

**WHAT CITIZENS REALLY WANT OUT OF PUBLIC INVOLVEMENT:  
A SQUEAKY WHEEL SURVEY OF WATER QUALITY  
STAKEHOLDERS**

**David Hitoshi Sumi**

**2009**



**California State University, Sacramento**

**Center for Collaborative Policy**

Center for Collaborative Policy  
California State University, Sacramento  
815 S Street, 1<sup>st</sup> Floor  
Sacramento, CA 95811  
916.445.2079  
<http://www.csus.edu/ccp>

This report may be freely reproduced and distributed for non-commercial use provided it is not modified and provided that acknowledgment is given to the author and the Center for Collaborative Policy.

## FORWARD

When and how to involve the public in agency policy decisions has been an enduring question for public policy practitioners and researchers. The issue has stimulated an extensive literature in several academic fields inquiring into the theory, purposes, methods, obstacles, and evaluation of public participation. But there has been little in the way of quantitative research inquiring into what citizens seek from their involvement in agency decisions. This thesis reports on research that takes a step in that direction. The author, David Sumi, asks the question “what do citizens really want out of public involvement?”

The research grows out of a project the Center for Collaborative Policy carried out for the California State Water Resources Control Board (SWRCB) from April 2003 to April 2005. SWRCB commissioned the Center to conduct a needs assessment of outreach and public participation practice at the SWRCB and its nine Regional Water Quality Control Boards (RWQCB). The Center used an assessment design including quantitative and qualitative analysis drawing on data generated from review of documents, site visits and interviews, and staff and stakeholder surveys. The SWRCB used the assessment to make changes in its practices and to inform training for its staff and the staff of the RWQCBs.

Mr. Sumi used content analysis and multidimensional scaling to quantitatively analyze the survey data. His results are interesting and helpful to both public agency officials and scholars who are interested in what citizens want from public involvement. Of course the research is only suggestive because it looks at only one case. But it

suggests the opportunity for more research on other policy issues and offers guidance to public agencies seeking to create more robust practices of public participation.

Mr. Sumi completed this research for his thesis in the Master's degree program in Public Policy and Administration at California State University, Sacramento. While a student at Sacramento State, he also worked on the staff of the Center for Collaborative Policy. With partial support from the William and Flora Hewlett Foundation, the Center's Research Director, Dr. William Leach, assisted Mr. Sumi with his research design and analysis. Because the Center carried out the public involvement needs assessment and helped design the training that resulted, our interest in the findings of his research are more than academic. The Center's research program is designed to (a) generate candid evaluations of the Center's own collaborative policy practice, (b) promote critical reflection upon the promise and limitations of collaborative strategies more generally, and (c) build stronger ties between theory and practice in the fields of collaborative governance and deliberative democracy. However, the analysis and conclusions presented in this report are those of the author alone.

David E. Booher  
Senior Policy Advisor  
Center for Collaborative Policy

## ACKNOWLEDGMENTS

This thesis could not have been written without the early support of Dr. Bill Leach who helped me to find my research topic, guided me on my methodology and computer analysis, and painstakingly sat with me as we tested my content coding protocols to achieve intercoder reliability. I wish to express my sincerest gratitude to Dr. Ted Lascher and Dr. Mary Kirlin for their constructive advice and responsiveness and for all their time and patience serving as my thesis committee. I wish to give special thanks to Lisa Beutler. I can now appreciate her faithful, persistent prodding; it was always tempered by encouragement and support. Finally, I wish to thank Dr. Dorian Fougères, and all my colleagues at the Center for Collaborative Policy, for their invaluable moral support.

## TABLE OF CONTENTS

	Page
List of Tables .....	viii
List of Figures .....	ix
Chapter	
1. INTRODUCTION .....	1
Squeaky Wheels Get the Grease .....	1
Research Question .....	4
Thesis Outline .....	6
2. LITERATURE REVIEW .....	7
Importance of Topic.....	7
Stakeholder Theory.....	8
Public Policy Roots of Stakeholder Theory.....	8
Definition of a Stakeholder.....	9
Public Participation Literature.....	10
Trust in Government / Trust in Citizens .....	11
Squeaky Wheels Are Important .....	13
3. METHODOLOGY .....	16
Methodology Introduction .....	16
Data Source.....	17
Survey Methods .....	18
Survey Limitations.....	18
Units of Analysis: .....	20
Sample Size: .....	20
Content Analysis.....	21
Intercoder Reliability .....	22
Descriptive Statistics of 16 Aggregated Issue Variables .....	23
Multidimensional Scaling .....	25

4. ANALYSIS OF THE DATA, RESULTS, AND DISCUSSION .....	27
Descriptive Statistics.....	27
Multidimensional Scaling Maps (MDS).....	34
Summary .....	45
5. CONCLUSION.....	47
Overview:.....	47
The Passive Public Participant: “How Can I Be Better Served”?.....	47
The Active Public Participant: “How Can I Get Involved, Listen, and Be Heard?” .....	49
The Deliberative Democrat: “How Can I Become Part of a Fair, Representative, and Transparent Decision-Making Process?” .....	51
Suggestions for Further Research .....	53
Implications for Public Administration: What do squeaky wheel stakeholders really want out of public involvement? .....	54
Appendix A. Stakeholder Survey .....	56
Appendix B. Codeform.....	61
Appendix C. Codeform Guidelines.....	66
References.....	71

## LIST OF TABLES

	Page
1. Table 2.1: Public Empowerment Typology .....	12
2. Table 3.1: Summary of Data Sources. ....	17
3. Table 3.2: Code Form Categories for Content Analysis.....	22
4. Table 3.3: 16 Aggregated Variables .....	24
5. Table 4.1: Descriptive Statistics .....	28
6. Table 4.2: Detailed Frequency Analysis.....	29
7. Table 4.3: Pearson’s Bivariate Correlations Among Variables .....	32
8. Table 4.4: Eigenvalue Report .....	35
9. Table 4.5: Guidelines for MDS Stress and Goodness-of-fit.....	35
10. Table 4.6: Dimensions and Stress Values.....	35
11. Table 4.7: Interpretation of MDS Dimensions .....	39
12. Table 4.7: Interpretation of MDS Clusters .....	42
13. Table 4.8: Public Empowerment Typology with Clusters Stakeholder Typology ....	44

## LIST OF FIGURES

	Page
1. Figure 4.1: MDS Map of Dimensions 1 and 2.....	36
2. Figure 4.2: MDS Map of Dimensions 1 and 3.....	37
3. Figure 4.3: MDS Map of Dimensions 2 and 3.....	37
4. Figure 4.4: MDS Map Dimensions 1 and 2 Interpreted.....	40
5. Figure 4.5: MDS Map Dimensions 1 and 3 Interpreted.....	40
6. Figure 4.6: MDS 3-D Map with Interpreted Dimensions and Clusters .....	41
7. Figure 4.7: Squeaky Wheel Stakeholder Typology .....	45

## Chapter 1

### INTRODUCTION

This thesis attempts to make sense of the issues and attributes of public involvement processes that matter most to stakeholders. The word “stakeholder” has assumed a prominent place in public and nonprofit management theory and practice during the last 20 years, and especially in the last decade (Bryson, 2004). The term refers to persons, groups or organizations that must somehow be taken into account by leaders, managers, and frontline staff. The literature concurs on the need for stakeholder support to create winning coalitions, and to ensure the long-term viability of organizations, policies, plans, programs, and communities (Bryson, 2004; Leach, 2006). Yet, public involvement appears to be done less effectively than its importance warrants.

#### **Squeaky Wheels Get the Grease**

A familiar axiom in politics (and in life) is that one must complain loudly and often in order to receive attention. In his famous poem, American humorist Josh Billings described his frustration with being polite and yet not getting his way with authorities:

I hate to be a kicker [complainer],  
I always long for peace,  
But the wheel that does the squeaking,  
Is the one that gets the grease.

“The Kicker,” ca 1870 by Josh Billings (Shapiro, 2006)

The “reinventing government” movement in public administration reinforces the “squeaky wheel” concept by urging introduction of market forces into government enterprises and treating citizens as customers (Osborne & Gaebler, 1992, Osborne &

Hutchinson, 2004). The “new managerialism” themes of competition, “rightsizing” and customer control place a premium on administrative efficiency and responsiveness to customer signals. In the presence of market forces, it follows that the loudest signals ought then receive the greatest response; the equivalent of willingness to pay by the private consumer might translate into a willingness to participate by various segments of the public citizenry. If government is to adopt the ethic and model of competition, then stakeholders naturally do the same.

Indeed, the pluralist tradition of public policy emphasizes the roles of interest groups engaging in an adversarial process to control the political decision-making in society. The basic logic behind the stakeholder-centered model of representation is that having a moral or economic stake in the outcome of a public decision-making processes entitles each faction to a seat at the table (Leach, 2006). However, representativeness can be impaired by disparity in resources and competence of participants to participate effectively (Webler, 1995; Leach, 2006). Empirical evidence hints towards a Darwinian arms race for the ever louder “squeak”; opposing interest groups tend to escalate political pressure in response and in retaliation to each other, and the more uneven the pressure exerted between interest groups, the more likely that federal bureaucrats will alter the content of final policies to match the preferences of the dominant interests (Yackee & McKay, 2004).

Some critics contend that democracy has become an elite game that excludes meaningful involvement by the public (Innes and Booher, 2004). On the other hand, some political science theorists (Dahl, 1989) argue that representative government by

elites is appropriate and that direct participation is unworkable in the modern bureaucratic state (Innes & Booher 2004). The public has become increasingly cynical about the democratic process, seeing it as dominated by elites for elites, and largely unrelated to real public needs (Nye et al., 1997; Hibbing & Theiss-Morse, 2002). As a consequence, the public increasingly declines to become engaged, seeing most policy issues as something they cannot influence. Skepticism or antagonism may stem from a fear that a public agency will seek only to manipulate community opinions, concerns and judgment into a form of support for predetermined plans and policies. At the same time, public agencies may fear that an involvement process will be subverted by the limited agendas of narrow interest groups and will not reflect the diverse opinions of the general public the agency serves.

In response to the adversarial pluralist tradition, an alternative civic model, often called deliberative democracy, participatory democracy or civic engagement, focuses as much on the process as the results of policymaking. It usually involves an extensive outreach effort to include marginalized or isolated groups in decisions, and to document dissent, grounds for dissent, and future predictions of consequences of actions. Many practitioners of deliberative democracy attempt to be as neutral and open-ended as possible, inviting (or even randomly selecting) people who represent a wide range of views and providing them with balanced materials to guide their discussions.

If it is the squeaky wheel that receives the grease, if there is diversity among stakeholder interests, effort, and preferences, and if ensuring stakeholder support is important to good governance, then public administrators must be able to anticipate and

discern the different kinds of “squeaks” and signals that come from activist stakeholders. To the extent that they have little choice but to deal with activist stakeholders, there are practical benefits if public administrations can prepare and think strategically to meet stakeholder expectations.

### **Research Question**

This thesis asks a question of interest to academics and practitioners in the public administration community: “What do citizens really want out of public involvement?” The purpose of this study is to derive insights about how to improve public involvement in government planning and decision-making. I hypothesize that analysis of empirical data will show a typology of at least two types of stakeholders based on distinct bundles of public involvement preferences. In particular, I predict that there will be at least one type of public as “customer”, who emphasizes efficient and responsive provision of services and outcomes, and another type that is more closely associated with public as “citizen,” where deliberation and inclusiveness of the process are of relatively higher concern.

The findings of the study will help agencies prioritize their public involvement strategies to focus on those aspects that vocal stakeholders value most, thereby generating greater public buy-in while potentially averting adverse press or litigation. The analysis will be patterned after several studies of public participation with the United States Forest Service (Germain, Floyd, & Stehman, 2001; Tuler & Webler 1999; Schuett & Selin 2002; Schuett, Selin, & Carr, 2001).

By identifying and categorizing the major issues of concern that were expressed by a “squeaky wheel” subset of external water quality stakeholders, the methodology I am using is designed to develop a typology of stakeholders based on the issues that they focus on when describing their satisfaction or dissatisfaction with public involvement processes. Using an inductive research approach, the exploration of empirical data from a sample of anonymous online stakeholder surveys will better inform conventional wisdom by testing relationships between such values as customer service, technical competence, and deliberativeness.

As a proxy for the “squeaky wheel concept” – that is, the most vocal and active stakeholders – the first 100 completed surveys that had more than five codable responses were chosen for analysis. The data source is an online survey administered in 2003 by researchers at the Center for Collaborative Policy and the University of California, Davis, on behalf of California’s State Water Resources Control Board (SWRCB) as part of its public involvement needs assessment. The online survey was completed by 204 water board staff and 394 stakeholders (with separate surveys for staff and stakeholders). This thesis used data from the stakeholder survey but did not use data from the staff survey. Data for the thesis were derived from formal coding of the original stakeholder survey responses, followed by qualitative and quantitative analysis using content analysis and multidimensional scaling (MDS) map techniques (i.e. a way of spatially grouping different units of analysis in a multidimensional space).

**Thesis Outline**

This thesis will follow a typical academic format comprised of a five chapter examination of the subject matter. Chapter Two will be a literature review, introducing major theories on stakeholder theory. The methodology will be presented in the third chapter. This chapter will further explain the data source as well as the content analysis and quantitative methods employed. The fourth chapter will provide results of the data analysis. Finally, the conclusions and relevance of the study will be presented in Chapter Five.

## Chapter 2

### LITERATURE REVIEW

#### **Importance of Topic**

Stakeholder analyses are arguably more important than ever. Choose any public problem – natural resources management, economic development, terrorism, global warming – and it becomes clear that the problem encompasses or affects numerous people, groups, and organizations (Bryson, 2004). Usually no one individual is ever fully in charge, and no one organization can completely address the problem. Instead, many individuals, groups, and organizations are involved, or affected, or have some partial responsibility to act.

The stakeholder concept has a long history and broad applicability. There have been over 100 articles and numerous books written on stakeholder theory, including an entire issue of the *Academy of Management Journal* (v 42 n 5, 1999). Stakeholder approaches and concepts have been articulated within business management literature from the early 1930s. Recent scholarly works on the topic of stakeholder theory include Donaldson and Preston (1995) and Mitchell, Agle, and Wood (1997), Friedman and Miles (2002) and Phillips (2003).

Ironically, while the term has become commonplace and the premise that key stakeholders must be taken seriously is now widely accepted, there is remarkably little in the public and nonprofit literatures on exactly how to systematically identify and analyze stakeholders, particularly with regards to public involvement preferences. This paper attempts to fill that gap in the literature.

