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HANDLING AND ANALYSIS OF PUBLIC COMMENTS IN NATURAL RESOURCE
MANAGEMENT PLANNING

By

Lisette B. Thurgood

A thesis submitted to the faculty of

Brigham Young University

In partial fulfillment of the requirement for the degree of

Masters of Science

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BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

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ABSTRACT

HANDLING AND ANALYSIS OF PUBLIC COMMENTS IN NATURAL RESOURCE MANAGEMENT PLANNING

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Masters of Science

The National Environmental Policy Act (NEPA) of 1970 required public input in any federal planning process or action. Consequently, natural resource planning can be characterized as more of a complex situation in recent years due to the increasing involvement of the number of constituents who want to be heard. Likewise, the public wants to know their ideas have been heard and considered. Unfortunately, there is very little information available which identifies how the BLM handles and analyzes public scoping comments that are required under NEPA. The purpose of this research is to identify the handling and analysis methodology used by BLM employees in large-scale natural resource plans, as well as gain insight into the experience and satisfaction of BLM employees in recent planning processes. The information gleaned from this study illustrates that through adjustments to the handling and analysis process, it is possible to maintain a supportive and accommodating relationship with the public by listening to their concerns and encouraging continued participation in natural resource planning, as well as adding credibility to the planning process overall through consistent handling and analysis.

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CHAPTER 1

HISTORY OF NATURAL RESOURCE PLANNING

While the United States was endowed with more wild land than any modern nation in the world, this land was dramatically changed as colonists cut down trees, polluted the nation's lakes and rivers, and built communities. However, it wasn't until the late 1800s and early 1900s that Americans' realized the need for conservation, of some sort of separation of public and private space, and some way to protect 'scenery.' Still, it took over 40 years and thousands of debates to establish the four major federal agencies: The National Park Service (NPS, 1916), the United States Forest Service (USFS, 1905), the U.S. Fish and Wildlife Service (USFWS, 1940) and the Bureau of Land Management (BLM, 1946). These four agencies were established with unique missions and still today, the majority of public lands in the United States are held in trust for the American people by these four agencies. For the purposes of this research, the Bureau of Land Management will be used as the principal example.

Interestingly, the ideals of these federal agencies were aimed at conserving as much land as possible; however, land preservation was piecemeal, because every person involved had a different outlook as to what needed to be preserved, how much needed to be preserved and even what was or was not an appropriate activity on this newly preserved land. Yet many conservationists believed just as Senator Cole, "Nature must be left completely alone somewhere" (Zaslowsky & Watkins 1994, 7). Still, those who worked for these agencies lacked concrete direction and objectives as to what they were

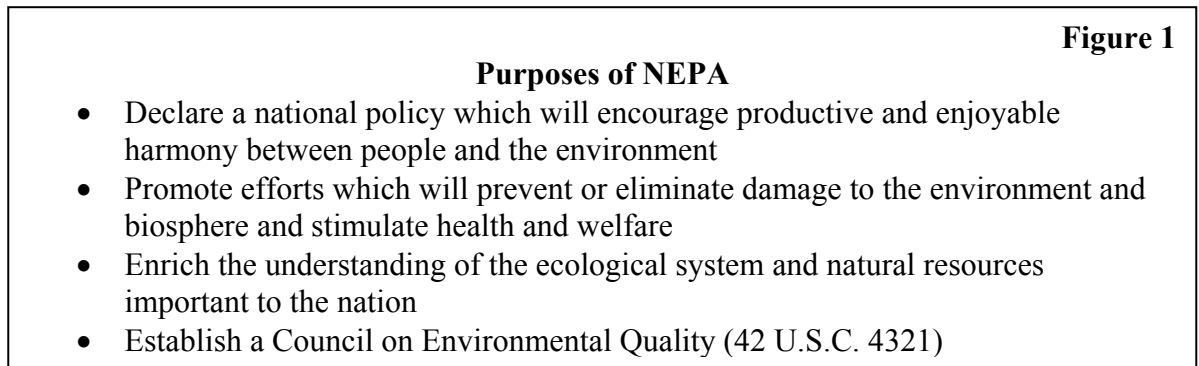
to do, under what rules and regulations, and with how much power, and most importantly, within the bounds of an ever-changing mandate. .

For example, the BLM was the last agency to come to fruition and, as such, its lands were sometimes dismissed as the ‘leftover lands,’ the ‘lands no one knows,’ or even the ‘lands nobody wanted’ (Zaslowsky & Watkins 1994). The agency itself was born of the Grazing Service, created to monitor grazing districts and permits and the General Land Office, created to keep public records of land after the passage of the Homestead Act of 1862 and the 1872 Mining Law. Because of its connections to ranching and resource extraction, the agency is also known as the Bureau of Livestock and Mining; yet as time went on these lands would be sought after for more reasons than just ranching and resource extraction alone.

The BLM has the most land under its stewardship (approximately 258 million acres) with multitudinous duties such as administration of public grazing lands, leasing for oil, gas, coal, and oil shale, claims for gold, silver, iron and copper, archaeological sites, petroglyphs, and fossil remains and potential additions to the National Wilderness Preservation System (Zaslowsky & Watkins 1994). The other three agencies have similar diverse obligations and responsibilities, but, which of these undertakings was most important and how were these lands to be managed? While there were several acts passed during the last half of the 20th century that impacted public lands (e.g. the Federal Lands Policy and Management Act of 1976 (FLPMA) and the Wilderness Act of 1964), one act, passed in late 1969, primarily shaped natural resource planning in all four federal agencies.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

The National Environmental Policy Act of 1969 had major consequences for federal agencies as it required some form of evaluation of the potential adverse impacts and means whereby these impacts might be reduced or eliminated, before taking a major federal action. As such, this act embodied balanced long-range planning and today is one of the nation's broadest environmental laws. There are four stated purposes of NEPA: (Figure 1).



Founded on the constitutional principles of representative democracy and popular sovereignty, the United States has produced a history of public involvement which influences federal planning and decision making. Still, this history dramatically changed during the 1960s, when the number of stakeholders involved in public lands policy increased considerably (Davis, C. 2001). Prior to this era of heightened environmental awareness and increased environmental legislation, conflicts over appropriate activities on public land were nominal in comparison to what they would be over the next four decades.

Essentially, NEPA requires all “major Federal actions significantly affecting the quality of the human environment” to include an environmental impact statement (EIS)

that identifies the environmental impact of the proposal and its alternatives. NEPA also requires public input as part of any planning process involving federal lands or actions (Section 102). The public is defined as public and private organizations and entities, state, local and tribal governments, and any other stakeholder group or individual (hereafter referred to as the public). Prior to NEPA, however, the public had limited opportunities to engage in the debate about social, economic, and environmental costs and benefits. Nor did the public have much recourse to challenge the federal government on decisions affecting their communities. Study participants applauded NEPA for opening the federal process to public input and were convinced that this open process has improved project design and implementation.

The National Environmental Policy Act (NEPA) of 1969 involves three key phases: the review for categorical exclusions or other exemptions, the preparation of an Environmental Assessment (EA), and the preparation of an EIS. A basic diagram of the key steps are show in Figure 2.

There is no question that NEPA has opened federal agency doors and revolutionized the way federal agency decisions are made. Still, it wasn't until 1776, that another legislative act, along with NEPA, had a significant impact on the agency, again changing the mandate under which the BLM was to operate. When the BLM was initially created, there were over 2,000 unrelated and often conflicting laws for managing the public lands. The BLM had no unified legislative mandate until Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA). In FLPMA, Congress recognized the value of the remaining public lands by declaring that these lands would remain in public ownership. Congress also gave us the term "multiple-use" management,

defined as "management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people." FLMPLA also required that the Secretary, with public involvement, "develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands." (Sec. 202. [43 U.S.C. 1712], 2001). Thereafter, the BLM prepared programmatic land use plans for its grazing, timber and coal programs, examining each program on a national and local level (Nelson 1995), yet these plans took considerably longer to prepare and revise because of the sparked public interest in these programs and their ability to now participate and give feedback. Since then, the BLM has produced several thousand plans and therefore involved the public in millions of seemingly insignificant decisions (Loomis 2002).

PUBLIC INVOLVEMENT AFTER NEPA & FLPMA

Public involvement and interest in public lands in general did increase after the passage of NEPA and FLPMA; however, other factors may have influenced this increase besides just the act alone. The majority of the examples used here refer to the western United States, because the majority of BLM public land exists in this region. Charles Davis argues that public land policy has been dramatically affected by the changing demographics of the America West. He states, "Most western states have become more urbanized, a trend that is associated with higher levels of income and education, increasing environmental group membership, and stronger public support for recreational uses on the public lands" (2001, 5). And, recreation on public lands has risen steadily from 1977 to the present, while livestock grazing and timber harvesting has declined.

Even so, resource developmental groups (ranchers, miners, loggers and energy firms) have sought to broaden their respective political coalitions to include university experts and public officials at all levels of government to amplify their clout. Furthermore, a new group of participants, environmentalists, became active in public lands and launched an aggressive campaign to redefine conservation. The environmental groups primarily emphasized, “preservation of resources to provide for aesthetics, animals, plants and wilderness experience” (Davis, S. 2001, 19).

In short, public participation in agency decision making involves not only the general public, but also private industry, local governments, conservation groups and other public agencies that provide input to and comment on a federal agency’s Draft EIS or EIS. The federal agency is then responsible for responding to these comments in preparing its Final EIS. Still, failure to heed the public was far more hazardous with the advent of NEPA, because the act made possible grounds for court suits against the agency and the threat of court delays forced many agencies to take seriously the assessment of social and environmental consequences of their actions. Some would argue that the success of a planning process heavily depends on whether an agency has systematically reached out to those who will be most affected by a proposal, gathered information and ideas from them, and responded to the input by modifying or adding alternatives throughout the entire course of a planning process.

PUBLIC INVOLVEMENT CURRENTLY

Today, cynical observers regard public participation as “window dressing: agencies do what they want to do—or what their “client” interest groups want them to

do—regardless of what the public—or the tiny segment of it that takes an interest in such proceedings—wants” (Lehmann 1995, 46). With the increase in the number of stakeholders interested in public lands planning, “The planner is increasingly confronted with the question of whose interest to represent” (McCool & Guthrie 2001, 309). Still, most participants believe that public participation makes some difference. It also allows land managers to keep in touch with those who are interested in federal lands, to adjust agency policies and expectations accordingly, and perhaps to use these interests to advance agency goals by playing one interest group off another (Lehmann 1995). From a broader perspective, there is still hope that public comments may make some real difference in policy.

Another factor that has influenced the way public feedback impacts a policy is the use of private contractors. Private contractors are defined generally as businesses that make a contractual agreement with the federal agency to perform work. In most cases, the private contractor is able to provide the manpower as well as the resources to assist in the completion of a natural resource planning project. With the specifications that NEPA, and other federal regulations, require, every planning project takes a substantial amount of time to complete. The BLM, for example, has the smallest budget of the four federal agencies, and as such, with only around 10,000 employees managing approximately one-eighth of the land in the United States, the BLM often relies on federal funding during large natural resource planning projects to enlist the help of a private contractor. Critics of private contractors would argue that the private contractor does not do justice to the public, similar to the “window dressing” idea above, because

they are unfamiliar with the area and surrounding issues. Still, this continues to be a regular practice in large-scale planning.

