientists was initiated as early as 1960 (Shindler, Brunson, & Stankey, 2002). Social acceptability literature supports the belief that natural resource management decisions must be based equally on environmental, economic, and social feasibility, and that trust plays a role in people’s feasibility judgments. While many social acceptability and public studies acknowledge the potential importance of trust, only a handful of studies have specifically addressed trust in natural resource agencies. Many natural resource-related opinion surveys have included items to measure trust in relationships between the public and natural resource agencies (Bengston & Fan, 1999; Hammond, 1994; Shindler, Leahy, & Toman, 2003; Shindler, List, & Steel, 1993; Winter, Palucki, & Burkhardt, 1999). Few studies have used qualitative methods to explore meanings of trust and trust relationships. Examples exist however: Carroll and Hendrix (1992) presented three case studies from Wild and Scenic Rivers around the United States, and Shindler and Neburka (1997) completed interviews with participants in the Forest Service’s public involvement process to identify key elements of successful public involvement in agency decision-making. Cvetkovich and Winter (2003) have recently evaluated trust in the U.S. Forest Service using multiple methods such as surveys, focus groups, and content analysis.

The understanding of trust in the natural resources context is also related to research on the collaborative management process. For example, Wondelleck and Yaffee (2000) defined an extensive list of items that constrain the success of collaborative natural resource management. Many of these constraints could be applicable to the study of trust in natural resource agencies. For example, structural barriers include lack of financial resources, differences in interests and motivations, policy and political constraints, and a lack of available options for including other organizations and the public in management decisions. These are focused on the natural resource agencies and their personnel. There may be attitudinal constraints as well that promote or hinder trust in natural resource agencies. Attitudinal constraints are stereotypes about the agency and its personnel, historical perceptions of the agency, sociocultural differences with the personnel, past experiences, and distrust of government in general. These attitudinal constraints are largely personal and could be attitudes held by people living in local communities affected by natural resource management agencies.

While trust has been extensively studied in other fields such as political science, psychology, and sociology, there has been a limited amount of research within the natural resources field. Research to date has not provided a solid answer to the fundamental questions, “What does it mean to trust a natural resource agency?”, “What factors influence trust in natural resource agencies?”, and “How can trust in a natural resource agency be built and maintained?” A better understanding of local community trust in natural resource agencies could help improve natural resource management and planning, and overall public trust in natural resource agencies, by providing answers to these questions.

Methods

Research Sites

This study focused on two natural resource areas in the state of Illinois, the Midewin National Tallgrass Prairie and the Kaskaskia Watershed. The Midewin National Tallgrass Prairie, located 40 miles southwest of Chicago, is

managed by the U.S. Forest Service. The U.S. Forest Service gained possession of this area from the U.S. Army in 1997. The land was previously used as an arsenal and several hazardous waste sites still exist on the property from munitions production. When the arsenal was decommissioned, the majority of the property (approximately 19,000 acres) was given to the U.S. Forest Service and designated a National Tallgrass Prairie. The remaining arsenal land was divided between a landfill (425 acres), two industrial parks (3000 acres), and a national cemetery (910 acres). As Chicago's urban growth boundaries continue to expand, land-use trends in the county have shifted from agriculture to residential and industrial development, including the newly constructed NASCAR raceway, which is only a few miles from the Midewin headquarters. Although the Midewin National Tallgrass Prairie offers recreation opportunities for hunting, walking, and guided tours, to date recreational access in Midewin is limited because of safety concerns associated with remaining hazardous sites. Only a few small remnants of prairie exist at the site, and native prairie habitat restoration is one of the primary management concerns at Midewin.

The Kaskaskia River watershed is managed in part by the U.S. Army Corps of Engineers. The Kaskaskia River runs nearly 300 miles, from its start near Champaign, Illinois to where it empties into the Mississippi River just south of St. Louis, Missouri. This large watershed encompasses all or part of 22 counties in southwestern Illinois. The Corps manages two lake projects, Lake Shelbyville and Lake Carlyle, and the Kaskaskia River Navigation Project within the watershed. Both lakes were constructed for flood control in the 1960s and 1970s, and serve dual purposes to protect downstream farmers and protect the lower Mississippi River. Private land was claimed by the government using eminent domain during construction of the lake projects. The Kaskaskia River Navigation Project, which also was developed during the same time, channelized a 36-mile stretch of river to allow coal and agricultural barge transportation. As the coal industry declined and agriculture industry consolidated, a shift toward tourism and recreation industries occurred throughout the entire watershed. The Kaskaskia River watershed now has over 5.5 million recreation visits each year and offers many water-based recreation activity opportunities such as fishing, boating, waterskiing, sight-seeing, and camping.

Qualitative Approach

This project used qualitative methods to better understand the role of trust in the relationship between local community members and natural resource management agencies. To best explore the concept of trust in these contexts, in-depth interviews were conducted with a sample of community members and agency personnel. As the literature suggests, trust is a complex concept, and little is known about the role of trust in natural resource management. Qualitative methods are appropriate for investigating complex, little known phenomena. Interviewing is a way to document rich and detailed information from the perspectives of the study participants. This approach allows the study participants to describe what trust means to them, explain why it is or is not important, and relate how their trust has been maintained or diminished in the past.

