THESIS

FACTORS INFLUENCING AGENCY STAFF'S WILLINGNESS TO ADOPT COLLABORATIVE PUBLIC PARTICIPATION TECHNIQUES IN THE NEPA DECISION-MAKING PROCESS

Submitted by

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ABSTRACT

PUBLIC PARTICIPATION TECHNIQUES IN THE NEPA DECISION-MAKING PROCESS

Today, U.S. government agencies face complex environmental issues and decisions.

These issues involve diverse stakeholders with a broad spectrum of interests and concerns.

While public participation has conceptually evolved over the years, many agencies continue to rely on the traditional public participation techniques such as the public meeting. However, both the public and agencies have been less than satisfied with the results of traditional public participation.

A trend towards implementing collaborative public participation techniques has been embraced by the U.S. government in environmental decision-making. However, based on the literature and observation, collaborative public participation is rarely implemented in the decision-making process.

This study reviewed the factors that either encourage or discourage agency staff from adopting collaborative public participation techniques, specifically in the NEPA decision-making process. Eleven semi-structured, in-depth interviews were conducted with environmental managers and public affairs representatives from Western Area Power Administration, U.S. Forest Service, and the Bureau of Land Management. This study evaluated these factors and identified potential relationships between the factors and the willingness to adopt collaborative techniques.

Agency culture was identified as the primary factor influencing agency staff to adopt collaborative public participation techniques. An agency culture that is service-oriented supports collaborative processes, and in turn, encourages training and education about the

appropriate use of collaboration. Further, while there is a direct effect of agency culture on willingness to adopt collaborative techniques, the study identified a potential indirect effect of agency culture on other factors.

Cost to implement a collaborative public participation programs and federal regulations were found to be encouraging factors, rather than discouraging factors as previously identified in the literature. The study found that with the cost reimbursement program and new technology, cost was not a hindrance to using collaboration. Also, threats to the agency's decision-making authority were not validated because the regulations secure this authority.

Two new factors affecting agency decisions to use collaboration emerged from the study that warrants further research. The relationship between agency culture and the individual's mindset and how these factors influence the use of collaboration provides opportunities for future research. Also, additional studies should explore how staff determines the appropriate level of participation for their projects. Are they unaware of other techniques or are they misapplying techniques based on the scope or type of project?

Collaboration is an extension of our democratic culture and when appropriately applied can be an effective means for resolving our environmental concerns. Without fear of losing decision-making authority, this study found that agency staff support alternative approaches to assist them in making sound decisions.

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CHAPTER 1: INTRODUCTION

From 1966 to 1976, numerous laws were enacted in the United States to provide greater public access to information and U.S. government decision-making (Beierle & Cayford, 2002). In response, U.S. governmental agencies predominantly used the public meeting or public hearing to meet the statutory requirements for involving the public in decision-making. During the 1970s, major environmental legislation (e.g., the National Environmental Policy Act [NEPA], Coastal Zone Management Act, Clean Air Act of 1970, Clean Water Act of 1977) was enacted, which included strong provisions for public review and participation (Guana, 1998). As a result, public participation evolved from ensuring U.S. government accountability to participation that influences U.S. government policy and decision-making.

While the public participation perspective has conceptually evolved over the years, in practice many U.S. government agencies continue to respond to the directive of involving the public by applying traditional public participation techniques. Agency staff typically relies on the public meeting to inform and engage the public in the decision-making process.

There are numerous techniques for involving the public, ranging from "informing" the public through public meetings to "collaboration," using advisory committees or group consultations (IAP2, 2004). The literature cites numerous benefits of implementing more intensive public participation, collaborative techniques. For example, collaborative decisions improve the quality of decision-making because the process allows for better information from informed participants (CEQ, 2007). Collaboration streamlines the decision-making process by integrating and incorporating multiple opinions, review and analyses, and allowing environmental, social, and economic issues to be addressed concurrently (CEQ, 2007).

An additional benefit of a collaborative process is the prevention of stakeholder conflict, as the process allows for differences to be resolved as they arise (CEQ, 2007). Resolving conflict collaboratively is more likely to result in decisions that are supported by stakeholders and, therefore, avoid potential litigation and gridlock (Beierle & Cayford, 2002).

The collaborative process increases public knowledge and understanding of the environmental issues, which in turn builds capacity for solving problems, identifying alternatives, and providing innovative ideas (Beierle & Cayford, 2002). Increased social capacity builds trust and confidence in U.S. government decisions (CEQ, 2007). When the public perceives that their opinion is valued, they gain more trust in the decision-maker (Creighton, 2005).

However, less intensive (less time and resource commitment) public participation techniques, such as public meetings, do not always achieve the desired public participation benefits. Additionally, studies indicate that public meeting participants, including U.S. government officials and the public, have been less than satisfied with public meetings as a technique for meaningful public involvement (Herberlein, 1966; McComas, 2001).

Factors that either encourage or discourage agency staff from adopting collaborative public participation techniques have been identified in the literature. For instance, while involving the public in the decision-making process is mandated, Brody et al. (2003) suggest that these mandates are vague, outdated, too general, and provide little guidance to U.S. government staff. With little guidance, U.S. government agencies employ traditional, one-way communication approaches to public participation. Other factors that discourage agencies from adopting collaborative approaches include cost constraints (CEQ, 2007), lack of internal resources or expertise needed to carry out intensive public participation techniques (Herberlien, 1976), time to commit to the collaborative process, and conflicts with agency objectives (CEQ, 2007).

The NEPA Task Force report to the Council on Environmental Quality (CEQ),

Modernizing NEPA Implementation, found that the benefits of incorporating collaborative public participation techniques in the NEPA process are integral to making better decisions (CEQ, 2003). Based on the findings of the report, the NEPA Task Force recommended that CEQ provide guidance to agencies on implementing collaborative public participation in the NEPA

process. As a result, the CEQ published *Collaboration in NEPA* (CEQ, 2007), guidelines for conducting collaboration in the NEPA decision-making process.

This study assessed the overall acceptance or rejection agency staff had toward implementing collaborative public participation techniques and explored the factors that either encouraged or discouraged agency staff's willingness to adopt collaborative public participation techniques in the NEPA/environmental decision-making process.

U.S. government agencies face complex environmental issues and decisions. These issues involve diverse stakeholders with a broad spectrum of interests and concerns.

Application of more intensive public participation, such as collaboration, is critical to making quality decisions that result in workable, long-term solutions that benefit all affected parties.

Exploring and identifying the factors that influence agency staff to implement collaborative public participation programs will not only benefit the practitioner and U.S. government staff who adopt these programs, but also the public. Minimizing the barriers and maximizing aspects that encourage adoption of a collaborative public participation program design, where appropriate, will help to ensure sound decision-making for today's complex environmental issues.

CHAPTER 2: LITERATURE REVIEW

The following sections define the key concepts identified in the research question posed for this study: "collaborative public participation techniques" and "factors that encourage or discourage adoption." The over-arching question for the study is: What are the factors that encourage or discourage agency staff from adopting collaborative public participation techniques in the NEPA decision-making process? First, the key construct, collaborative public participation techniques, will be defined by individual concepts as identified in the literature: public participation, public participation techniques, collaborative public participation, and finally, collaborative public participation techniques. The remaining sections will define the concept of factors that encourage adoption and factors that discourage adoption.

Collaborative public participation techniques

The conceptual definition of "collaborative public participation techniques" is complex.

The first challenge is to define "public participation." The literature identifies three challenges to defining public participation: differing perspectives, variety of terms, and the concept's evolution throughout history.

Public participation

The first challenge is associated with the different perspectives or purpose of public participation and what it should accomplish. The U.S. government perspective views public participation as a mandate stipulated by environmental and rulemaking legislation (Arnstein, 1969), whereas, from the public's perspective, public participation allows for empowerment and active engagement in the decision-making process (James & Blamey, 1999).

The second challenge is the variety of terms that have been used throughout the literature. In most cases, the various terms for the concept of public participation have been used interchangeably. Terms such as citizen involvement, public involvement, citizen action, and political participation have been used in literature in reference to "public participation" (Langton, 1980). While most of the literature suggests the terms are interchangeable, Langton

purports the terms have distinctly different meanings and goals. For example, he suggests that using the term "citizen" means the participation of individuals with the rights and obligations of citizenship, whereas "public" refers to all people, whether or not they are citizens.

Finally, the third challenge to defining public participation relates to the concept's continuous evolution throughout history. Relatively recent literature suggests that the evolution of the public participation concept is associated with the history and evolution of environmental decision-making over the last century (Beierle & Cayford, 2002). During the late 19th century and mid-20th century, the U.S. government was entrusted with making decisions for the common good with very little input from the public. As U.S. government responsibilities increased, large bureaucracies emerged. Coupled with the need for expertise in managing large U.S. government programs while maintaining transparency and participation from the public, the U.S. government was faced with an overwhelming challenge (Beierle & Cayford, 2002). As this challenge surfaced, new legislation (e.g., the Administrative Act of 1946) was enacted to promote greater public participation (Kerwin, 1999). Pluralism began to replace the managerialism model in the following decades (Stewart, 1975; Reich, 1985). Under the pluralism management model, the U.S. government made decisions for the publics' good through negotiation with special interests (Williams & Matheney, 1995). From 1966 to 1976, numerous public participation legislation was enacted (e.g., The Freedom of Information Act [1966], Federal Advisory Committee Act [1972], Privacy Act [1974], and the Government in Sunshine Act [1976]) to provide greater public access to information and government decisionmaking (Beierle & Cayford, 2002). During the late 1960s and into the 1970s, environmental groups began to demand more public participation in the environmental decision-making process (Nelkin, 1979). An explosion of major environmental acts in the 1970s was enacted and included strong provisions for public review and participation (Gauna, 1998).

NEPA significantly advanced public involvement in environmental decision-making (Nelkin, 1979). NEPA required the preparation of an Environmental Impact Statement (EIS) for

actions that could affect the environment (Nelkin, 1979). The EIS addressed potential impacts and evaluated alternatives to the action, then solicited input from the public about the analysis conducted in the environmental document. Requirements also included public notification of the document's availability (Nelkin, 1979).