BLM AND PUBLIC PARTICIPATION

In 2001, the BLM initiated an effort to evaluate and amend its land use plans or Resource Management Plans (RMPs), many of which were over 20 years old, stemming back to the original mandate of FLPMA in 1776. This included new plans for designated units of the National Landscape Conservation System (NLCS) (e.g. National Conservation Areas (NCA), National Monuments, Wilderness, Wilderness Study Areas (WSAs), etc). Several of these large-scale plans used the assistance of a private contractor throughout the amendment process.

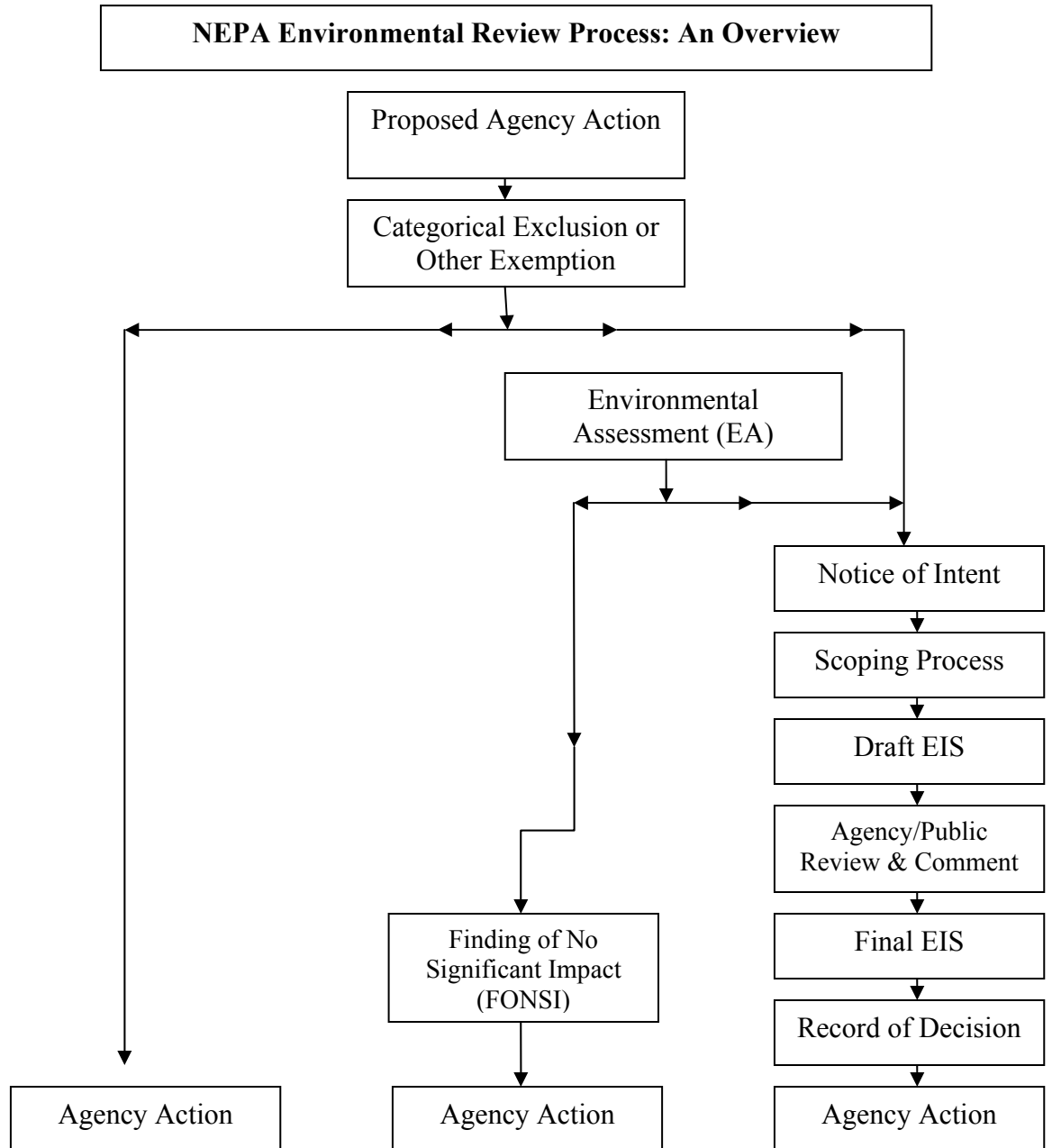
Throughout these planning processes, BLM has solicited feedback from the public through scoping. Figure 3 summarizes the scoping process as outlined in the NEPA Handbook (BLM Handbook H-1790-1, 1988). Scoping is just that, defining the extent of the project or planning initiative; and part of this scoping is to request the help of the public in defining the range of the project in terms of what issues should be addressed (scoping is hereafter defined as the latter). Scoping can be done in various ways through personal contact in meetings, seminars, workshops, tours, public hearings, conferences or through written responses in the form of faxes, emails and letters. NEPA says that public involvement is important but the legislation itself leaves room for interpretation of what form that public involvement should take. This ambiguity has created misunderstandings between the agency and its various publics about what their appropriate role should be (Steelman 1999).

Consequently, after scoping takes place, the information gleaned is often carried forward in written form (e.g. notes from workshop or seminar or actual fax or letter from the public). At that point, these written comments may or may not be used, but that's up to the discretion of the agency and its employees, sometimes with the aid of a private contractor. Yet, significant questions remain unanswered for the public. What happens to the feedback once received by the federal agency? And furthermore, what is the process that determines how these comments impact the plan and are these methods effective? Finally, are BLM employees satisfied with these processes? This research seeks essentially to answer these questions, specifically focusing on BLM natural resource planning using communication with BLM employees across the Western United States. This research is important because as the public learns how the BLM essentially handles and analyzes their comments, and what criteria determines how their feedback actually impacts the plan; as such, they will know that their *voice* has been heard and their ideas considered, which adds credibility to the scoping process as a whole.

Discussing how the BLM handles and analyzes data, directly relates to the field of geography because it takes into consideration the human-land relationship between the public and their land (public land). If the public feels like they have an influence in natural resource planning, they are more likely to take care of this land because of the feeling of stewardship this mutually-beneficial relationship creates. Likewise, this study shows the spatial relationship of handling and analysis within BLM field offices in the Western United States. In a sense, this study is uniquely suited to the field of geography because it allows for greater understanding of how humans shape the physical and cultural landscape through public involvement in natural resource planning and is unique

in getting a glimpse of BLM employees' satisfaction with the lands they have stewardship over. If the human-land relationship is recognized as part of the natural resource planning process, the public and federal agencies (BLM in this case) can work together to protect public lands and still operate under the procedures of NEPA.

Figure 2



(Bass & Herson 1993)

Figure 3: BLM NEPA HANDBOOK (H – 1740 – 1)

Scoping the EIS

- Publish a Notice of Intent in the Federal Register
- Develop a preparation plan
- Develop a strategy for public involvement and interagency/intergovernmental coordination and consultation
- Define the proposed action
- Identify the purpose and need, alternatives to be considered and impacts to be analyzed
- Identify information and data needs
- Identify cooperating agencies
- Determine contracting needs
- Determine staffing and budget needs and proposed schedule

Conduct the analysis and prepare the Draft EIS

- Conduct the analysis
- Select the preferred alternative
- Prepare a Preliminary Draft EIS
- Complete the Draft EIS

Issue the Draft EIS

- Print the Draft EIS
- File with EPA
- Publish a Notice of Availability of the Draft EIS for review
- Distribute the Draft EIS
- Hold public meetings/hearings

Analyze comments and prepare the Final EIS

- Evaluate and respond to public comments
- Prepare a Preliminary Final EIS
- Reevaluate and revise the preferred alternative or proposed action

Issue the Final EIS (publish an NOA if actions have effects of national concern)

Reach and record the decision

- Evaluate public comments
- Document the decision
- Publish an NOA regarding the availability of the Record of Decision

CHAPTER 2

LITERATURE REVIEW

INTRODUCTION

Natural resource planning has become a “messy” situation in this “era of turbulence” over the past few decades (Lachapelle et. al 2003, 473). Clearly because of numerous interest groups and a juxtaposition of concern for the environment as well as use, natural resource planning in public lands is prone to serious conflict. The typical natural resource planning situation is epitomized by growing public dissatisfaction expressed by a lack of public participation, animosity and distrust toward government, appeals and litigation, and occasionally threats and violence (Lachapelle et. al 2003). Likewise, these messy situations are typified by multiple and competing goals, little scientific agreement on cause-effect relationships, limited time and resources, lack of information and structural inequities in access to information and distribution of political power. Furthermore, even by following the NEPA process, the public themselves may feel as though the emphasis is on the “procedure” to avoid litigation rather than the actual input itself, which then contributes to a lack of participation. The public want to know they have been heard and their ideas have been seriously considered instead of the process being a “meaningless formality” as part of the NEPA process (Smith and McDonough 2001, 245). Clearly, natural resource planners are confronted with a variety of troublesome and perplexing barriers in messy situations (Lachapelle et. al 2003; McCool and Guthrie 2001), but what is the solution?

RECOMMENDATIONS

Several authors have proposed various solutions as to how to more effectively involve the public in natural resource planning processes and improve the practice of scoping (Kangas and Store 2003; Colvin 2002; Hillman 2002; Natcher and Hickey 2002; Singleton 2002; Bryner 2001; Constantine and Phillips 2001; Crewe 2001; Halfacre, Browning and Ballard 2001; McCool and Gutherie 2001; Smith and McDonough 2001; Twarkins, Fisher and Robertson 2001; Webler, Tuler and Krueger 2001; Overdeest 2000; Singleton 2000; Beierle 1999; Duram and Brown 1999; Palerm 1999; Smith, McDonough and Mang 1999; Steelman 1999; Tuler and Webler 1999; Brady 1998; Collin and Collin 1998; Richard and Burns 1998; Wang and Van Loo 1998; Twight 1977). Several of these solutions involve case studies where the proposed solution has been implemented, yet many lack complete success in each aspect of the resolution. For instance, Colvin (2002) suggests a Community-Based Environmental Protection (CBEP) initiative, which focuses on six processes:

1. focus on a definable area
2. work collaboratively with a full range of stakeholders
3. assesses the local quality of the air, water, land and living resources as parts of a whole;
4. integrate environmental, economic, and social objectives and foster local stewardship of all community resources
5. use the appropriate regulatory and non-regulatory tools, both public and private, and
6. monitor and direct efforts through adaptive management (2002, 449).

The idea of CBEP is appealing. Under ideal conditions, stakeholders will come together and communicate and exchange values, build trust and understanding of environmental issues and ultimately contribute to policy dialogue as part of the scoping process.

Unfortunately, most planning processes are complicated and polarized and getting all

stakeholders to come and cooperate can be a seemingly impossible undertaking. Likewise, public policy-makers are frequently caught in a “cross-fire” of competing expectations (Bryner 2002, 59) from various interest groups that may conflict with expertise and scientific assessments. Essentially, the public have different ideas as to what is or is not an appropriate activity for natural resource areas they use and this causes conflict.

Another author suggests the use of the Internet as a powerful tool for educating, informing, and surveying the public to obtain a broad range of perspectives as part of scoping (Constantine and Phillips 2001, Kangas and Store 2003). Kangas and Store (2003) recommend that agencies “use direct democracy via data networks so that the communication is interactive” (2003, 90). This idea is a fairly new development in natural resource planning and there are still numerous hurdles to cross, such as slow networks, lack of interest among people, lack of access to the Internet, or bias among active persons who use the Internet. Still, in this case, Kangas and Store use a case study in the Finnish Forest Research Institute, where they used a combination of Geographical Information System (GIS) operations and models to demonstrate the possibilities of the area for different forest uses. This combination of GIS software with qualitative data collection can be very effective in terms of gathering the issues of concern, but the author has no suggestion as to data analyses after compilation. This process is rarely revealed. Kangas and Store state that one of the biggest problems is “how to get the diverse and more or less qualitative feedback material into a form enabling analytical examination and commensurable with numerical data more readily processable” (2003, 99).