## **Stakeholder Theory**

The growing popularity of stakeholder analysis reflects an increasing recognition of how the characteristics of stakeholders influence decision-making processes. This concern is rooted in management theory. In management theory, stakeholder analysis is used to gain knowledge about relevant actors of a policy or program so as to understand their behavior, intentions, interrelations, agendas, interests, and the influence or resources they could bring to bear on decision-making processes (Bryson, 2004). Ideally, managers are able to use this knowledge of their stakeholders to develop strategies for managing these stakeholders, to facilitate the implementation of specific decisions or organizational objectives, or to understand the policy context and assess the feasibility of future policy directions.

## **Public Policy Roots of Stakeholder Theory**

While the relationship between interest groups and stakeholders is not entirely clear, policy analysts have long been aware of the importance of interest groups in the policy process. In 1959, Lindblom outlined an incrementalist model to explain the policy-making process, characterized by “negotiation, bargaining and adjustment between different interest groups.” Gergen (1968) recognized the role of actors as potential “leverage points” in the policy formulation process. In 1975, Hall developed a model of policy agenda-setting that included the concept of levels of support, along with legitimacy and feasibility (Brugha & Varvasovszky, 2000). Kingdon (1984) referred to visible and hidden actors who can actively promote policy options or solutions in the policy stream.

## **Definition of a Stakeholder**

Theorists struggle to define who and what constitutes a stakeholder. A central element of this definition is the relationship between the parties, and role of management in negotiating parties. Crombie and Driscoll (2001) found a strong correlation between organizational and stakeholder power and the presence of stakeholder legitimacy. Greater legitimacy leads to increased consideration of stakeholder concerns by management. Another business definition of stakeholders is “all those people who have an interest in the project, either as direct beneficiaries or as those who are responsible for funding and implementing the project” (Cracknell, 2000, p. 317).

The most cited definition of a stakeholder in business literature comes from Freeman, who wrote that a stakeholder is “any group or individual who is affected by or can affect the achievement of an organization’s objectives (Freeman, 1984, Bryson, 2004). Freeman also defined a stakeholder as “any identifiable group or individual on which the organization is dependent for its continued survival” (Freeman and Reed, 1983). In the management literature, Freeman’s definition of stakeholder has been expanded to include groups that have interests in the corporation, regardless of the corporation’s interest in them (Preston and Sapienza, 1990).

While specific stakeholder definitions vary, the literature indicates a common theme in the need for stakeholder support to create and sustain winning coalitions (Riker 1986, Baumgartner & Jones 1993) and to ensure long-term viability of organizations (Eden & Ackermann 1998,; Bryson, Gibbons & Shaye 2000, Abramson & Kamensky,

2001), as well as policies, plans, and programs (Bryson & Crosby 1992, Baumgartner & Jones, 1993, Roberts & King, 1996, Jacobs & Shapiro, 2000)

### **Public Participation Literature**

If stakeholders are basic elements that determine the legitimacy, power, urgency, and – ultimately – the success or failure of government policies, then public participation might be considered as the means of harvesting a precious resource. However, public involvement has many gaps the in literature.

The public administration literature is ambivalent about the idea of participation (King & Stivers, 1998). Some theorists (Dahl, 1989) have argued that representation by elites is inevitable in large, modern, pluralist democracies and that public participation in decision making will remain limited. The “new public management” (NPM) reform movement from the 1980’s to the early 2000’s emphasizes running government like a business, relying heavily on the market-based principles of “reinventing government” (Osborne & Gaebler, 1992). NPM has sought management reform in government not only through introduction of new techniques, but also through a new set of values largely drawn from the private sector. The consistent recommendation of NPM is to let the market guide not only individual choices but ultimately the direction of society as a whole (Denhardt & Denhardt, 2001).

A debate has emerged on whether to consider citizens to be customers or owners of government. The NPM customer model implies that the citizen is a passive recipient of services, and the role of the public manager is to provide for needs and wants

efficiently. The owner model of citizenship resembles the corporate shareholder where citizens set some direction, although not necessarily in a hands-on way. Other scholars argue that collaborative participation, based upon authentic dialogue, networks, and institutional capacity, can solve complex, contentious problems such as budget decision making and create an improved climate for future action when bitter disputes divide a community (Innes & Booher, 2004).

Some scholars say that the NPM movement has peaked and is now in decline (Hughes, 2003). In the public administration debate about NPM, the concept of “digital era governance” is suggested to have replaced NPM since around 2000-2005 (Dunleavy, Margetts, et al, 2006).

### **Trust in Government / Trust in Citizens**

Public administrators and scholars are at best ambivalent about participation, with many finding it problematic (Kettering Foundation, 1989). One of the biggest issues in participation is information, who controls it, and whether it is trustworthy (Hanna, 2000). Trust in citizens is related to citizens’ trust in government, which has become a fundamental concern in public administration communities because it recognizes a trend of decline in trust over the past several decades (Hibbing & Theiss-Morse, 2002; Braithwaite & Levi, 1998; Nye, Zelikow, & King, 1997). Because trust is mutual and reciprocal, a theory of improving citizens’ trust in government is not complete without an explanation of administrators’ trust in citizens. Citizens will not trust public administrators if they believe that public officials do not trust them.

Public administrators' trust in citizens may explain the extent to which administrators feel comfortable sharing power with citizens (Yang, 2005). Citizen participation efforts tend to vary in the amount of power given to citizens, resulting in a ladder of participation (Arnstein, 1969). In her classic typology, Arnstein graded nine levels of participation from "manipulation" (least citizen participation) to "citizen control" (most citizen participation). Arnstein defined citizen participation as "the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future". More recently, Chase, Schusler, & Decker (2000) identify five participation approaches: the expert authority approach, the passive-receptive approach, the inquisitive approach, the transaction approach, and comanagement. Below is a summary of typologies of public empowerment (adapted from Germain et al., 2001, 115):

Table 2.1: Public Empowerment Typology

More Empowerment ↑	Typology	Characteristics
	1. <b>Citizen power</b>	Citizens have total control
	2. <b>Delegated power</b>	Citizens given dominant control over decision-making by authorities; also accountable for decisions
	3. <b>Collaborative decision-making</b>	Citizen and agency become partners; public begins to have decision-making clout; can negotiate and engage in trade-offs with power holders
	4. <b>Consultation</b>	Agency retains decision-making authority; participation in the form of public hearings; public role is review and comment
	5. <b>Manipulation</b>	Illusory participation in the form of rubber-stamp advisory, express purpose is to engineer support or educate
	6. <b>Informing</b>	One-way flow of information; no public avenue for feedback or negotiation

### **Squeaky Wheels Are Important**

To further illustrate the “squeaky wheel” concept, although most citizens rate local government service as satisfactory (Miller & Miller, 1991), “much of what administrators hear may be complaints rather than praise because citizens and the media appear more likely to criticize than to complement public service” (Melkers & Thomas, 1998, 328). Instead of being energized by the criticism, administrators tend to feel alienated, ineffective, cynical, and even frightened (King and Stivers, 1998). Yet, even the most frightening complaints that administrators hear may be only the tip of the iceberg.

As another saying goes, “a few bad apples can spoil the bunch.” The public relations and marketing literature is replete with admonitions that bad word of mouth is the one factor that can undo careful marketing efforts and years’ worth of building goodwill with customers and community. The 2007 Retail Customer Dissatisfaction Study conducted by the University of Pennsylvania found that “...more than 50% of Americans report a negative shopping experience they've heard about from a friend or family member will prevent them from shopping that particular store altogether” (Casinger, 2006). This is dangerous because bad word of mouth not only ruins past public relations efforts but future efforts as well. Customers who have a problem are five times more likely to tell their friends about it rather than contacting the store itself. Customers who have a bad shopping experience will tell four people on average (Blank, 2007).

Comparisons between private sector and public sector experiences are imperfect, since parties affected by government do not have same the choice to shop or not shop as customers in the marketplace. When people act as customers, they tend to take one approach; when they act as citizens, they take another. Customers focus on their own limited desires and how to satisfy them with the least amount of effort. Citizens, on the other hand, may consider the common good and long-term consequences to the community.

However, the private/public sector comparison is applicable in the sense that, like businesses, public agencies do face consequences for building a bad reputation and giving grief to people, whether as customers or as citizens. Agencies can be embarrassed by the news media, pressured by elected officials who are in turn being lobbied by activist constituents, and sued by adversarial stakeholders. Administrators spend considerable effort fending off turf challenges from rival agencies, coping with criticism from the media and activist groups, and trying to win or retain executive and legislative support. Moreover, whereas business managers are judged and rewarded on the basis of their firm's earnings, the government managers are judged and rewarded (or punished) on the basis of the appearance of success, where success can be vaguely interpreted as reputation and absence of criticism (Wilson, 2000). It is my hope that the findings of this thesis will give public administrators cause for hope rather than fear, and provide them with a theoretical framework to add to their toolkit. If public administrators are able to better design their public involvement strategies to avoid cascading failures caused by bad word of mouth, then they may go a long way to improving their policy outcomes as

well. While the literature does not lead anyone to expect the public to affirmatively express their satisfaction anytime soon, it does raise alarm to the paramount importance of avoiding the wrath of “bad apples” and “squeaky wheels”.

## Chapter 3

### METHODOLOGY

#### **Methodology Introduction**

This thesis attempts to make sense of the bundles of issues of public involvement processes that matter most to stakeholders. This methodology is designed to develop a typology of stakeholders based upon the issues that they focus on when describing their satisfaction or dissatisfaction with public involvement processes. Using an inductive research approach, it is hoped that exploration of empirical data from a sample of anonymous online stakeholder surveys will better inform conventional wisdom by revealing relationships (or lack thereof) between such values as customer service, technical competence, and deliberativeness. Because this thesis is primarily interested in the most vocal and active contingent stakeholders (i.e., the “squeaky wheel” sample), I chose to analyze the first 100 completed stakeholder surveys with more than five codable responses as a proxy for the “squeaky wheel” concept.

The data source is an online survey administered by researchers at the Center for Collaborative Policy and the University of California, Davis on behalf of California’s State Water Resources Control Board (SWRCB) as part of its public involvement needs assessment. The online survey was completed by 204 water board staff and 394 stakeholders (with separate surveys for staff and stakeholders). The Center for Collaborative Policy’s original report to the SWRCB was based on a qualitative analysis of the data, and focused on lessons specific to SWRCB and its effort to develop a training manual and course for agency staff.

The data to be analyzed in this thesis were derived from formal coding of the Center for Collaborative Policy's original stakeholder survey data, followed by qualitative and quantitative analysis using content analysis and multidimensional scaling techniques. This thesis did not use data from the staff survey. The purpose of this study is to derive insights about how to improve public involvement in government planning and decision-making.

**Data Source: Center for Collaborative Policy's 2003 Needs Assessment Report of the State Water Boards**

In August of 2003, the State Water Resources Control Board (SWRCB) commissioned the Center for Collaborative Policy to conduct a needs assessment of outreach and public practice at the SWRCB and its nine Regional Water Quality Control Boards (RWQCBs). The final report was released on April 13, 2005. The Center for Collaborative Policy developed an assessment design that used both qualitative and quantitative analysis of data. Staff and stakeholder surveys were conducted to complement site visits. The text of the stakeholder survey is attached as Appendix A. Survey participation was anonymous and open to anyone with an Internet connection who wished to submit a response. The survey respondents identified themselves according to stakeholder type. The table below summarizes the data source used for this thesis, and further explanation is given in the rest of this chapter.

**Table 3.1: Summary of Data Sources**

<b>8,529</b>	People on mailing lists (sampling frame)
<b>3,114</b>	People surveyed via Internet (1,970 with known email addresses plus random sample of 20% without)

<b>394</b>	Responses (12.7% response rate)
<b>100</b>	Coded surveys (content analysis of 1st 100 responses)
<b>74%</b>	Intercoder reliability rate (where both coders were in agreement 90 out of 109 (83%) times and “incorrect” 10 times out of 109 (9%).

### **Survey Methods**

For the stakeholder survey, the commissioned research team from the Center for Collaborative Policy and UC Davis contacted a sample of stakeholders by e-mail or traditional mail. Stakeholders were invited to either complete the survey online, or to request a paper copy of the survey via traditional mail. The population of invited stakeholders had been identified through existing mailing lists that have been compiled by the SWRCB and various RWQCBs for various purposes, including mailing lists for specific programs or projects as well as general agenda mailing lists. These lists included 8,529 individual names. Invitations to participate in the survey were e-mailed to all 1,970 of the individuals on the lists who had valid e-mail addresses. Of the remaining 6,559, a random sample of 20% was selected to receive an invitation letter addressed to their mailing address. In all, 3,114 invitations were distributed statewide by mail and e-mail. Of these, 394 surveys were completed online or submitted by mail, yielding a response rate of 12.7%.

### **Survey Limitations**

Considering three limitations of the survey methods—likely depressed response rates among stakeholders who were personally interviewed for the original project, the

modest overall response rates, and the online survey administration—caution must be exercised when interpreting survey results. Because staff and stakeholders who were personally interviewed for this study likely did not also participate in the survey, survey results may not reflect this portion of the stakeholder population (which included all sample of stakeholders with ongoing or deeply invested relationships with the Water Boards). Because the surveys were administered online, and because a hard copy was administered to anyone upon request, it is likely that some of the completed surveys were submitted by individuals other than those who were initially invited to participate.

The reported response rates should be interpreted as upper ceilings on the true response rate, and it should be presumed that the results likely include overrepresentation of some stakeholders who may have encouraged their friends and associates to participate. It is also conceivable, though less likely, that one or more respondents submitted multiple surveys to strategically influence the overall findings.

In light of the modest response rates, online administration, and potential for in-person interviewees self-selecting themselves out of survey participation, the survey results and the quantitative and qualitative findings based on those results, cannot be interpreted as representing the view of the Water Board stakeholders as a whole. The survey data reflect the opinions of only stakeholders who chose to participate.

It must also be acknowledged that the online survey was not designed for the purpose of this study. Many of the survey questions were closed-ended in format with standard options of “Agree”, “Neutral/No Opinion,” and “Disagree,” with an option for open-ended comments. Ideally, survey questions would have been designed to ask more

open-ended questions or present attitudinal statements with a richer measure for agreement or disagreement on a 5-point likert scale. Data for this thesis were derived from the available open-ended comments that were available in the original dataset.

**Unit of Analysis:**

The unit of analysis was the individual survey respondent (i.e. all written comments for all questions answered by each survey respondent). I defined the unit of text to be coded as a “codable statement” as any phrase, clause, sentence, or passage that conveys a meaning very similar to the meaning of a variable (line) in the code form. A single sentence may contain two or more codable statements. The text that makes up a codable statement may overlap with other codable statements. However, each codable statement was coded only once on the code form. The code form had 111 lines (see Appendix B).

The data set is based on frequencies, that is, the number of times each line is coded in each testimony. Therefore, it is ratio-level numerical data.