In more recent years, the Popular Democratic Theory perspective of public participation has become prevalent. The theory "...stresses the importance of the act of participation, not only in influencing decisions, but also in strengthening civic capacity and social capital" (Beierle & Cayford, 2002). Public participation engages the public early in the decision-making process to identify the common good and make decisions based on shared communal goals. (Dryzek, 1997).

For the purpose of this study, public participation was defined as the process of engaging the public in the environmental decision-making process.

Public participation techniques

Public participation techniques are the activities associated with enabling public participation in the decision-making process. Public participation techniques are chosen based on the type of decision being made, level of controversy, the type of participants, the public participation goal, and whether the goal is to reach consensus (Beierle & Cayford, 2002). In some references, techniques are referred to as mechanisms of public participation processes. For example, Beierle and Cayford (2002) describe mechanisms as categories of public participation processes. For the purpose of this study, techniques was used because the term is more common and understood as methods to engage the public.

The literature primarily defines public participation techniques by the goal the public participation program intends to achieve. For example, Creighton (2005) characterizes public participation techniques as those designed to "get information to the public" and techniques that "get information from the public." Getting information to the public requires public participation techniques that inform and educate the public. To receive information from the public, public

participation techniques involve two-way communication and interaction between the decision-maker and the public most affected by the decision (Creighton, 2005).

The International Association for Public Participation (IAP2) identifies and categorizes public participation techniques by five different public participation goals. Table 1 illustrates the five public participation goals and a sampling of techniques that correspond to each type of goal.

Table 2.1. IAP2 Public participation techniques

Public Participation Goal	Example Techniques
Inform – Provide the public with balanced and objective information to assist them in understanding the problems, alternative and/or solutions.	Fact sheetsWeb sitesOpen houses
Consult – Obtain public feedback on analysis, alternatives and/or decisions	Public commentFocus groupsSurveysPublic meetings
Involve – Work directly with the public throughout the process to ensure that public issues and concerns are consistently understood and considered	WorkshopsDeliberative pollings
Collaborate - To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution	Citizen advisory committeesCharette
Empower – To place final decision-making with the public	Citizen juriesBallotsDelegated decisions

International Association for Public Participation, 2004

Collaborative public participation

Collaborative public participation is a relatively new concept that has surfaced over the last decade in response to the dissatisfaction with the results of traditional techniques that have

been implemented over the past half century. Defining collaborative public participation has been problematic because it includes a broad range of activities and is applied in various situations and at different points in the decision-making process (CEQ, 2007). However, the trend towards implementing collaborative public participation techniques has predominantly been embraced by the U.S. government in environmental decision-making (Koontz & Johnson, 2004). Collaborative decision-making has been used on the Federal level in making decisions about habitat conservation plans, land management plans, and watershed resource management plans (Koontz & Johnson, 2004). However, based on literature and observation, there is little evidence that collaborative public participation has been implemented in the NEPA decision-making process.

One definition of collaborative public participation focuses on collaboration with diverse stakeholders (Koontz & Johnson, 2004; Gray, 1989), while another defines the collaborative public participation as a process carried out only with the affected and interested parties (CEQ, 2007). For example, one definition in the literature defines collaboration as "a process in which diverse stakeholders work together to resolve a conflict or develop and advance a shared vision" (Koontz & Johnson, 2004; Gray, 1989). In the context of the NEPA process, collaborative public participation is defined as an agency engaging other U.S. government agencies and/or interested parties to seek agreement during stages of the NEPA process through a shared vision, trust, and communication (CEQ, 2007). Innes and Booher (2004) distinguish collaborative public participation from the traditional regulatory requirements by emphasizing the inclusion of stakeholders with the focus on dialogue between the groups.

One criticism of public participation effectiveness is the ability of traditional methods to reach the disadvantaged public. Arnstein (1969) comments that true collaboration and sharing of the decision-making power is based on reaching society's disadvantaged population. Based on this thought, the term "empowered deliberative democracy," is a definition of collaboration

that involves the empowerment of ordinary people to directly participate in the decision-making process (Fung & Wright, 2001).

The conceptual definition of collaborative public participation techniques for this study was in the context of the NEPA decision-making process. Therefore, the definition incorporated aspects of the definition presented in *CEQ's Collaboration in NEPA* handbook. Collaborative public participation techniques were defined as techniques that employ and engage active communication and information sharing between agencies and affected stakeholders throughout the decision-making process.

Collaborative public participation techniques

Collaborative public participation techniques are rooted in the idea of engaging the public in the decision-making process. Common dimensions of collaborative public participation techniques include active dialogue through two-way communication, active participation in the decision-making process, and the goal of seeking agreement (not to be confused with consensus).

Active dialogue through two-way communication is based on a multi-dimensional model of learning, sharing, and action joined together where interests are discovered and eventually co-evolve (Innes & Booher, 2004). It is not a one-way communication model from the public to U.S. government, or U.S. government to public similar to traditional public participation techniques. Active public participation in the decision-making process is based on the idea that all participants in the collaborative process have an influence in decision-making, not just comment and input (CEQ, 2007). The goal of collaboration is to seek agreement and not consensus. There are boundaries in participating in collaborative processes with Federal agencies because the lead Federal agencies in the NEPA process retain decision-making authority (CEQ, 2007).

The citizen advisory group is a common collaborative public participation technique.

Participants in citizen advisory groups are representative of the stakeholders and provide input

during project planning (IAP2, 2004). Working together, the group gains a better understanding of different perspectives and often encourages compromise. Another collaborative technique is the charette. A charette is a working meeting of key stakeholders frequently lasting all day or is broken up into several meetings. The focus of a charette is to generate ideas, alternatives, and plans that lead to a project decision (IAP2, 2004). In both of these examples, the emphasis is on active communication and participation.

Factors that encourage or discourage adoption

The literature is rich with discussion and studies on the use of collaboration in the context of U.S. government rule-making, industry and business, and in U.S. government agency resource management (e.g., Beierle & Cayford, 2002). This study focused on the factors that influence agency staff to adopt collaborative public participation techniques in the NEPA decision-making process.

The literature identifies some of these factors and indicates potential relationships between the factors. Figure 2.1 illustrates these relationships and the realization of benefits from implementing collaborative public participation techniques.

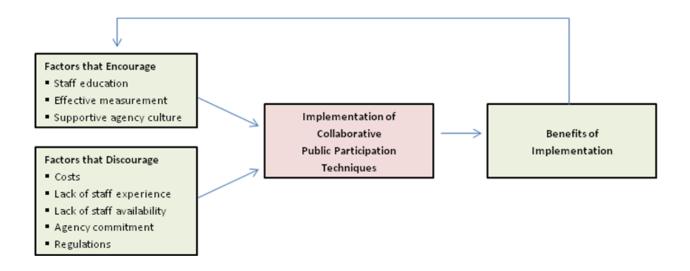


Figure 2.1 Factors influencing adoption and implementation of collaborative techniques.

The most prevalent factors that encourage or discourage adopt of collaborative public participation techniques are discussed and defined in the following sections.

Factors that encourage adoption

Educating U.S. government employees about collaboration and improving their skills is a predominant factor cited in literature to encourage adoption of collaboration public participation techniques (CEQ, 2007; USGAO, 2008). Collaborative processes are intensive and require great effort in coordination.

Related to collaborative skills is the ability to determine the most effective public participation approach to an issue or situation. The degree of group involvement in the decision-making process depends on the problem to be solved, the complexities, and the regulatory constraints (Thomas, 1990). Collaboration may not be appropriate in all situations. Results of a multiple-case study by Thomas (1990) found that "...effective decisions mostly follow use of the right approach." Therefore, environmental managers must be knowledgeable in assessing whether a situation would benefit from a collaborative public participation approach. Developing staff capacity in collaborative processes provides an incentive to engage in the process.

The ability to measure and monitor collaborative public participation efforts have been identified in the literature as a factor encouraging adoption of collaborative public participation. Effective measurement of collaborative public participation helps agencies show how their participation was beneficial to achieving the problem-solving goal (USGAO, 2008). When success for a collaborative program is measured and the benefits of quality decisions documented, agency management is more willing to support the concept with training, finances, and time.

Another factor that encourages adoption of collaborative public participation is the agency culture (CEQ, 2007). Collaborative processes often are perceived as a conflict with agency objectives to expedite decisions. Once agencies embrace the value of collaboration

and have successful experiences with the approach, then the concept becomes ingrained in the agency culture (CEQ, 2007). Agency culture that is supportive of collaborative processes encourages agency staff to adopt these public participation techniques.

Factors that discourage adoption

Several factors that discourage adoption of collaborative public participation techniques in the decision-making process have been identified in the literature. These factors are defined in the following paragraphs.

Cost has been cited as a factor discouraging collaborative decision-making process (Koontz & Johnson, 2004; Irvin & Stansbury, 2004; Fiorino, 1990). Implementing a collaborative endeavor requires ongoing participation throughout the process and typically involves a geographically widespread public participation effort. This commitment of scope and time can be costly.

Insufficient staff experience has been suggested as a factor that discourages the adoption of the collaborative approach to public participation (CEQ, 2007; Heberlein, 1976). Within the resource management agencies, environmental managers traditionally determine how public participation will be implemented. Environmental managers often are technical experts and may not be have collaborative skills such as the ability to conduct meetings, resolve conflicts, and identify and involve key stakeholders (USGAO, 2008). Managers must be able to embrace the role as a "facilitator" and feel comfortable moving from the traditional "expert role" to the role of mediator and enabler (Selin & Chavez, 1995).

Lack of staff resource availability has been cited as a factor that discourages adoption of collaborative approaches. Some U.S. government agency field offices have experienced a workforce reduction, leaving the remaining staff spread thinly over several projects (USGAO, 2008). Because the collaborative process for one project typically spans over several years and requires a consistent and ongoing commitment, agency staff has less time to participate in a collaborative process (USGAO, 2008). This is particularly the case when staff is over-

committed to other agency programs. Another factor that affects staff time and commitment to a collaborative process is related to the agency's practice of frequently transferring staff from one field office or district to another. If the transition of staff committed to a collaborative effort is not smooth, progress and effectiveness is hindered (USGAO, 2008).

Another factor that discourages agency staff from adopting collaborative public participation techniques is lack of agency commitment to not only public participation in general, but specifically to collaborative public participation (CEQ, 2007). As identified in the literature, approaches to public participation and public empowerment in the decision-making process could be perceived as a threat to agency power (Checkoway & Van Til, 1980). Some agencies may resist collaborative approaches if they fear loss of control over their statutory responsibilities (CEQ, 2007).