In short, all of the above-mentioned case studies discuss how to improve scoping, yet not one of them addresses how the public scoping comments are handled or analyzed from then on. In essence, all of the research is concentrated on collection of feedback, yet the methodology and tactics used thereafter demonstrate the concrete impact of the public's concerns on the plans themselves. The BLM essentially deals with this same dilemma in every scoping course of action, taking public feedback in various forms for every natural resource planning project and lacking a clear, consistent handling and analysis methodology.

PUBLIC SCOPING IN THE BLM

In BLM's planning, public input takes several forms throughout the scoping process including oral comments at public scoping meetings (which later become written notes) and hand-written or typed letters and emails from state and local governments, other interested public or private organizations, corporate entities and individuals themselves. BLM analyses are fundamentally defined by two terms – substantive and non-substantive. The public input is categorized into substantive and non-substantive comments based upon a process of analysis which is undefined for the agency as a whole. The BLM defines substantive comments as those that request clarification or more discussion, give new information, question analytical techniques, or suggest new alternatives whereas non-substantive comments simply express a preference or opinion (Bureau of Land Management 2003). Typically, these analyses are rudimentary and lack a clear step-by-step process for categorization and interpretation because each field office really governs itself.

Recently, the BLM has implemented a new planning process called ‘ePlanning.’ ePlanning is an Internet-based planning process which allows any person, group or entity to submit alternative(s) using a combination of interactive maps and/or submit public comments associated with a specific place (points, lines or polygons) in the planning area by clicking on a portion of the interactive map and then inserting a comment (Cherry 2003). However, a barrier still exists to allow the agency, in this case the BLM, to analyze the now electronic public comment data once it is received. Again, the focus here, in terms of scoping, is the comment collection, but is lacking in methodological analyses. Basically, the ePlanning system allows for a very simple managing and tracking of public comments associated with a geographical area.

Nevertheless, in terms of BLM principles, there is no standardized format for interpreting public comments (whether in written or oral form), thus each field office is responsible for determining an analysis process to review these comments. Likewise, employees within the BLM are trained in their respective disciplines (e.g. wildlife biology or range science specialist), but may only have a small amount of training in interpreting and analyzing qualitative data; this lack of training diminishes the effectiveness of the public comment process overall (Smith & McDonough 2001). The public are left feeling worthless and irrelevant in terms of the importance of their comments in actually impacting the plan and are frustrated with the agency as a whole because their individual comment is generalized to fit a category that has been or will be addressed in the plan (2001).

The question of how the analysis was undertaken remains. Several commentators have argued for a more serious and rigorous reporting of techniques when analyzing text,

essentially qualitative data (Bazeley and O'Rourke 1996; Hasselgren 1993; Francis 1993). In the same manner, BLM employees must cite a detailed qualitative methodology when handling and analyzing public comments, so the public can better evaluate the credibility of the process. While the majority of these studies have addressed the overall need to improve the public scoping process, none of them have addressed specifically how the BLM currently handles and analyzes the public comments once they are received and BLM land manager's experiences in analyzing this data, which is the focus of this research. This research seeks to answer the following:

1. How is the BLM handling and analyzing data (public comment) in major planning processes?
2. Are the current practices effective? Are BLM planning coordinators satisfied with these processes?

At present, this "black box" process has never been explored, yet it plays a critical role in how the comments eventually impact the EIS, corresponding public land use and the public's continued participation in these decision making processes in the future. Of course, there will still be messy situations because of the competing interests of those who use public lands, yet using a transparent, reliable and consistent methodology in every BLM planning project can improve the credibility of the public scoping process all together.

CHAPTER 3

METHODOLOGY

INTRODUCTION

One way to determine how the BLM is handling and analyzing data (public comments) in major planning processes and gain insight into BLM employee thoughts on the effectiveness of their methodology and satisfaction is to carry out interviews and administer surveys. This thesis will primarily focus on how the BLM handles and analyzes data, and explore why the agency uses certain methods by collecting information from BLM employees, even though there are several other groups (e.g. environmentalists, locals, ranchers, the public) that could provide satisfaction & effectiveness feedback. Key parts to understanding how this data is analyzed are to become familiar with the software available to analyze large amounts of qualitative data as well as BLM terminology to facilitate discussion. This chapter summarizes the methods used to collect this data as well as the selection process for choosing the respondents for the email survey.

SPATIAL & TEMPORAL MATRIX

This thesis focuses on western BLM Field Offices, defined as those offices existing west of the Mississippi River because most federal public land exists in the western United States. The following states and associated state offices are included: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah and Wyoming. Each state office manages anywhere from six to sixteen field offices.

Because of the extensive amount of time it takes in completing a plan, contact was limited to those field offices currently working on a plan (January 2004) or those that have completed a plan within the last five years beginning January 1, 1998. Plan types were limited to only large scale plans (those which required an EIS), including Resource Management Plans (RMP), Travel Plans, Wild & Scenic Rivers Plans, and Plan Amendments, because these plans typically embody a wide-range of planning issues, represent a diversity of characteristics in major planning processes, and have the potential to generate significant interest from the public.

DATA COLLECTION

Research & Development

By studying BLM reports and published EISs, it was possible to gain a background of the terminology used in the handling and analysis of BLM comments. Similarly, taking coursework specifically related to public lands helped to understand its history and pertinent issues facing public land managers today. Likewise, participation in a research project using public comments regarding the recent San Rafael Swell Motorized Route Designation Plan (Emery County, Utah), aided in understanding the difference between ‘substantive’ and ‘non-substantive’ comments.

Telephone Interviews

The BLM website published contact information for every field office within the western United States on their website (<http://www.blm.gov>); there are 110 field offices within the spatial matrix identified above, with only a few field offices managing land in

more than one state because the nearby state had little or no public land which did not justify a full field office. However, nearly 120 interviews were conducted because in a few instances, a field office would be working jointly on a plan within the bounds of more than one field office. The first phase of data collection occurred during September, October, November and December of 2003, through phone interviews of BLM employees (e.g. Planning & Environmental Coordinator (typical administrator of public scoping) or other recommended employee) from every field office in the states listed above to find out about the qualitative analysis of public comments. The purpose of these interviews was to gain a basic knowledge of the planning processes recently undertaken, and how each field office was handling & analyzing the public scoping comments. The questions in the interview were designed to answer the first research question. The following questions were asked using a semi-structured interview guide:

- Since January 1, 1998 to the present, what major plans has your field office been working on?
 - Are you the primary point of contact for each of these plans?
 - If not, who is?
- How are you carrying out the handling and analysis of public comments on each of those plans specifically?
 - Are you using a private contractor?

These questions were broad enough to allow for individual follow-up questions in order to gain more information about the context and details of the handling and analysis procedures used. A relationship of trust and rapport was formulated during this first phone call by first explaining the purpose of the call and concluding with a question asking whether or not they would be willing to participate in a follow-up session. Phone conversations were transcribed immediately into a word processor as verbatim as

Figure 4 – Email Survey

Plan Name(s)

1. What is the name of the field office you are currently employed?
2. What was your specific role in the data handling and analysis process for your RMP? I

Satisfaction and Experience with the Analysis Process Used

1. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how satisfied are you with the *handling/organization* of public comments?
2. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how satisfied are you with the *content analysis* of public comments?
3. What are the strengths of your current methods of handling and analysis of public comments? Weaknesses?
 - a. Strengths
 - b. Weaknesses
4. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how would you rate your project team members' overall satisfaction was with the handling and analysis of public comments?
5. Did your project team members mention any opinions or comments about the handling and analysis of the public comments?
6. What do you think could be done to improve the current methods of handling and analysis of public comments?

The Role of the Private Contractor

1. In handling/analyzing the public comments for your RMP, did you use a private contractor? (Yes or No)

If *yes*, please answer the following three questions.

2. On a scale from 1-5 (1 being little involvement with 5 being heavy involvement) how involved is the private contractor in your RMP analysis? Explain.

Figure 4 – Email Survey

(Continued)

3. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how satisfied have you been with private contractor handling and analysis of public comments? Explain.
4. On a scale from 1-5 (1 being little involvement and 5 being heavy involvement) how involved do you feel private contractors *should be* in BLM handling and analysis of public comments for your field office? Explain.

Thank you for your participation in this survey.

possible. In this first phase, interviews were conducted with the entire population of BLM field offices in the western United States.

E-mail Survey

Figure 4 shows a sample copy of the survey instrument. The purpose of this survey was to elicit information about the effectiveness of the current analysis processes in practice and their experiences associated with varying types of analysis. In this survey, employees were asked to rate their satisfaction with the current practices of handling and analysis using a scale of 1-5, to describe their experiences, and to detail strengths and weaknesses. The last section of the survey explored experiences with the use of a private contractor and its associated strengths and weaknesses, since over half of the plans sampled had used a private contractor to assist or complete the analysis of public comments. Essentially, these questions were designed to answer the second research question regarding whether or not the current practices are effective and how satisfied BLM employees are with these processes.

This email survey occurred during April and May of 2004 and involved BLM employees who had participated in the first interview, whose field office was working on a Field Office Resource Management Plan (RMP) or a National Conservation Area (NCA)/National Monument (NM) Resource Management Plan (RMP) within the 5-year time period. These field offices were selected because of the size and extent of the planning process, with greater potential impact to the public. Sixty-three field offices were contacted to complete the email survey; eleven additional offices were contacted, however, because the RMP was in the very early stages, the survey questions were not yet applicable. This survey yielded a response rate of 52%.

GENERAL RESULTS AND ANALYSES

Upon completion of all interviews, each interview was printed to begin categorization. Categorization emerged from hand-coding these initial interviews to determine exactly how the data was handled and what type of analyses were being done in each office. Similar types of handling and analyses were grouped into the same category. Five categories basically described the distinction in the type of handling and analysis completed (Figure 5).

Category 1	Private Contractor
Category 2	Interdisciplinary team hand codes; data entered into a database to query
Category 3	Interdisciplinary team hand codes; uses spreadsheet to summarize
Category 4	Interdisciplinary team reads and hand codes
Category 5	Forest Service Content Analysis Team (CAT)

These categories were broad in scope so as to encompass the sometimes extensive variation in data handling and analysis even within the same category. For all intents and purposes, every field office was using its own handling and analysis process, similar in some aspects to other field offices, yet very different in others. In some field offices where more than one plan was completed or in-process in the last five years, the handling and analysis was different depending on the plan. A matrix is an arrangement of items into labeled rows and columns within a table (Merriam-Webster Online Dictionary 2005). For the purposes of this research, a matrix was created to show the relationship between these five categories and the type of planning process (e.g. RMP) undertaken. This information was then used to determine the sample selection of the email surveys. Lastly, each field office category was put onto a map to analyze the spatial relationship from one field office to the next as well as the western United States as a whole.

Upon reviewing the matrix, it was interesting to note that several field offices were undergoing Field Office RMPs, an occurrence that typically would only occur once every 15-20 years or so, which stems back to the passage of FLPMA in 1976, where several of the plans written at that time were due for review. Also, several BLM offices were working on National Monument (NM) or National Conservation Area (NCA) RMPs, designations that were relatively new for BLM land. All of the rest of the BLM analyses being undertaken were very specific in scope and dealt with much smaller areas in comparison. For this reason, those field offices working on a Field Office RMP, NCA or National Monument plan were used as the sample for the email survey.