Study Participants

A network sampling scheme was used to select study participants. The initial set of participants was identified through conversations with agency personnel and local community leaders. Study participants were asked to recommend other community members that have a stake in the management of the site. A diversity of participants was sought based on their connection to the site (e.g., occupation, organization membership, recreation activities), length of residence in the community, and level of involvement with the agency. Likewise, agency personnel were chosen to represent a cross-section of the staff in the unit. For example, upper level management as well as on-the-ground staff—park rangers, interpretive specialists, and resource managers—were interviewed. Under this sampling approach, the goal is not to be representative of the entire community or agency population, but rather to capture a range of perspectives on the community-agency trust relationship.

Sixty-one participants were interviewed in total. Forty-four were community members (14 from Midewin, 30 from Kaskaskia), while the other seventeen participants were agency personnel (7 from Midewin, 10 from Kaskaskia). The community members interviewed tended to be in their late 50s, ranging from 27 to 80 years old (Table 1).

Community member participants had lived in the area for 2 to 80 years, with an average of 35-38 years. Community members interviewed from Midewin were more involved in community organizations (93% were members of a local organization) but participated in onsite activities less (64% engaged in onsite activities) than those interviewed in the Kaskaskia watershed (83% and 73%, respectively). The agency personnel interviewed were, for the most part, middle-aged. On average, they had lived in the local communities for a shorter amount of time than the local community members. As expected, Midewin personnel were especially new to the area, since the Forest Service only recently took over management of the property. Compared to their local community member counterparts, the agency personnel were less involved in community organizations and non-work onsite activities.

Table 1 - Summary Participant Information

Community Members (n=44)						
	Male/Female (%)	Age (avg. yrs.)	Residence (avg. yrs.)	Agency (avg. yrs.)	Involved in Comm. Org. (%)	Involved in Onsite Activities (%)
Midewin	71/29	59	35	---	93	64
Kaskaskia	83/17	56	38	---	83	73
Agency Personnel (n=17)						
	Male/Female (%)	Age (avg. yrs.)	Residence (avg. yrs.)	Agency (avg. yrs.)	Involved in Comm. Org. (%)	Involved in Onsite Activities (%)
Midewin	43/57	47	4	16	57	43
Kaskaskia	60/40	52	17	23	50	50

Data Collection and Analysis

Interviews were conducted face-to-face at the participant’s home, office, or public location (library, café, etc.) and lasted between 30 and 90 minutes. A semi-structured interview guide was used. The questions centered around four main themes: connections to community and place, relationships between the community and agency, perspectives on management, and visions for the future. Participation was voluntary and the informed consent process was used in the study. Each interview was tape recorded and transcribed. Detailed field notes were recorded. At this point, the data are in the initial stages of analysis. In turn, these preliminary findings are likely to evolve as the analysis process continues.

Preliminary Results

Complex Sense of Trust

Preliminary study findings confirm that the trust relationship between local communities and natural resource agencies is complex and multilayered. Not only is there variation in how trust was defined, but diversity is also found in the expectations linked to a trusting relationship. Several community member participants differentiated their trust in the agency from their trust in agency personnel, while others struggled with what trusting a natural resource agency truly meant.

I have no reason not to trust. Everyone that I have dealt with has been forthright. When you say do you trust the Forest Service you are talking about some faceless entity. The people I deal with are the Forest Service to me and they have been very good. Yes, I trust the people I deal with. – Community member, Midewin. When I think of trust often times I would think of it as a very personal thing. And I don’t really know that I know the values of the people on the project now. I don’t have a real strong positive feeling towards the Corps of Engineers just because I think just the whole concept of them managing waterways instead of the Department of Interior seemed like an oddity.... When you don’t ever consider the ecological cost of the project, it’s easy to make your economic cost benefit ratio come out good.... You know I’m not sure if I would say I would be totally trustworthy of those types of projects being evaluated in a sense that all things are considered. But I don’t think it’s really for me to judge of because I’m not in those areas. – Community member, Kaskaskia

While perceptions of the extent of trust that exists between the agency and community are important to assess, so too are the expectations tied to trust. Therefore an important follow-up question is, “What does the local community trust the agency to do?” Participants expected the Forest Service and Army Corps of Engineers to provide reliable information and expertise about the resource area, to “do what is right” for the ecosystem, to follow the rules and regulations specified in management plans, and to involve the public in planning and management. Additional meanings of trust and expectations from trusting natural resource agencies will emerge from further data analysis.

Factors that Promote or Hinder Trust

Many factors seemed to promote or hinder trust in natural resource agencies: knowledge of agency constraints, formal relationships, informal relationships, past experiences, and historical contexts. For example, the importance of knowing agency constraints and developing informal relationships was mentioned quite often. Trust was linked to the participants' understanding of the agency's organizational structure, bureaucracy, and constraints. Some participants maintained their trust in the agency despite unfulfilled expectations because of their awareness of an agency's financial or staff constraints or their understanding that some directives come from higher levels of the agency (regional office, Washington office). One community member from Midewin said, "...Bureaucracies have shortcomings and their hands are tied with limited funds and there are a lot of other properties that need attention as well."