**Sample Size:**

Since the online survey data sample was not randomly controlled and the premise of the study is to look at a “squeaky wheel” sample, this study looks at the (chronological) first 100 stakeholders ( $n = 100$ ) to submit their surveys as the most motivated. To improve the quality of sub-sample, a sampling rule required at least 5 codable statements that met the code form guidelines (see Appendix C). Surveys were coded in chronological order until a sample of 100 surveys met the “5+” criterion.

## **Content Analysis**

With hundreds of completed surveys, a method was needed to convert qualitative text into quantifiable data that can be analyzed for general principles. Toward this end, I decided to use an adapted grounded theory approach (Glaser & Strauss 1967). Grounded theory is a qualitative research tool growing in acceptance. Moore (1996) used this approach in her study of participants' definitions of successful outcomes in participatory decision-making, and Tuler and Webler (1998) used it in their categorization of principles that participants in a forest policymaking process used to evaluate public participation. In grounded theory, important concepts emerge inductively during the data analysis, rather than in advance of the investigation. Data are categorized with respect to relevant similar characteristics in a process called coding. At first, a relatively large number of characteristics are developed. Through iteration, these categories are grouped into more abstract categories of conceptual relevance. Eventually, it is hoped to be able to generalize patterns of association (or typologies) using computer-assisted multidimensional scaling techniques on the categorized data points.

I then organized the code form into ten broad categories, several of which were adapted from William Leach (2006): Categories were then subdivided into a total 111 lines on the code form. Subdividing into numerous specific subcategories allowed for greater precision when coding survey responses and helped to prevent degradation of data for subsequent analysis.

**Table 3.2: Code Form Categories for Content Analysis**

<b>Category</b>	<b>Description</b>
<b>Competency</b>	<i>Competency refers to the demonstrated ability of agency staff to efficiently produce and convey accurate, credible, and reliable information and to provide services as required to meet dynamic circumstances.</i>
<b>Customer Service</b>	<i>Customer service refers to the degree of assistance and courtesy granted to parties who interact with the agency.</i>
<b>Deliberativeness</b>	<i>A deliberative process allows participants to brainstorm, critically examine each other's arguments, identify common interests, and build a base of shared knowledge and social capital.</i>
<b>Empowerment</b>	<i>An empowered process enables participants to influence policy outcomes.</i>
<b>Impartiality</b>	<i>An impartial process treats all parties equally.</i>
<b>Inclusiveness</b>	<i>An inclusive process places few formal restrictions on participation.</i>
<b>Lawfulness</b>	<i>A lawful process upholds all existing statutes and regulations</i>
<b>Representativeness</b>	<i>A representative process ensures that the interests of all affected individuals are effectively advocated, either in person or through proxies.</i>
<b>Satisfactory Outcomes</b>	<i>Satisfactory Outcomes refers to the respondent's perception of how well the public participation process resulted in favorable policies, decisions, or actions.</i>
<b>Transparency</b>	<i>A transparent process governs itself through clear and public rules.</i>

### **Intercoder Reliability**

Data collection and analysis in a grounded theory approach requires significant judgment on the part of the researcher. Theoretical sensitivity refers to the ability of researchers to remain true to meanings that emerge from the data (Glaser, 1992).

Whenever more than one person is involved in coding, individual differences in judgment can introduce errors. To guard against bias, Dr. William Leach, Research Director for the Center for Collaborative Policy, and I developed coding guidelines with both general and

specific rules and then tested for intercoder reliability. Dr. Leach and I tested the guidelines against an identical set of 50 surveys using our code form and guidelines, and then compared the two sets of coded results. It was important to ensure that there is a reasonably high likelihood that the same text would be coded in the same way by both of us. After several revisions of the code form, an intercoder reliability rate of 74 percent was achieved, whereby both coders were in agreement 90 out of 109 (83%) times and in disagreement 10 times out of 109 (9%).

### **Descriptive Statistics of 16 Aggregated Issue Variables**

I entered frequency data into a Microsoft Excel spreadsheet and then imported into SPSS software for statistical analysis. SPSS was used to produce descriptive statistics. By comparing the means of the variables, it is possible to discern which issues were raised most often among survey respondents, which in turn suggests that those issues are more important. To simplify analysis with a manageable number of variables, I used SPSS to recode the 111 data subcategory variables from the codeform into the following 16 aggregated variables:

Table 3.3: 16 Aggregated Variables

<p><b><u>Characteristics of the Public Involvement Process</u></b></p> <ol style="list-style-type: none"> <li>1. Impartiality</li> <li>2. Transparency</li> <li>3. Inclusiveness</li> <li>4. Accessibility</li> <li>5. Representativeness</li> <li>6. Deliberativeness</li> <li>7. Lawfulness</li> <li>8. Empowerment</li> </ol> <p><b><u>Supporting Actions by the Lead Agency</u></b></p> <ol style="list-style-type: none"> <li>9. Funding for public involvement</li> <li>10. Proactive outreach and education</li> <li>11. Customer service</li> </ol> <p><b><u>Traits of Lead Agency Staff</u></b></p> <ol style="list-style-type: none"> <li>12. Communication skills (of staff)</li> <li>13. Trustworthiness</li> <li>14. Competence</li> </ol> <p><b><u>Policy Implementation and Outcomes</u></b></p> <ol style="list-style-type: none"> <li>15. Appropriate level of regulatory enforcement</li> <li>16. Favorable or fair outcomes</li> </ol>
---

These aggregated “issue” variables were then recoded to evaluate the following information:

- The average number of times each stakeholder discussed the issue
- The average proportion of each stakeholder’s comments
- The percentage of stakeholders who mention the issue at least once
- The percentage of stakeholders who devote at least 20% of their open-ended survey comments to the issue

I ran bivariate correlations for the variables using the Pearson product moment correlation to determine which pairs of variables had statistically significant

relationships. In addition to the strength of a relationship, I was also interested in the direction of each association.

### **Multidimensional Scaling**

As a final step to establish a typology of stakeholder by public involvement preferences, I attempted a multidimensional scaling (MDS) of the 16 aggregated issue variables to visually group the different variables on a spatial grid based on survey respondent preferences. For the MDS analysis, variables were reconstructed as “Percent of stakeholders who mention the issue at least once.” NCSS software was used to run the application technique.

Multidimensional scaling (MDS) is a set of exploratory data analysis techniques used to identify unrecognized dimensions affecting behavior. MDS reduces large amounts of data to relatively simple, easy-to-visualize structures that reveal important relationships in an economical way. MDS is used to provide general solutions to many problems in perception, emotion, and cognition, where the stimuli are too complex to be quantified by other means (Mugavin, 2008). The more similarly the objectives are perceived, the nearer they are positioned in the spatial map (Weinberg, 1991). MDS is used in a wide variety of fields, such as biology, child development, cognitive science, information science, criminology, economics, engineering, physics, psychophysiology, and ecology (Lattin, Carroll, & Green, 2003, Mugavin 2008).

Whereas other techniques (such as factor analysis, discriminant analysis, and conjoint analysis) obtain underlying dimensions from responses to product attributes identified by the *researcher*, MDS has the advantage of obtaining the underlying

dimensions from judgments from *survey respondents* about the similarity of products (Mugavin, 2008). MDS has been applied by sociologists to examine the organization and structure of groups based on member perceptions (Lively & Heise, 2004), by anthropologists to compare different cultural groups (Harman, 2001), by economists to investigate consumer reactions to products (DeSarbo, Kim, Choi, & Spaulding, 2002), and by education researchers to study intelligence (Cohen, Fiorello, & Farley, 2006).

In the next Chapter, I will interpret the results of my quantitative analyses on the 16 aggregated issue variables derived from the survey data. By assigning conceptual labels for the different axes (i.e. dimensions) in the MDS perceptual map and developing theoretical explanations for the dimensions and the variable groupings, I will have an empirical basis for a typology of stakeholders, based on what they say they really want out of public involvement.

## Chapter 4

### ANALYSIS OF THE DATA, RESULTS, AND DISCUSSION

The purpose of this Chapter is to report the results of my quantitative analyses and to interpret the findings. Included in this chapter are descriptive statistics, bivariate correlations, and the multidimensional scaling (MDS) perceptual maps. In the larger view of this thesis, I examine empirical evidence of what water quality stakeholders say matters to them in public participation processes and test a hypothesis that at least two types of stakeholder typologies will manifest themselves based upon grouping of comments. In this data analysis, I am looking for patterns of how often items were mentioned by survey respondents and a framework to interpret the patterns.

#### **Descriptive Statistics**

The purpose of this thesis is to enhance understanding of stakeholder attitudes toward aspects of public participation programs. To understand the dataset, we begin by describing it. Descriptive statistics are used as a bridge between measurement and understanding. Typically, the data are reduced to a few descriptive summaries such as the mean and standard deviation or correlation to present data in a clear and accessible way.

Descriptive statistics are shown in Table 4.1 below, showing the mean, standard deviation, minimum and maximum of the number of times (i.e. frequencies) each aggregated variable was coded in remarks by individual respondents.

Table 4.1: Descriptive Statistics (N= 100)

	Mean	Standard Deviation	Minimum	Maximum
<b>Customer Service</b>	1.51	1.57	0	7
<b>Proactive Outreach and Education</b>	1.38	1.32	0	8
<b>Accessibility</b>	1.25	1.27	0	7
<b>Deliberativeness</b>	1.15	1.83	0	12
<b>Representativeness</b>	1.12	1.43	0	7
<b>Communications Skills (of staff)</b>	1.07	1.20	0	5
<b>Empowerment of Stakeholders</b>	0.95	1.35	0	8
<b>Competence</b>	0.91	1.45	0	7
<b>Funding for Public Involvement</b>	0.44	0.89	0	4
<b>Impartiality</b>	0.41	1.04	0	7
<b>Favorable or Fair Outcomes</b>	0.4	0.77	0	3
<b>Trustworthiness</b>	0.33	0.62	0	2
<b>Appropriate Enforcement of Regulations</b>	0.29	0.67	0	4
<b>Inclusiveness</b>	0.16	0.55	0	4
<b>Transparency</b>	0.08	0.37	0	3
<b>Lawfulness</b>	0.05	0.26	0	2

Beyond the usual descriptive statistics, a more helpful way to look at the frequency data is to describe them in ways that answer questions about what is important. This study is concerned about what “squeaky wheel” stakeholders say matters to them. In finding out what really matters, it helps to measure both breadth and intensity of issues. Table 4.2 recasts the frequency data using the following framework: “Overall intensity of concern of each issue”; “Overall intensity, controlling for loquaciousness”; “Breadth of concern”; and “Breadth of intensity, controlling for loquaciousness.”

Table 4.2: Detailed Frequency Analysis

	Average number of times each stakeholder discussed the issue	Average proportion of each stakeholder's comments	Percent of stakeholders who mention the issue at least once	Percent who devote $\geq 20\%$ of their comments to the issue
	<i>"Overall intensity of concern for each issue"</i>	<i>"Overall intensity, controlling for loquaciousness"</i>	<i>"Breadth of concern"</i>	<i>"Breadth of intensity, controlling for loquaciousness"</i>
Customer service	1.51	13.8%	64	35
Proactive outreach and education	1.38	13.7%	69	34
Accessibility	1.25	13.2%	70	28
Deliberativeness	1.15	8.5%	55	18
Representativeness	1.12	9.7%	51	26
Communication skills (of staff)	1.07	10.1%	58	25
Empowerment of stakeholders	0.95	7.3%	55	10
Competence (of staff)	0.91	8.1%	43	18
Funding for public involvement	0.44	3.8%	26	9
Impartiality	0.41	3.2%	21	6
Favorable or fair outcomes	0.40	3.1%	25	4
Trustworthiness	0.33	2.9%	25	5
Appropriate enforcement of reg's	0.29	2.4%	20	2
Inclusiveness	0.16	1.2%	11	2
Transparency	0.08	0.5%	6	0
Lawfulness	0.05	0.3%	4	0

Descriptive statistics for the aggregate variables (see Table 4.2) suggest that “competence” and “customer service” are two to 30 times as important as other issues, based on the number of times issues were coded in survey responses. Almost two-thirds (64 percent) of the sample mentioned customer service at least once, and of these, more than one-third (35 percent) devoted at least 20 percent of their total comments on the issue. A majority of stakeholders mentioned customer service, outreach, and education.

The descriptive statistics also suggest salience for democratic principles of deliberativeness, representativeness, access, and empowerment. A majority of

stakeholders gave comments that were coded for democracy-related variables, and those who mentioned representativeness devoted 26% of their comments to the subject.

Relatively few stakeholders (less than 25 percent) brought up impartiality, favorable outcomes, transparency, and trustworthiness as issues of concern. There are several possible explanations. The Water Boards may have already addressed these areas in their normal operations to the extent that stakeholders don't notice them (for kudos or complaint). If survey respondents did not associate these attributes with public involvement programs, they may not have thought to make comments about them even if it they felt they were important if asked. It is also possible that the water quality stakeholders in the sample simply did not care about them compared to the areas that commented about more often.

A clear message from the frequency data is that while many survey respondents feel strongly about the importance of customer service and competence, others emphasize deliberative democratic aspects, and many care about both. By comparison, few squeaky wheel stakeholders raised process concerns about fairness and transparency.

Descriptive statistics are helpful in showing the relative magnitude of different variables in the dataset, but they cannot show how items fit together or "what goes with what." To address that question, I turned next to bivariate correlations.

### **Bivariate Correlations**

Correlation analysis helps to determine both the nature and the strength of a relationship between two variables. The relationship between two random variables is known as a bivariate relationship. A common measure of correlation is Pearson's

coefficient of correlation. The correlation coefficient (symbolized as “ $r$ ”) can have a value between -1 and 1. The greater the absolute value of  $r$ , the stronger the linear, “tit-for-tat” association between the two variables and the more accurately one variable can be predicted from knowledge of the other variable. A correlation of 1 or -1 means that the two variables are perfectly correlated, meaning that the values of one variable can be predicted from the values of another variable with perfect accuracy. At the other extreme, an  $r$  value of 0 implies that there is no special relationship between the two variables. A positive correlation means that relatively high scores on one variable are paired with relatively high scores on the other variable, and low scores are paired with relatively low scores. On the other hand, a negative correlation means that relatively high scores on one variable are paired with relatively low scores on the other variable.

Table 4.3 shows the bivariate correlations among the 16 variables.