The matrix supplied valuable information to answer the first research question, however, lacked in generating experiential feedback to know if the analyses were

successful and what measures determined success. Are the current handling and analyses processes working well for BLM employees and if so, why? Therefore, several of the survey questions were written to get at the experience of the BLM employee and his or her satisfaction with the current practices to answer the second research question.

The telephone interview responses were also used to illuminate topics to explore in the email survey. The role of the private contractor in natural resource planning came up repeatedly. For instance, several of the respondents in the first interview mentioned the additional frustration that can take place when a private contractor assists in the analysis. A few respondents mentioned that working with a private contractor requires a lot of oversight because of their lack of familiarity with the data. Likewise, one of the things that stood out upon completion of the matrix was the large amount of plans completed by a private contractor, approximately 38% of plans in the last five years. Therefore, because a little over 50% of the plans selected as the sample included those working with a private contractor, a few additional questions were asked to get at the experience of working with a private contractor.

Closed-ended responses from the email survey were used to compute basic statistics (mean, median & mode). The correlation coefficient was computed to compare overall satisfaction as well as how involved a private contractor is and should be in BLM planning. The open-ended responses from the email survey were read and re-read to allow themes to emerge to help draw conclusions.

In short, the methods used in this paper help to pinpoint exactly how the BLM currently handles and analyzes the public scoping comments and furthermore, gain insight to BLM land manager's experiences in analyzing this data and whether or not

BLM employees feel the current practices are effective. The outcome of this research clarifies the handling and analyses process and reveals whether or not the BLM employees are satisfied with the current methods.

CHAPTER 4

VARIATIONS IN DATA HANDLING & ANALYSES

INTRODUCTION

This chapter takes a more in-depth look at the telephone interview data to understand BLM handling and analysis methods. In these initial interviews, the BLM employees revealed what plans they had been working on in the last 5 years and how they handle and analyze any public comments they receive during scoping and feedback received when presenting the draft EIS. The initial findings are summarized in Table 1. Each plan worked on in the last 5 years was categorized by how the data were analyzed and then compiled into a matrix by what type of plan it was. A basic discussion summarizes the results in Table 1 followed a more in-depth discussion handling and analyses variations in all BLM field offices.

BLM HANDLING & ANALYSIS OVERVIEW

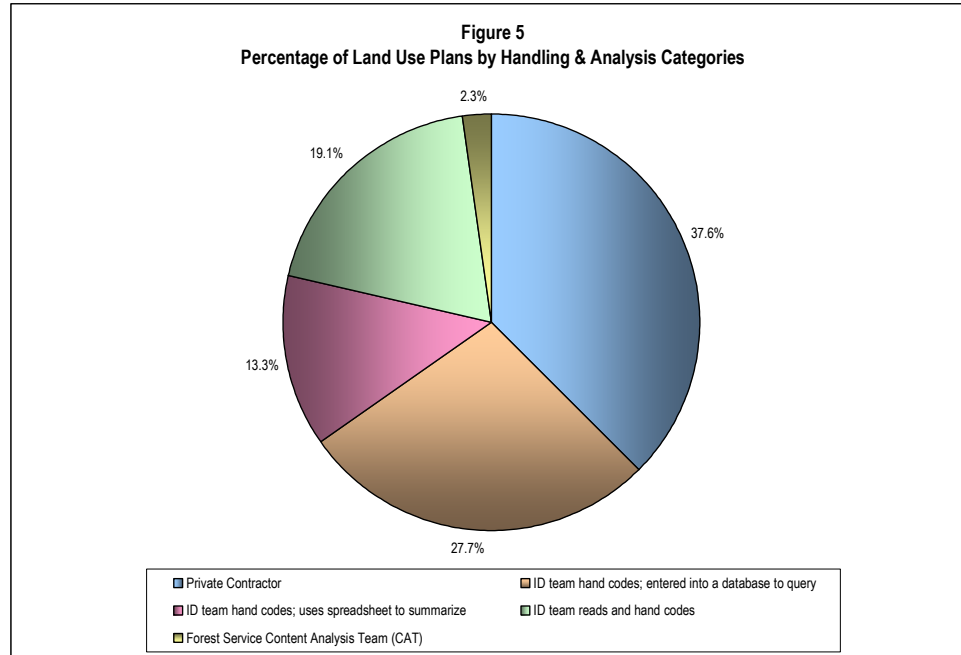
The Bureau of Land Management receives public scoping comments orally through meetings, seminars, workshops, tours, public hearings, and conferences, as well as written comments via email, fax and standard mail. In field offices where a controversial plan is presented, often strikingly similar letters are sent in (form letters) which creates voluminous amounts of data that must be sorted through. At every field office, each public comment is recorded. This record most often includes: the name, address and state of residence where the response came from; the type of response (state/county/city government, interest groups and the general public); and a reference number. In areas where land use is contentious, BLM employees must sort through and

analyze thousands of comments. When the number of comments generated becomes larger, typically the issues have to be categorized electronically, in some way, in order to organize and comprehend that much information. Generally, the most time consuming aspect of the initial process is the receipt of thousands of comments which have to be hand-keyed into an electronic file.

Nearly 10% of field offices have adopted stakeholder (grazing, environmental group, city council, OHV users, mineral users, or other interested party) interviews as part of the analysis process. (Every category of handling and analysis had at least one field office using stakeholder interviews, so this data is presented separately from the five categories.) Before any reading or hand-coding of the comments begins, the identification team meets with a representative stakeholder to determine the main issues of concern. Pete Zwaneveld, Planning & Environmental Coordinator for the Royal Gorge Field Office (CO), felt this process was helpful because we “learned a lot of things that we would never have gotten from public comments. In talking to these stakeholders over coffee, we would all of the sudden learn a lot of the history and gain a broader spectrum of the issues we were dealing with” (Zwaneveld 2003). Several BLM employees commented that by bringing all the interested parties to the table from the beginning tended to reduce the number of comments that have to be addressed once the alternatives have been formulated. Interestingly, while this has been beneficial for those field offices, there is still much inconsistency in the handling and analysis processes that occur even after the important issues of concern are brought to the table. The following paragraphs detail the five categories of handling and analysis used by BLM field offices.

Table 2 – Matrix of Handling & Analysis Categories

Type of Plan Type of Analysis	Field Office RMP	National Monument RMP	Amendment to RMP	NCA RMP	RMP with other federal agency	Regional RMP (2+ Field Offices)	Misc. RMP	OHV EIS	Travel Mgmt Plan EIS	EIS joint with other agency Regional EIS	Land Exchange EIS	Wild & Scenic River EIS	Motor- ized Route Design- ation EIS	Misc. EIS Plans	TOTAL
Private Contractor	15	8	10	5	2	3	1		1	4				16	65
ID team hand codes; entered into a database to query	9	4	3		1	1						2	1	27	48
ID team hand codes; uses spreadsheet to summarize	2	3	5	1			1	1	3	1	2			4	23
ID team reads and hand codes	2	1		2	1	1	1		8					17	33
Forest Service Content Analysis Team (CAT)				1		2			1						4



Private Contractor

For larger plans involving a significant amount of land or land that is generally controversial, a private contractor, (company) was used to perform the analysis for the Field Office, once the scoping period was complete. Those who used private contractors stated that they used them typically because they offered resources to analyze large amounts of comments in these types of plans. Sixty-five (37.5%) of the plans used a private contractor or outside company for analysis (Figure 5). In nearly every single case, the field offices that used a private contractor, also read and hand-coded some of the comments initially to be sure they were aware of the most pertinent issues for the project.

ID team hand codes; entered into a database to query

A number of field offices categorized the comments initially into substantive issues and non-substantive issues by reading each comment with the interdisciplinary team (ID Team), defined as those area specialists impacted by the plan. Hand-coding can

be defined in many ways, but generally means, the interpretation of text, or the constant comparison of phenomena, cases and concepts by highlighting patterns and ideas (Flick 2002). Only the substantive issues were highlighted on the original document and were thereafter entered into a database (Microsoft Access was the primary software) and then categorized into themes based on what the substantive issue was about. The project leader then used a series of queries to analyze the data. The queries were plan-specific based on concerns brought up during the scoping process and further clarified through written feedback.

ID team hand codes; uses spreadsheet to summarize

Some of the field offices used a similar process to that mentioned above, but because of the small amount of scoping comments received, the planning coordinator did not require an electronic categorization. The interdisciplinary team was responsible for hand-coding the substantive issues and then generating a spreadsheet to summarize the results, where the substantive issues were listed, along with the corresponding percentage of comments dealing with that concern.

ID team reads and hand codes

Most of the time, the field offices which used hand-coding as the sole method for handling and analysis do not receive a large amount of comments; therefore, it is feasible for one person, or an interdisciplinary team to read through and hand-code that information. Most often, the team will first group the comments by issues but in two categories—substantive comments that would merit a response and general comments

lumped together in a single response. These issues would then be addressed in the draft EIS.

Forest Service Content Analysis Team (CAT)

The United States Department of Agriculture Forest Service Content Analysis Team (CAT) provides services to Forest Service units as well as to other agencies including: (1) Training and software for processing and analyzing large numbers of public comments, (2) Contract administration for processing and analyzing public comments, and (3) Publishing services for design, layout and editorial purposes. Every BLM field office that used CAT did so for contract administration and occasionally publishing services. Likewise, these field offices were allocated surplus budget for their planning project, whereas typically hiring an outside contractor can be very expensive on a very limited budget. In essence, the CAT was acting as a private contractor, however somewhat improved in comparison to other private contractors because of their knowledge of issues facing public lands.

In short, these five categories describe the distinction in handling and analysis processes used in BLM field offices. However, this detail only provides the handling and analysis process for the described plans as outlined in Table 1. And, furthermore, the categories described are broad in scope so as to encompass the sometimes extensive variation from one field office to the next. Likewise, one basic conclusion that can be drawn from the matrix is the overwhelming diversity of plan types generated within the agency. There are twelve basic categories describing a specific type of plan, yet two other categories are 'Miscellaneous EIS' or 'Miscellaneous RMP' which are made up of

nearly 70 plans, consisting of plans for resources such as mining, oil and gas, or grazing. This variety in types of plans further contributes to the complexity of natural resource planning as a whole, although more multifaceted in the BLM because of its multitudinous duties, even if the handling and analysis remains the same. In summary, the type of analysis carried out generally depends on several factors, including, but not limited to: BLM proposed budget for the project and corresponding funding, the interest and corresponding amount of scoping involved, the size of the proposed planning area, and finally, the field office(s) involved and the availability of staff.

For the purposes of this project, the focus will be on the spatial patterns of handling and analysis with respect to the location of the field office. Research was not completed for the other factors including: proposed budget, size of the planning area, or the availability of staff. However, 20% of respondents did mention the number of comments received for the plan (scoping). Of that 20%, over half of the plans were using/had used private contractors to assist with the handling and analysis of comments. Interestingly, in every case where a private contractor was used, respondents noted a minimum of 1000 comments, with several respondents saying “thousands and thousands” (Bocknes 2003) or even “tens of thousands” (Womack 2003). Therefore, a private contractor essentially assists in the handling and analysis of large amounts of comments, whereas the other handling and analysis types may deal with a smaller amount of comments.