Implementing collaboration within the framework of Federal statutes and agency policies has been cited as a discouraging factor to adopting collaborative approaches (USGAO, 2008). For example, the Federal Advisory Committee Act imposes several requirements on interaction between Federal and nonfederal participants. Requirements include: 1) collaborative groups have a charter stating the goals and objectives of the group; 2) requires meetings be open to the public; 3) meetings must be announced in advance; 4) preparation and publication of meeting minutes; and 5) adherence to conflict of interest and ethics rule for Federal government employees (CEQ, 2007). These administrative tasks inhibit groups from working openly and spontaneously to solve problems (USGAO, 2008). Additionally, NEPA has been cited as a hindrance to collaborative efforts because NEPA's mandated public participation requirements actually duplicate the efforts of a collaborative group (USGAO, 2008).

In summary, "factors that encourage adoption" are defined in the literature as including staff educated in the collaboration process, effective measurement, and agency culture. For this study, "factors that encourage adoption" was defined as any mechanism that promotes and supports the adoption of collaborative public participation techniques in the NEPA decision-

making process. "Factors that discourage adoption" include costs, insufficient staff experience, lack of staff time, agency commitment, and regulations. For the purpose of this study, "factors that discourage adoption" was defined as any impediment that prevents agency staff from adopting collaborative public participation techniques in the NEPA decision-making process.

Research questions

Based on the benefits cited in the literature, such as improved quality in decision-making, prevention of stakeholder conflict, building of civic capacity, and agency trust, an exploration of possible factors that influence agency adoption of collaborative public participation techniques was warranted. Agencies need alternative tools for engaging the public in NEPA decisions than those traditionally implemented in the past, particularly since agencies are confronted today with complex environment decisions.

This study had two objectives: 1) to search for evidence of previously identified factors that influence agency adoption of collaborative public participation techniques as suggested by the literature (see Figure 2.1); and 2) to explore and identify other potential factors contributing to the willingness to adopt these techniques. Finally, the study also explored evidence of relationships between the factors. As such, the study will use an inductive approach.

The following research questions examined the factors suggested in the literature that either encouraged or discouraged agency willingness to adopt collaborative public participation techniques and also identified any additional factors not documented in the literature or previous studies:

RQ1: What are the factors that encourage agency willingness to adopt collaborative public participation techniques in the NEPA decision-making process?

RQ2: What are the factors that discourage agency willingness to adopt collaborative public participation techniques in the NEPA decision-making process?

RQ3: How does cost affect the choice to implement a collaborative public participation technique in the NEPA process?

RQ4: How does agency experience in implementing collaborative public participation techniques affect agency staff's willingness to adopt a collaborative public participation technique in the NEPA process?

RQ5: How does resource availability affect agency willingness to implement collaborative public participation techniques in the NEPA process?

RQ6: How does agency commitment affect agency willingness to implement collaborative public participation techniques in the NEPA process?

RQ7: How do Federal regulations and agency policies affect agency willingness to adopt collaborative public participation techniques in the NEPA process?

RQ8: How does staff education on collaborative public participation techniques encourage willingness to adopt collaborative public participation techniques in the NEPA process?

RQ9: How does the ability to measure the success of a collaborative effort encourage agency willingness to adopt collaborative public participation in the NEPA process?

RQ10: How does agency culture affect agency willingness to adopt collaborative public participation techniques?

CHAPTER 3: METHOD

Using collaborative public participation techniques in the NEPA decision-making process is a relatively new public participation tool and, until recently, has not been considered in the context of NEPA decision-making. This study used a qualitative research method -- specifically, semi-structured interviews -- to explore and better understand the factors that influence agency staff's willingness to use collaborative public participation techniques for their NEPA decision-making projects. Interviews were particularly well suited for this study because of their flexibility to probe the interviewees and gain a better understanding of their experiences and perspectives (Lindlof & Taylor, 2002).

Population and sampling

Semi-structured, in-depth interviews were conducted with two Federal agencies, the U.S. Department of Energy Western Area Power Administration (Western) and the U.S. Department of Interior Bureau of Land Management (BLM). Western is a Federal agency that sells and delivers power within the United States through transmission lines that cross public rights-of-way. Western also grants commercial power generators interconnection to their substations. BLM is a Federal agency that manages multiple resources and uses on Federal public lands primarily in the western United States. In addition to multiple-use management, the BLM administers mineral leases and livestock grazing permits, and is responsible for wild horse and burro management. While Western and BLM have different jurisdictional and managerial objectives, both agencies are mandated to comply with NEPA and therefore participate in numerous NEPA projects requiring public participation.

Supervisory management from each of the federal agencies was contacted to request approval for staff participation in the study. Managers from the U.S. Forest Service, Western Area Power Administration, and the Bureau of Land Management gave verbal approval for staff participation and to initiate the sampling process. See Appendix A, Sample Authorization for Participation Letter.

Environmental managers from the three agencies comprised the population for the study. Study participants from Western were sampled from Western's Corporate Services

Office (CSO). Western's CSO environmental staff provides project management support to the regional offices where there is a limited number of staff to work on NEPA projects. Unlike Western's organizational structure, BLM's field offices typically manage NEPA projects within their field office jurisdiction without formal or significant support from the State BLM office.

Therefore, study participants from the BLM were limited to field offices within Colorado. U.S.

Forest Service study participants came from the Roosevelt-Arapaho Forest.

Two sampling methods were used to obtain participants for the study. Participant selection was based on one criterion: the interviewee had managed at least one agency NEPA project requiring public participation. To ensure that subjects selected had met the one criterion, a purposive sample of seven initial participants were selected from Western and BLM's websites where current projects and Western staff managing those projects were listed (McComas, 2001). It was anticipated that these initial participants primarily would work within Western and BLM's environmental department; however, the sample included members from other departments (e.g., public affairs). A snowball sampling method was also used, as the initial participant selections made referrals to other potential participants. Two individuals from Western Area Power Administration declined to participate; one participant from the U.S. Forest Service was unable to participate because of work-related travel. The sampling achieved a balanced representation of participants based on years of experience, gender, and age (see Appendix B, Sampling Protocol).

The sample included four participants from the Forest Service and four participants from Western; three participants were selected from the BLM. The researcher consulted with her advisor and it was determined that the data collected was sufficient to answer the research questions and ensure a comprehensive compilation of data. No additional participants were selected.

This study involved data collection from human subjects; therefore, prior to conducting the study and collecting data, a Human Subjects Form H-100 was prepared and submitted for approval in accordance with Colorado State University requirements. The H-100 form was prepared by the researcher and committee advisor.

Once authorization from agency managers was granted allowing staff to participate and the initial study participants were selected, each study participant was contacted by telephone or through email requesting their participation in the study. The telephone sampling protocol and email sampling protocol described the topic of the study, requested their participation, explained why their participation was important, and provided information about the time commitment required for the interview. If the study participant consented to participate in the study, an interview date, time, and location was scheduled. A copy of the telephone and email sampling protocol is presented in Appendix B.

Eleven interviews were conducted with participants from three federal agencies. Four participant interviews were conducted with U.S. Forest Service personnel, three with the Bureau of Land Management, and four with Western Area Power Administration. More than half of the participants were male (seven), and four were females. Participant ages ranged from 31 to 70 years old; three participants were in the age range of 31 to 40 years, two participants were in the range of 41 to 50 years, five participants fell within the age range of 51 to 60 years, and one participant was in the age range of 61 to 70 years.

Most participants were seasoned professionals, with approximately 65 percent of the participants having 20+ years of work experience. However, seven of the 11 participants had 10 or less years of experience with the agency they were representing. Most of the participants had a technical/science educational background; only three participants had a background in communications. Likewise, most of the participants held a technical and/or managerial title, while three participants held the title of Public Affairs. Appendix E, Table A.0 presents demographic frequencies of the participants.

Researcher

Peggy Cochran Roberts is a Master of Science candidate at Colorado State University and an environmental consultant responsible for preparing NEPA documents such as Environmental Assessments and Environmental Impact Statements. She also is responsible for the planning and development of public participation programs in support of the NEPA process. With twenty years of experience in the environmental consulting industry, she routinely works with Western Area Power Administration and the Bureau of Land Management on project-specific, NEPA-compliance projects and public participation programs.

Study design

Interviews were conducted during working hours at either the agencies' field or regional offices or outside of the office at local coffee shops or restaurants. Two interviews were conducted over the phone for the convenience of the interviewees, and in some cases, the interviewee's geographic location. While telephone interviews have limitations such as the inability for capturing visual cues or participant expressions (Berg, 2007), the telephone interviews conducted for this study provided rich data, allowing interviewees the opportunity to engage in storytelling. This experiential information was valuable for gaining a deeper understanding of the factors influencing agency staff's willingness to adopt collaboration (Lindlof & Taylor, 2002). The researcher conducted all interviews.

A digital recorder was used during the interviews with prior approval by the interviewee.

Using a digital recorder ensured that the participant's responses were accurate and complete.

There are two additional advantages of recording interviews: 1) it allows the researcher the opportunity to fully engage in the interview; and 2) it records not only what was said, but also the intonation and how words and phrases were spoken (Lindlof & Taylor, 2002). General notes were taken by the researcher during the interview to record any nonverbal expressions of the interviewee or observations made during the interview.

Procedures

The researcher conducted all interviews for the study. As previously mentioned, interviews took place during working hours at the field office or regional office location or outside location, or by telephone. Participants were asked to read and sign the informed consent letter to: a) ensure their understanding that participation was voluntary, b) that their answers would remain confidential, and c) inform participants of any potential risks or benefits. The interviewee signed an original and a copy of the informed consent letter; the researcher maintained the original. A copy of the informed consent letter is provided in Appendix C.

Each participant was assigned a three-digit participant code number and nomenclature that associated the code with the agency, so that his/her identity would not be associated with the actual interview data (i.e. W004, BLM002, etc.). This ensured confidentiality for the participant. Although the interviewee's name remained confidential, the agency was identified in the interview coding and by name in the study results.