Table 4.3: Pearson's Bivariate Correlations Among Variables (N=100)

	Access- ibility	Comm- unication	Compet- ency	Customer Service	Deliber- ativeness	Empower- ment	Enforce- ment	Impart- iality	Inclusi- veness	Lawful- ness	Outcomes	Outreach	Public Funding	Repres- entative- ness	Trans- parency	Trust
Accessibility	1 (0.000)	-0.027 0.793	-0.004 0.965	0.145 0.149	0.022 0.829	0.022 0.829	-0.055 0.590	0.177 0.078	0.091 0.370	0.022 0.826	-0.076 0.455	-0.109 0.282	0.040 0.694	0.057 0.575	-0.018 0.856	0.126 0.212
Communi- cation	-0.027 (0.793)	1 (0.000)	0.166 (0.098)	0.037 (0.714)	0.004 (0.968)	0.086 (0.398)	0.071 (0.483)	-0.059 (0.562)	-0.025 (0.808)	0.070 (0.487)	-0.070 (0.488)	0.131 (0.195)	0.135 (0.181)	-0.105 (0.300)	-0.041 (0.686)	0.117 0.246
Competency	-0.004 (0.965)	0.166 (0.098)	1 (0.000)	-0.064 (0.527)	0.136 (0.177)	-0.026 (0.794)	0.071 (0.485)	-0.001 (0.988)	-0.112 (0.269)	0.029 (0.776)	-0.082 (0.419)	-0.029 (0.773)	-0.008 (0.935)	-0.038 (0.711)	0.036 (0.724)	-0.035 (0.730)
Customer Service	0.145 (0.149)	0.037 (0.714)	-0.064 (0.527)	1 (0.000)	0.075 (0.456)	0.034 (0.741)	-0.042 (0.681)	0.080 (0.430)	-0.003 (0.979)	0.047 (0.644)	0.000 (1.000)	-0.007 (0.943)	0.017 (0.866)	-0.027 (0.792)	0.102* (0.314)	0.096 (0.341)
Deliberative- ness	0.022 (0.829)	0.004 (0.968)	0.136 (0.177)	0.075 (0.456)	1 (0.000)	0.313** (0.002)	0.201* (0.045)	0.121 (0.231)	0.190 (0.059)	0.082 (0.417)	0.104 (0.301)	0.002 (0.983)	-0.060 (0.556)	0.078 (0.438)	0.229* (0.022)	0.151 (0.134)
Empowerment	0.022 (0.829)	0.086 (0.398)	-0.026 (0.794)	0.034 (0.741)	0.313** (0.002)	1 (0.000)	0.201* (0.045)	0.170 (0.090)	0.061 (0.546)	0.185 (0.066)	0.290** (0.003)	-0.041 (0.683)	0.215* (0.031)	0.078 (0.438)	0.229 (0.022)	0.151 (0.134)
Enforcement	-0.055 (0.590)	0.071 (0.483)	0.071 (0.485)	-0.042 (0.681)	0.201* (0.045)	0.201* (0.045)	1 (0.000)	0.233* (0.020)	-0.016 (0.875)	0.026 (0.801)	0.231* (0.021)	0.065 (0.521)	0.046 (0.652)	0.190 (0.058)	-0.126 (0.210)	0.000 (1.000)
Impartiality	0.177 (0.078)	-0.059 (0.562)	-0.001 (0.988)	0.080 (0.430)	0.121 (0.231)	0.170 (0.090)	0.233* (0.020)	1 (0.000)	0.133 (0.188)	0.020 (0.843)	0.269** (0.007)	0.027 (0.789)	-0.082 (0.419)	0.112 (0.265)	0.387** (0.000)	-0.071 (0.483)
Inclusiveness	0.091 (0.370)	-0.025 (0.808)	-0.112 (0.269)	-0.003 (0.979)	0.190 (0.059)	0.061 (0.546)	-0.016 (0.875)	0.133 (0.188)	1 (0.000)	0.254 (0.011)	0.092 (0.361)	0.097 (0.335)	0.010 (0.920)	0.217* (0.030)	0.046 (0.651)	0.018 (0.855)
Lawfulness	0.022 (0.826)	0.070 (0.487)	0.029 (0.776)	0.047 (0.644)	0.082 (0.417)	0.185 (0.066)	0.026 (0.801)	0.020 (0.843)	0.254 (0.011)	1 (0.000)	0.118 (0.243)	-0.084 (0.407)	-0.121 (0.230)	-0.004 (0.968)	-0.052 (0.610)	0.000 (1.000)
Outcome	-0.076 (0.455)	-0.070 (0.488)	-0.082 (0.419)	0.000 (1.000)	0.104 (0.301)	0.290** (0.003)	0.231* (0.021)	0.269** (0.007)	0.092 (0.361)	0.118 (0.243)	1 (0.000)	0.087 (0.387)	0.290** (0.003)	0.058 (0.568)	0.049 (0.631)	0.093 (0.356)
Outreach	-0.109 (0.282)	0.131 (0.195)	-0.029 (0.773)	-0.007 (0.943)	0.002 (0.983)	-0.041 (0.683)	0.065 (0.521)	0.027 (0.789)	0.097 (0.335)	-0.084 (0.407)	0.087 (0.387)	1 (0.000)	0.200* (0.046)	0.078 (0.439)	0.078 (0.439)	-0.112 (0.266)
Public Funding	0.040 (0.694)	0.135 (0.181)	-0.008 (0.935)	0.017 (0.866)	-0.060 (0.556)	0.215* (0.031)	0.046 (0.652)	-0.082 (0.419)	0.010 (0.920)	-0.121 (0.230)	0.290** (0.003)	0.200* (0.046)	1 (0.000)	-0.103 (0.308)	-0.054 (0.595)	0.342** (0.000)
Represent- ativeness	0.057 (0.575)	-0.105 (0.300)	-0.038 (0.711)	-0.027 (0.792)	0.078 (0.438)	0.078 (0.438)	0.190 (0.058)	0.112 (0.265)	0.217* (0.030)	-0.004 (0.968)	0.058 (0.568)	0.078 (0.439)	-0.103 (0.308)	1 (0.000)	0.163 (0.104)	-0.035 (0.732)
Transparency	-0.018 (0.856)	-0.041 (0.686)	0.036 (0.724)	0.102 (0.314)	0.229* (0.022)	0.229* (0.022)	-0.126 (0.210)	0.387** (0.000)	0.046 (0.651)	-0.052 (0.610)	0.049 (0.631)	0.078 (0.439)	-0.054 (0.595)	0.163 (0.104)	1 (0.000)	-0.049 (0.631)
Trust	0.126 (0.212)	0.117 (0.246)	-0.035 (0.730)	0.096 (0.341)	0.151 (0.134)	0.151 (0.134)	0.000 (1.000)	-0.071 (0.483)	0.018 (0.855)	0.000 (1.000)	0.093 (0.356)	-0.112 (0.266)	0.342** (0.000)	-0.035 (0.732)	-0.049 (0.631)	1 (0.000)

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Interpreting correlations is difficult because the social science literature does not agree on a rule for determining what size of correlation is considered strong, moderate or weak (Shortell, 2001). Interpretation of the correlation coefficient depends, in part, on the topic of study. When studying things that are difficult to measure, such as perception, we can expect correlation coefficients to have a lower acceptable threshold. The strongest correlations between my dataset's variables pairs are Transparency and Impartiality (.387), Trustworthiness and Public Funding (.342), Empowerment & Deliberativeness (.313); and Outcome & Empowerment (.290). Variable pairs with weaker but still statistically significant correlations were Outcomes and Enforcement (.231), Transparency and Deliberativeness (.229), Empowerment and Public Funding (.215), Deliberativeness and Enforcement (.201), Outreach and Public Funding (.200), and Customer Service and Transparency (.102).

The bivariate correlations help make the case that many of the variables are related to each other beyond chance. It is important to understand that these correlations are based on frequency data – that is, whether or not an issue was mentioned at all. The underlying dataset does not reflect the quality or direction of the particular comments. For example, the strong correlation between trustworthiness and public funding is based on individuals giving a combination of both positive and negative comments on both issues. This means it cannot be assumed that more (or less) public funding is associated with more (or less) perceived trustworthiness by agency staff. However, variable pairs do not tell a story of what bundles of issues are most important to most of individuals

who took the survey. To take the bigger picture of what it is that stakeholders *really* care about, I turned to multidimensional scaling analysis.

### **Multidimensional Scaling Maps (MDS)**

This study used multidimensional scaling (MDS) to reveal patterns among the variables that are not apparent in the simple table of bivariate correlations. It is a statistical technique often used in data visualization for exploring similarities or dissimilarities in data. The MDS map created by the statistical program may consist of one, two, three, or even more dimensions. The researchers must decide on the number of dimensions they want to use, keeping in mind eigenvalues and goodness-of-fit stress values generated by the computer. The dimensions must then be interpreted and labeled by the researcher. I used 3 dimensions for this MDS analysis.

Table 4.4 shows the eigenvalues reported by the MDS program. In MDS, eigenvalues are helpful in determining the number of dimensions that are necessary to represent the dissimilarity matrix accurately. One of the researcher's challenges in designing an MDS analysis is selecting enough dimensions to approximate the data but few enough to keep the interpretation simple. Eigenvalues allow the researcher to determine the impact of each additional dimension. A basic rule of thumb for determining the number of dimensions is to stop when eigenvalues drop below 1.0. I used 3 dimensions because a 4<sup>th</sup> dimension would decrease the eigenvalue to 0.88, which is below the 1.0 threshold. In this MDS analysis, the first 3 dimensions cumulatively account for 53 percent of the variation in eigenvalues.

Table 4.4: Eigenvalue Report

Dimension Number	Eigenvalue	Individual Percentage	Cumulative Percentage
1	1.28	19.23	19.23
2	1.16	17.47	36.70
3 (used)	1.11	16.76	53.47
4	0.88	13.27	66.73
5	0.84	12.68	79.41
6	0.73	11.02	90.43
7	0.63	9.57	100.00
8	0.00	0.00	100.00
<b>Total</b>	6.63		

Table 4.5 shows the values for the stress goodness-of-fit statistic. It is one of the most common measures of accuracy of the fit. According to the NCSS tutorial, a value below 0.05 is acceptable. A value below 0.01 is considered good. In his paper on MDS, Kruskal (1964) gave following advice about stress values based on his experience, summarized in Figure 4.1:

Table 4.5: Guidelines for MDS Stress and Goodness-of-fit

Stress	Goodness-of-Fit
0.200	poor
0.100	fair
0.050	good
0.025	excellent
0.000	perfect

Table 4.6: Dimensions and Stress Values

Number of Dimensions	Stress
1	0.334974
2	0.124074
3 (used)	0.026049
4	0.009793
5	0.001844

For 3 dimensions, the stress value is .026, which is an excellent fit according to Kruskal’s goodness-of fit guidelines.

Figures 4.1, 4.2, and 4.3 map the correlations on three dimensions using a MDS model or ordinal data. The model produces an adequate approximation of the original matrix, as revealed by the goodness-of-fit statistic (stress less than .01, 53 percent of variance explained). Each dimension (axis) of the MDS map can be interpreted as an unobserved factor responsible for generating the observed distances.