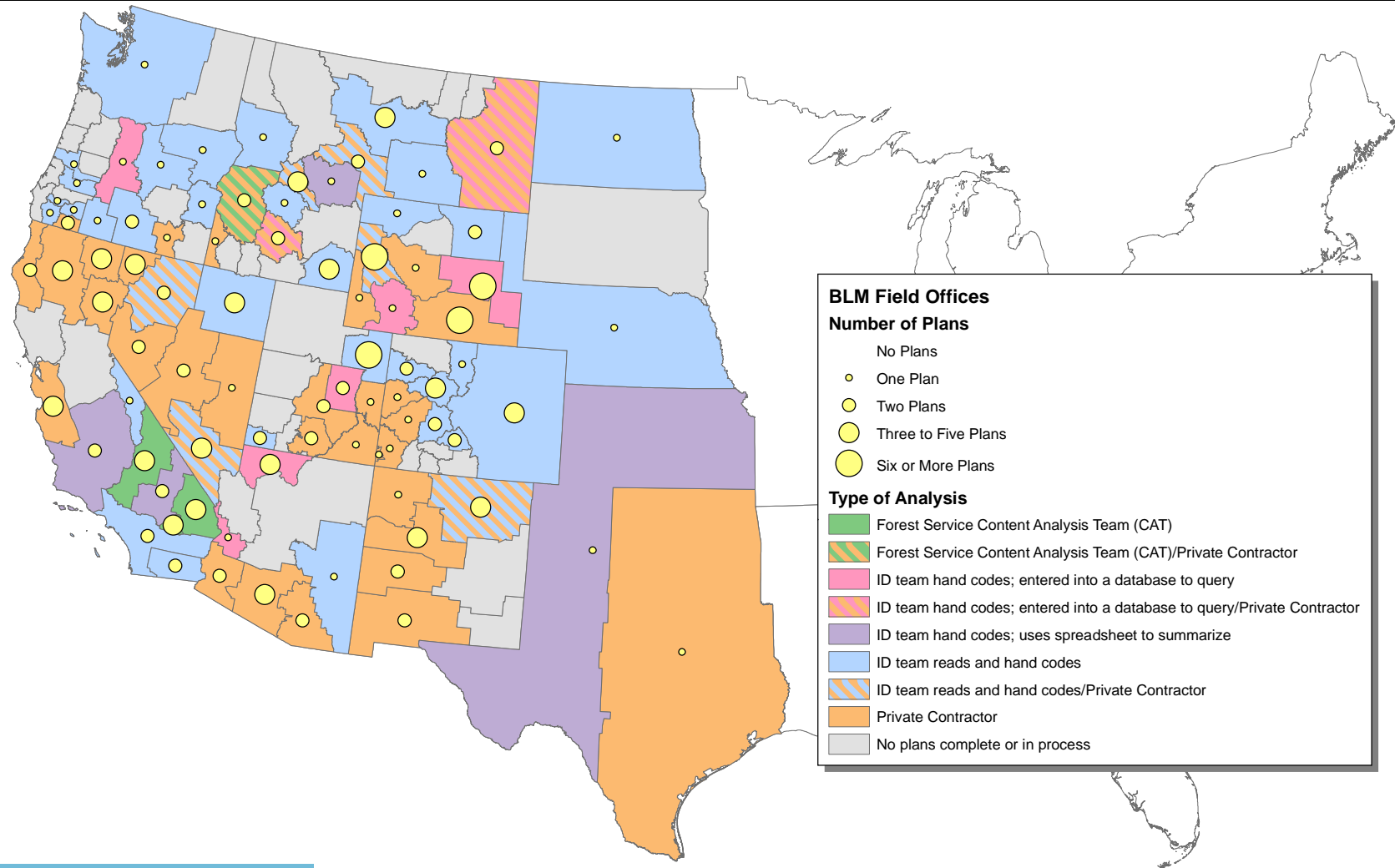
SPATIAL PATTERNS

90% of field offices employed the same handling and analysis methodology for all plans completed or in-process at their respective offices in the last five years. On the other hand, 10% of the field offices working on more than one plan have used a different method of handling and analysis for each plan. Still, in every case where more than one method was used, a private contractor was used for at least one of the plans. When reviewing the spatial patterns on the map (Figure 6), one will notice the significant presence of the private contractor, which accounts for nearly 38% of all handling and analyses and just over 42% of field offices in the Western United States. The state of Nevada had with the highest concentration of field offices using private contractors, representing 83.3%.

The second most prevalent type of handling and analysis methodology, in terms of the number of plans, were those field offices using “ID team hand codes; entered into a database to query.” This methodology is deceiving spatially because all of the field offices using this type of analysis were working on at least two or more plans, so its impact spatially is minimal. In brief, while this methodology is employed in nearly 28% of plans, its range in field offices is much smaller in scope compared to the other categories.

On the other hand, those field offices using “ID team reads and hand codes” have the broadest range in terms of spatial impact on field offices in the Western United States. Although just under 20% in terms of types of plans, this methodology is employed in over 43% of field offices, in comparison to just over 42% of field offices using a private

Figure 6: Analysis Type and Number of Plans for Western United States BLM Field Offices
 January 1, 1998 to December 31, 2003



contractor. Oregon and Washington field offices have the highest density of plans using hand coding as the sole methodology of the field offices in those states (80%).

Both the Forest Service Content Analysis Team and the use of a spreadsheet to summarize after hand-coding have minimal impacts on field offices spatially. For instance, only 2.3% of plans used the Forest Service Content Analysis team and 75% of those plans are located in three adjacent field offices working on a regional RMP and NCA RMP. In short, the spatial patterns of the handling and analysis methodologies in some cases reveal strikingly different conclusions than the matrix.

SUBSTANTIVE VERSUS NON-SUBSTANTIVE

During the course of the initial interviews, BLM employees used the terms substantive and non-substantive to separate comments about the plan. But, what do these terms mean? Scott Pavey, Planning & Environmental Coordinator for the White River Field Office (CO), states, “Non-substantive comments are opinion, rather than statements based on research or facts.” (2003) Buddy Greene, the NEPA Coordinator at the Gunnison Field Office (CO), states, “[Substantive comments] help us define the proposed action, help us with a thorough impact analysis and really, help us make an informed decision. For example, a person may say, ‘Your draft EIS is flawed because you did not do an analysis of issue ‘x’” (2003). BLM employees may use substantive comments to learn new information or possibly review a change in circumstance, to clarify methodology or to modify conclusions drawn. Non-substantive issues generally make little, if no impact on the plan.

There is a definite difference between the two; however, there may be controversy as to what is substantive and what is not. “Obviously deciding if something has "substance" is a subjective exercise and many would argue that the way a standard dictionary defines the term all comments could qualify.” (Durrant 2003, 1). However, BLM employees have been given a charge to categorize and conceptualize these public comments, so what they say, most often, goes.

Whatever the analysis type, as discussed above, the basic directive is the same. NEPA opened up for public scrutiny the planning and decision-making processes of federal agencies, in many cases providing the only opportunity for the public to affect these processes. In looking more closely at BLM analyses, nearly all planning coordinators would agree that more often than not you are getting ideological generalities (non-substantive) rather than specific issues (substantive). “First, many private individuals do not send in the "substantive" comments that the BLM takes into consideration. These "non-substantive" comments are therefore generally ignored (or at least not as thoroughly and rigorously considered) in the planning process.” (Durrant 2003, 1). Gary Foulkes, Burn Oregon Field Office stated, “We always hope that we get concrete suggestions from people but usually they are just general comments” (2003). Still, some might argue that “these non-substantive comments deserve a more thorough examination and consideration by public managers” (Durrant 2003, 1). However, the public managers would most likely disagree as many felt shorthanded and overwhelmed by public comments, therefore they often would hire private contractors.

THE ASSISTANCE OF PRIVATE CONTRACTORS

In order to understand these results, it is imperative that the reader understand the definition of a contractor. A contractor is generally a privately owned company, hired by the BLM to perform a specific task. Often the contractor will assist in writing in EIS and analyzing the comments for BLM Field Offices. As mentioned previously, private contractors are often used in field offices engaging in large plans, especially those plans that are expected to be contentious, thus enlisting a sizeable quantity of public comments. Private contractors are very rarely used unless agency funding is made available.

One primary conclusion drawn from the initial interviews is that contractors generally require a lot of oversight. Even so, several respondents mentioned that they felt 'lucky' to get the funding to use a contractor to complete complex analyses. "We're short-handed and so the contractors serve a real service in coming up in the information. They're short-falling in that they're not BLM employees. They have not had experience with the Bureau." (Craggett 2003). One planning coordinator stated, "I don't care how good a contractor you have, the home office still has to be prepared to be involved and participate in the process." (Coffman 2003) Likewise, one respondent stated,

One of the problems you get is the contractor is unfamiliar with the comment context or they may not know why the comment was made. For example, the response from the contractor was coming at the issue from the environmental side; where in fact, the whole one of the comment was to show that the industry had no impact." (Rameka 2003)

Nevertheless, private contractors that specialize in data analyses are able to provide manpower and software that can handle volumes of data and process and examine the comments to summarize the issues for land managers. Nonetheless, by using various

private contractors throughout the country, the details of how the analyses were carried out remains a mystery.

CONCLUSION

To sum up, there are definitely variations in BLM handling and analysis methods. While the handling and analysis types can generally be summarized into five categories, there is still a great deal of variation within each category type. Several factors influence the type of handling and analysis completed, which include: BLM proposed budget for the project, the interest and corresponding amount of scoping involved, the size of the proposed planning area, and finally, the field office(s) involved and the availability of staff. Furthermore, the spatial analysis revealed the impact of both the private contractor and hand coding as the two most spatially dominating types of handling and analysis methodology. Likewise, using the terms substantive and non-substantive to define the public scoping comments is often a subjective exercise, and essentially defined by the individual reading the comment; therefore, some comments may be defined as substantive by one individual while another would argue that the comments are definitely non-substantive. In general, private contractors aid in the handling and analysis process, providing manpower and software to ease the burden of a large amount of comments. Yet again, they often require substantial oversight and are unfamiliar with the issues at hand, thus contributing further to the subjectivity of the substantive/non-substantive categorization. Furthermore, these respondents, who engage in these planning processes day after day, stated that they wanted a more standardized consistent handling and analysis process throughout the BLM, to essentially open up the ‘black box.’