The interviewer began the interview with some introductory statements explaining how the interview would be conducted, verifying if there were objections to recording the interview, and whether there were any additional questions. The interview protocol is provided in Appendix D.

Once the interviewee had given his/or consent, the tape recorder was activated. A semi-structured interview method was used, which involved a predetermined number of questions asked of all participants, but the semi-structured interview format also allowed the interviewer flexibility to ask "probing" questions (Berg, 2007). The interviewee also was able to digress from the original questions and offer additional information, which was beneficial to the study (Berg, 2007).

Interview protocol

The interviewer provided the introductory information above, and began with general, easy-to-answer questions to obtain demographic information and to develop a rapport with the

interviewee (Berg, 2007). Introductory questions focused on the interviewee (e.g., age, how long they had worked with the agency, etc.) The responses to these questions gave the investigator data that could suggest potential variables affecting agency willingness to use collaborative public participation techniques. The interview then moved to a series of openended questions that focused on the study's objectives. Open-ended questions allowed the interviewee an opportunity to expand on a topic. The study benefited from the open-ended questions because the format allowed the interviewer to probe with additional questions, providing more detail and in-depth information. (Wimmer & Dominick, 2006).

First, questions were asked about the interviewee's general understanding of the purpose of public participation and their agency's goals in public participation. The responses to these questions gave the investigator a better understanding of the interviewee's perspective and their agency's emphasis on the process. The interviewee's perspective provides insights on willingness to use collaborative public participation techniques. The most critical questions were designed to identify factors that supported or discouraged the use of collaborative public participation techniques in the NEPA decision-making process and to identify news factors that affect the adoption collaboration. Probing questions were used to solicit additional information about the factors identified in the research questions. The flexibility of the semi-structured interview allowed for storytelling and free conversation, providing the researcher greater insights (Lindlof & Taylor, 2002). Finally, a summary question asked the interviewee to express their general thoughts about using collaborative public participation techniques. The intent of this final question was to stimulate the interviewee's thinking about collaboration and possibly generate some additional factors that either encouraged or discouraged adoption of collaborative public participation techniques. This question provided more insight in to what motivated agency staff to consider using collaborative public participation techniques.

Pilot test

The interview protocol was first used in a pilot test to identify any flaws, issues, or misunderstandings with the interview questions. Interviews during the pilot test were recorded and transcribed to replicate the actual interviews process for the study.

A convenience sample of four participants was selected for the pilot test. The same criterion used for selection of study participants was also applied to the pilot testing participants. Pilot test participants were selected from the U.S. Forest Service, an agency that routinely manages NEPA projects involving public participation. No changes to the interview protocol were made as a result of the pilot test. Therefore, data collected from the pilot test interviews were included in the total study analysis.

Data analysis

Data analysis of the interview samplings were conducted using the grounded theory approach. The grounded theory approach inductively derives theory through a systematic set of procedures that draws directly from the data itself (Strauss & Corbin, 1990). Contrary to other research procedures, data collection and data analysis occur alternately as the analysis directs the data sampling (Strauss & Corbin, 1990). This alternating process allows for the development of rich and dense categories, whereby theory can be built. While each coding process has a distinct purpose, the data analysis may gravitate back and forth, building from each other. Highlights from each data analysis session were recorded in a memo. The following describes the process of data analysis for this study using the grounded theory approach.

The interviews were transcribed from digital tape recordings. The electronic files will be stored in a secure location for three years. A three-digit participant code was assigned to each interviewee, which was also included on each transcript (Berg, 2007).

The first step in the grounded theory approach is to conduct open coding. The purpose of open coding is to name and categorize the data (Strauss & Corbin, 1990). Ideas were noted

in a running list during the first review of the transcripts. Similarities and differences emerged, and the concepts were grouped by similar topics, or themes. These groupings formed categories which were descriptively labeled by the researcher.

The open coding process was documented electronically in Microsoft Word™. The electronic tabular format provided ease in organizing and compiling the ideas, then sorting them by category in an all-inclusive table. As a discrete idea was identified, it was listed in the table vertically. Similar ideas were electronically moved into categories and category labels were assigned. Each discrete idea was then removed from the --running list and placed under the appropriate category name. Descriptive codes were then assigned. Once all the ideas had been identified and grouped into categories with codes, a code book was developed. The researcher assigned the codes developed in the code book to the transcripts during a second review.

Intercoder reliability was checked to ensure that the codes and categories are assigned with the same results as the researcher. Using the code book developed for this study, an independent coder applied codes and categories to a subset of the transcripts. Following negotiation between the researcher and independent coder, the intercoder reliability check resulted in an 83 percent agreement, achieving a slightly greater percentage than the recommended 80 percent agreement (Neuendorf, 2001).

The next step in the data analysis compared the categories with the phenomenon of interest, "willingness to adopt collaborative public participation techniques." Throughout the comparison process, the researcher explored and identified any intervening conditions that could have an effect on an independent variable. For example, did interviewee's age affect their willingness to adopt collaborative public participation techniques? Additionally, the comparison process evaluated whether there were any potential relationships between the independent variables. Relationships between variables, identification of new factors, and interview quotes

were documented in memoranda (Strauss & Corbin, 1990). Memoranda documenting key findings for this study are presented in Appendix F, Theoretical Memoranda.

CHAPTER 4. RESULTS

Interview participants were first asked questions about their personal understanding of the purpose of public participation, what their agency's goal for public participation, and their personal understanding of collaborative public participation. Information from these inquiries provided an understanding of the participant's knowledge base, or perspective, which in turn would influence their responses to interview questions. Most of the participants responded that the purpose of public participation was to "inform the public" (38 percent, or 13 of the total of 34 responses) and to acquire "feedback from the public" (41 percent, or 14 of the total of 34 responses). The remaining 20 percent, or 7 of the 34 responses, indicated that the purpose of public participation was related to a benefit for the agency, such as compliance with federal regulations, obtaining public "buy-in," or the ability to make better agency decisions. In general, the interview participants understood the overall purpose of public participation. Appendix E, Table B.0 presents the frequency results for understanding the purpose of public participation.

When asked about their agency's goal for public participation, almost half (41 percent) of the responses were to "engage the public." "Meeting regulatory requirements" and "agency benefits" each represented 20 percent of the responses, followed by "to inform" and "avoid litigation," 13 percent and 3 percent, respectively. These results indicate that the individual's understanding of public participation and their agency's goal for public participation were similar and that the individual's and their agency's perspectives aligned. Appendix E, Table C.0 shows the frequency results for agency's goal for public participation.

Over half of the participants (56 percent) understood the concept of collaborative public participation. Twenty-five percent of the participant comments indicated a misunderstanding of the collaborative public participation concept. For example, one BLM participant defined collaborative public participation as "some formalized agreement." Appendix E, Table D.0 presents the results of participants' understanding of collaborative public participation.

The following research questions were examined in the interviews to validate factors previously identified in the literature and to identify new factors not identified in the literature that either encouraged or discouraged agency willingness to adopt collaborative public participation techniques. The following paragraphs summarize the results of each research question.

Research question 1 asked what factors encouraged agency willingness to adopt collaborative public participation techniques in the NEPA decision-making process. Several factors emerged that provided support for willingness to adopt collaborative techniques. The two most prominent factors were "agency mission," representing 80 percent of the responses, and "ability to measure success," with 75 percent of the responses. The "loss of agency decision-making power" was not a factor for either encouraging or discouraging the willingness to adopt collaborative processes. "Federal regulations" was a strong factor in motivating use of collaborative public participation (71 percent of the responses). The results indicated that "agency culture" and "agency commitment" were important to support collaborative public participation at 56 percent and 50 percent, respectively. Refer to Appendix E, Table F.0.

Research question 2 asked about the factors that discouraged agency willingness to adopt collaborative public participation techniques in the NEPA decision-making process. "Lack of staff education" on collaborative techniques emerged as the most influential factor for discouraging adoption of collaboration, resulting in 89 percent of the responses. The results indicated that "cost" to implement a collaborative public participation process was a discouraging factor, representing 63 percent of the responses, followed by "schedule" and "staff availability," representing 58 percent and 50 percent of the responses, respectively. Fifty percent of the responses showed that a lack of "agency experience" with collaborative processes would discourage staff from adopting these techniques in their public participation programs. See Appendix E, Table F.0.

Research question 3 explored whether cost would affect the decision to implement collaborative public participation in the NEPA process. Most of the participants recognized that

implementing collaborative public participation was costly. Fifty percent of the participants felt that costs were a constraint to implementing collaborative public participation programs. Thirty-three percent indicated that cost was not a factor in implementing a collaborative public participation process. For example, one Western participant noted that while cost-saving and cost-effectiveness within the agencies was important, most of their NEPA projects were under an applicant cost reimbursement program. Therefore, funding through the applicant cost reimbursement program reduced the cost constraint for conducting collaborative public participation. See Appendix E, Table F.0.

Related to costs, participants were asked if schedule constraints were a factor in adopting collaborative public participation techniques. Most of the responses, 47 percent, believed that schedule constraints had a negative influence on whether staff used collaborative public participation techniques. Sixteen percent indicated that it wasn't a factor and 25 percent of the responses were neutral, suggesting that schedule was a consideration, but not necessarily a factor that encouraged or discouraged adopting collaborative public participation techniques. Appendix E, Table F.0 summarizes the frequencies for schedule constraints.

Research question 4 asked whether an agency's experience using collaborative public participation affected the willingness to use the approach again. Fifty percent of the responses indicated that lack of agency experience with collaboration would discourage staff from using these techniques. See Appendix E, Table F.0.

Research question 5 investigated whether staff availability affected agency willingness to implement collaborative public participation. Participants from all three federal agencies, 60 percent, reported that staff availability was a factor that discouraged implementing a collaborative public participation process. Twenty percent of the responses indicated that staff availability was not a factor. The remaining 20 percent of responses acknowledged staff availability as a consideration, but did not indicate whether it was a positive or negative factor in deciding whether to use collaborative public participation. See Appendix E, Table F.0.

Research question 6 addressed if agency commitment to collaborative public participation affected whether there was a willingness to implement the process. Responses for this question were limited to the Forest Service, an unintended omission of the researcher when interviewing Western and BLM. Half of the Forest Service participants indicated that agency commitment did have a positive influence on whether staff was willing to apply the collaborative approach to their public participation efforts. Twenty percent of participant responses did not believe agency commitment was a factor. See Appendix E, Table F.0.