Figure 4.1: MDS Map of Dimensions 1 and 2

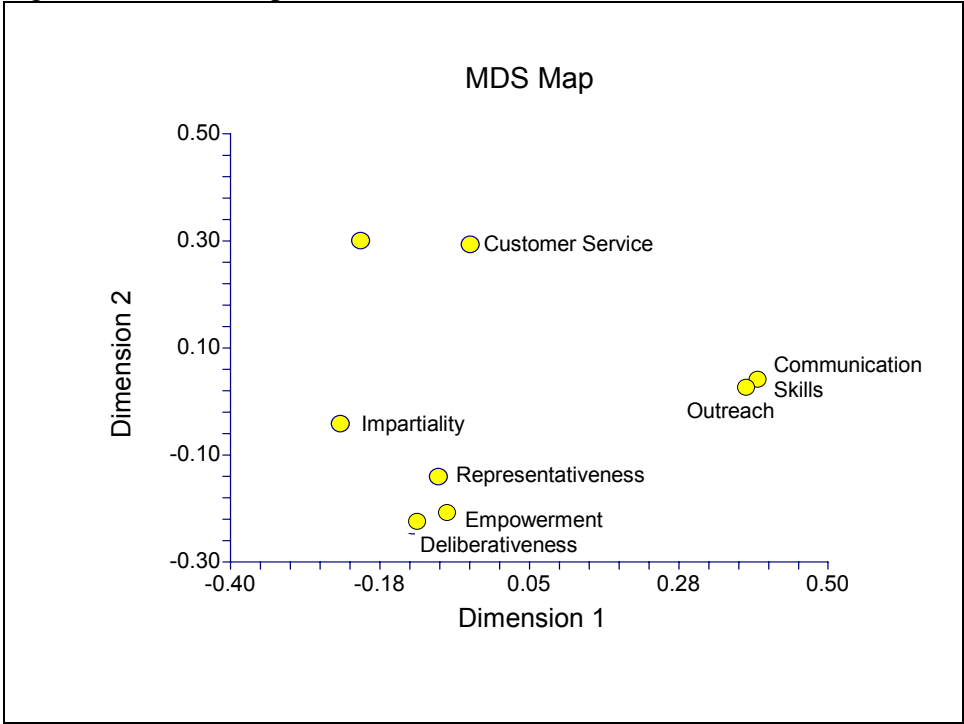


Figure 4.2: MDS Map of Dimensions 1 and 3

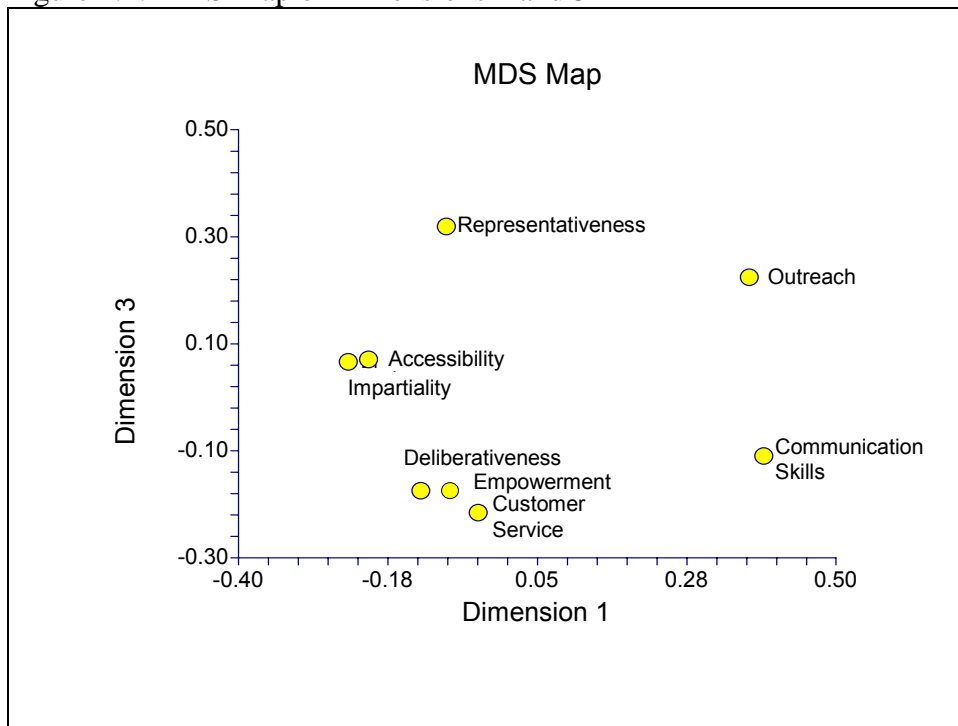
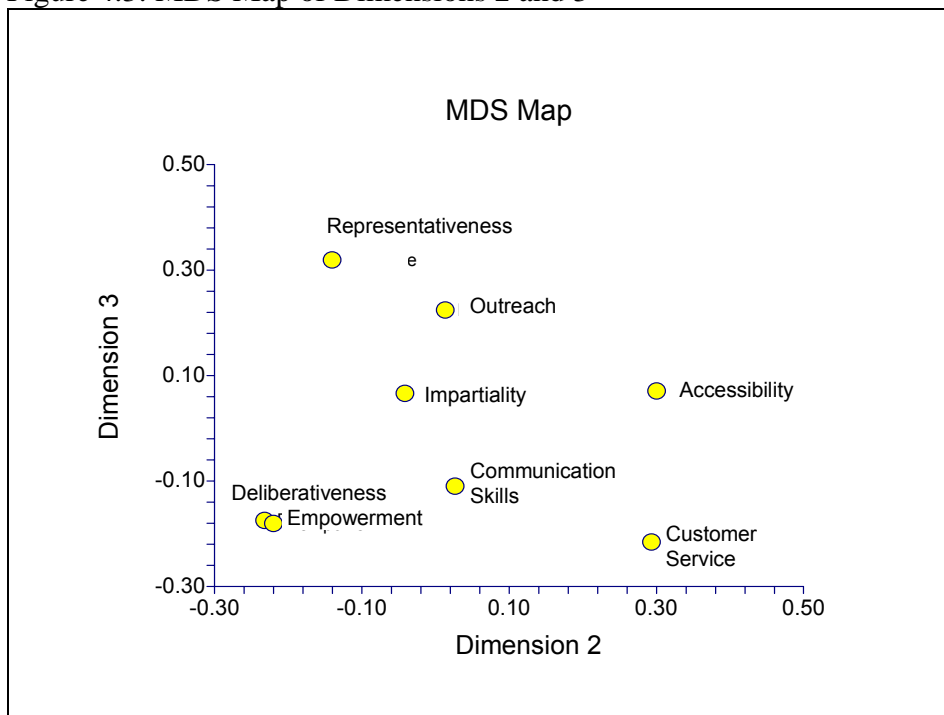


Figure 4.3: MDS Map of Dimensions 2 and 3



There are two things to look for when interpreting an MDS map: clusters and dimensions. Clusters are groups of items that are closer to each other than to other items. For example, in an MDS map of perceived similarities among animals, it is typical to find that the barnyard animals such as chicken, cow, horse, and pig are all very near each other, forming a cluster. Similarly, zoo animals such as the lion, tiger, antelope, monkey, elephant and giraffe form a cluster. When tight, highly separated clusters occur in perceptual data, it may suggest that each cluster is a domain which should be analyzed individually. It is important to realize that any relationships observed *within* such a cluster, such as item *a* being slightly closer to item *b* than to *c* should not be trusted because the exact placement of items within a tight cluster has little effect on overall stress and may be quite arbitrary.

Dimensions are attributes that seem to order the items in the map along a continuum. For example, an MDS of perceived similarities among breeds of dogs may show a distinct ordering of dogs by size. The ordering might go from right to left, top to bottom, or move diagonally at any angle across the map. At the same time, an independent ordering of dogs according to friendliness might be observed. This ordering of “dog friendliness” might be perpendicular to the dog size dimension, or it might cut a sharper angle. Underlying dimensions are used to explain the perceived similarity between items (such as a possible relationship between dog friendliness and dog size).

In my MDS analysis, I interpreted the dimensions based upon the layout of the variables (see Figures 4.4 and 4.5). In Figure 4.4, I identified 3 clusters between

Dimensions 1 and 2. In Figure 4.6, I overlaid the 3 dimensions into the same graph for a 3-dimensional model, with the 3 clusters circled.

- **Dimension 1** (accounting for 19.2 percent of the variance) is a continuum between “Stakeholder-Driven Participation” and “Agency-Driven Participation.”
- **Dimension 2** (accounting for 17.5 percent of variance) is a continuum between “Passive & Reactive Participation” and “Active and Proactive Participation”.
- **Dimension 3** (accounting for 16.8 percent of variance) is a continuum between “Broad and Anonymous Participation” and “Personalized One-on-One Participation”

Table 4.7: Interpretation of MDS Dimensions

Axis	Interpreted Meaning of Dimension
Dimension 1	“Stakeholder-Driven Participation” vs. “Agency-Driven Participation.”
Dimension 2	“Passive & Reactive Participation” vs. “Active and Proactive Participation”.
Dimension 3	“Broad and Anonymous Participation” and “Personalized One-on-One Participation”

Figure 4.4: MDS Map Dimensions 1 and 2 Interpreted

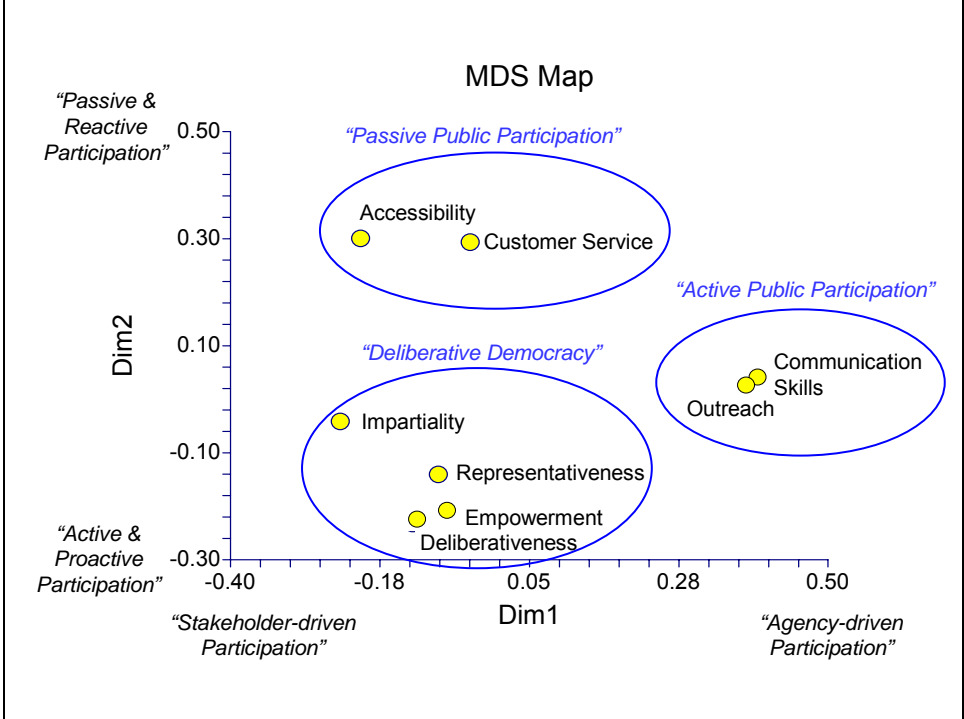


Figure 4.5: MDS Map Dimensions 1 and 3 Interpreted

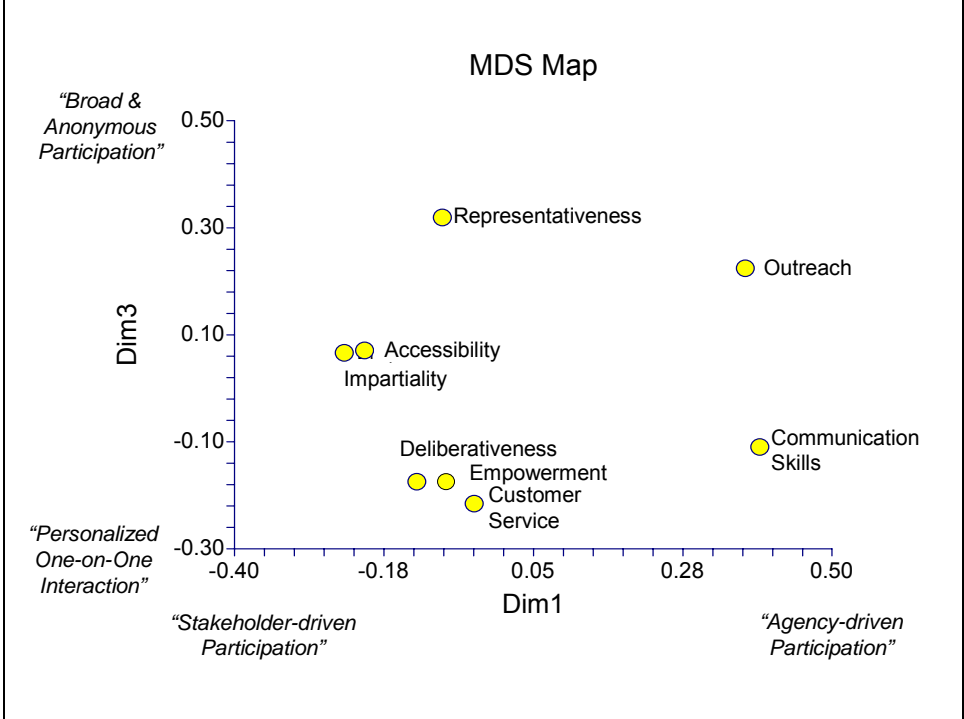


Figure 4.6: MDS 3-Dimensional Map with Interpreted Dimensions and Clusters

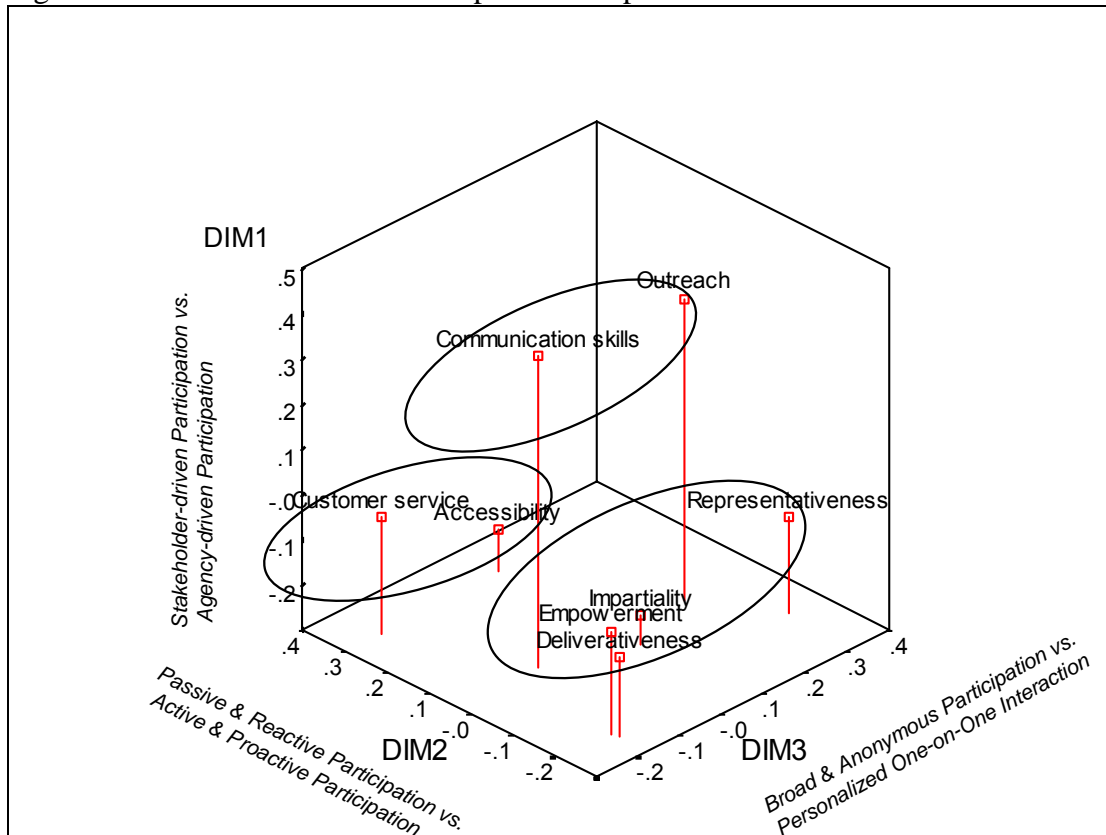


Figure 4.6 illustrates my most important data finding in this thesis. The MDS map shows 3 distinct clusters of stakeholder preferences when viewed in three-dimensional space. I interpreted these clusters as “Passive Public Participation” (emphasis on customer service and accessibility), “Active Public Participation” (emphasis on communication and outreach), and “Deliberative Democracy” (emphasis on impartiality, empowerment, deliberativeness, and representativeness). See Table 4.6 below.

Table 4.8: Interpretation of MDS Clusters

Interpreted Cluster Name	Associated Variables
“Passive Public Participation”	<ul style="list-style-type: none"> <li>▪ Customer Service</li> <li>▪ Accessibility</li> </ul>
“Active Public Participation”	<ul style="list-style-type: none"> <li>▪ Communication Skills</li> <li>▪ Outreach</li> </ul>
“Deliberative Democracy”	<ul style="list-style-type: none"> <li>▪ Impartiality</li> <li>▪ Empowerment</li> <li>▪ Deliberativeness</li> <li>▪ Representativeness</li> </ul>

The first cluster emphasizes customer service and accessibility. I called this group “Passive Public Participation” since customer service and accessibility put the onus for action on the agency rather than on the stakeholders themselves. The implication is that that these people may be primarily interested in receiving attention and service as individuals, rather than as a public body at large. For example, a private citizen interested in customer service and accessibility may be interested in finding a form or regulation text on the agency website, or being able to ask an agency staffer about a particular question. None of this suggests that the person actually wants to commit to becoming engaged in a public decision-making process.

The second cluster, based on communication skills and outreach, was named “Active Public Participation” because it relates to interest in the staff communication skills and outreach activities of the agency (such as holding hearings and public workshops) and implies an interest having opportunities for wider involvement in a public space. This is distinguished from “Passive Public Participation” because interest in public space opportunities suggests that these people may want to attend these meetings and become engaged and interact with agency staff in a public setting. An

example of this might be a citizen potentially affected by a proposed regulation who would like to receive advance notice of public hearings in her community so she can prepare a comment to present for the public record.