CHAPTER 5

EXPERIENCE OF BLM EMPLOYEES IN HANDLING & ANALYSIS

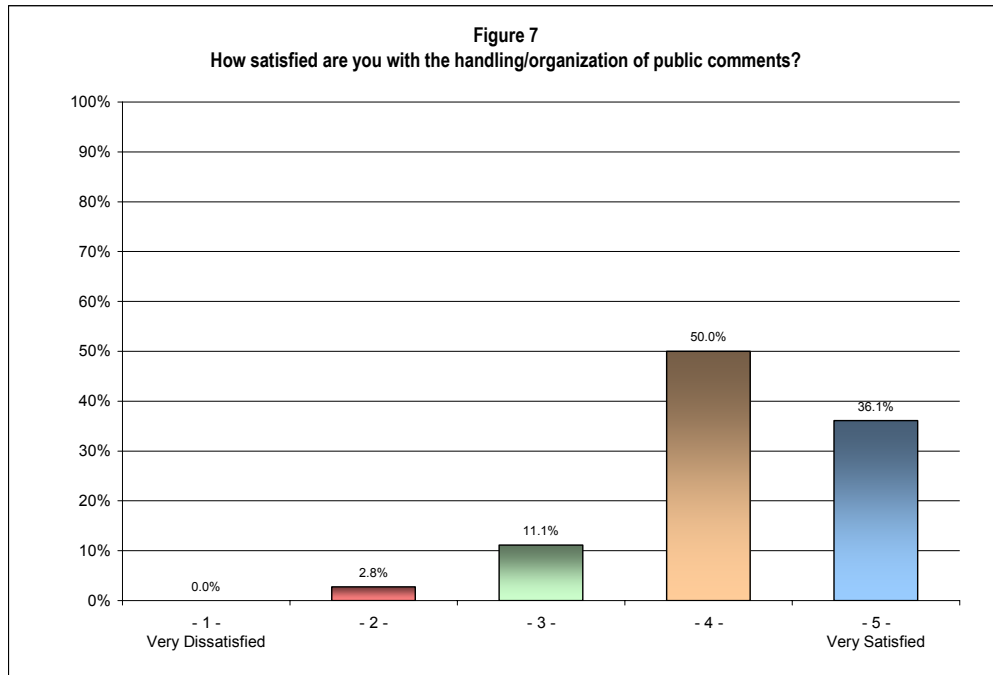
INTRODUCTION

This chapter seeks to draw some basic conclusions as to how satisfied BLM employees are and the effectiveness of the methodology in the handling and analysis of public comment in large-scale BLM planning to answer the second research question. The chapter is divided into two sections: 1) Experience and Satisfaction in Handling & Analysis of BLM Public Comments and 2) The Role of the Private Contractor, subdivided based on the separation in the email survey. A filter question was used at the beginning of section 2 to ensure that only those respondents who had used a private contractor would respond.

1. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how satisfied are you with the handling/organization of public comments?	Mean = 4.19 Median = 4.00 Mode = 4.00 n = 36
2. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how satisfied are you with the content analysis of public comments?	Mean = 4.00 Median = 4.00 Mode = 5.00 n = 35
3. What are the strengths of your current methods of handling and analysis? Weaknesses?	Open-ended
4. On a scale from 1-5 (1 being very dissatisfied and 5 being very satisfied) how would you rate your project team members overall satisfaction with the handling and analysis of public comments?	Mean = 3.92 Median = 4.00 Mode = 4.00 n = 32
5. Did your project team members mention any opinions or comments about the handling and analysis of the public comments?	Open-ended
6. What do you think could be done to improve the current methods of handling and analysis of public comments?	Open-ended

EXPERIENCE AND SATISFACTION IN HANDLING & ANALYSIS

The mean satisfaction for the 1st question, ‘*How satisfied are you with the handling/organization of public comments?*’ is 4.19, a fairly high response on a 5.0 scale. Likewise, just over 86% of respondents answered a 4 or 5, suggesting that the handling process is satisfactory (Figure 7).



One of the primary themes that emerged from the open-ended responses was the ability of the BLM to effectively organize the comments initially, by “keeping track of each comment individually” (Respondent 26). This organization is a very time-consuming and labor-intensive process, especially in a plan heavy laden with form letters and several interested constituencies. In cases like these, it is difficult for individuals to get personal treatment, in that they “cannot see their exact letter and response statement” (Respondent 17). However, it is interesting to note that the mean continues to decline as the survey

questions delve more into the analysis and overall satisfaction of this process, which suggests that there are probably more difficult issues to resolve in those areas.

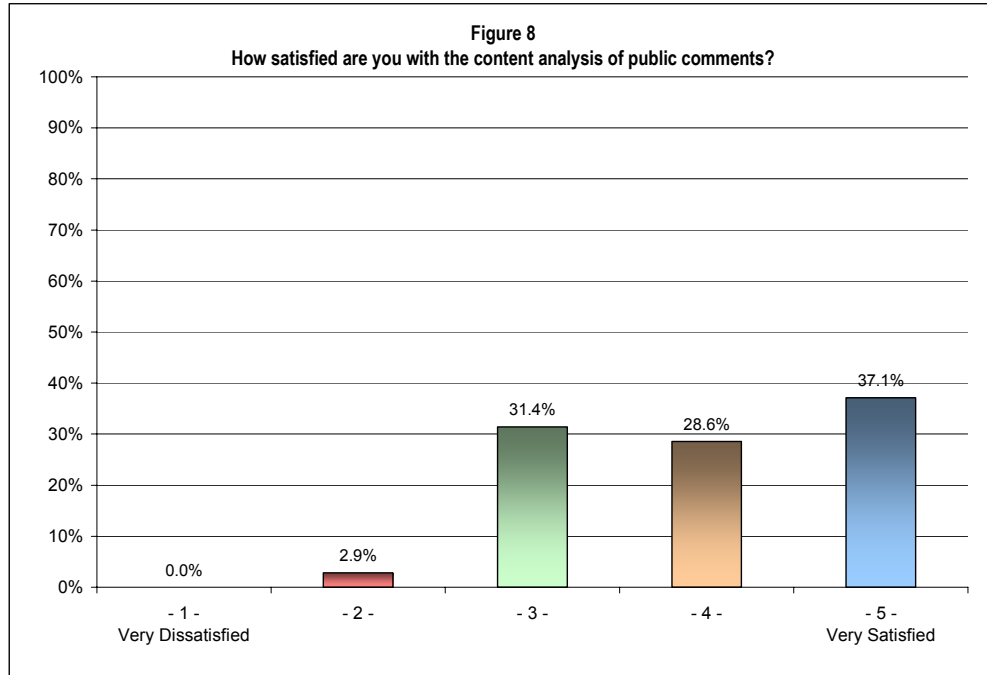
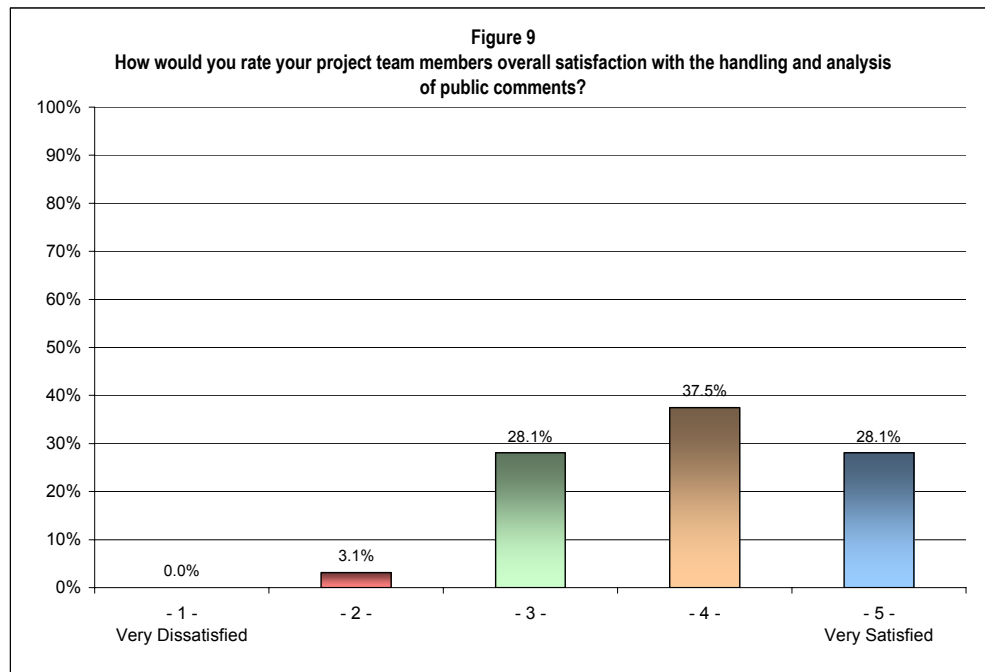


Figure 8 shows the percentage of responses when asked, ‘*How satisfied are you with the content analysis of public comments?*’ It is interesting to note that the respondents are generally more satisfied with the handling/organization of public comments (Figure 7), whereas these responses (Figure 8) are much more expansive, with only 65.7% of responses answering a 4 or 5. One respondent noted,

Analysis of comments appears to be superficial if agency officials have already chosen a course of action, generally, and the typical responses of ideas or conservation programs that were contrary to agency desires were discounted or dismissed. Public comment generally resulted in few changes to draft or proposed plans (Respondent 34).

This respondent felt that the content analysis was superficial and was skeptical about public comments actually impacting the plan as a whole, which can contribute to public

animosity and distrust towards government agencies (Smith & McDonough 2001) and a general lack of satisfaction among the planning team as well.



Furthermore, figure 9 shows the percentage of responses in project team members' overall satisfaction with the handling and analysis of public comments. The mean for this question was 3.92. This difference in mean for this question in comparison to the first question (handling/organization satisfaction) may be the experience and/or inexperience of team members in dealing with large projects with extensive public comments. For instance, one respondent noted that his or her team lacked experience and, "as a result, some of their responses were even less appropriate than those of the contractor" (Respondent 40). Other respondents with experience were concerned about personal bias in representing the results of the comment analysis and furthermore, those who were required to write their own responses griped at the required amount of reading. Other team members with little experience had trouble "agreeing on the categories and understanding context when they [the comment] stand alone outside the format they were

submitted in” (Respondent 58). Finally, some experienced team members weren’t sure how much weight should be applied to comments from certain constituencies, electronic form letters or state or local governments. In brief, the experience of team members, or lack thereof, contributed significantly to how smooth the process went and what issues the teams had to deal with, which possibly contributed to overall satisfaction.

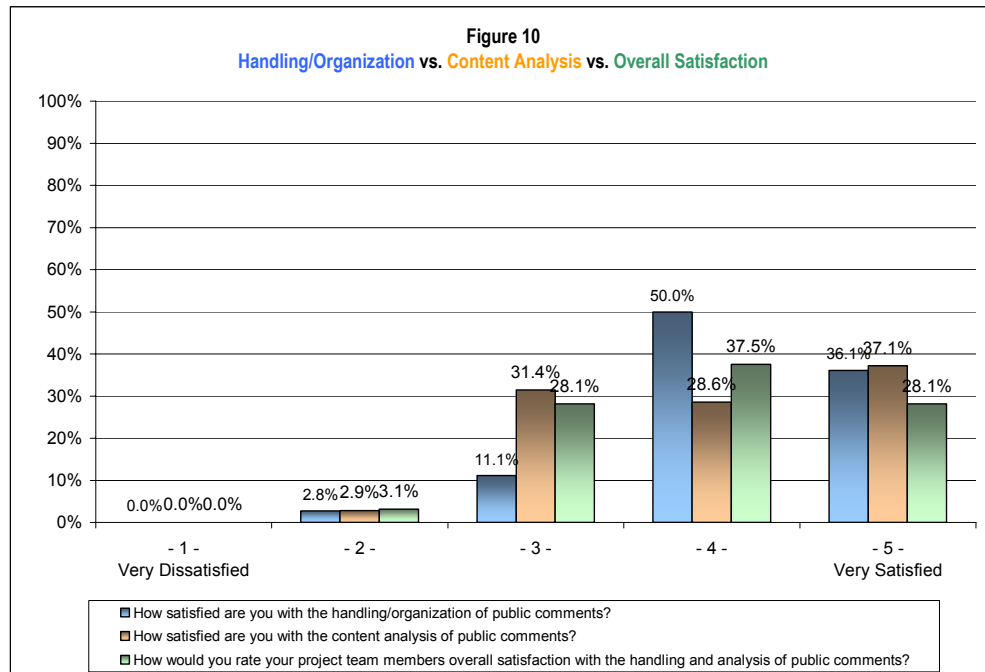


Figure 10 is a comparison of responses for handling/organization, content analysis and overall satisfaction of handling and analysis. In comparing the responses for all three questions combined, the area with the greatest satisfaction is the handling/organization of public comments. BLM employees are least satisfied with the overall process of handling and analysis, yet the responses for content analysis are strikingly similar. The handling/organization of public comments is an important aspect in natural resource planning, yet a relatively simple piece; on the other hand, content analysis tends to take a front seat because of its time- and labor-intensive phases, which often falls under public

scrutiny. Generally, if the BLM employee is not as satisfied with the content analysis, he/she is more likely to be less satisfied with the overall handling and analysis process.