Research question 7 explored whether Federal regulations and agency policies affected agency willingness to adopt collaborative public participation techniques. All three agencies reported a positive influence of federal regulations and agency policy to whether collaborative public participation was implemented, with 71 percent of the responses. However, 21 percent of the responses indicated the regulations could discourage use of collaborative public participation, primarily referring to the Federal Advisory Committee Act. The remaining 8 percent of responses were neutral on the effect of Federal regulations and agency policies in adopting collaborative public participation techniques. A summary is provided in Appendix E, Table F.0.

Research question 8 looked at whether staff education was a positive or negative factor in choosing collaborative public participation techniques. None of the agencies responded that staff education was a significant factor, but 83 percent of the responses indicated that the "lack" of staff education about collaborative techniques would discourage use of collaborative public participation techniques. See Appendix E, Table F.0.

Research question 9 asked whether the ability to measure the success of a collaborative effort would encourage a willingness to use collaboration. Discussion of this factor was low and limited to the Forest Service, but three of the four responses indicated that the ability to show success in implementing a collaborative process would encourage willingness to adopt collaborative public participation. Recognizing that she wasn't familiar with any metric for

measuring success in public participation, one U.S. Forest Service participant did state, "I can't think of one time when the administrators...seeing the results of collaborative process, didn't go, 'wow, that's what we ought to do from now on." Related to research question 9, participants were asked about their thoughts on the effectiveness of collaboration. Participants representing all three agencies strongly believed that collaboration was effective, representing 89 percent of the responses. See Appendix E, Table F.0.

Agency culture and whether it promotes or discourages willingness to adopt collaborative public participation was explored in research question 10. More than half, 56 percent, of the participants responded that a positive culture would influence agency to implement collaboration. Thirty-six percent of the responses indicated that an unsupportive agency culture would discourage willingness of staff to implement a collaborative process. Refer to Appendix E, Table F.0.

During the data collection process, two new factors emerged that could potentially influence agency staff's willingness to implement collaborative public participation. These new factors were addressed by asking study participants whether their agency's mission or concern of losing decision-making power were affecting agency staff's willingness to adopt collaborative public participation.

While all three agencies are mandated to comply with public participation requirements under NEPA, each of the Federal agencies have different mission statements. The first additional question explored whether the agency's mission would percent of the responses indicated that their agency's mission would be an encouraging factor to use collaboration, while 20 percent indicated their agency's mission would not be a factor. See Appendix E, Table F.0.

Participants were asked if concern about losing agency decision-making power was a factor affecting willingness to adopt collaborative public participation. Sixty-seven percent of the participant responses indicated that this concern was not a factor and would not affect willingness to adopt collaborative public participation. A Western participant's response was,

"we make it really clear that your input is valued and used, and we try to show you how it's used, but that the final decision is ours." Thirty-three percent believed this was a misinformed perception, because the decision-making power lied with the agency and was protected by law. Therefore, the participants didn't see this concern as a factor that influenced implementing a collaborative public participation process. Refer to Appendix E, Table F.0.

CHAPTER 5: DISCUSSION

The study focused on factors that influence federal agency staff to adopt collaborative public participation techniques in the NEPA decision-making process. The first objective was to find evidence of previously identified factors from the literature that influence adoption of collaborative public participation techniques. The second objective was to explore and identify other potential factors that could contribute to the willingness of agency staff to adopt these techniques. Eleven interviews were conducted with participants from three federal agencies: the U.S. Forest Service, Western Area Power Administration, and Bureau of Land Management.

Most of the participants had a good understanding about the purpose of public participation and collaborative public participation. A solid understanding of collaborative public participation provides study credibility and supports the overall study results. Participants' understanding of public participation and their agency's goal for public participation were similar, both agreeing that the purpose of public participation was to "engage the public." Study results revealed additional agency goals of public participation were to "meet regulatory requirements," obtain "agency benefits" (e.g., make better decisions, obtain public "buy-in," etc.), and to "avoid litigation."

"Federal regulations" were a significant factor encouraging the implementation of a collaborative process with 71 percent of the responses. "Agency culture" and "agency commitment" also were key factors supporting collaborative processes at 56 percent and 50 percent, respectively. Two additional factors mentioned that encouraged agency willingness to adopt collaborative public participation were "agency mission" and the "ability to measure success."

While most participants agreed that collaborative techniques were effective, study results identified factors discouraging implementation of collaborative techniques in their public participation programs. "Lack of staff education" about collaborative techniques emerged as the most influential factor followed by "cost" to implement. "Schedule," "staff availability," and

"agency experience" were also cited as factors that would discourage adoption of collaborative public participation.

Additional factors emerged from the study results that had not been previously identified in the literature. Previously identified and new factors in the willingness to adopt collaborative public participation are discussed in the following section.

Theoretical Implications

The literature review identified three factors that encouraged willingness to adopt collaborative public participation techniques: staff education about collaborative processes and techniques, the ability to measure the success of collaboration, and agency culture (see Figure 2.1). The following summarizes the theoretical implications derived from the study for each factor that encouraged willingness to adopt collaborative public participation.

Staff education

Educating agency staff about collaborative techniques and improving their implementation skills was cited in the literature as a factor encouraging the adoption of collaboration (CEQ, 2007; USAGAO, 2008). None of the agency participants felt that staff education influenced adoption of collaborative public participation; however, many felt that the lack of awareness about collaborative processes could discourage use of collaborative techniques. For example, most of the participants were technical experts with little experience working with the public. A lack of training opportunities within the agency reduces awareness of alternative methods beyond what is required for public participation by law.

It was suggested by U.S. Forest Service participant that the absence of training in collaboration was related to agency culture. In the recent past, this participant noted that government agencies traditionally operated under a "power model of leadership" as compared to a "service type model of leadership." The "power model of leadership" is a leadership approach involving control over resources, such as information, status, but particularly, finances (Foa & Foa, 1974). Conversely, the "service type model of leadership" is a leadership approach

whereby leaders view their responsibility is to serve to others through mentoring, empowerment, and team building behaviors (Kanungo & Mendonca, 1996). Service-style leaders are stewards of an organization's vision, a part of something bigger, the community at large (Senge, 1990).

There appears to be a gradual shift in agency culture towards the "service type model of leadership" as older staff begin to retire and new staff, trained in the classroom, bring the collaborative mindset to the workforce. This shift was evident throughout the study as all three agencies have employed mechanisms for using collaborative processes at some level with their most complex and controversial projects.

Related to education is the knowledge and experience to assess whether a situation or project would benefit from a collaborative public participation approach. Based on responses during the study, the participants recognized that collaboration may not be appropriate for all situations, particularly projects where few stakeholders are directly affected, there is little public controversy, or in the absence of outside organized groups. The type and scope of the project was a new factor affecting staff adoption of public participation that emerged in the study and was not previously identified in the literature.

In summary, study results did not support the literature that cited staff education was an influencing factor in the willingness to adopt collaborative public participation, but rather, whether staff was aware of collaborative processes. Staff awareness and training are dependent on whether the agency's culture is supportive of public participation and whether there is a service-oriented mindset.

Ability to measure the effectiveness of a collaborative process

Collaborative public participation was recognized as an effective tool for improved agency decision-making; however, it was acknowledged that the ability to measure the effectiveness of a collaborative process was challenging. Agency participants suggested that effectiveness could be measured by the number of appeals, lawsuits, condemnations, and/or "angry" calls. The concern about reducing the number of appeals and lawsuits was found to be

an underlying theme and potential motivator to implementing a collaborative process. If decision-makers could observe its success, whether it was a reduction in appeals, lawsuits, condemnations, and/or "angry calls," then there would be more willingness to adopt the process. The ability to measure the effectiveness and document successful outcomes could support a culture that promotes collaborative public participation.

Agency culture

The agency's culture emerged as a central factor influencing staff willingness to engage in a collaborative process with all three agencies, but primarily with the U.S. Forest Service.

Many of the factors explored in this study were dependent on whether the agency's culture promoted collaborative processes. The literature suggested one reason why agency culture did not support collaborative processes was that collaboration was often perceived as a conflict with agency objectives to expedite decisions (CEQ, 2007). As agency decisions on projects have become increasingly more complex and challenging and drawing more public attention, the study found that agencies have become more supportive of the collaborative process. Agency decision-makers are reticent to make decisions before consulting the public and engaging key stakeholders. Again, the key motivation for the agencies is to avoid appeals and lawsuits on their decisions. The study results found that agency support for collaborative public participation was not necessarily a conflict in expediting agency decisions, but was important for informing agency decisions.

The literature review identified four factors that discouraged willingness to adopt collaborative public participation techniques: costs to implement, staff experience, staff availability, and agency commitment (see Figure 2.1).

Costs

Cost to implement a collaborative public participation program was cited in literature as a factor that would discourage agency adoption (Koontz & Johnson, 2004; Irvin & Stansbury, 2004; Fiorino, 1990). The study supported this previously identified factor; however, it was

noted that this factor was not a strong influence on the decision to use collaborative public participation. Concerns about costs to implement a collaborative process are related to agency culture. In agencies that operate in an intensive cost-saving environment, there is more sensitivity to costs and budgets. However, if the agency culture supports and promotes public participation, realizing the long-term benefits of public participation and the collaborative process, then costs become less of a constraint.

Additionally, the study found that some agencies frequently operated under the cost reimbursement arrangement for NEPA projects, whereby the applicant for the project finances agency staff activities to conduct the NEPA process. This provides a funding mechanism for agencies to implement a collaborative process within the NEPA framework. Also, new technology (e.g., project websites, email, etc.) has improved cost efficiencies in communicating to a broader group of people. Costs associated with high volume mailings have dramatically been reduced with the improved technology. Therefore, costs become less of a constraint in agencies that use the cost reimbursement program and implement improved technologies for communicating to the public.

Staff experience

The literature cites insufficient staff experience as a factor that discourages adoption of collaborative public participation (CEQ, 2007; Heberlein, 1976). This factor is related to staff education and knowledge about collaborative techniques. Insufficient experience was not a significant factor in choosing whether to adopt the collaborative approach; however, study participants did recognize that most environmental managers come from a technical or science background. These managers may lack the skills to implement a collaborative approach (USGAO, 2008). Selin and Chavez (1995) stated that environmental managers must embrace the role as a facilitator instead of the expert role.