The third cluster, which I labeled “Deliberative Democracy,” brings together many of the characteristics of deliberative democracy, which are impartiality, empowerment, deliberativeness, and representativeness. The cluster implies an interest in the authenticity, equity, and process-related aspects of how the government works with the citizenry, with respect to public-at-large as well as with any particular interest group.

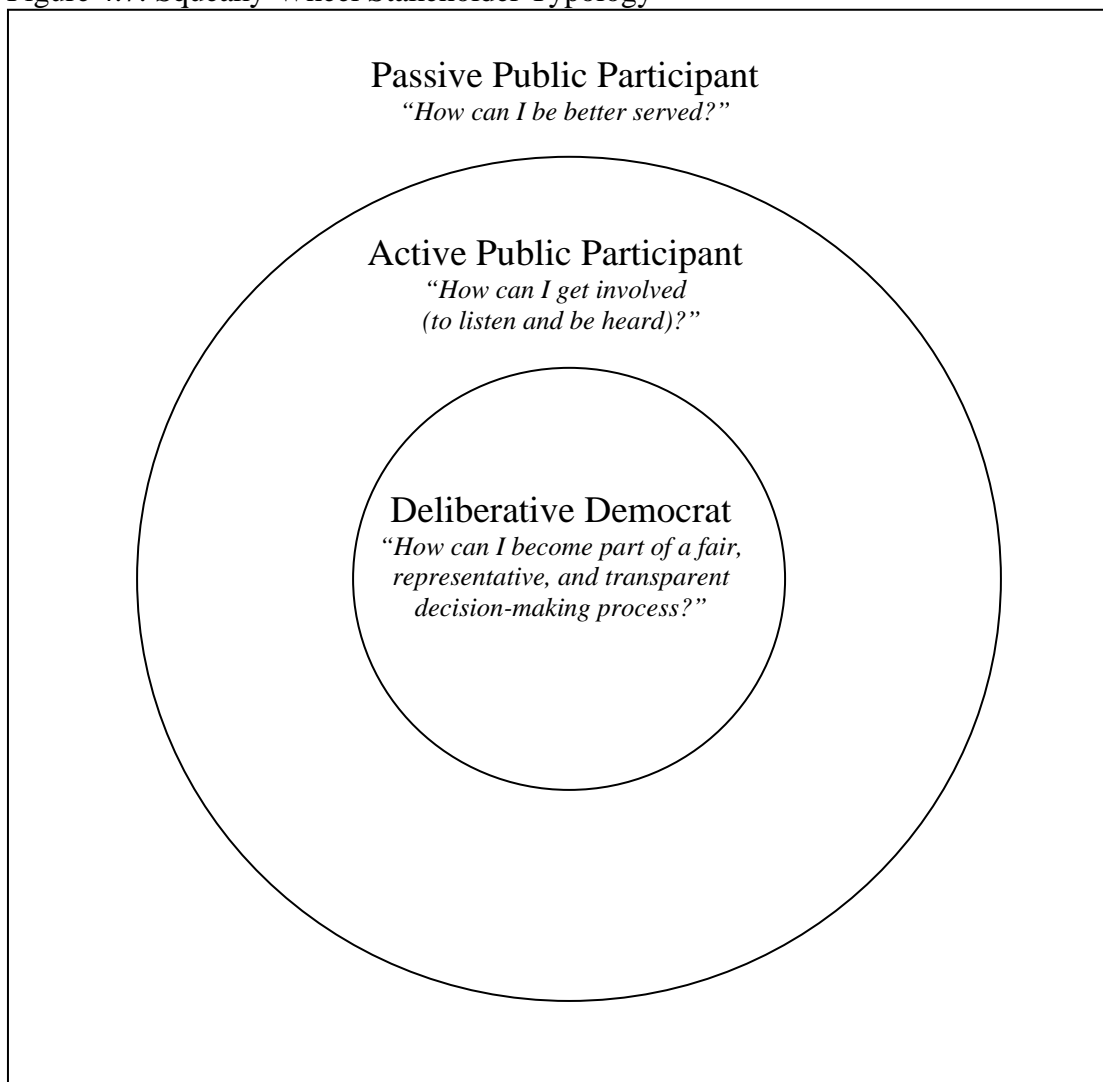
The three MDS clusters reminded me of a theoretical framework introduced in the Literature Review of this thesis. I reexamined Table 2.1 Public Empowerment Typology from Chapter 2 and compared it with the Table 4.6. See Table 4.7. Using the public empowerment typology framework, the Deliberative Democracy cluster appears to be consistent with higher levels of public empowerment, while characteristics of the “Passive Public Participation” cluster are more consistent with the lower levels public empowerment. In a continuum of public empowerment, “Active Public Participation” falls in the middle. These comparisons are approximations; hence Table 4.7 does not have lines that distinguish where one cluster ends and another cluster begins along the public empowerment ladder.

Table 4.9: Public Empowerment Typology with Clusters Stakeholder Typology

		<b>Public Empowerment Typology</b>	<b>Characteristics</b>	<b>MDS Cluster (Stakeholder Typology)</b>
<b>More Empowerment ↑</b>	1.	<b>Citizen power</b>	Citizens have total control	“Deliberative Democracy” <ul style="list-style-type: none"> <li>▪ Impartiality</li> <li>▪ Empowerment</li> <li>▪ Deliberativeness</li> <li>▪ Representativeness</li> </ul>
	2.	<b>Delegated power</b>	Citizens given dominant control over decision-making by authorities; also accountable for decisions	
	3.	<b>Collaborative decision-making</b>	Citizen and agency become partners; public begins to have decision-making clout; can negotiate and engage in trade-offs with power holders	
	4.	<b>Consultation</b>	Agency retains decision-making authority; participation in the form of public hearings; public role is review and comment	“Active Public Participation” <ul style="list-style-type: none"> <li>▪ Communication Skills</li> <li>▪ Outreach</li> </ul>
	5.	<b>Manipulation</b>	Illusory participation in the form of rubber-stamp advisory, express purpose is to engineer support or educate	“Passive Public Participation” <ul style="list-style-type: none"> <li>▪ Customer Service</li> <li>▪ Accessibility</li> </ul>
	6.	<b>Informing</b>	One-way flow of information; no public avenue for feedback or negotiation	

Using the public empowerment framework from Table 4.7, I created a framework for a 3-part typology for squeaky wheel water quality stakeholders, shown in Figure 4.7. The 3 stakeholder types are Passive Public Participant, Active Public Participant, and Deliberative Democrat.

Figure 4.7: Squeaky-Wheel Stakeholder Typology



### Summary

MDS analysis of the coded survey data gave me an empirical basis for a simple typology of “squeaky wheel” water quality stakeholders: the “Passive Public Participant”, the “Active Public Participant,” and the “Deliberative Democrat.” These three stakeholder types can be shown to roughly correspond to an escalation in

expectations for public involvement and empowerment. The next chapter explores the implications of the stakeholder typology for public agencies.

## Chapter 5

### CONCLUSION

#### **Overview**

This chapter attempts to answer the question posed at the start of this research: “What do people really want out of public involvement?” It turns out that the answer is not as simple as the question. Although this study is based on a “squeaky wheel” subset of water quality stakeholders, my intention is to frame my findings broadly to help agencies to prioritize and optimize their public involvement strategies through a generic typology of stakeholders.

I predicted that the data would reveal at least one type of public as “customer” who emphasizes efficient and responsive provision of services and outcomes, and another type that is more closely associated with public as “citizen,” where deliberation and inclusiveness of the process are of relatively higher concern. To my surprise, not two, but three stakeholder types emerged from my analysis: “Passive Public Participant,” “Active Public Participant,” and “Deliberative Democrat” (see Figure 4.7). These stakeholder types represent distinct bundles of individual preferences. They are based on empirical data, using a research methodology adapted from techniques used in the consumer marketing and voter polling industries. And what is perhaps most significant, as I mentioned in the previous chapter, these stakeholder types can be arranged along a continuum of citizen involvement and empowerment. I now attempt to explain each stakeholder type.

### **The Passive Public Participant: “How Can I Be Better Served”?**

Of the three types, the “Passive Public Participant” most closely approximates the “public as customer” model. The Passive Public Participant’s defining attributes are concern for customer service and accessibility. The most pressing question for this stakeholder type is “how can I be better served?” Customer service may be provided by a person (for example, a service representative or clerk), or by automated means for self-service (for example, an Internet website or an automated teller machine). Accessibility refers to the relative ease by which a citizen/customer can obtain desired assistance, whether in-person or through self-service. Accessibility has intellectual, emotional, physical, and temporal qualities, all of which are important.

The passive approach to public involvement is compatible with Hibbing and Theiss-Morse’s theory of stealth democracy. Empirical evidence in the literature suggests that most Americans are uninterested in politics and are conflict averse, and that people are naturally more concerned about their everyday lives than politics (Hibbing & Theiss-Morse, 2002). People do not want a bigger role in governance; in fact, most people would prefer to have a smaller role, but they suspect that elites are corrupt, so they believe that citizens must periodically intervene to prevent abuse. Hence accessibility and customer service become crucial to maintaining the legitimacy of a stealth democracy. Although citizens generally want to keep at arms length away from government, they want to have the option to be able to access the levers of power when they want.

Public agencies can directly address the needs of Passive Public Participants by making services more convenient, more plentiful, and more pleasant. For example, the agency can provide content-rich and frequently-updated websites, extended or flexible business hours for students and working people, and respectful treatment during points of interface and interaction. In this regard, it is important to have materials available in various formats to meet the needs of different audiences, such as translations for ethnic minorities and text for the hearing impaired.

Indeed, it seems that the “customer is always right” for many government reformers. Under the market models of Reagan and Thatcher, Clinton’s “Reinventing Government” and Blair’s “Third Way,” customer focus has been an emerging theme in public management literature and practice (Flynn, 1990; Walsh, 1991, Osborne & Gaebler, 1992; Gore, 1993). Customer-driven approaches are offered as a solution to popular stereotypes of bureaucracy, such as red tape, long lines, officious administrators, and a tedious uniformity of services.

On the other hand, other writers question whether the customer concept is valid within the circumstances of the public sector (Moe, 1994; Patterson, 1998). They point to a variety of ways in which the customer notion does not adequately characterize the relationships between government organizations and members of the public. In particular, it is seen as devaluing citizens, reducing them to passive recipients of services rather than active agents (Frederickson, 1997; King & Stivers, 1998; Patterson 1998).

Democratic governance, at the most basic level, concerns the linkage between the purpose of government and the preferences of the public (Stivers, 1994). It involves

balancing self-interest, as advocated by the market model, with the public interest. The public interest focus on citizen involvement rather than customer satisfaction redirects the emphasis from outcomes grounded on efficiency and effectiveness to democratic governance defined by the role of the citizen (King & Stivers, 1998). This concern for the relationship between the citizen and the administration brings us to the second type of stakeholder, the “Active Public Participant.”

### **The Active Public Participant: “How Can I Get Involved, Listen, and Be Heard?”**

Unlike the Passive Public Participant, the *Active* Public Participant expresses genuine concern for meaningful communications with agency staff and the public outreach efforts taken by the agency. This suggests a desire for a symbolic level of interaction and involvement between citizens and government institutions that goes beyond efficient provision of services. The basic question asked by the Active Public Participant is “how can I get involved and be heard?” There is an appreciation for the authenticity and effort of government to involve citizens that is not readily apparent with the Passive Public Participant. Stakeholders of this type are more likely to attend and participate in public meetings such as workshops and hearings.

Public agencies can address the needs of Active Public Participants by providing opportunities for public consultation, such as public hearings, meetings, and extensive public review periods on proposed documents and regulations. The standards for customer service and accessibility that are important to the Passive Public Participant are also essential to the Active Public Participant. Public meetings should be noticed in

advance and efforts should be taken for agency personnel to be seen as attentive to public comment.

The public administration literature has found attitudes toward citizen contacts to be an important linkage between citizens' requests and agencies' actions (Greene, 1982). Listening promotes accountability as administrators come to view the public as fellow citizens with whom they can engage in a meaningful dialogue. The hearing of neglected voices, engagement in real communication with stakeholders, and openness to emerging perspectives is cited as the benefits skillful listening brings to the promotion of active participation and accountability (Stivers, 1994).

### **The Deliberative Democrat: “How Can I Become Part of a Fair, Representative, and Transparent Decision-Making Process?”**

The third type of stakeholder in my “squeaky wheel” stakeholder typology is the “Deliberative Democrat.” The Deliberative Democrat is characterized by expressed concern for impartiality, empowerment, deliberativeness, and representativeness – traits commonly associated with deliberative democracy. In contrast to traditional theories of democracy which emphasize voting as the central democratic institution, deliberative democracy theorists argue that legitimate public policy arises from the public deliberation of the citizenry. Hence, deliberative democracy elevates expectations for citizen empowerment and involvement beyond that even of the Active Public Participant.

All agencies must obey laws that prescribe certain public participation procedures. These requirements give the public the opportunity to get their comments

into a written record of decision-making. However, Deliberative Democrat stakeholders may not be satisfied with the formal aspect of public participation. They want assurances that the agency will use their input and involve them in the final decision-making. They wonder if agencies are “going through the motions” and not actually considering any ideas that differ from what they already had planned to do. Many traditional public comment methods, such as hearings, are not designed to encourage discussion or explore new ideas.

Because of their high expectations, Deliberative Democrats present public agencies with greater challenges than the other two stakeholder types. Deliberative Democrats are concerned with the process of governance and the role of the citizen within the apparatus of the state. The central question they ask is “how can I become part of a fair, representative, and transparent decision-making process?” In effect, the expectation is for government agencies to partner with the public to explore the best approach to making policy. Such collaborations are institutionally and logistically complex, sometimes justifying the expense of specialized public involvement facilitator expertise. Deliberative processes can be expensive in terms of time and resource opportunity costs. However, when done well, this approach can address challenging public issues in a constructive way that may avoid expensive lawsuits and other costly adversarial tactics.

### **Suggestions for Further Research**

This study does not indicate the relative proportion of the population that is distributed across the three stakeholder types. The multidimensional scaling technique employed only shows the clusters of attributes, not the proportions within the sample attributed to each cluster. For further research, it would be useful for public administrators to have a sense of the relative magnitude of each type of stakeholder across the population. For example, to the extent a mass, random survey found that few people fit into the Deliberative Democrat type, then the stealth democracy findings of Hibbing and Theiss-Morse might still hold well, at least with respect to the mass public, if not the activist public. By contrast, to the extent that one found a lot of Deliberative Democrats, it would underscore the need to revise earlier theories.