Also, cross-cutting relationships between local community members and agency personnel were found to be important. Informal relationships, such as being neighbors, belonging to the same local organizations, and friendships, that develop personal trust between people seemed to be related to positive formal relationships and institutional trust.

...I live in the same subdivision as the current [lake] manager.... So I speak with him, not necessarily about Corps business, but that is one of the reasons that my trust in what the Corps does has, is better now, is greater now than it was before. Because I know him, and I know that he does what he thinks is best not only for the Corps, but for the area. – CM, Kaskaskia

While community members and agency personnel usually agreed about factors involved in trusting relationships, there were differences. Some agency personnel believe that the key to building trust in the community is education. One agency participant from Kaskaskia concluded, "...if it is the right thing to do then people [local community members] with the right knowledge and the right information...everybody will...have this consensus." Community members did not mention the need for additional education.

Differences between Community Members and Agency Personnel

Differences in the perceptions of community members and agency personnel were revealed, but many shared views emerged as well. For example, trust between the agency and the local community was deemed important by both participant groups. At the same time preliminary analysis shows that factors perceived to promote or hinder trust vary. Community members and agency personnel also differed somewhat in their spatial perceptions of the resource area and opinions about which communities were affected by the natural resource agency.

Differences between Midewin National Tallgrass Prairie and Kaskaskia River Watershed

The most striking difference between Midewin and the Kaskaskia River watershed is the historical legacies of each site. Midewin's prior use as a U.S. Army arsenal meant that for many years the general public was excluded from using the property. When the Forest Service gained possession there were very high expectations for increased recreational access. The slow development of recreational facilities has been particularly frustrating for some community members. This sentiment was expressed by one community member, who felt the key to winning the trust of the local community was opening Midewin for public access.

Open more areas up in Midewin. Get more interim trails in there... You get more community out there to see what it is they are working on, there will be more people involved.... Give people, show them what it is now, what it can be if you help.... That is the only way, they can't really get the people involved if you keep it closed up. They are going to have to, I don't know what they are going to do, bring in more security, whatever it takes. But they have to open it up more. – Community member, Midewin

Although Midewin was originally removed from private ownership through eminent domain, it was not the Forest Service who originally benefited; therefore, eminent domain is not a major issue between Midewin community members and the Forest Service. However, it is a serious issue for some community members in the Kaskaskia River watershed. The historical legacy of condemnation creates a difficult barrier for community members to overcome. It has created particularly volatile situations. One example was when the Corps had to resurvey adjacent property due to original surveying errors. An increasing concern magnified by the historical legacy is shoreline erosion of adjacent property at both lakes:

But it was big government coming and taking their ground, and some people never get used to that.... You know we have a community, is disappointed that the Corps isn't able to control the siltation and the

erosion around the shorelines...some of these adjacent land owners to the lake who, after they have had a portion of their ground taken when the lake was constructed, are now going out and seeing additional portions of their ground lost, washed away. – Community member, Kaskaskia

Discussion and Conclusion

The objectives of this study were to explore community member and agency personnel perceptions of trust at Midewin National Tallgrass Prairie and in the Kaskaskia River watershed, and identify factors that promote or hinder the trust relationship. The preliminary results confirm that trust in natural resource agencies is a complex phenomenon. It appears that some of the factors that affect trust identified in this study echo Wondelleck and Yaffee's (2000) structural and attitudinal barriers to collaborative relationships. Some of these barriers included agency constraints (lack of resources, political influences, etc.), differences in perceptions about each other and the resource area, a lack of informal relationships between community members and agency personnel, limited options for involving the local community members in management and planning, and past experiences and history of the area.

With some preliminary notions of how trust is perceived and affected at these two natural resource areas in Illinois, some possibilities for agencies to develop and foster trust with their local communities can be provided. Specifically, natural resource agencies might consider the following the actions:

- Increase involvement in the local community – increase visibility in the local community, participate in local organizations and events and encourage community participation in agency sponsored events.
- Improve public involvement in decision-making and planning – avoid technical jargon and use accessible language in public documents, engage community members in dialogue beyond what is mandated, improve mandated public meetings, and monitor perceived fairness.
- Re-focus communication efforts – focus outreach efforts on illustrating agency trustworthiness (moral and technical competence), and acknowledge agency constraints.
- Make changes within agencies to help personnel – provide additional conflict management training for staff, provide incentives for agency personnel (work plans, awards, etc.), and focus efforts on accomplishing small projects with local communities to create a history of past success.

The qualitative research approach proved effective in capturing and preserving a range of perspectives on the community-agency relationship. As the analysis process continues, the meanings of and expectations linked to this relationship will be established. Study findings associated with the factors that promote and hinder trust will guide managers and community leaders interested in maintaining or building trusting relationships.

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