Individual mindset

The study identified a new factor that could influence the willingness to adopt collaborative public participation – the individual's mindset. The concept of the individual's mindset includes several dimensions – personal values, ability to proactively seek public opinion, and fear of vulnerability. Personal values are defined as how one views their role as a representative of a government agency. Personal values serve as criteria for setting priorities and making decisions (Kumar, 2012). For example, does one see oneself as a public servant and steward of the public's assets? Is collaborative public participation the right thing to do? Are the public's concerns important?

Related to the dimension of personal values, seeking public opinion is a personality dimension defined as the natural inclination to approach the public and actively solicit their input and concerns. If the individual values his or her decision-making responsibilities and the public's concerns, they are willing to pursue those concerns and issues for the benefit of a sound agency decision.

The final dimension identified – "fear of vulnerability" - is rooted in personal self confidence or lack of knowledge about public participation. Some personalities take negative feedback personally and, therefore, choose to avoid situations where there is direct criticism. Vulnerability is a tendency to construct mental scenarios of negative events or an outcome (Riskind, 1997; Riskind, et al. 2000). Individuals who feel vulnerable attempt to put distance between themselves and the threat (Elwood, et al., 2011). Some fear is borne from a misunderstanding of the process and the agency's role. The individual's mindset is directly related to the agency's culture and whether the two are aligned.

Resource availability

Agency field offices have experienced workforce reductions and turnover, leaving the remaining staff thinly spread over multiple projects (USGAO, 2008). Over-committed staff leaves little available time to oversee a collaborative process that requires dedication over the

life of the project. The study supported the findings in literature that lack of staff availability is a discouraging factor to implementing a collaborative process. All of the agency participants acknowledged that a collaborative process requires additional staff resources and reported that staff availability was a key factor to effective implementation of collaboration. Current staff workloads and shifting priorities do not support a collaborative process. Staff availability also is related to costs and how funds are distributed and managed within the agency. As noted by a Western participant, if a government-funded project does not have the funds to allocate for meetings outside of the regular workday, or to support travel, then a collaborative effort isn't feasible. However it was noted that with new technology, some collaborative efforts require less staff and provides more efficient execution of collaborative communication and activities. Improved technology was identified as an effective communication tool for collaboration on large projects that encompassed a large geographic region with numerous stakeholders. The agency's culture, how funds are allocated, and how staff work load leveling is managed can negatively affect the availability of staff to implement a collaborative public participation program.

Federal regulations

The literature indicated that implementing collaboration within the framework of Federal regulations and agency policies is a factor that discourages adoption of collaborative public participation (USGAO, 2008). An example cited was the Federal Advisory Committee Act, which imposes strict requirements for collaboration between Federal and nonfederal participants (CEQ, 2007). However, study results indicated that some federal regulations actually encourage collaboration. For example, the Healthy Forest Restoration Act of 2003 introduced a proactive public participation approach as part of the statutes engaging the U.S. Forest Service directly with stakeholders and affected communities.

The Bureau of Land Management uses a collaborative tool that not only involves a diverse representation of stakeholders, but incorporates collaboration within the NEPA process

through Resource Advisory Councils (RACs). RACs are citizen-based groups consisting of 12 to 15 members from diverse representations such as environmental groups, ranchers, state and local governments, tribes, and academia (USDOI, 2012). RAC members are appointed by the Secretary of Interior and serve three-year terms (USDOI, 2012).

Agency commitment

The literature suggested that a lack of agency commitment to public participation and specifically, commitment to collaborative public participation was a factor that discouraged the adoption of collaboration (CEQ, 2007). The study results showed that agency commitment to public participation and collaboration was a positive factor to adopting collaboration and helps to define the agency. Some participants suggested a relationship between agency commitment and agency culture. When the agency's culture supports the process, there is an increase in agency commitment to public participation and collaboration.

The literature suggested that agency commitment to collaborative processes could be related to the perception of the term "collaboration." "Collaboration" suggests public empowerment and the potential for agencies to lose their decision-making power (Checkoway & Van Til, 1980). Study participants indicated that the potential to lose agency decision-making power was not a discouraging factor. Agency participants were confident that federal laws and statutes mandating decision-making power to the agencies were upheld; therefore, engaging in a collaborative process would not jeopardize that mandate. Given that agencies are required to make these complex and controversial decisions, it was the perception that collaboration served as an effective tool for making better decisions and decisions supported by the public. While collaboration was perceived as an effective tool in making better decisions, participants commented that it was important to develop parameters around the process to protect the agency's decision-making mandate.

Summary of Findings

The above factors were examined to identify patterns or relationships among the factors influencing adoption of collaborative public participation. A repeated pattern emerged for all the factors in relation to agency culture. How the agency is organized and how decisions are made about public participation affect the magnitude of each factor's effect on adopting collaborative techniques. For example, if the agency has a decentralized organization, allowing the local field offices the authority to make decisions results in "...the best decision for the local area." Local knowledge of the public's concerns and key stakeholder issues personalizes the agency decision and, in turn, provides support for working collaboratively with the public in their decision-making.

There appears to be a relationship among factors reviewed in this study. Agency culture has a profound and direct effect on willingness to use collaborative public participation techniques, but also has an indirect effect on other factors, such as attitudes and perception of staff personnel. How an agency is organized and managed affects the attitudes and perceptions of staff personnel toward collaborative public participation and its effectiveness. The direct and indirect effect of agency culture on the willingness to adopt collaborative techniques is shown on Figure 5.1 below.

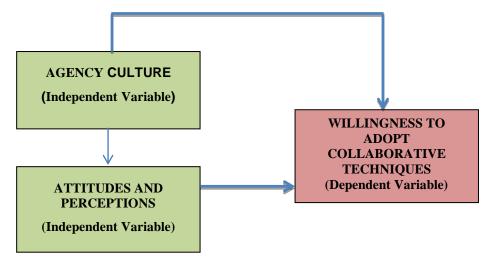


Figure 5.1 Direct and indirect effect of agency culture.

Also, federal regulations were found to be a positive factor for encouraging collaborative public participation. Agency decision-making processes are based on the regulatory framework to guide and support their decisions. While some regulations specifically require public participation, there are few regulations that provide guidance or requirements to specifically applying collaborative public participation. In the absence of this regulatory guidance and statutes, agency staff may not motivated and may be reluctant to explore implementing collaborative public participation from the standard procedures as mandated by law.

Practical Implications

The study offered several practical implications for agency staff when considering the application of collaboration techniques in their public participation programs. First, agency staff need the skills to identify whether implementing a collaborative process is appropriate for a particular situation and to apply the appropriate level of participation required for their outreach programs. Associated with identifying the appropriate level of public participation, environmental managers need to be more aware of the public participation options available.

Furthermore, in applying the correct level of public participation, agency staff must understand objectives and goals for their public participation programs. For instance, is the public participation goal to acquire input and comments, or is the goal to provide opportunities for the public to actively engage in the decision-making process? Once the public participation objective is understood, agency staff can implement the appropriate technique to their situation. If collaboration is identified as the appropriate level of participation for a situation, training and education for implementing a successful collaborative process is recommended. A U.S. Forest Service participant did comment that training staff can be challenging. If a staff member has an unfavorable mindset towards engaging the public, training may not be effective.

Study Limitations

There are inherent limitations to qualitative research and in-depth interviews that affect both internal and external validity. The primary limitation is related to external validity and whether the study findings can be generalized to the overall population of agency personnel.

The sample method used for this study, purposive (nonrandom) sampling, was a limiting factor to generalizability. To collect the relevant data in understanding the factors that influence agency decisions on public participation techniques in the NEPA decision-making process, it was necessary to limit the interviewees to those directly involved in making public participation decisions for NEPA projects. Purposive sampling of interviewees prevents generalization of study results to other government agencies who might engage in collaborative public participation.

To strengthen generalizability, future research could be expanded to include additional federal agencies that conduct NEPA evaluations with public participation requirements, such as the U.S. Environmental Protection Agency, U.S. Federal Highway Administration, and U.S. Department of Energy, as well as others. Because the sample size for this study was small (11 participants), expanding the study to other federal agencies would increase the pool of potential participants.

In-depth interviews are particularly vulnerable to interviewer bias (Wimmer & Dominick, 2006). Introduction of researcher bias cannot be overlooked in qualitative studies. One bias introduced in this study was related to how the questions were asked. The survey protocol outlined the survey questions primarily based on the study research questions. However, because of the nature of the open-ended interview (e.g., ability to ask additional probing questions, tiering off responses with additional questions), some respondents weren't asked every question in the survey protocol. For instance, only one agency's participants commented on the question about whether agency experience, or lack of agency experience, influences the use of collaborative public participation. Therefore, these results could not be generalized to the

other two agencies and measuring this factor was limited. Future research should consider written questionnaires and a quantitative study to obtain consistent, more generalized results.

Participant responses could have been influenced by the purpose of the study.

Government agencies are required to solicit public input; therefore, if their responses reflected negatively toward their agency's approach to public participation, they could have experienced scrutiny from their employers. For instance, most participant responses promoted public participation and applauded their agency's approach. It is unclear if these responses accurately reflected reality. This confounding social desirability variable could affect data analysis and study results. Future studies should include triangulation of perspectives to identify any response discrepancies.

Interviews were conducted in a variety of locations and methods. For instance, some were conducted at the participant's office, others were conducted in restaurants and coffee shops, and one interview was held at the interviewer's workplace. Interview location could have been a confounding variable affecting participant responses and impacting internal validity. Interviews held in the agency's office could have biased the participant's response to favor the agency; while interviews held in restaurants and coffee shops could have resulted in more accurate responses. Future study designs should consider an off-site, neutral location for all one-on-one interviews to improve the accuracy of responses.

Future research

Further research is needed to expand on the findings of this study and to explore their implications. The dynamics of the federal agency culture and organization provide fertile ground for future research using organizational and social studies theories. Applying these theoretical concepts could expand the understanding of how federal agencies are organized, how that organization affects the culture, and how the culture affects the decision-making process.