This study intentionally used a “squeaky wheel” sample of the first 100 respondents to the survey results. A next step in analysis might be to expand the sample to include all 394 survey respondents and compare the multidimensional scaling analysis clusters between the “squeaky wheel” first responders and the larger sample. Such a comparative analysis may show qualitative differences between “squeaky wheel” stakeholders versus other stakeholders, and thus provide further insight on how to customize their public involvement programs.

The three stakeholder types, although they represent actual stakeholder preferences, are based on a snapshot of the preferences of water quality stakeholders on a water quality-related public involvement needs survey. Individuals who expressed one set of preferences about the Water Boards and water quality regulations may feel

differently about other public policy issues. Moreover, it is conceivable that individuals may change their positions on the same issues over the course of their careers and life stages. The stakeholder typology framework could be made more robust by having a longitudinal study to measure stakeholder preferences over time and across a broader array of issues.

**Implications for Public Administration: What do squeaky wheel stakeholders really want out of public involvement?**

The “squeaky wheel” stakeholder typology can facilitate greater clarity about who is to be served by the public agency. It underscores the reality that public administrators serve multiple publics, and it offers a more structured way of comprehending them than merely lumping them all as amorphous “stakeholders”. In particular, the typology can help public administrators better understand the claims of different types of stakeholders on organizational efforts. It enables the exploration of ways to enhance value for one group while not diminishing it for others.

Many "squeaky wheel" stakeholders feel strongly about the importance of deliberative democracy (like collaborative planning) and others emphasize customer service (like returning phone calls, courtesy, and websites), and many care about both. Finite resources set practical limits to how much agencies can do to involve the public. When efforts are constrained, it is important to consider the long-term costs versus benefits to including some or all of the elements of a collaborative public involvement approach.

Agencies trying to create opportunities for collaboration and deliberation should not forget to also cover the basics (such as customer service and responsiveness). Importantly, it also appears that a significant proportion of stakeholders are not clamoring for more collaboration. Perhaps they are just not aware of the possibilities, or perhaps they truly have other priorities and would prefer a stealthy democracy over a highly deliberative one.

## APPENDIX A

## Stakeholder Survey

## California State Water Resources Control Board Outreach Survey for Water Board Stakeholders

*DEFINITIONS*

For the purpose of this survey, “the public” is defined as

- general public (unorganized);
- interested stakeholders (organized or unorganized);
- grantees;
- members of the regulated community; AND / OR
- consultants and attorneys representing any of the above.

“Working with the public” is defined as

- Outreach / educational efforts, where staff are trying to inform or teach something to the
- public; AND / OR
- Public involvement efforts, where staff are soliciting input, feedback, information, suggestions, and / or concerns from the public for consideration in Water Board actions,
- decisions, permits, etc.

## QUESTIONS

1. What is your affiliation or area of interest in connection with the State Water Resources Control Board or Regional Water Quality Control Boards? (e.g. agriculture, environmental group, homeowner, local government representative, recreational water user group, regulated industry representative, private well owner, timber, etc.)

2. How long have you been interacting with members or staff of the State Water Resources Control Board or Regional Water Quality Control Boards (hereafter referred to collectively as the Water Board)? Please mark an X in the parentheses next to your selection.

- ( ) Less than one year
- ( ) One to four years
- ( ) Five to ten years
- ( ) Greater than 10 years

3. Please indicate the ways in which you personally have interacted with members or staff of the Water Board in the past year. Please mark an X in the parentheses next to all that apply, and add additional detail in the comment section as needed.

- I have submitted comments on upcoming Water Board actions or testified at Board meetings.
- I have personally called or met with Water Board staff to explain my interests and concerns regarding water quality issues or water rights.
- I have received written or verbal information from staff on Water Board policy, actions, or ways to achieve water quality objectives.
- As a member of the regulated community, I have worked with staff regarding conditions or changes to conditions for my permit, and what I must do to achieve compliance.
- I have sought or received grant funding through the Water Board.
- I have participated in a task force, technical team, or other advisory group to the Water Board.
- I have attended informational community meetings, presentations, or other briefings conducted by Water Board staff.
- A Water Board staff member serves as a technical resource to another group in which I participate.
- Other (please explain)

Comments:

4.a. How do you find out about upcoming opportunities to interact or work with the Water Board or its staff on items of interest to you? Please mark an X in the parentheses next to all that apply.

Water Board mass communications

Please indicate all that apply:

- website
- letter
- email listserve
- other:
- Personal contact with Water Board members or staff
- Public news source

Please indicate all that apply:

- radio
- TV
- print media
- other:
- Word of mouth

Other (please explain)

b. Is this communication effective? If not, how could it be improved?

5. Please rate the statements below on the scale provided. Please explain any “Disagree” response and suggest what could be done to improve the situation.

a. Water Board staff are adequately skilled at public speaking and giving public presentations.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

b. Water Board staff present technical information in a manner that is easily understood by a lay audience.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

c. I am able to obtain needed information and assistance from staff in a timely fashion.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

d. Written materials provided by staff are clear, up to date, and meet my needs.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

e. Water Board staff provide helpful guidance to regulated groups, grantees, and / or the general public on how to achieve water quality objectives.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

f. The Water Board members and staff are receptive to learning about my concerns and needs.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

g. I am able to have meaningful involvement on the issues / decisions that are important to me.

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

h. Water Board staff make adequate efforts and accommodations to ensure that all audiences have equal access to the educational and decision-making process (e.g. disadvantaged communities, ethnic communities, the disability community, opposing interests).

1—Agree  2—Neutral / No Opinion  3—Disagree

Comments:

6. In your experience, what has the Water Board or its staff done especially well in terms of working with the public and the regulated community?

7. What could the Water Board or its staff do differently to improve their work with the public and the regulated community?

8. Do you feel that the public has been able to have appropriate input into and impact upon Water Board actions? Why or why not?

9. Please give an example of a case where you felt that the public's input to the Water Board members or staff made a difference. What happened?

10. Environmental Justice is defined as "the fair treatment of people of all races, cultures and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations and policies." Please rate the State and Regional Water Board's performance in involving all interested parties, including ethnic and low-income communities, in its work by marking an X in the parentheses next to your choice.

- Excellent, No Improvement Needed
- Satisfactory, But Could Use Some Improvement
- Poor, Needs Major Improvement

Comments:

11. How can the Water Board best improve educational and involvement opportunities for the general public (e.g. more management measures workshops, more school visits, better presentations, better use of the media, better outreach to affected neighborhoods, more attention to environmental justice issues, etc.)?

12. Please provide any additional comments you believe would be helpful.

## APPENDIX B

## Codeform

## Codeform for Water Boards Public Participation Stakeholder Survey

	-2	-1	+1	+2
	Passionate or scathing criticism	Moderate criticism	Moderate praise	Passionate or effusive praise
<b>1. Competence (in general/other)</b>				
2. Technical knowledge (in general/other)				
a. Regulated Industry				
b. Agriculture				
c. Environment				
d. Recreation				
e. Science (e.g. TMDLs)				
3. Process knowledge (in general/other)				
a. Environmental law and legislation				
b. Open meeting law and legislation				
c. Water board policies & deadlines				
4. Communication skills (in general/other)				
a. Enunciation or accent				
b. Clarity or brevity (including use of jargon or acronyms)				
c. Appropriateness for audience (incl. complexity, applicability, etc.)				
d. Foreign language skills				
5. Consistency of information/advice/treatment				

	-2	-1	+1	+2
6. Consistency of staff skills				
a. Within same water board agency				
b. Between water board agencies				
7. Efficiency of expenditure of public funds				
8. Adequacy of funding for public involvement				
<b>9. Customer Service (in general/other)</b>				
10. Friendliness, courtesy, respect, empathy				
11. Helpfulness, ability to anticipate needs, offer or timely response to requests for information, advice or guidance,				
12. Trustworthiness, authenticity, honesty, good intention, well meaning				
13. Ability to locate appropriate person in the agency				
14. Outreach, education, use of media, or Pro-active or physical presence in community				
15. Public access to existing data, info, docs, etc.				
<b>16. Deliberativeness (in general/other)</b>				
17. Adequacy of public meeting format				
18. Sufficient time or opportunities for non-adversarial discussion, learning, brainstorming, etc.				
19. Willingness to listen, learn, consider new ideas, suggestions or criticisms.				
<b>20. Empowerment (in general/other)</b> <i>[Affecting Outcomes]</i>				
21. Board/Staff Commitments to stakeholders (in general/other)				
a. Willingness to share authority				
b. Willingness to make commitments				
c. Follow-through on commitments				
d. Accountability and/or provisions for monitoring of commitments				
22. Opportunities for early stakeholder involvement				
23. Opportunities for stakeholders to help design the process.				
24. Ability for participants to have an influence on agency outputs/decisions/actions				
<b>25. Impartiality; equal treatment</b>				

	-2	-1	+1	+2
	Strong Bias Against (-2)	Moderate Bias Against (-1)	Moderate Bias in Favor of (+1)	Strong Bias in Favor of (+2)
26. <i>Bias toward/against stakeholder types (in general/other)</i>				
a. Industry or business				
b. Agriculture				
c. Environment				
d. General Public, Citizens, Taxpayers, Homeowners,				
e. Local Government or District				
f. State/Federal Government				
g. Academia or consultant				
h. Community Activist / Organization				
i. Ethnic				
j. Socioeconomic or education level				
<b>27. Transparency (in general/other)</b>				
28. Disclosure of how the agency uses public input				
29. Effectiveness or timeliness of advance notice of public meetings				
30. Clarity of procedural groundrules; or availability of process documentation and meeting minutes				

<b>31. Inclusiveness (vs. active exclusion)</b>				
a. Industry or business				
b. Agriculture				
c. Environment				
d. General Public, Citizens, Taxpayers, Homeowners,				
e. Local Government or District				
f. State/Federal Government				
g. Academia or consultant				
h. Community Activist / Organization				
i. Ethnic				
j. Socioeconomic or education level				

<b>32. Representativeness (in general/other)</b>				
33. Passive barriers to participation				
a. Length of Time (of meetings or entire process)				
b. Convenience of timing and location of meetings				
c. Differential in ability to afford transaction costs				
d. Adequacy of time for public review and comment				
34. Representation of all relevant communities				
a. Industry or business				
b. Agriculture				
c. Environment				
d. General Public, Citizens, Taxpayers, Homeowners,				
e. Local Government or District				
f. State/Federal Government				
g. Academia or consultant				
h. Community Activist / Organization				
i. Ethnic				
j. Socioeconomic or education level				
<b>35. Lawfulness (in general/other)</b>				
36. Compliance with the law (in general)				
a. Procedural laws				
<b>37. Satisfactory Outcomes (in general/other)</b>				
a. for Industry or business				
b. for Agriculture				
c. for Environment				
d. for General Public, Citizens, Taxpayers, Homeowners,				
e. for Local Government or District				
f. for State/Federal Government				
g. for Academia or consultant				
h. Community Activist / Organization				
i. for Ethnic				
j. for Socioeconomic or education level				

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>Extremely Lax or Inadequate Enforcement</b>	<b>Somewhat Lax or Inadequate Enforcement</b>	<b>Appropriate Level of Enforcement</b>	<b>Somewhat Inflexible or Excessive Enforcement</b>	<b>Extremely Inflexible or Excessive Enforcement</b>
<b>38. Regulatory Enforcement (in general)</b>					
a. for Industry or business					
b. for Agriculture					
c. Environment					
d. for General Public, Citizens, Taxpayers, Homeowner					
e. for Local Government or District					
f. for State/Federal Government					
g. for Academia or consultant					
h. Community Activist / Organization					
i. for Ethnic					
j. for Socioeconomic or education level					

## APPENDIX C

### Codeform Guidelines

# **CODING GUIDELINES FOR WATER BOARDS PUBLIC PARTICIPATION STAKEHOLDER SURVEY (September 25, 2006)**

These guidelines are designed to instruct you in the process of coding stakeholder preferences and concerns for the Water Board public involvement practices. You are to code the survey response based on the instructions that follow. You may have previous experience in research or coding but because each study is different you are to code only according to these instructions.

The study is looking for what aspects of public involvement are expressly valued by vocal stakeholders. Your task is to read the open-ended survey responses, identify and evaluate responses that correspond to issues in the code form according to the guidelines below, and then fill out the Codeform appropriately.

### ***Codeform Organization***

The Codeform is intended to catalogue issues that are raised by stakeholders with regard to the Water Boards' public involvement programs. It is also intended to roughly measure each respondent's intensity, direction (approval/disapproval), and frequency of opinion with regard to each issue raised.

Issues are organized into ten broad categories, several of which are adapted from: "Collaborative Public Management and Democracy: Evidence from Western Watershed Partnerships." *Public Administration Review* 66 (December): in press.

### **Competency**

*Competency refers to the demonstrated ability of agency staff to efficiently produce and convey accurate, credible, and reliable information and to provide services as required to meet dynamic circumstances.*

### **Customer Service**

*Customer service refers to the degree of assistance and courtesy granted to parties who interact with the agency.*

**Deliberativeness**

*A deliberative process allows participants to brainstorm, critically examine each other's arguments, identify common interests, and build a base of shared knowledge and social capital.*

**Empowerment**

*An empowered process enables participants to influence policy outcomes.*

**Impartiality**

*An impartial process treats all parties equally.*

**Inclusiveness**

*An inclusive process places few formal restrictions on participation.*

**Lawfulness**

*A lawful process upholds all existing statutes and regulations.*

**Representativeness**

*A representative process ensures that the interests of all affected individuals are effectively advocated, either in person or through proxies.*

**Transparency**

*A transparent process governs itself through clear and public rules.*

**Satisfactory Outcomes**

Satisfactory Outcomes refers to the respondent's perception of how well the public participation process resulted in favorable policies, decisions, or actions.

**What To Code**

1. The unit of analysis is the survey respondent (i.e. all written comments for all questions answered by each survey respondent).
2. Coding unit: The unit of text to be coded is a "codable statement" defined as any phrase, clause, sentence, or passage that conveys a meaning very similar to the meaning of a variable (line) in the codeform. A single sentence may contain two or more codable statements. The text that makes up a codable statement may overlap with other codable statements. However, each codable statement should be coded only once on the codeform.