EFFECTIVENESS OF BLM METHODOLOGY

Strengths of BLM Methods

One of the primary strengths drawn from almost every plan was the ability to involve the public and various stakeholders through meetings, newsletters and websites to provide specific information on the scope of the plan. In turn, many felt this helped in the feedback the BLM received from the public, receiving well-thought out comments on relevant items. Another strength was that every comment, letter, fax and email received thorough and personal attention and review. For instance, “Every member of the ID team read every comment letter at least once. This gives folks a feel for the nuances, tone and intensity of comments that may not come through in a more formal, quantitative analysis” (Respondent 66). In short, this process often helps BLM employees to get the full spectrum and in turn gives the public a sense of ownership in the work of the BLM and in a perfect world, the subsequent implementation of the program is painless.

Weaknesses of the BLM Methods

“The only weakness I can think of is that we didn’t have an approach set up to handle large volumes of comments efficiently” (Respondent 5). The comments are “not electronic and not easily sortable” (Respondent 22). Teams were strained primarily for two reasons: 1) the lack of specialists in certain areas, and 2) the lack of training for those who have not worked on a plan this large before (Respondent 11 and 40). “We do

not have a well-defined system” (Respondent 62) and “the process is extremely time intensive” (Respondent 65). In essence, nearly every single comment regarding the weaknesses of the current methods of handling and analysis drew upon the above-mentioned areas. Even staff members who had worked on large-scale plans before mentioned similar weaknesses because of the lack of training and standardization from one field office to the next. Essentially,

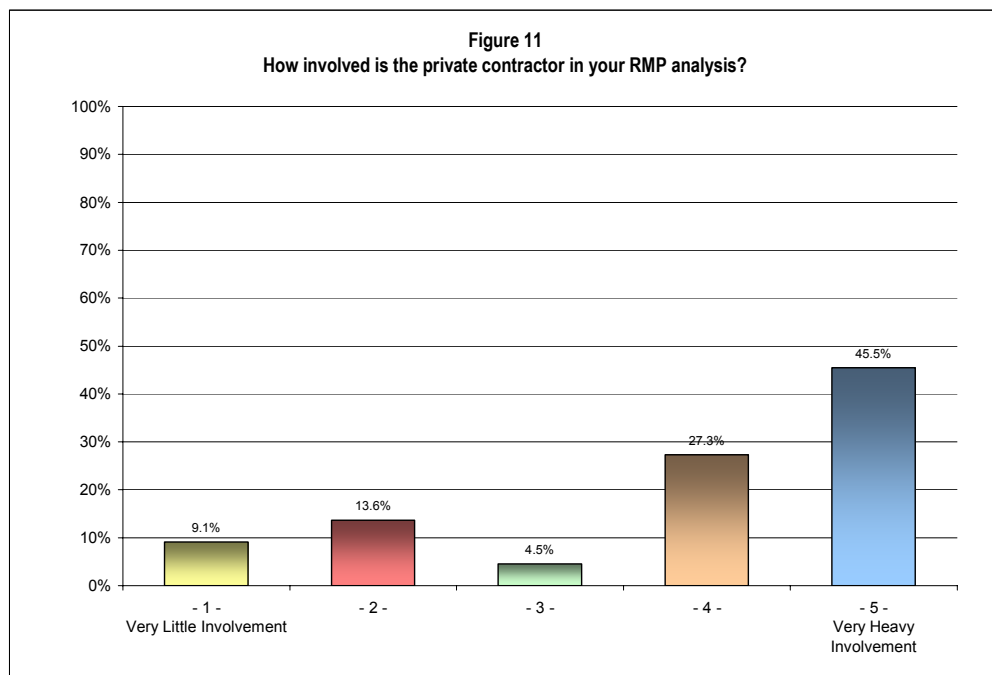
the Bureau needs some standardized tools to collect, handle and support analysis of public comments that are scaleable, user friendly and effective. And to support those tools, planning training needs to include modules on how to review and respond to public comments (Respondent 77).

Altogether the BLM has both good and bad aspects in handling and analysis processes, which are made clear by the BLM employees. The BLM, similar to the literature reviewed previously, does well in collecting public feedback through a variety of means and in most cases, are able to handle and organize these comments. Still, the agency is lacking in being able to analyze large amounts of comments efficiently, and do so using their current staff, without the assistance of a private contractor. Moreover, this practice of being involved in natural resource planning processes is becoming more commonplace as the public continues to increase their use of local and long-distance public lands (Davis, C. 2001) and want to be listened to as part of planning how this land is managed.

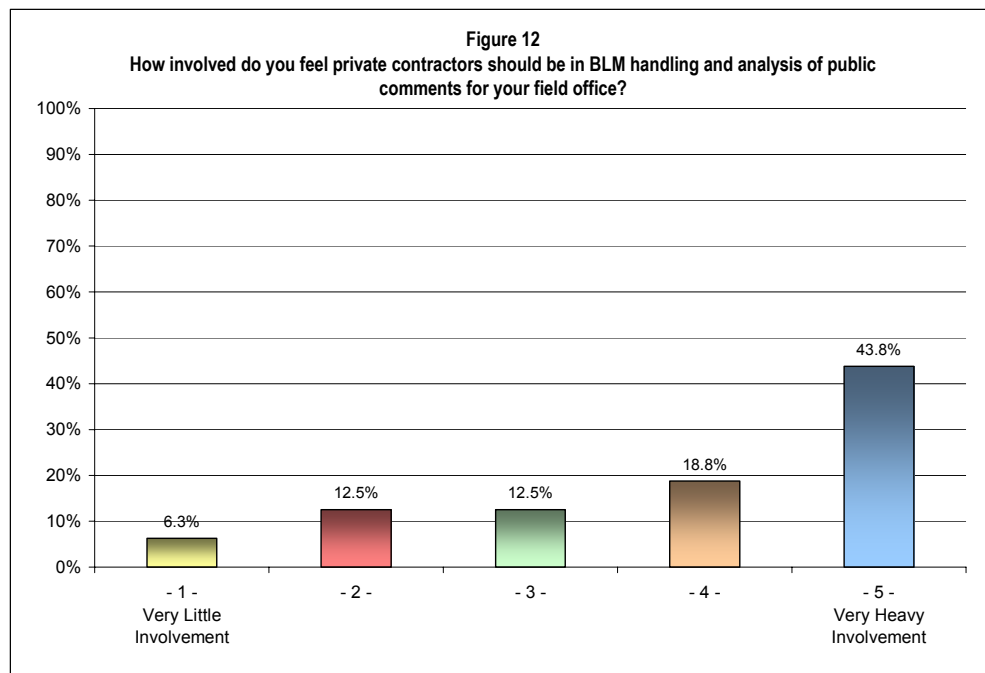
Table 4 – The Role of the Private Contractor	
1. In handling/analyzing the public comments for your Resource Management Plan (RMP), did you use a private contractor?	Yes or No 61% Yes 39% No
2. On a scale from 1-5 (1 being very little involvement with 5 being heavy involvement) how involved is the private contractor in your RMP analysis?	Mean = 3.86 Median = 4.0 Mode = 5.0 n = 22
3. On a scale from 1-5 (1 being very dissatisfied with 5 being very satisfied) how satisfied have you been with private contractor handling and analysis of public comments?	Mean = 3.71 Median = 4.00 Mode = 4.00 n = 21
4. On a scale from 1-5 (1 being very little involvement and 5 being very heavy involvement, how involved do you feel private contractors should be in BLM handling and analysis of public comments for your field office?	Mean = 3.91 Median = 4.25 Mode = 5.0 n = 16

THE ROLE OF THE PRIVATE CONTRACTOR

A little over half of the respondents had used a private contractor to assist in handling and analysis of comments. When asked how involved the private contractor is in the RMP analysis, 5.0 was the mode, suggesting that when a private contractor is used, they are used quite a lot throughout the entire planning process, with the mean at 3.86.

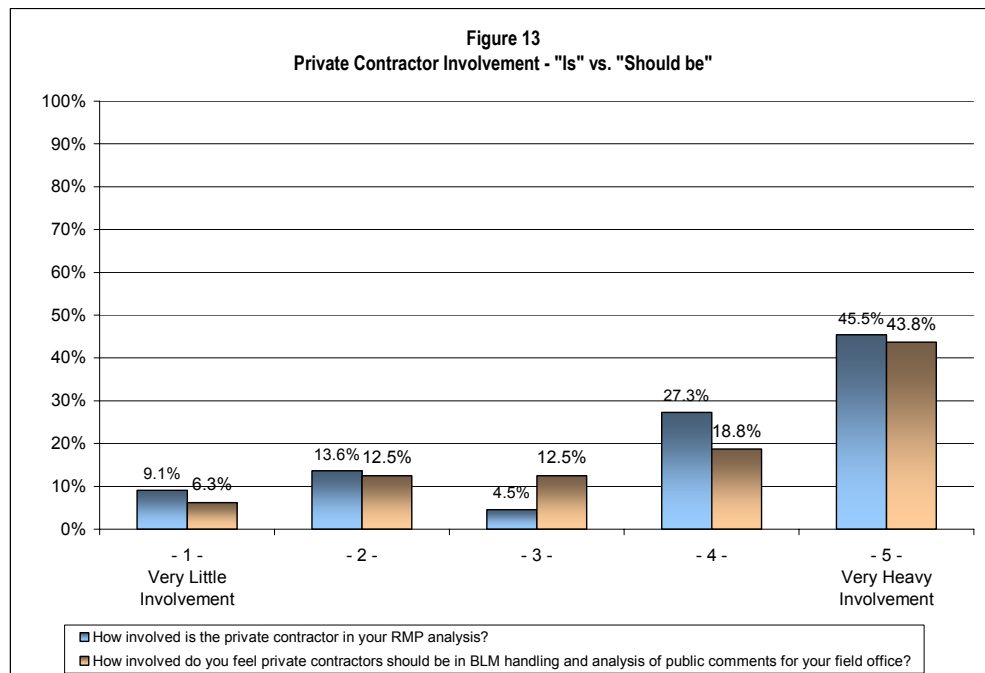


Likewise, nearly 73% of respondents answered a 4 or 5 (Figure 11). On the other hand, when asked how involved private contractors should be in BLM handling and analysis of public comments, the mean increased by 5 basis points to 5.91, suggesting that respondents felt private contractors should be more involved than they already are (Figure 12).