Additional research should expand the current study to include additional participants, geographies, as well as a broader range of federal agencies. For example, the Federal

Highway Administration conducts NEPA projects that directly affect the public and their communities. What is their perspective on collaborative public participation? Would the results of this study be the same across all agencies, or does individual agency culture affect how they approach outreach with the public?

Future research could explore sampling agency staff not directly involved in the NEPA process but may nonetheless have attitudes about collaborative public participation. This would require expanding the criteria to incorporate a wider diversity of agency staff, with the potential to gain new perspectives on the factors that influence collaborative public participation.

Measuring the effectiveness of any public communication program has always presented a challenge; however, its effectiveness is important to continual support of collaborative public participation through allocation of funds and staffing. Additional research building from previous research on measuring effectiveness would be beneficial to building agency culture and acceptance of collaboration in decision-making.

Future research should explore the practicality of using collaborative public participation techniques for all types and scopes of projects. Not all situations warrant the use of collaborative public participation, and misapplication of collaboration can be time-consuming and ineffective. Additional research could evaluate how agency staff determines the appropriate level of public participation for their project. This information would provide insights in developing criteria for selecting the most effective public participation technique.

Finally, additional research is needed in understanding the individual's mindset and how it affects whether to use collaborative public participation techniques. Further, the interaction between the two variables, individual's mindset and the agency's culture, and whether they are aligned or misaligned, and how they affect the decision to use collaborative public participation should be explored.

Conclusions

There are several public participation techniques that government agencies use to inform, involve, and engage the public in the decision-making process. As environmental issues become more complex and controversial, agencies have found that engaging the public in the decision-making process using collaborative public participation techniques results in sound, supported decisions. The literature suggests many benefits to using collaboration, such as streamlining the decision-making process, resolving conflicts as they arise, increasing public knowledge, and building social capacity for solving problems. However, there are factors that discourage agency personnel from implementing the collaborative process.

There appears to be a relationship between agency culture and other factors that influence whether agency staff would implement collaboration. Agency culture influences how the decision-making process is conducted and whether collaboration with the public and interested participants benefit the decisions. An agency culture that is service-oriented supports collaboration and in turn, encourages training and education about the appropriate use of collaboration.

Two significant findings in this study, contrary to the literature, were cost to implement a collaborative effort and federal regulations. With new technology and the cost reimbursement program, costs did not hinder the use of collaboration. Additionally, federal regulations were expressed as an encouraging factor, rather than a discouraging factor. Study participants felt that the collaboration actually streamlines the process and provides information that supports sound decision-making. The perception that collaboration threatens the agency's decision-making authority was not validated, as federal regulations actually secure this authority.

Two new factors affecting agency staff decisions to use collaborative public participation techniques warrant further study. The dimensions of the individual mindset provide opportunities to research how agency culture and the individual's personality influence the use collaboration in their participation programs. Also, further research is needed to better

understand how staff determines the appropriate level of public participation for their projects. Are agency staff not applying collaborative techniques because they are unaware of the techniques, or are they misapplying public participation techniques based on the scope of the decision to be made?

In summary, federal agencies' public participation approaches are evolving. As decisions become more complex, simply following the regulatory requirements for public participation is becoming less effective. Without fear of losing decision-making authority, this study found that agency staff support alternative approaches that assist in making sound decisions. Collaboration is an extension of our democratic culture and when appropriately applied can be an effective means for resolving our environmental concerns.

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APPENDICES

APPENDIX A: SAMPLE AUTHORIZATION FOR PARTICIPATION LETTER

May [], 2009

[NAME] [TITLE] [AGENCY NAME] [ADDRESS]

Dear []:

My name is Peggy Roberts and I am a graduate student in the Journalism and Technical Communications Department at Colorado State University. I am writing to request your authorization for members of your staff to participate in a study about public participation techniques in the NEPA decision-making process.

Today, U.S. government agencies are facing complex environmental issues and decisions. These issues involve diverse stakeholders with a broad spectrum of interests and concerns. This study will be looking at the public participation techniques agency staff uses to meet the needs of the agency and the ever-increasing demands from the public to participate.

I would like to have your authorization to interview your environmental managers at your office during a workday. The interviews should take approximately one hour. If you approve your staff to participate in this study, please provide me with a written authorization on your letterhead by [Date] to the following address.

Peggy Roberts
Colorado State University
[Address]
Fort Collins, CO 80523

Thank you for your time and consideration. If you have any questions, please feel free to contact me at [Telephone Number] or my Committee Advisor, Dr. Cindy Christen at (970) 491-6319.

Sincerely,

Peggy Roberts

APPENDIX B: SAMPLE TELEPHONE SAMPLING PROTOCOL

TELEPHONE SAMPLING PROTOCOL

Date:	Time:
Intervi	ewee:
Agenc	y Affiliation/Location:
Phone	Number:
Good r	morning/afternoon.
My nar	me is Peggy Roberts, and I am a graduate student in the Journalism and Technical
Comm	unication department at Colorado State University. I am conducting a study about public
particip	pation techniques in the NEPA decision-making process. One-hour interviews will be
conduc	cted at your place of business during the week day. Would you be interested in
particip	pating?
(If so)	I am scheduling interview times for [Day], [Day], and [Day]. What is your availability on
those of	days?
Do you	have any questions?
Is there	e someone else you would recommend to participate in this study?
	Name:
	Contact Information:
Thank	you so much, Mr./Mrs. [Name] for taking the time out of your busy schedule to participate
in this	study.

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I look forward to seeing you on [Date, Time, Location].

APPENDIX C: INFORMED CONSENT FORM

INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT COLORADO STATE UNIVERSITY

TITLE OF STUDY:

Factors that Influence Agency Willingness to Adopt Collaborative Public Participation Techniques in the Decision Making Process

NAME OF PRINCIPAL INVESTIGATOR: Peggy Roberts

970.210.2181

CO-PRINCIPAL INVESTIGATOR: NA

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH?

As a manager of NEPA projects requiring public participation, you are in the position to make decisions about how to manage public participation programs.

WHO IS DOING THE STUDY?

The primary researcher, a graduate student at Colorado State University and a public participation practitioner, will conduct the study.

WHAT IS THE PURPOSE OF THE STUDY?

To identify the factors that encourage or discourage agencies from using collaborative public participation techniques in the NEPA decision-making process.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

One-on-one interviews will be conducted at your workplace during work hours. Interviews will take about one hour.

WHAT WILL I BE ASKED TO DO?

You will be asked questions during the interview that relate to public participation in the NEPA decision-making projects. The first set of questions will be general, followed by more specific questions relating to public participation decisions. The interview will be recorded.

Page 1 of 3	Participant's Initials _	Date

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY?

If you have not managed a NEPA project that involved public participation, you should not participate.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

We will make every effort to maintain your confidentiality. Your interview transcript will be assigned a code number that will be carried throughout the data analysis and study process. The Agency will be identified by name in the summary of results. No other known risks are associated with participation in this study.

It is not possible to identify all potential risks in research procedures, but the researcher has taken reasonable safeguards to minimize any known and potential, but unknown risks.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

Using collaborative public participation techniques could improve the quality of agency decisions in the NEPA process. It is hoped that your participation in the study will help identify factors that encourage or discourage agencies from using collaborative public participation techniques.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this research is voluntary. If you decide to participate in this study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHAT WILL IT COST ME TO PARTICIPATE?

There are no costs to participate in this study.

Not Applicable.

WHO WILL SEE THE INFORMATION THAT I GIVE?

We will keep private all research records that identify you, to the extent allowed by law. Your information will be combined with information from other people taking part in the study. When we write about the study to share with other researchers, we will write about the combined information that has been gathered. You will not be identified in these written materials; however, the agency will be identified by name in the summary of results. We may publish the results of this study; however, we will keep your name and other identifying information private.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY?

Page 2 of 3	Participant's Initials	Date	

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH?

The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Peggy Roberts, at (970) 210-2181. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator at (970) 491-1655. We will give you a copy of this consent form to take with you.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 3 pages.

Signature of person agreeing to take part in the study	Date
Printed name of person agreeing to take part in the study	
Name of person providing information to participant	Date
Signature of research staff	

Page 3 of 3 Participant's Initials _____ Date _____

APPENDIX D: INTERVIEW PROTOCOL

INTERVIEW PROTOCOL

Date:1	Гіте:
Interviewee:	
Agency Affiliation/Location:	
Phone Number:	
INTRODUCTION	
My name is Peggy Roberts, and I am a graduate s	tudent in the Journalism and Technical
Communications Department at Colorado State Ur	niversity.
I am studying public participation techniques in the	NEPA decision-making process. I will begin
the interview by asking you questions about your e	
Then I will ask you more specific questions about t	he public participation techniques you use in
the NEPA decision-making process. The interview	v should take about an hour.
You as an individual will remain anonymous; the o	nly identification will be your agency. I would
like to record the interview. Do I have your permis	sion to record this interview?
Turn on recorder.	
Do you have any questions before we start the inte	erview?

INTERVIEW QUESTIONS

First,	I am	going to ask some questions about you.
Male		Female
	1.	What is your age?
	2.	What is your job title?
	3.	What is your educational background?
	4.	How many years of experience do you have overseeing projects that include public
		participation programs?
	5.	How long have you worked for Western Area Power Administration/Bureau of Land
		Management/U.S. Forest Service?
Now,	ľm (going to ask you questions about public participation.
	1.	Tell me what you think is the purpose of public participation?
	2.	Describe your agency's goal for public participation.
	3.	Could you tell me the reasons why you might consider using collaborative public
		participation techniques for your NEPA projects? (Collaborative public participation
		techniques are defined as techniques that employ and engage active communication
		and information sharing between agencies and affected stakeholders throughout the
		decision-making process.)
		[Probing questions would be asked according to the factors or conditions
		discussed]
		Probe: How do you think that the agency's culture affects the willingness to
		adopt collaborative public participation techniques?

the NEPA process?

Probe: How do you think the ability to measure the success of a collaborative

effort encourages agency willingness to adopt collaborative public participation in

Probe: How do you think staff education on collaborative public participation techniques encourages willingness to adopt collaborative public participation techniques in the NEPA process?

4. Could you tell me reasons why you would not consider using collaborative public participation techniques for your NEPA projects?

[Probing questions would be asked according to the factors or conditions discussed]

Probe: How does cost affect the choice to implement a collaborative public participation technique in the NEPA process?