## **Coding Logistics**

1. Code each codable statement in the order in which they appear in the survey.
2. For each codable statement, choose the appropriate value on the following scale:

- +2     Passionate or effusive praise
- +1     Moderate praise
- 1     Moderate criticism
- 2     Passionate or scathing criticism

Exception: Line #51 uses the following scale:

- 1     Extremely Lax or Inadequate Enforcement
- 2     Somewhat Lax or Inadequate Enforcement
- 3     Appropriate Level of Enforcement
- 4     Somewhat Inflexible or Excessive Enforcement
- 5     Extremely Lax or Excessive Enforcement

Exception: Lines #32-33 use the following scale:

- 1     Strong bias against
- 2     Moderate bias against
- +1     Moderate bias in favor of
- +2     Strong bias in favor of

3. If a single completed survey contains more than one statement that can be coded on the same line of the codeform, code each statement separately. In other words, any given line in the codeform can be coded multiple times (e.g. -2 and -1, or -1 and +1).
4. Indicate each code by writing the survey question number for the coded statement in the appropriate column of the codeform. For example, if “moderate praise” related to *Technical Knowledge (regulated industry)* were coded in answer to survey question #5b, then write “5b” on Line 2a in Column “+1” of the codeform.
5. If a single line of the Codeform is coded more than once using the same numeric code, record up to three survey questions that contain coded statements. For example, if “moderate praise” related to *Technical Knowledge (regulated industry)* were coded in answer to survey questions #5b, #5h, #7, and #10, then write “5b, 5h, 7” on line 2a, in column “+1” of the codeform.

## General Coding Rules

1. Be conservative with respect to deciding when to code a statement. If you cannot refer to a specific comment do NOT code it. You must give a specific citation (survey question number) for every code you choose.
2. Be conservative with respect to the value of the code assigned to a statement. End points -2 and +2 are always extremes.
3. Survey responses indicating a wish for *additional* treatment of a particular issue should be inferred as *critical* statements for the purposes of the Codeform. This is because wanting more is a form of dissatisfaction with the status quo.
4. Survey responses indicating that they do not know enough about an issue to comment *and* that provide no qualitative comment should not be coded.
5. For self-deprecating remarks that precede a codable statement (for example, comments indicating that they do not know much about an issue), disregard the self-deprecating remark, and code the rest of the comment normally.
6. For survey responses that refer to the first person “I” , “we,” “me” and “us,” identify should be inferred from the affiliation given in Survey Question 1.

## Specific Coding Rules

1. Distinguishing between Representativeness, Inclusiveness, and Impartiality:

**Inclusiveness** (Lines 38-39) = Absence of formal restrictions regarding which individuals or factions get to participate.

**Representativeness** = Participation by all relevant factions vs. nonparticipation by one or more factions (due to resource constraints, informal barriers, or other unnamed reasons).

**Impartiality** = Absence of bias or discrimination (whether active or structural) against *participating* individuals or factions.

### Examples:

**Inclusiveness:** “The process was unfair because local governments were not invited.

**Representativeness:** “The process was unfair because government officials couldn’t afford to attend the meetings on weekends and evenings.”

**Impartiality:** The facilitator made the woman from the community group feel so unappreciated that she hardly ever spoke.

**Impartiality and Representativeness:** The facilitator made the woman from the community group feel so unappreciated that she eventually quit.

2. Answers to Line #41 “Passive Barriers to representation” should match with answers to Line #33 “Passive bias towards/against stakeholder types.”
3. Self-affiliation as “Science” and “Research” in survey question #1 should be inferred as “Academic” unless otherwise noted.
4. Self-affiliation as a “Homeowner” in survey question #1 should be inferred as “Community”.
5. For purposes of this study, consider the terms “legal” and “regulatory” and “law” and “regulation” as interchangeable.
6. For Line #51, any allegations the water boards exceeded their legal authority should be coded as an extreme case (value = 5) of excessive law enforcement.

## REFERENCES

- Abramson, M. A., & Kamensky, J. M. E. (2001). *Managing for Results 2002*. Lanham: Rowman and Littlefield Publishers, Inc.
- Academy of Management Journal* (1999). 42(5).
- Arnstein, S.R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners* 35(4). [Electronic Version]. Retrieved September 8, 2007 from <http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.pdf>
- Baker, L., Koestner, R., Worren, N.M., Losier, G.F., & Vallerand, R.J. (1995). False consensus effects for the 1992 Canadian Referendum. *Canadian Journal of Behavioral Science*, 27:1-22.
- Baumgartner, J., & Jones, B.D. (1993). *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Blank, D. (2007). Business killers: Bad word of mouth. Retrieved October 27, 2007, from Expert Business Source Web site: <http://www.expertbusinesssource.com/article/CA6410006.html>
- Brugha, R. & Varvasovszky, Z. (2000). Stakeholder analysis: A review. *Health Policy and Planning*, 15(3): 239-246.
- Bryson, J.M. (2004). What to do when stakeholders matter. Stakeholder identification and analysis techniques”, *Public Management Review* 6(1): 21-53.
- Bryson, J.M., & Crosby, B C. (1992). *Leadership for the Common Good: Tackling Public Problems in a Shared Power World*. San Francisco: Jossey-Bass.

- Bryson, J. M., Gibbons, M. J., & Shaye, G. (2001). Enterprise schemes for nonprofit survival, growth, and effectiveness. *Nonprofit Management and Leadership*, 11(3), 271-288.
- Carpini, M.X.D. & Keeter, S. (1996). *What Americans Know about Politics and Why It Matters*. New Haven: Yale University Press.
- Cassinger, L. (2008, April 27). *Unhappy shoppers can spread the bad word*. Retrieved May 11, 2008, from Home Accents Today:  
<http://www.homeaccentstoday.com/article/CA6327641.html?industryid=42684&industry=Columns>
- Chase, L. C., Schusler, T. M., & Decker, D. J. (2000). Innovations in stakeholder involvement: what's the next step? *Wildlife Society Bulletin*, 28(1): 208-217.
- Clark, W.C. (1984). Application of multidimensional scaling to problems in experimental and clinical pain. Pain measurement in man. In B. Bromm (Ed.), *Neurophysiological Correlates of Pain* (pp. 349-369). New York: Elsevier Science Publishers.
- Clarkson, M. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review* 20(1): 92-117.
- Cohen, A., Fiorello, C.A., & Farley, F.H. (2006). The cylindrical structure of the Wescher Intelligence Scale for Children—IV: A retest of the Guttman model of intelligence. *Intelligence*, 34(6): 587-591.
- Cracknell, B.E. (2000). *Evaluating Development Aid: Issues Problems, Solutions*. New Delhi and London: Sage Publications.

- Crick, B. (1992). *Defense of Politics*, 4<sup>th</sup> ed. Chicago: University of Chicago Press.
- Crombie, A. & Driscoll, C. (2001). Stakeholder legitimacy management and the qualified good neighbor: The case of nova nada and JDI," *Business & Society*, 40(4). 442-471.
- Dahl, R.A. (1989) *Democracy and Its Critics*. New Haven: Yale University Press.
- DeSarbo, W.S., Kim, J., Choi, S.C., & Spaulding, M. (2002). A gravity-based multidimensional scaling model for deriving spatial structures underlying consumer preference/choice. *Journal of Consumer Research*, 29: 91-100.
- Denhardt, R.B. & Denhardt, V.D. (2001). The New Public Service: Putting Democracy First. *National Civic Review*. 90(4): 391-400.
- Donaldson, T. & Preston, L.E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review* 20(1):65-91.
- Dunleavy, P., Margetts, H., et al. (2006). *Digital Era Governance: IT Corporations, the State and E-Government*. Oxford: Oxford University Press.
- Dunnell, R.C. (1986). Methodological issues in Americanist artifact classification. In M.B. Schiffer (ed.) *Advances in Archaeological Method and Theory*. pp. 35-99. New York: Academic Press.
- Eden, C., & Ackermann, F. (1998). *Making Strategy: The Journey of Strategic Management*. London: Sage Publications.
- Flynn, N. (1990). *Public Sector Management*. Hemel Hempstead: Harvester Wheatsheaf.
- Frederickson, H.G. (1997). *The Spirit of Administration*. San Francisco, CA: Jossey-Bass.

- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman Publishing.
- Freeman, R.E., & Reed, D.L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, 25(3): 88-106.
- Friedman, A.L. & Miles, S. (2002). Developing stakeholder theory". *Journal of Management Studies*, 39: 1-21.
- Gergen, K.J. (1968). Assessing the leverage points in the process of policy formulation. In: Bauer R. and Gerken K. (eds.). *The Study of Policy Formulation*. New York: The Free Press, pp. 181-204.
- Germain, R.H., Floyd, D.W., & Stehman, S.V. (2001). Public perceptions of the USDA Forest Service public participation process. *Forest Policy and Economics*, 3(3-4): 113-124.
- Glynn, C.J., Herbst, S., O’Keffe, G.J., & Shapiro, R.Y. (1999). *Public Opinion*. Boulder: Westview.
- Glaser, B. (1992). *Basics of Grounded Theory Analysis*. Mill Valley: Sociology Press.
- Gore, A. (1993). *From Red Tape to Red Tape to Results: Creating a Government that Works Better and Costs Less*. Report of the National Performance Review. New York: Times Books.
- Heclo, H. (1977). *A Government of Strangers: Executive Politics in Washington*. Washington, D.C.: Brookings Institution Press.
- Hibbing, J.R. & Theiss-Morse, E. (2002). *Stealth Democracy: Americans’ Beliefs about How Government Should Work*. Cambridge, MA: Cambridge University Press.

Hughes, O. (2003) *Public Management and Administration: An Introduction*, 3rd ed.

Basingstoke. UK: Palgrave

Innes, J.E. & Booher, D.E. (2004). Reframing public participation: Strategies for the 21<sup>st</sup> century. *Planning Theory & Practice*, 5(4): 419-436. [Electronic Version].

Retrieved March 5, 2006 from

[http://www.csus.edu/ccp/publications/Reframing\\_Public\\_Participation\\_Final.pdf](http://www.csus.edu/ccp/publications/Reframing_Public_Participation_Final.pdf)

Jacobs, L.R., & Shapiro, R.Y. (2000). *Politicians don't pander, political manipulation and the loss of democratic responsiveness*. Chicago: University of Chicago Press.

Kettering Foundation (1989) *The Public's Role in the Policy Process: A View from State and Local Policy Makers*. (Dayton, OH, Kettering Foundation).

King, C.S. & Stivers, C. (1998). Citizens and administrators: Roles and relationships. In *Government Is Us: Public Administration in an Anti-Government Era*. Thousand Oaks, CA: Sage Publications.

Kingdon, J.W. (1984). *Agendas, alternatives, and public policies*. Boston: Little, Brown.

Lattin, J., Carroll, J.D., & Green, P.E. (2003). *Analyzing Multivariate Data*. Pacific Grove, CA: Brooks/Cole Publications.

Leach, W.D. (2006). Collaborative public management and democracy: Evidence from western watershed partnerships. *Public Administration Review*, 66(1): 100-110.

Lindblom, C. (1959). The science of muddling through. *Public Administration Review*, 19(1):79-88.

Lively, K.J. & Heise, D.R. (2004). Sociological realms of emotional experience. *American Journal of Sociology*, 109:1109-36.

- Melkers, J. & Thomas, J.C. (1998). What do administrators think citizens think?  
Administrator predictions as an adjunct to citizen surveys. *Public Administration Review*, 58(4): 327-34.
- Mitchell, R.K., Agle, B.R., & Wood, D.J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review* 22(4): 853-886.
- Miller, T. & Miller, M.A. (1991). *Citizen Surveys: How to Do Them, How They Mean*. Washington, D.C.: International City/County Management Association.
- Moe, R. (1994). The “reinventing government” exercise: Misinterpreting the problem, misjudging the consequences. *Public Administration Review* 54(2): 111-122.
- Moore, S.F. (1996). Post-socialist micro-politics: Kilimanaro, 1993. *Africa*, 66(4): 587-606.
- Mugavin, M.E. (2008). Multidimensional scaling: a brief overview. *Nursing Research*, 57(1): 64-68.
- Nye, J.S., Zelikow, P.D. & King, D.C. (Eds.) (1997). *Why People Don't Trust Governmen* . Cambridge, MA: Harvard University Press.
- Osborne, D. & Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. New York: Plume.
- Osborne, D. & Hutchinson, P. (2004). *The Price of Government: Getting the Results We Need in an Age of Permanent Fiscal Crisis*. New York: Basic Books.

- Parker, M. (1997). "Dividing Organizations and Multiplying Identities." In *Ideas of Difference: Social Spaces and the Labor of Division*, Kevin Hetherington and Rolland Murro, eds. Oxford: Blackwell.
- Patterson, P. (1998). Market metaphors and political vocabularies. *Public Productivity and Management Review* 22(2): 220-31.
- Phillips, R. (2003). *Stakeholder Theory and Organizational Ethics*. San Francisco: Berrett-Koehler.
- Preston, L.E., & Sapienza, H.J. (1990). "Stakeholder management and corporate performance. *The Journal of Behavioral Economics*, 19(4), 361-375.
- Riker, W. H. (1986). *The Art of Political Manipulation*. New Haven: Yale University Press.
- Roberts, N.C. and King, P.J. (1996). *Transforming Public Policy: Dynamics of Policy Entrepreneurship and Innovation*. San Francisco: Jossey-Bass.
- Schuett, M.A. & Selin, S.W. (2002). Profiling Collaborative Natural Resource Initiatives and Active Participants. *Northern Journal of Applied Forestry*, 19(4 (December): 155-160.
- Schuett, M.A., Selin, S.W., & Carr, D. (2001). Making it work: Keys to successful collaboration in natural resource management. *Environmental Management*, 27(4): 587-593.
- Shapiro, F.R. (2006). *The Yale Book of Quotations*. New Haven: Yale University Press.

- Shortell, T. (2001). *An Introduction to Data Analysis & Presentation*. World Wide Web: <http://academic.brooklyn.cuny.edu/soc/courses/712/chap18.html> Retrieved May 11, 2008.
- Stivers, C. (1994). The listening bureaucrat: Responsiveness in public administration. *Public Administration Review*. 5(4): 364-369
- Tuler S. & Webler, T. (1999). Voices from the forest: What participants expect of a public participation process. *Society & Natural Resources* 12:437-453.
- Walsh, K. (1991). Citizens and Consumers: Marketing and Public Sector Management. *Public Money and Management* 11(2): 9-16.
- Webler, T. (1995). "Right" discourse in citizen participation: An evaluative yardstick. In *Fairness and Competence in Citizen Participation: Evaluation Models for Environmental Discourse*, ed. Ortwin Renn, Thomas Webler, and Peter Widemann, 35-86. Dordrecht, Netherlands: Kluwer Academic.
- Wilson, J.Q. (2000). *Bureaucracy: What Government Agencies Do And Why They Do It*. New York: Basic Books, Inc.
- Yackee, S. & McKay, A. (2004). *Does the Squeaky Wheel Get the Grease? Interest Group Influence on the Bureaucracy*. Paper presented at the annual meeting of the The Midwest Political Science Association, Palmer House Hilton, Chicago, Illinois. Online. Retrieved 2006-10-05 from [http://www.allacademic.com/meta/p83161\\_index.html](http://www.allacademic.com/meta/p83161_index.html)