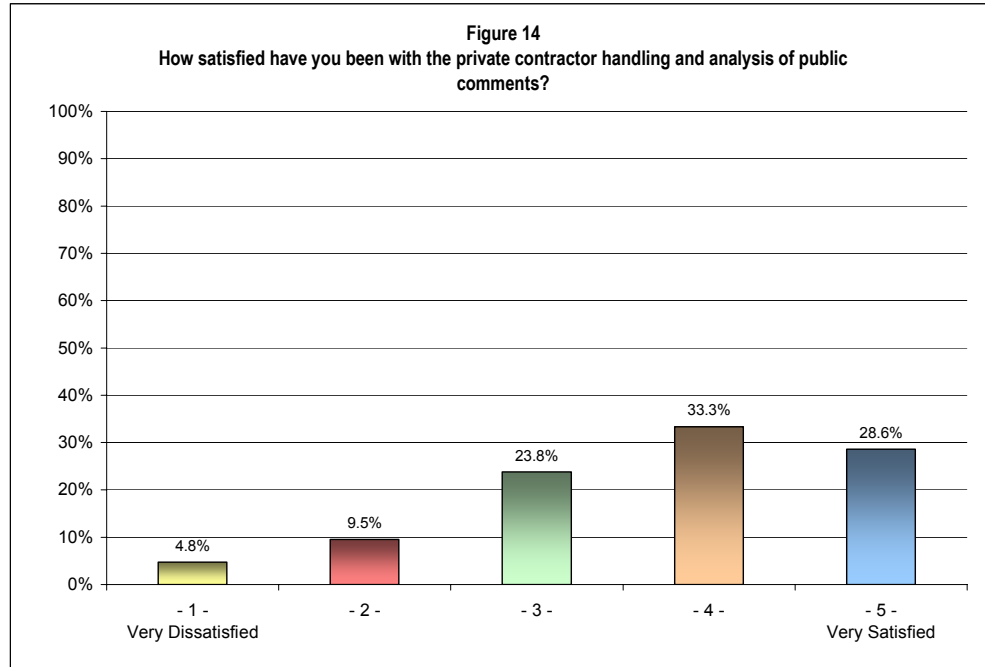


Nevertheless, one of the primary themes from the open-ended responses in this section was the lack of familiarity with the issues, concerns and resources, which then requires considerable oversight from BLM personnel. These two ideas seem somewhat contradictory. The BLM employees want the contractor to be more involved, yet their primary concern is the lack of understanding. One might conclude that the BLM is short-staffed, especially in large-scale plans, so more help, even with minimal insight and ample supervision, is better than no help at all.

In some cases, the private contractors “are heavily involved because we do not have the manpower or the funds to do most of the work within the BLM” (Respondent 51). Interestingly, there is a pretty broad range of responses in terms of how involved the private contractor really is (Figure 10). The correlation coefficient between how involved the private contractor really is (Figure 10). The correlation coefficient between how involved the private contractor is and how involved they should be is -0.009 , suggesting that these two variables are statistically independent, (e.g. when the magnitudes of one thing are high; the other's magnitudes are sometimes high, and sometimes low.) (Figure 13)



Nevertheless, BLM employees are generally moderately satisfied with the assistance of a private contractor (Figure 14). In comparing the responses of overall satisfaction of BLM employees altogether compared with those who used a private contractor, the correlation coefficient is $.338$, suggesting that those who use a private contractor may be slightly more satisfied.



In every case where a private contractor was used, the primary purpose was to provide additional manpower and/or software to help handle and analyze public comments. In some cases, the private contractor also assisted in writing not only the plan itself, but also the responses to substantive public comments. However, BLM employees reiterated again and again that the private contractor was not familiar with the concerns and/or resources nor could they understand the context, connotation and tone of the public comments. For instance, when BLM employees were asked about the satisfaction with the private contractor, any respondent who replied three or less always pointed out that the “BLM had to spend more time checking the responses than was anticipated” (Respondent 36). Yet when respondents were asked how involved private contractors should be in BLM handling and analysis of public comments, nearly 45% of respondents said ‘5 - Very Heavy Involvement’ and the mean was 3.91.

Interestingly, this is somewhat of a paradox because BLM employees appreciate the aid of a private contractor, yet they are often quick to criticize their lack of knowledge and the substantial oversight required throughout the process. One respondent noted,

If they are going to help write these documents then they need to know more than they do. However, remote offices offer challenges since the contractors are often hundreds of miles away. So the people reading comments and providing assistance are not as familiar as they pretend to be when they are looking for work (Respondent 26).

Furthermore, a few respondents felt that the role of the private contractor should only be administrative—to simply organize and categorize the comments in a report for public records. Then, the BLM must interpret and respond to comments because “diversity in thought and skills are required to honestly evaluate and consider such information so that public confidence in agency administration remains high” (Respondent 34). A few respondents noted that private contractors should only be used in large planning processes, especially those which could potentially impact spirited stakeholders (e.g. environmentalists), who have a tendency to submit thousands of public comments. While both processes (administrative and interpretation) can be labor intensive, the majority of respondents felt this separation was the right fit for a relationship between the contractor and the BLM.

CONCLUSION

Considering the amount of land BLM employees have the responsibility to manage, as well as the size of the BLM budget (the lowest of the four agencies), BLM employees are generally fairly satisfied with the current methods of handling and analysis of public comments, despite being less satisfied with content analysis in comparison with

data handling and feel these methods are effective. When asked if improvements could be made, a number of suggestions arose, yet, these BLM employees seem to make things work with what they have in terms of resources. Likewise, nearly every respondent provided at least one strength of the current practices of handling and analysis. In general, the complete process continues to be labor- and time-intensive, and some BLM employees lack experience, yet overall, they are able to incorporate and effectively respond to public comments, with or without the assistance of a private contractor. Still, the overarching assumption is that BLM employees knew when they started working for the BLM that working for the public puts a person 'between a rock and hard spot' in terms of trying to generate a plan that pleases everyone. Knowing this, BLM employees are carefully deliberate in generating alternatives and writing plans that will protect the public land and also allow for multiple-use as well. Finally, BLM employees provide some valuable insight to improve the handling and analysis methods as well, which will be discussed in the concluding chapter.

CHAPTER 6

CONCLUSION

INTRODUCTION

This chapter will begin by summarizing the primary weakness of BLM handling and analysis methods. Then, this chapter will briefly outline three suggestions for handling and analyzing public scoping comments, using the verbatim responses from BLM employees. Finally, this chapter will conclude with why these changes are important, not only for the Bureau of Land Management, but also for other federal agencies in natural resource planning.

NON-STANDARDIZED METHODOLOGY

There is no standardized format for interpreting public comments (whether in written or oral form), thus each field office is responsible for determining a handling and analysis process to review these comments, and, in every case, the handling and analysis is unique to that field office and unique to the plan on the table. Similarly, the type of analysis carried out generally depends on several factors, including, but not limited to: BLM proposed budget for the project and corresponding funding, the interest and corresponding amount of scoping involved, the size of the proposed planning area, and finally, the field office(s) involved and the availability of staff. Generally, if a large amount of public comments are expected, a private contractor is generally used to assist in the handling and analysis because of lack of manpower in the agency. Likewise, employees within the BLM are trained in their respective disciplines (e.g. wildlife biology or range science specialist), but may only have a small amount of training, if any,

in interpreting and analyzing qualitative data. The BLM also has procedural obligations and time constraints which must be strictly enforced to avoid litigation by interested parties. Furthermore, BLM employees, without the aid of a private contractor, spend the majority of their time handling the data (data entry and organization, initial categorization, etc.) and are left with little time to actually interpret and use the feedback to impact the plan. Those who use a private contractor end up spending nearly equal amounts of time in oversight and revisions because of the lack of understanding of the contractor team. While BLM employees appear fairly satisfied with the current practices of handling and analysis, the bar needs to be raised to more effectively use public comments in natural resource planning in the BLM.

A NEED FOR IMPROVEMENT

The purpose of these suggested improvements is based on the open-ended feedback provided by the BLM to enhance and update the current methodology of handling and analysis. Several BLM employees in this study had great suggestions to improve the handling and analysis of public comments.

The Bureau needs some standardized tools to collect, handle and support analysis of public comments that are scaleable, user friendly and effective. And to support those tools, planning training needs to include modules on how to review and respond to public comments (Respondent 77).

This comment embodies what the BLM needs to change in terms of handling and analysis. First, the administration of the BLM needs to put in place consistent, transparent and fairly standardized methods of handling and analysis, which are “scaleable, user friendly and effective” (Respondent 77). These methods should have a

basic step-by-step formula which all BLM employees could easily grasp. These methods will not totally eliminate the subjectivity of reading and interpreting text, however, they will definitely reduce the bias.

Because of the substantial cost of using a private contractor, specific stipulations should be put in place for plans that would merit the use of a private contractor to ensure consistency across all field offices as well as careful use of the modest BLM budget. To avoid the label of “window dressing,” ensure that the public has been made aware of the role of the private contractor in the handling and analysis process.

Second, BLM employees need to be trained in how to effectively analyze and subsequently respond to public comments from various constituencies. Training units need to be developed to facilitate understanding of the consistent, transparent and fairly standardized methods mentioned previously as well as opportunities for employees to practice review, interpretation and response to public comments. This practice would facilitate the idea that public land planning gives BLM employees an opportunity to educate the public on BLM processes and objectives.

Third, consider researching the feasibility of implementing an agency-wide qualitative analysis software. Qualitative analysis using computer software has given much more credibility to qualitative research overall using software tools such as indexing, cross-indexing, coding, and sorting various combinations of segments of textual data and facilitates the management of large volumes of data (Schwandt 2001). CAQDAS uses tools that assist in the data analysis and allows users (e.g. BLM employees) and the public to visually see how the process was carried out as well as increasing efficiency in terms of the time allocated to the public review process and the

ability to incorporate comments and adapt and complete the planning process (Schwandt 2001; Fielding and Lee 1998; Fisher 1997; Fielding 1994).

There are several justifications for using computer-assisted qualitative data analysis software (CAQDAS) as an analytic tool in qualitative analysis. First, the machine itself can facilitate the task of “data management” (Fielding and Lee 1998, 57). This mechanizing of manual procedures offers considerable benefits in terms of time, efficiency and more thorough analysis. For the BLM, increasing efficiency in handling public input in BLM planning is beneficial as deadlines which are set are often extended due to challenges of analyzing thousands of public comments. Second, CAQDAS software can enhance the acceptability and credibility of qualitative research, which, for the BLM would prove beneficial to persuade the public that they are indeed not “window dressing.” Third, CAQDAS can also help with consistency. Software that provides a graphic map of relationships among codes, text segments or cases can help the reader to visualize and extend his or her thinking about the data or theory at hand (Welsh 2002).

Finally, allowing the researcher to record field notes, interviews, codes, memos, annotations, reflective remarks, diagrams, audio and visual recordings, demographic variables and structural maps of the data and the theory all in one place can be a tremendously powerful benefit to the analysis process. In this case, large amounts of energy can be devoted to the critical tasks and help the researcher see and keep track of connections that might otherwise easily be overlooked (Fielding and Lee 1998).

CONCLUSION

While the suggestions made here will not eliminate complex natural resource planning situations, they will make transparent a previous 'black box', which will bring much credibility to the agency as a whole. Creating a pattern of handling and analysis would provide stability to turbulent natural resource planning situations and hopefully decrease the appeals and litigation, public dissatisfaction and animosity and distrust toward government. These types of changes also support the existing human-land relationship between the public and *their* land, and the BLM and their stewardship to manage these lands to the best of their ability, with the limited resources they have available. A spirit of cooperation would likely ensue. Because place matters for different reasons to different people, better analytical methods for public comments will allow BLM decision-makers to pinpoint unique factors important to the public and expand natural resource plans to be alignment with these ideals.

BLM employees will hopefully be more satisfied with the handling and analysis processes and, as a result, be more optimistic, rather than skeptical, regarding all the feedback received from the public. Likewise, the public will see how their comments actually impact land use plans, which plays a critical role in natural resource planning and and hopefully influence and encourage the public's continued participation in these natural resource decision-making processes in the future.

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