Probe: How does agency experience in implementing collaborative public participation techniques affect agency staff's willingness to adopt a collaborative public participation technique in the NEPA process?

Probe: How does resource availability affect agency willingness to implement collaborative public participation techniques in the NEPA process?

Probe: How does the agency's commitment affect willingness to implement collaborative public participation techniques in the NEPA process?

Probe: How do Federal regulations and agency policies affect agency willingness to adopt collaborative public participation techniques in the NEPA process?

- 5. Can you tell me about other factors that could influence agency staff from adopting collaborative public participation techniques in the NEPA decision-making process?
- 6. In general, what are your thoughts about the effectiveness of using collaborative public participation techniques in the NEPA decision-making process?

CONCLUSION

Is there anyone else you think I should considering interviewing?	
Individual's Name:	

Individual's Contact Information:
Are there any other comments you would like to add regarding collaborative public participation
techniques or this study?
This concludes the interview. I appreciate you taking time out of your busy schedule to talk with
me. If I have additional questions, would you mind if I contact you?
Yes No
Thank you.

APPENDIX E: FREQUENCY TABLES

Frequency Tables

A.0 Demographics

A.1 Agency	Frequency
A.1.1 Forest Service	4
A.1.2 Bureau of Land Management	3
A.1.3 Western Area Power Administration	4

A.2 Age

	A.2.1	A.2.2 A.2.3		A.2.4	A.2.5
	20 – 30	31 – 40	41 – 50	51 – 60	61 - 70
Frequency	0	3	2	5	1

A.3 Title		Frequency
A.3.1	Staff/Environmental Coordinator/NEPA	4
	Specialist	
A.3.2	Manager	1
A.3.3	Public Affairs	3
A.3.4	Other	3

A.4 Years of experience

	A.4.1	A.4.2	A.4.3	A.4.4	A.4.5	
	1 – 10	11 - 20	21 - 30	31 - 40	Other	
Frequency	4	0	3	4	0	

A.5 Years with agency									
	A.5.1	A.5.2	A.5.3	A.5.4	A.5.5				
	1 – 10	11 - 20	21 - 30	31 - 40	Other				
Frequency	7	0	1	3	0				

A.6 Educational Background*	Frequency
A.6.1 Technical/Science	9
A.6.2 Communications	3
A.6.3 Other	2
*Some participants had more than 1 degree	
A 7 Particinant gender	Frequency

A.7 Participant gender	Frequency
A.7.1 Male	7
A.7.2 Female	4

B.0 Purpose of public participation

		Frequency
B.1	Inform the public	13
B.2	Feedback from the public	14
B.3	Agency benefits	7

C.0 Agency goal for public participation

		Frequency
C.1	To inform	4
C.2	Meet regulatory requirements	7
C.3	Avoid litigation	1
C.4	Agency benefits	7
C.5	To engage the public	13

D.0 Understanding of collaborative public participation

Frequency						
+	0	-				
9	3	4				

E.0 Considerations for using collaborative public participation

		Frequency				
		+	0	-		
E.1	Project benefits	8	1	2		
E.2	Building relationships	14	0	3		
E.3	Agency benefits	12	0	1		
E.4	Project characteristics	2	2	6		

F.0 Factors influencing use of collaborative public participation

F.0	Factors influencing use of collabor	1	ores	-	пстра	BLM		W	/ester	'n
Facto	Factors		Service							
		+	0	•	+	0	-	+	0	-
F.1	Agency culture	5	1	5	3	1	0	6	0	4
F.2	Ability to measure the effectives of	3	0	1	0	0	0	0	0	0
	a collaborative process									
F.3	Effectiveness of collaboration	7	1	0	12	0	1	6	0	1
F.4	Staff education on collaborative	0	1	3	0	0	2	0	0	3
	public participation									
F.5	Cost to implement	2	1	4	1	1	3	5	0	5
F.6	Schedule constraints	0	0	2	1	5	4	2	0	5
F.7	Agency experience	1	1	2	0	0	0	0	0	0
F.8	Agency staff availability	2	0	3	0	1	1	0	1	2
F.9	Agency commitment	2	1	1	0	0	0	0	0	0
F.10	Regulations	11	1	1	6	2	6	7	0	0
F.11	Agency mission	2	0	1	1	0	0	1	0	0
F.12	Loss of agency decision-making	2	0	1	2	0	0	2	0	2
	power									
F.13	Other factors that influence using	4	2	5	5	4	7	3	0	9
	collaborative public participation									

APPENDIX F: THEORETICAL MEMORANDA

OTHER FACTOR - INDIVIDUAL PERSONALITY

Transcript FS002, page 10

"...so another factor I think that is as important is just a person's individual personality and their natural inclination to go out and ask people vs. are you kidding they're gonna take pot shots at me I'm not going to open myself up to that..."

This factor suggests that the decision to use collaboration is not necessarily based on compliance with regulation or agency directive, but could be as specific as the individual and their personality.

- Dimension individual's ability to actually ask to proactively seek people's opinions.
- Dimension fear of vulnerability opening themselves up for criticism.

"...just the personal value system, personal value system..."

 Dimension – individual's personal value system – are people's opinions/concerns important?

"Oh, they'll tell you, that no, you can teach somebody to be a good consensus facilitator. I basically would disagree with that." "I think, I think somebody's either fine that way or they're not. And if they're not, they're always going to struggle and have a hard time managing the groups, the collaborative groups, and as simple as being able to depersonalize the pot shots."

 Dimension – not everyone can be taught collaboration (again, "fear" of managing groups/taking comments personally)

###

Transcript BLM003, page 8

"...your personal value of being a public servant and whether or not that it is adding value or whether it is something you have to do because you have to..."

• Dimension: Personal value – doing it because it is important

INDEPENDENT VARIABLE – THE LAW (REGULATION) AND DECISION-MAKING POWER

Transcript FS001, page 9

The law is that we are going to make the decision, the line officer, the responsible official is going to make the decision.

Identification of a dependent variable - Loss of decision-making power is dependent on the law. The law states that the agency makes the final decision. Without the law, loss of decision-making power would be a factor discouraging agencies from using collaborative public participation. Since the law is present, loss of decision-making power would not be a factor discouraging use of collaborative public participation.

OTHER FACTOR - INDIVIDUAL FEAR

Transcript FS0004, page 3

"Um, in my experience there may be some individuals that will do just the bare minimum to, you know, to meet, to comply with regulations. Uh, in other words they are not, they look at is as, well let's not, you know, let's not raise a concern for people."

 Dimension: Individual choice - Another example of an individual's fear? Not wanting to raise public concern...

###

Transcript W003, page 4 and 5

..anytime you deal with technical specialists, you always run into the "I know what's best." "I know what the right thing to do is here." "I don't want to go our necessarily and have someone tell me I am wrong."

• Individual's fear of being told they are wrong could discourage collaboration.

INDEPENDENT VARIABLE - AGENCY ORGANIZATION

How the agency is organized affects agency culture, which in turn affects whether collaboration is promoted. In a decentralized organization, the individual field office and/or forest makes the decisions on level of public outreach based on local needs. The local field offices and/or forest would be able to appropriately apply the level of public outreach and if can choose whether to use collaboration. If however, the agency is centralized, the less likely that collaboration as an option would be used. A centralized organization would not understand the local needs and concerns and therefore, would not know the appropriate level of public outreach.

It was noted that the districts in the Forest Service are very autonomous and that the districts was were the power lies within the agency.

FS002, Page 5

....because of the culture that was set up initially, there is a tremendous amount of turf protection that goes. ...the culture leads to people being....very inclined to not think about or give as much credit as they should to the public input...they wanted the basic decision making about what happens locally to happen locally.

The Bureau of Land Management operates under a decentralized system where local management has the discretion for making decisions.

And then individual managers have a fair bit of discretion in making decisions much more than in other agencies that I have observed. And part of that is to, uh, is to be able to make the best decision, the best decision in the local area.

February 25, 2012

NEW FACTOR – TECHNOLOGY

Technology emerged as a factor in encouraging collaborative public participation. The ability to have more information readily available and use of technology to disseminate information has had an influence on using collaborative techniques. Technology allows for more agency transparency.

FS003, page 3

"So much more of that [information] is available online and easy for people to find that I think more people are getting involved."

Technology has also allowed for broader dissemination of information and the ability to reach more people.

FS004, page 6

[Information]...is there and available for public collaboration.

February 25, 2012

NEW FACTOR – PUBLIC WILLINGNESS TO PARTICIPATE

Public willingness to participate was highlighted as a factor that could affect an agencies' willingness to implement collaborative public participation.

FS001, page 9

"...there has to be participation to collaborate and if somebody doesn't want to participate then there cannot be collaboration so..."

One dimension of this concept is the public's willingness to devote time to the process.

FS003, page 2

...finding people who want to take the time...

BLM001, page 8

And the length of time [required for the public]...bigger projects...that is a lot to ask someone to keep involved.

Another dimension to public willingness to participate is a reluctance to work with a government agency.

W004, page 4

"Some people are reluctant, you know. We deal largely with the rural folks. They are rather reticent to deal with government agency."

Public willingness is related to the public's willingness to listen. Some publics believe that a decision has already been made and aren't won't listen to the agencies proposal.

February 25, 2012

NEW FACTOR – TYPE OF PROJECT

The type of project was mentioned numerous times as a factor in either choosing to use or not use collaborative techniques. Several dimensions are associated with the concept of the type of project.

Dimension – Projects with schedule constraints would be appropriate for using a collaborative process.

BLM001, page 3

So you are going to have to pick the right projects to do that. And we are not going to have time to an in-depth collaborative process on everything we do.

Dimension – level of controversy or interest

BLM001, page 4

The significance of the project and how much interested there is in a project...

W001, page 5

So there aren't a lot of public stakeholders, so there aren't a whole lot of collaborative efforts going on with the public because they are not as interested.

Dimension – scope of project and number of people directly affected.

FS003, page 2

...some things probably don't need collaboration fi they are a simple little project that doesn't have a lot of controversy or a lot of impacts.

Dimension – project has organized groups with opposition

W004, page 2

"...when a proposal is complicated, complex, there is a lot of opposition or confusion over what the project is about. If you have, say, an organized public group, either landowners, or special interest groups..."